

Package ‘simplevis’

March 4, 2022

Type Package

Title Simple 'ggplot2' and 'leaflet' Visualisation with Less
Brainpower

Version 6.2.0

Description Wrapper functions to make 'ggplot2' and 'leaflet' visualisation easier with less brain-
power required.

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URL <https://statisticsnz.github.io/simplevis/>,
<https://github.com/statisticsnz/simplevis/>

BugReports <https://github.com/statisticsNZ/simplevis/issues/>

Encoding UTF-8

LazyData true

Depends R (>= 3.5.0)

Imports dplyr, forcats, ggplot2, htmlwidgets, leaflet, leafem,
leafpop, kimisc, lubridate, magrittr, plotly, purrr, rlang,
scales, sf, shiny, snakecase, stars, stringr, tidyr,
tidyselect, viridis

Suggests DT, glue, knitr, pals, palmerpenguins, patchwork, rgdal,
rgeos, rmarkdown, s2, shinycssloaders, tibble, tidytext

VignetteBuilder knitr

RoxygenNote 7.1.2

NeedsCompilation no

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Repository CRAN

Date/Publication 2022-03-04 04:30:02 UTC

R topics documented:

example_borders	3
example_point	4
example_polygon	4
example_stars	5
gg_bar	5
gg_bar_col	8
gg_bar_col_facet	12
gg_bar_facet	16
gg_boxplot	19
gg_boxplot_col	23
gg_boxplot_col_facet	27
gg_boxplot_facet	31
gg_density	34
gg_density_col	36
gg_density_col_facet	39
gg_density_facet	42
gg_hbar	45
gg_hbar_col	48
gg_hbar_col_facet	52
gg_hbar_facet	56
gg_hboxplot	60
gg_hboxplot_col	63
gg_hboxplot_col_facet	67
gg_hboxplot_facet	71
gg_histogram	74
gg_histogram_col	76
gg_histogram_col_facet	79
gg_histogram_facet	82
gg_hpointrange	84
gg_hpointrange_col	87
gg_hpointrange_col_facet	91
gg_hpointrange_facet	96
gg_hviolin	99
gg_hviolin_col	102
gg_hviolin_col_facet	105
gg_hviolin_facet	109
gg_line	112
gg_line_col	114
gg_line_col_facet	118
gg_line_facet	122
gg_point	125
gg_pointrange	128
gg_pointrange_col	131
gg_pointrange_col_facet	134
gg_pointrange_facet	139
gg_point_col	142

gg_point_col_facet	146
gg_point_facet	149
gg_sf	153
gg_sf_col	154
gg_sf_col_facet	157
gg_sf_facet	160
gg_smooth	162
gg_smooth_col	165
gg_smooth_col_facet	169
gg_smooth_facet	172
gg_stars	176
gg_stars_col	177
gg_theme	180
gg_tile_col	181
gg_tile_col_facet	185
gg_violin	188
gg_violin_col	191
gg_violin_col_facet	194
gg_violin_facet	198
leaf_basemap	201
leaf_clear	202
leaf_sf	202
leaf_sf_col	204
leaf_stars	206
leaf_stars_col	207
mutate_text	209
pal_d3_reorder	210
pal_na	211
pal_viridis_reorder	211
plotly_camera	212
plotly_col_legend	212
shiny_demo	213
summarise_boxplot_outliers	213
summarise_boxplot_stats	214

Index**216**

example_borders	<i>Example sf object of the New Zealand coastline.</i>
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Description

Example sf object of the New Zealand coastline used to demonstrate adding borders to maps.

Usage

```
example_borders
```

Format

An sf object.

Examples

```
gg_sf_col(example_point, col_var = trend_category, borders = example_borders)
```

example_point	<i>Example sf point object.</i>
---------------	---------------------------------

Description

Example sf point object.

Usage

```
example_point
```

Format

An sf object.

Examples

```
gg_sf_col(example_polygon, col_var = density, borders = example_borders)
```

example_polygon	<i>Example sf polygon object.</i>
-----------------	-----------------------------------

Description

Example sf polygon object.

Usage

```
example_polygon
```

Format

An sf object.

Examples

```
gg_sf_col(example_point, col_var = trend_category, borders = example_borders)
```

example_stars	<i>Example stars object.</i>
---------------	------------------------------

Description

Example stars object.

Usage

```
example_stars
```

Format

A stars object.

Examples

```
library(stars)
gg_stars_col(example_stars, col_var = nitrate, borders = example_borders)
```

gg_bar	<i>Bar ggplot.</i>
--------	--------------------

Description

Bar ggplot that is not coloured and not faceted.

Usage

```
gg_bar(  
  data,  
  x_var,  
  y_var,  
  text_var = NULL,  
  pal = pal_viridis_reorder(1),  
  alpha_fill = 1,  
  alpha_line = 1,  
  size_line = 0.5,  
  size_width = NULL,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  x_balance = FALSE,  
  x_expand = NULL,  
  x_labels = NULL,  
)
```

```

x_na_rm = FALSE,
x_breaks_n = 5,
x_reorder = FALSE,
x_rev = FALSE,
x_title = NULL,
x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,
y_balance = FALSE,
y_breaks_n = 5,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_na_rm = FALSE,
y_title = NULL,
y_title_wrap = 50,
y_zero = TRUE,
y_zero_line = NULL,
caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE),
mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>x_var</code>	Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
<code>y_var</code>	Unquoted numeric variable to be on the y scale. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to <code>NULL</code> .
<code>pal</code>	Character vector of hex codes.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 1.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of bars.
<code>size_width</code>	Width of bars. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 100.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to <code>FALSE</code> .

x_expand	A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use function(x) x to keep labels untransformed.
x_na_rm	TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
x_breaks_n	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
x_reorder	For a categorical x variable, TRUE or FALSE of whether the x variable variable is to be reordered by the x variable. Defaults to FALSE.
x_rev	For a categorical variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
x_title	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap	Number of characters to wrap the x title to. Defaults to 50.
x_zero	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_balance	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
y_breaks_n	For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 5.
y_expand	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels	A function or named vector to modify y scale labels. Use function(x) x to keep labels untransformed.
y_na_rm	TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.
y_title	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap	Number of characters to wrap the y title to. Defaults to 50.
y_zero	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
y_zero_line	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.
mobile	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

```
library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(species) %>%
  summarise(body_mass_g = mean(body_mass_g, na.rm = TRUE))

gg_bar(plot_data,
        x_var = species,
        y_var = body_mass_g)
```

gg_bar_col

Bar ggplot that is coloured.

Description

Bar ggplot that is coloured, but not faceted.

Usage

```
gg_bar_col(
  data,
  x_var,
  y_var,
  col_var,
  text_var = NULL,
  stack = FALSE,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 1,
  alpha_line = 1,
  size_line = 0.5,
  size_width = NULL,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_balance = FALSE,
  x_expand = NULL,
  x_labels = NULL,
```

```

x_na_rm = FALSE,
x_breaks_n = 5,
x_rev = FALSE,
x_title = NULL,
x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,
y_balance = FALSE,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_na_rm = FALSE,
y_breaks_n = 5,
y_title = NULL,
y_title_wrap = 50,
y_zero = TRUE,
y_zero_line = NULL,
col_breaks_n = 4,
col_cuts = NULL,
col_intervals_right = TRUE,
col_labels = NULL,
col_legend_none = FALSE,
col_method = NULL,
col_na_rm = FALSE,
col_rev = FALSE,
col_title = NULL,
col_title_wrap = 25,
caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE),
mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>x_var</code>	Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
<code>y_var</code>	Unquoted numeric variable to be on the y scale. Required input.
<code>col_var</code>	Unquoted categorical or numeric variable to colour the bars. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to <code>NULL</code> .
<code>stack</code>	<code>TRUE</code> or <code>FALSE</code> of whether bars are to be positioned by "stack". Defaults to <code>FALSE</code> , which positions by "dodge".
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.

<code>pal_rev</code>	Reverses the palette. Defaults to FALSE.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 1.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of bars.
<code>size_width</code>	Width of bars. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 100.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 <code>expand</code> argument in ggplot2 scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>function(x) x</code> to keep labels untransformed.
<code>x_na_rm</code>	TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
<code>x_rev</code>	For a categorical variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 <code>expand</code> argument in ggplot2 scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>function(x) x</code> to keep labels untransformed.
<code>y_na_rm</code>	TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.
<code>y_breaks_n</code>	For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 5.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.

y_zero	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
y_zero_line	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.
col_breaks_n	For a numeric colour variable, the desired number of intervals on the colour scale.
col_cuts	A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.
col_intervals_right	For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut right-closed. Defaults to TRUE.
col_labels	A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case for categorical colour variables and scales::label_comma() for numeric. Use function(x) x to keep labels untransformed.
col_legend_none	TRUE or FALSE of whether to remove the legend.
col_method	The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".
col_na_rm	TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
col_rev	TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.
col_title	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
col_title_wrap	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.
mobile	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

```
library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(species, sex) %>%
  summarise(body_mass_g = mean(body_mass_g, na.rm = TRUE))
```

```
gg_bar_col(plot_data,  
           x_var = species,  
           y_var = body_mass_g,  
           col_var = sex,  
           col_na_rm = TRUE)
```

```
gg_bar_col(plot_data,  
           x_var = species,  
           y_var = body_mass_g,  
           col_var = sex,  
           col_na_rm = TRUE,  
           stack = TRUE,  
           size_width = 0.5)
```

gg_bar_col_facet *Bar ggplot that is coloured and faceted.*

Description

Bar ggplot that is coloured and faceted.

Usage

```
gg_bar_col_facet(  
  data,  
  x_var,  
  y_var,  
  col_var,  
  facet_var,  
  text_var = NULL,  
  stack = FALSE,  
  pal = NULL,  
  pal_na = "#7F7F7F",  
  pal_rev = FALSE,  
  alpha_fill = 1,  
  alpha_line = 1,  
  size_line = 0.5,  
  size_width = NULL,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  x_balance = FALSE,  
  x_breaks_n = 2,  
  x_expand = NULL,  
  x_labels = NULL,
```

```

x_na_rm = FALSE,
x_rev = FALSE,
x_title = NULL,
x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,
y_balance = FALSE,
y_breaks_n = 3,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_na_rm = FALSE,
y_title = NULL,
y_title_wrap = 50,
y_zero = TRUE,
y_zero_line = NULL,
col_breaks_n = 4,
col_cuts = NULL,
col_labels = NULL,
col_intervals_right = TRUE,
col_legend_none = FALSE,
col_method = NULL,
col_na_rm = FALSE,
col_rev = FALSE,
col_title = NULL,
col_title_wrap = 25,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE)
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>x_var</code>	Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
<code>y_var</code>	Unquoted numeric variable to be on the y scale. Required input.
<code>col_var</code>	Unquoted categorical or numeric variable to colour the bars. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to NULL.

<code>stack</code>	TRUE or FALSE of whether bars are to be positioned by "stack". Defaults to FALSE, which positions by "dodge".
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to FALSE.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 1.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of bars.
<code>size_width</code>	Width of bars. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 100.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>function(x) x</code> to keep labels untransformed.
<code>x_na_rm</code>	TRUE or FALSE of whether to include <code>x_var</code> NA values. Defaults to FALSE.
<code>x_rev</code>	For a categorical variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in <code>x_var</code> . Otherwise defaults to FALSE.
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
<code>y_breaks_n</code>	For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 4.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>function(x) x</code> to keep labels untransformed.

<code>y_na_rm</code>	TRUE or FALSE of whether to include <code>y_var</code> NA values. Defaults to FALSE.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
<code>y_zero_line</code>	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in <code>y_var</code> . Otherwise defaults to FALSE.
<code>col_breaks_n</code>	For a numeric colour variable, the desired number of intervals on the colour scale.
<code>col_cuts</code>	A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.
<code>col_labels</code>	A function or named vector to modify colour scale labels. Defaults to <code>snake-case::to_sentence_case</code> for categorical colour variables and <code>scales::label_comma()</code> for numeric. Use <code>function(x) x</code> to keep labels untransformed.
<code>col_intervals_right</code>	For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut right-closed. Defaults to TRUE.
<code>col_legend_none</code>	TRUE or FALSE of whether to remove the legend.
<code>col_method</code>	The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".
<code>col_na_rm</code>	TRUE or FALSE of whether to include <code>col_var</code> NA values. Defaults to FALSE.
<code>col_rev</code>	TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.
<code>col_title</code>	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>col_title_wrap</code>	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where <code>mobile</code> equals TRUE.
<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>function(x) x</code> to keep labels untransformed.
<code>facet_na_rm</code>	TRUE or FALSE of whether to include <code>facet_var</code> NA values. Defaults to FALSE.
<code>facet_ncol</code>	The number of columns of faceted plots.
<code>facet_nrow</code>	The number of rows of faceted plots.
<code>facet_rev</code>	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
<code>facet_scales</code>	Whether <code>facet_scales</code> should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 80.
<code>theme</code>	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(species, sex, island) %>%
  summarise(body_mass_g = mean(body_mass_g, na.rm = TRUE))

gg_bar_col_facet(plot_data,
                 x_var = species,
                 y_var = body_mass_g,
                 col_var = island,
                 facet_var = sex)
```

gg_bar_facet

Bar ggplot that is faceted.

Description

Bar ggplot that is faceted, but not coloured.

Usage

```
gg_bar_facet(
  data,
  x_var,
  y_var,
  facet_var,
  text_var = NULL,
  pal = pal_viridis_reorder(1),
  alpha_fill = 1,
  alpha_line = 1,
  size_line = 0.5,
  size_width = NULL,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_balance = FALSE,
  x_breaks_n = 2,
  x_expand = NULL,
  x_labels = NULL,
```

```

x_na_rm = FALSE,
x_rev = FALSE,
x_title = NULL,
x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,
y_balance = FALSE,
y_expand = c(0, 0),
y_breaks_n = 3,
y_labels = scales::label_comma(),
y_na_rm = FALSE,
y_title = NULL,
y_title_wrap = 50,
y_zero = TRUE,
y_zero_line = NULL,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE)
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>x_var</code>	Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
<code>y_var</code>	Unquoted numeric variable to be on the y scale. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to <code>NULL</code> .
<code>pal</code>	Character vector of hex codes.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 1.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of bars.
<code>size_width</code>	Width of bars. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.

<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 100.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>function(x) x</code> to keep labels untransformed.
<code>x_na_rm</code>	TRUE or FALSE of whether to include <code>x_var</code> NA values. Defaults to FALSE.
<code>x_rev</code>	For a categorical variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in <code>x_var</code> . Otherwise defaults to FALSE.
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_breaks_n</code>	For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 4.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>function(x) x</code> to keep labels untransformed.
<code>y_na_rm</code>	TRUE or FALSE of whether to include <code>y_var</code> NA values. Defaults to FALSE.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
<code>y_zero_line</code>	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in <code>y_var</code> . Otherwise defaults to FALSE.
<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>function(x) x</code> to keep labels untransformed.
<code>facet_na_rm</code>	TRUE or FALSE of whether to include <code>facet_var</code> NA values. Defaults to FALSE.
<code>facet_ncol</code>	The number of columns of faceted plots.

facet_nrow	The number of rows of faceted plots.
facet_rev	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
facet_scales	Whether facet_scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(species, sex) %>%
  summarise(body_mass_g = mean(body_mass_g, na.rm = TRUE))

gg_bar_facet(plot_data,
             x_var = sex,
             y_var = body_mass_g,
             facet_var = species)
```

gg_boxplot

Boxplot ggplot.

Description

Boxplot ggplot that is not coloured and not faceted.

Usage

```
gg_boxplot(
  data,
  x_var,
  y_var = NULL,
  pal = pal_viridis_reorder(1),
  alpha_fill = 0.5,
  alpha_line = 1,
  alpha_point = 1,
  size_line = 0.5,
```

```

size_point = 1.5,
size_width = 0.5,
title = NULL,
title_wrap = 80,
subtitle = NULL,
subtitle_wrap = 80,
x_expand = ggplot2::waiver(),
x_labels = snakecase::to_sentence_case,
x_na_rm = FALSE,
x_rev = FALSE,
x_title = NULL,
x_title_wrap = 50,
y_balance = FALSE,
y_breaks_n = 5,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_title = NULL,
y_title_wrap = 50,
y_zero = FALSE,
y_zero_line = NULL,
caption = NULL,
caption_wrap = 80,
stat = "boxplot",
ymin_var = NULL,
ylower_var = NULL,
ymiddle_var = NULL,
yupper_var = NULL,
ymax_var = NULL,
theme = gg_theme(gridlines_h = TRUE),
mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe generally in a structure to be transformed to boxplot statistics (or alternatively in a structure of summary boxplot statistics). Required input.
<code>x_var</code>	Unquoted categorical variable to be on the x scale (i.e. character, factor, logical). Required input.
<code>y_var</code>	Unquoted numeric variable to be on the y scale for when <code>stat = "boxplot"</code> is selected.
<code>pal</code>	Character vector of hex codes.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 0.5.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>alpha_point</code>	The opacity of the outlier points. Defaults to 1.
<code>size_line</code>	The size of the outlines of boxplots. Defaults to 0.5.

size_point	The size of the outlier points. Defaults to 1.5.
size_width	Width of boxes. Defaults to 0.5.
title	Title string.
title_wrap	Number of characters to wrap the title to. Defaults to 75.
subtitle	Subtitle string.
subtitle_wrap	Number of characters to wrap the subtitle to. Defaults to 75.
x_expand	A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.
x_na_rm	TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
x_rev	For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
x_title	x scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap	Number of characters to wrap the x title to. Defaults to 50.
y_balance	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
y_breaks_n	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
y_expand	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels	A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.
y_title	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap	Number of characters to wrap the y title to. Defaults to 50.
y_zero	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
y_zero_line	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
stat	String of "boxplot" or "identity". Defaults to "boxplot".
ymin_var	Unquoted numeric variable for minimum of whisker on the y scale for when stat = "identity" is selected.
ylower_var	Unquoted numeric variable for minimum of box on the y scale for when stat = "identity" is selected.

<code>ymiddle_var</code>	Unquoted numeric variable for middle of box on the y scale for when <code>stat = "identity"</code> is selected.
<code>yupper_var</code>	Unquoted numeric variable for maximum of box on the y scale for when <code>stat = "identity"</code> is selected.
<code>ymin_var</code>	Unquoted numeric variable for minimum of box on the y scale for when <code>stat = "identity"</code> is selected.
<code>ymin_var</code>	Unquoted numeric variable for minimum of whisker on the y scale for when <code>stat = "identity"</code> is selected.
<code>theme</code>	A <code>ggplot2</code> theme.
<code>mobile</code>	Whether the plot is to be displayed on a mobile device. Defaults to <code>FALSE</code> .

Value

A `ggplot` object.

Examples

```
library(dplyr)
library(simplevis)
library(palmerpenguins)

gg_boxplot(penguins,
           x_var = species,
           y_var = body_mass_g)

plot_data <- penguins %>%
  group_by(species) %>%
  summarise_boxplot_stats(body_mass_g)

outliers <- penguins %>%
  group_by(species) %>%
  summarise_boxplot_outliers(body_mass_g)

gg_boxplot(plot_data,
           x_var = species,
           ymin_var = min,
           ylower_var = lower,
           ymiddle_var = middle,
           yupper_var = upper,
           ymax_var = max,
           stat = "identity",
           y_title = "Body mass g",
           y_breaks_n = 4) +
  ggplot2::geom_point(ggplot2::aes(x = species, y = body_mass_g),
                    size = 0.75, col = pal_viridis_reorder(1),
                    data = outliers)
```

gg_boxplot_col	<i>Boxplot ggplot that is coloured</i>
----------------	--

Description

Boxplot ggplot that is coloured

Usage

```
gg_boxplot_col(  
  data,  
  x_var,  
  y_var = NULL,  
  col_var,  
  pal = NULL,  
  pal_na = "#7F7F7F",  
  pal_rev = FALSE,  
  alpha_fill = 0.5,  
  alpha_line = 1,  
  alpha_point = 1,  
  size_line = 0.5,  
  size_point = 1.5,  
  size_width = 0.5,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  x_expand = ggplot2::waiver(),  
  x_labels = snakecase::to_sentence_case,  
  x_na_rm = FALSE,  
  x_rev = FALSE,  
  x_title = NULL,  
  x_title_wrap = 50,  
  y_balance = FALSE,  
  y_expand = c(0, 0),  
  y_labels = scales::label_comma(),  
  y_breaks_n = 5,  
  y_title = NULL,  
  y_title_wrap = 50,  
  y_zero = FALSE,  
  y_zero_line = NULL,  
  col_labels = snakecase::to_sentence_case,  
  col_legend_none = FALSE,  
  col_na_rm = FALSE,  
  col_rev = FALSE,  
  col_title = NULL,  
  col_title_wrap = 25,  
)
```

```

caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE),
stat = "boxplot",
ymin_var = NULL,
ylower_var = NULL,
ymiddle_var = NULL,
yupper_var = NULL,
ymax_var = NULL,
mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe generally in a structure to be transformed to boxplot statistics (or alternatively in a structure of summary boxplot statistics). Required input.
<code>x_var</code>	Unquoted categorical variable to be on the x scale (i.e. character, factor, logical). Required input.
<code>y_var</code>	Unquoted numeric variable to be on the y scale for when <code>stat = "boxplot"</code> is selected.
<code>col_var</code>	Unquoted categorical variable to colour the fill of the boxes. Required input.
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to <code>FALSE</code> .
<code>alpha_fill</code>	The opacity of the fill. Defaults to 0.5.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>alpha_point</code>	The opacity of the outlier points. Defaults to 1.
<code>size_line</code>	The size of the outlines of boxplots. Defaults to 0.5.
<code>size_point</code>	The size of the outlier points. Defaults to 1.5.
<code>size_width</code>	Width of boxes. Defaults to 0.5.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 75.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. If <code>NULL</code> , categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_na_rm</code>	<code>TRUE</code> or <code>FALSE</code> of whether to include <code>x_var</code> NA values. Defaults to <code>FALSE</code> .
<code>x_rev</code>	For a categorical x variable, <code>TRUE</code> or <code>FALSE</code> of whether the x variable variable is reversed. Defaults to <code>FALSE</code> .

x_title	x scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap	Number of characters to wrap the x title to. Defaults to 50.
y_balance	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
y_expand	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels	A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.
y_breaks_n	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
y_title	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap	Number of characters to wrap the y title to. Defaults to 50.
y_zero	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
y_zero_line	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.
col_labels	A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case. Use ggplot2::waiver() to keep colour labels untransformed.
col_legend_none	TRUE or FALSE of whether to remove the legend.
col_na_rm	TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
col_rev	TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.
col_title	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
col_title_wrap	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.
stat	String of "boxplot" or "identity". Defaults to "boxplot".
ymin_var	Unquoted numeric variable for minimum of whisker on the y scale for when stat = "identity" is selected.
ylower_var	Unquoted numeric variable for minimum of box on the y scale for when stat = "identity" is selected.
ymiddle_var	Unquoted numeric variable for middle of box on the y scale for when stat = "identity" is selected.
yupper_var	Unquoted numeric variable for maximum of box on the y scale for when stat = "identity" is selected.

<code>ymin_var</code>	Unquoted numeric variable for minimum of whisker on the y scale for when <code>stat = "identity"</code> is selected.
<code>mobile</code>	Whether the plot is to be displayed on a mobile device. Defaults to <code>FALSE</code> .

Value

A `ggplot` object.

Examples

```
library(simplevis)
library(dplyr)
library(palmerpenguins)

gg_boxplot_col(penguins,
               x_var = species,
               y_var = body_mass_g,
               col_var = sex,
               col_na_rm = TRUE)

#For ggplotly, pipe in plotly::layout(boxmode = "group") layer

plot_data <- penguins %>%
  group_by(species, sex) %>%
  summarise_boxplot_stats(body_mass_g)

outliers <- penguins %>%
  group_by(species, sex) %>%
  summarise_boxplot_outliers(body_mass_g)

size_width <- 0.5

gg_boxplot_col(plot_data,
               x_var = species,
               ymin_var = min,
               ylower_var = lower,
               ymiddle_var = middle,
               yupper_var = upper,
               ymax_var = max,
               col_var = sex,
               size_width = size_width,
               stat = "identity",
               y_title = "Body mass g",
               y_breaks_n = 4,
               col_na_rm = TRUE) +
  ggplot2::geom_point(ggplot2::aes(x = species, y = body_mass_g, col = sex),
                     size = 0.75,
                     position = ggplot2::position_dodge(width = size_width),
                     data = outliers)
```

gg_boxplot_col_facet *Boxplot ggplot that is coloured and faceted.*

Description

Boxplot ggplot that is faceted, but not coloured.

Usage

```
gg_boxplot_col_facet(  
  data,  
  x_var,  
  y_var = NULL,  
  col_var,  
  facet_var,  
  pal = NULL,  
  pal_na = "#7F7F7F",  
  pal_rev = FALSE,  
  alpha_fill = 0.5,  
  alpha_line = 1,  
  alpha_point = 1,  
  size_line = 0.5,  
  size_point = 1.5,  
  size_width = 0.5,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  x_expand = ggplot2::waiver(),  
  x_labels = snakecase::to_sentence_case,  
  x_na_rm = FALSE,  
  x_rev = FALSE,  
  x_title = NULL,  
  x_title_wrap = 50,  
  y_balance = FALSE,  
  y_breaks_n = 3,  
  y_expand = c(0, 0),  
  y_labels = scales::label_comma(),  
  y_title = NULL,  
  y_title_wrap = 50,  
  y_zero = FALSE,  
  y_zero_line = NULL,  
  col_labels = snakecase::to_sentence_case,  
  col_legend_none = FALSE,  
  col_na_rm = FALSE,  
  col_rev = FALSE,  
  col_title = NULL,  
)
```

```

col_title_wrap = 25,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE),
stat = "boxplot",
ymin_var = NULL,
ylower_var = NULL,
ymiddle_var = NULL,
yupper_var = NULL,
ymax_var = NULL
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe generally in a structure to be transformed to boxplot statistics (or alternatively in a structure of summary boxplot statistics). Required input.
<code>x_var</code>	Unquoted categorical variable to be on the x scale (i.e. character, factor, logical). Required input.
<code>y_var</code>	Unquoted numeric variable to be on the y scale for when <code>stat = "boxplot"</code> is selected.
<code>col_var</code>	Unquoted categorical variable to colour the fill of the boxes. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to <code>FALSE</code> .
<code>alpha_fill</code>	The opacity of the fill. Defaults to 0.5.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>alpha_point</code>	The opacity of the outlier points. Defaults to 1.
<code>size_line</code>	The size of the outlines of boxplots. Defaults to 0.5.
<code>size_point</code>	The size of the outlier points. Defaults to 1.5.
<code>size_width</code>	Width of boxes. Defaults to 0.5.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 75.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.

<code>x_labels</code>	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_na_rm</code>	TRUE or FALSE of whether to include <code>x_var</code> NA values. Defaults to FALSE.
<code>x_rev</code>	For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
<code>x_title</code>	x scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
<code>y_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
<code>y_zero_line</code>	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in <code>y_var</code> . Otherwise defaults to FALSE.
<code>col_labels</code>	A function or named vector to modify colour scale labels. Defaults to <code>snake-case::to_sentence_case</code> . Use <code>ggplot2::waiver()</code> to keep colour labels untransformed.
<code>col_legend_none</code>	TRUE or FALSE of whether to remove the legend.
<code>col_na_rm</code>	TRUE or FALSE of whether to include <code>col_var</code> NA values. Defaults to FALSE.
<code>col_rev</code>	TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.
<code>col_title</code>	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>col_title_wrap</code>	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where <code>mobile</code> equals TRUE.
<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>ggplot2::waiver()</code> to keep facet labels untransformed.
<code>facet_na_rm</code>	TRUE or FALSE of whether to include <code>facet_var</code> NA values. Defaults to FALSE.
<code>facet_ncol</code>	The number of columns of faceted plots.
<code>facet_nrow</code>	The number of rows of faceted plots.

<code>facet_rev</code>	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
<code>facet_scales</code>	Whether <code>facet_scales</code> should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 80.
<code>theme</code>	A <code>ggplot2</code> theme.
<code>stat</code>	String of "boxplot" or "identity". Defaults to "boxplot".
<code>ymin_var</code>	Unquoted numeric variable for minimum of whisker on the y scale for when <code>stat = "identity"</code> is selected.
<code>ylower_var</code>	Unquoted numeric variable for minimum of box on the y scale for when <code>stat = "identity"</code> is selected.
<code>ymiddle_var</code>	Unquoted numeric variable for middle of box on the y scale for when <code>stat = "identity"</code> is selected.
<code>yupper_var</code>	Unquoted numeric variable for maximum of box on the y scale for when <code>stat = "identity"</code> is selected.
<code>ymin_var</code>	Unquoted numeric variable for maximum of whisker on the y scale for when <code>stat = "identity"</code> is selected.

Value

A `ggplot` object.

Examples

```
library(simplevis)
library(palmerpenguins)

penguins %>%
  dplyr::mutate(year = as.character(year)) %>%
  gg_boxplot_col_facet(x_var = year,
                      y_var = body_mass_g,
                      col_var = sex,
                      facet_var = species,
                      col_na_rm = TRUE,
                      x_labels = function(x) stringr::str_sub(x, 3, 4))

#For ggplotly, pipe in plotly::layout(boxmode = "group") layer
```

gg_boxplot_facet	<i>Boxplot ggplot that is faceted.</i>
------------------	--

Description

Boxplot ggplot that is faceted, but not coloured.

Usage

```
gg_boxplot_facet(  
  data,  
  x_var,  
  y_var = NULL,  
  facet_var,  
  pal = pal_viridis_reorder(1),  
  alpha_fill = 0.5,  
  alpha_line = 1,  
  alpha_point = 1,  
  size_line = 0.5,  
  size_point = 1.5,  
  size_width = 0.5,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  x_expand = ggplot2::waiver(),  
  x_labels = snakecase::to_sentence_case,  
  x_na_rm = FALSE,  
  x_rev = FALSE,  
  x_title = NULL,  
  x_title_wrap = 50,  
  y_balance = FALSE,  
  y_breaks_n = 3,  
  y_expand = c(0, 0),  
  y_labels = scales::label_comma(),  
  y_title = NULL,  
  y_title_wrap = 50,  
  y_zero = FALSE,  
  y_zero_line = NULL,  
  facet_labels = snakecase::to_sentence_case,  
  facet_na_rm = FALSE,  
  facet_ncol = NULL,  
  facet_nrow = NULL,  
  facet_rev = FALSE,  
  facet_scales = "fixed",  
  caption = NULL,  
  caption_wrap = 80,  
)
```

```

theme = gg_theme(gridlines_h = TRUE),
stat = "boxplot",
ymin_var = NULL,
ylower_var = NULL,
ymiddle_var = NULL,
yupper_var = NULL,
ymax_var = NULL
)

```

Arguments

<code>data</code>	An tibble or dataframe. Required input.
<code>x_var</code>	Unquoted categorical variable to be on the x scale (i.e. character, factor, logical). Required input.
<code>y_var</code>	Unquoted numeric variable to be on the y scale for when <code>stat = "boxplot"</code> is selected.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>pal</code>	Character vector of hex codes.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 0.5.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>alpha_point</code>	The opacity of the outlier points. Defaults to 1.
<code>size_line</code>	The size of the outlines of boxplots. Defaults to 0.5.
<code>size_point</code>	The size of the outlier points. Defaults to 1.5.
<code>size_width</code>	Width of boxes. Defaults to 0.5.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 75.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. If <code>NULL</code> , categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_na_rm</code>	<code>TRUE</code> or <code>FALSE</code> of whether to include <code>x_var</code> NA values. Defaults to <code>FALSE</code> .
<code>x_rev</code>	For a categorical x variable, <code>TRUE</code> or <code>FALSE</code> of whether the x variable variable is reversed. Defaults to <code>FALSE</code> .
<code>x_title</code>	x scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use <code>""</code> if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.

<code>y_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 <code>expand</code> argument in ggplot2 scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_title</code>	y scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use <code>""</code> if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, <code>TRUE</code> or <code>FALSE</code> of whether the minimum of the y scale is zero. Defaults to <code>TRUE</code> .
<code>y_zero_line</code>	For a numeric y variable, <code>TRUE</code> or <code>FALSE</code> whether to add a zero reference line to the y scale. Defaults to <code>TRUE</code> if there are positive and negative values in <code>y_var</code> . Otherwise defaults to <code>FALSE</code> .
<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>ggplot2::waiver()</code> to keep facet labels untransformed.
<code>facet_na_rm</code>	<code>TRUE</code> or <code>FALSE</code> of whether to include <code>facet_var</code> NA values. Defaults to <code>FALSE</code> .
<code>facet_ncol</code>	The number of columns of faceted plots.
<code>facet_nrow</code>	The number of rows of faceted plots.
<code>facet_rev</code>	<code>TRUE</code> or <code>FALSE</code> of whether the facet variable variable is reversed. Defaults to <code>FALSE</code> .
<code>facet_scales</code>	Whether <code>facet_scales</code> should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 80.
<code>theme</code>	A ggplot2 theme.
<code>stat</code>	String of "boxplot" or "identity". Defaults to "boxplot".
<code>ymin_var</code>	Unquoted numeric variable for minimum of whisker on the y scale for when <code>stat = "identity"</code> is selected.
<code>ylower_var</code>	Unquoted numeric variable for minimum of box on the y scale for when <code>stat = "identity"</code> is selected.
<code>ymiddle_var</code>	Unquoted numeric variable for middle of box on the y scale for when <code>stat = "identity"</code> is selected.
<code>yupper_var</code>	Unquoted numeric variable for maximum of box on the y scale for when <code>stat = "identity"</code> is selected.
<code>ymax_var</code>	Unquoted numeric variable for maximum of whisker on the y scale for when <code>stat = "identity"</code> is selected.

Value

A ggplot object.

Examples

```
library(dplyr)
library(simplevis)
library(palmerpenguins)

gg_boxplot_facet(penguins,
                 x_var = sex,
                 y_var = body_mass_g,
                 facet_var = species)
```

gg_density

Density ggplot.

Description

Density ggplot that is not coloured and not faceted.

Usage

```
gg_density(
  data,
  x_var,
  pal = pal_viridis_reorder(1),
  alpha_fill = 0.5,
  alpha_line = 1,
  size_line = 0.5,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_balance = FALSE,
  x_breaks_n = 5,
  x_expand = c(0, 0),
  x_labels = scales::label_comma(),
  x_title = NULL,
  x_title_wrap = 50,
  x_zero = FALSE,
  x_zero_line = NULL,
  y_breaks_n = 5,
  y_expand = c(0, 0),
  y_labels = scales::label_comma(),
  y_title = NULL,
  y_title_wrap = 50,
  caption = NULL,
  caption_wrap = 80,
  theme = gg_theme(gridlines_h = TRUE),
```

```

  model_bw = "nrd0",
  model_adjust = 1,
  model_kernel = "gaussian",
  model_n = 512,
  model_trim = FALSE,
  mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be transformed to density statistics. Required input.
<code>x_var</code>	Unquoted numeric variable to be on the x scale. Required input.
<code>pal</code>	Character vector of hex codes.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 0.5.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of density areas.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 75.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
<code>x_breaks_n</code>	For a numeric x variable, the desired number of intervals on the x scale, as calculated by the
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 <code>expand</code> argument in ggplot2 scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in <code>x_var</code> . Otherwise defaults to FALSE.
<code>y_breaks_n</code>	For a numeric y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 5.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 <code>expand</code> argument in ggplot2 scales functions.

y_labels	A function or named vector to modify y scale labels. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
y_title	y scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use <code>""</code> if you would like no title.
y_title_wrap	Number of characters to wrap the y title to. Defaults to 50.
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A <code>ggplot2</code> theme.
model_bw	The <code>bw</code> argument of the <code>stats::density</code> function. Defaults to <code>"nrd0"</code> .
model_adjust	The <code>adjust</code> argument of the <code>stats::density</code> function. Defaults to 1.
model_kernel	The <code>kernel</code> argument of the <code>stats::density</code> function. Defaults to <code>"gaussian"</code> .
model_n	The <code>n</code> argument of the <code>stats::density</code> function. Defaults to 512.
model_trim	<code>TRUE</code> or <code>FALSE</code> of whether to trim the tails. Defaults to <code>FALSE</code> .
mobile	Whether the plot is to be displayed on a mobile device. Defaults to <code>FALSE</code> .

Value

A `ggplot` object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_density(penguins,
           x_var = body_mass_g)
```

<code>gg_density_col</code>	<i>Density ggplot that is coloured.</i>
-----------------------------	---

Description

Density `ggplot` that is coloured but not faceted.

Usage

```
gg_density_col(
  data,
  x_var,
  col_var,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
```

```

alpha_fill = 0.5,
alpha_line = 1,
size_line = 0.5,
title = NULL,
title_wrap = 80,
subtitle = NULL,
subtitle_wrap = 80,
x_balance = FALSE,
x_breaks_n = 5,
x_expand = c(0, 0),
x_labels = scales::label_comma(),
x_title = NULL,
x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,
y_breaks_n = 5,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_title = NULL,
y_title_wrap = 50,
col_labels = snakecase::to_sentence_case,
col_legend_none = FALSE,
col_na_rm = FALSE,
col_title = NULL,
col_title_wrap = 25,
caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE),
model_bw = "nrd0",
model_adjust = 1,
model_kernel = "gaussian",
model_n = 512,
model_trim = FALSE,
mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be transformed to density statistics. Required input.
<code>x_var</code>	Unquoted numeric variable to be on the x scale. Required input.
<code>col_var</code>	Unquoted categorical variable to colour density areas. Required input.
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to FALSE.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 0.5.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.

<code>size_line</code>	The size of the outlines of density areas.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 75.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
<code>x_breaks_n</code>	For a numeric x variable, the desired number of intervals on the x scale, as calculated by the
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in <code>x_var</code> . Otherwise defaults to FALSE.
<code>y_breaks_n</code>	For a numeric y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 5.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>col_labels</code>	A function or named vector to modify colour scale labels. Use <code>ggplot2::waiver()</code> to keep colour labels untransformed.
<code>col_legend_none</code>	TRUE or FALSE of whether to remove the legend.
<code>col_na_rm</code>	TRUE or FALSE of whether to include <code>col_var</code> NA values. Defaults to FALSE.
<code>col_title</code>	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>col_title_wrap</code>	Number of characters to wrap the colour title to. Defaults to 25.
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 80.

theme	A ggplot2 theme.
model_bw	The bw argument of the stats::density function. Defaults to "nrd0".
model_adjust	The adjust argument of the stats::density function. Defaults to 1.
model_kernel	The kernel argument of the stats::density function. Defaults to "gaussian".
model_n	The n argument of the stats::density function. Defaults to 512.
model_trim	TRUE or FALSE of whether to trim the tails. Defaults to FALSE.
mobile	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_density_col(penguins,
               x_var = body_mass_g,
               col_var = sex,
               col_na_rm = TRUE)
```

gg_density_col_facet *Density ggplot that is coloured and faceted.*

Description

Density ggplot that is coloured and faceted.

Usage

```
gg_density_col_facet(
  data,
  x_var,
  col_var,
  facet_var,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 0.5,
  alpha_line = 1,
  size_line = 0.5,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
```

```

  subtitle_wrap = 80,
  x_breaks_n = 2,
  x_balance = FALSE,
  x_expand = c(0, 0),
  x_labels = scales::label_comma(),
  x_title = NULL,
  x_title_wrap = 50,
  x_zero = FALSE,
  x_zero_line = NULL,
  y_breaks_n = 3,
  y_expand = c(0, 0),
  y_labels = scales::label_comma(),
  y_title = NULL,
  y_title_wrap = 50,
  col_labels = snakecase::to_sentence_case,
  col_legend_none = FALSE,
  col_na_rm = FALSE,
  col_title = NULL,
  col_title_wrap = 25,
  facet_labels = snakecase::to_sentence_case,
  facet_na_rm = FALSE,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_rev = FALSE,
  facet_scales = "fixed",
  caption = NULL,
  caption_wrap = 80,
  theme = gg_theme(gridlines_h = TRUE),
  model_bw = "nrd0",
  model_adjust = 1,
  model_kernel = "gaussian",
  model_n = 512,
  model_trim = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be transformed to density statistics. Required input.
<code>x_var</code>	Unquoted numeric variable to be on the x scale. Required input.
<code>col_var</code>	Unquoted categorical variable to colour density areas. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to FALSE.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 0.5.

alpha_line	The opacity of the outline. Defaults to 1.
size_line	The size of the outlines of density areas.
title	Title string.
title_wrap	Number of characters to wrap the title to. Defaults to 75.
subtitle	Subtitle string.
subtitle_wrap	Number of characters to wrap the subtitle to. Defaults to 75.
x_breaks_n	For a numeric x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
x_balance	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
x_expand	A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.
x_title	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap	Number of characters to wrap the x title to. Defaults to 50.
x_zero	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_breaks_n	For a numeric y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 4.
y_expand	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels	A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.
y_title	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap	Number of characters to wrap the y title to. Defaults to 50.
col_labels	A function or named vector to modify colour scale labels. Use ggplot2::waiver() to keep colour labels untransformed.
col_legend_none	TRUE or FALSE of whether to remove the legend.
col_na_rm	TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
col_title	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
col_title_wrap	Number of characters to wrap the colour title to. Defaults to 25.

facet_labels	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>ggplot2::waiver()</code> to keep facet labels untransformed.
facet_na_rm	TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.
facet_ncol	The number of columns of faceted plots.
facet_nrow	The number of rows of faceted plots.
facet_rev	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
facet_scales	Whether facet_scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.
model_bw	The bw argument of the stats::density function. Defaults to "nrd0".
model_adjust	The adjust argument of the stats::density function. Defaults to 1.
model_kernel	The kernel argument of the stats::density function. Defaults to "gaussian".
model_n	The n argument of the stats::density function. Defaults to 512.
model_trim	TRUE or FALSE of whether to trim the tails. Defaults to FALSE.

Value

A ggplot object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_density_col_facet(penguins,
  x_var = body_mass_g,
  col_var = sex,
  facet_var = species,
  col_na_rm = TRUE)
```

gg_density_facet	<i>Density ggplot that is faceted.</i>
------------------	--

Description

Density ggplot that is faceted, but not coloured.

Usage

```
gg_density_facet(  
  data,  
  x_var,  
  facet_var,  
  pal = pal_viridis_reorder(1),  
  alpha_fill = 0.5,  
  alpha_line = 1,  
  size_line = 0.5,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  x_balance = FALSE,  
  x_breaks_n = 2,  
  x_expand = c(0, 0),  
  x_labels = scales::label_comma(),  
  x_title = NULL,  
  x_title_wrap = 50,  
  x_zero = FALSE,  
  x_zero_line = NULL,  
  y_breaks_n = 3,  
  y_expand = c(0, 0),  
  y_labels = scales::label_comma(),  
  y_title = NULL,  
  y_title_wrap = 50,  
  facet_labels = snakecase::to_sentence_case,  
  facet_na_rm = FALSE,  
  facet_ncol = NULL,  
  facet_nrow = NULL,  
  facet_rev = FALSE,  
  facet_scales = "fixed",  
  caption = NULL,  
  caption_wrap = 80,  
  theme = gg_theme(gridlines_h = TRUE),  
  model_bw = "nrd0",  
  model_adjust = 1,  
  model_kernel = "gaussian",  
  model_n = 512,  
  model_trim = FALSE  
)
```

Arguments

data	An ungrouped summarised tibble or dataframe in a structure to be transformed to density statistics. Required input.
x_var	Unquoted numeric variable to be on the x scale. Required input.
facet_var	Unquoted categorical variable to facet the data by. Required input.

<code>pal</code>	Character vector of hex codes.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 0.5.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of density areas.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 75.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
<code>x_breaks_n</code>	For a numeric x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in <code>x_var</code> . Otherwise defaults to FALSE.
<code>y_breaks_n</code>	For a numeric y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 4.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>ggplot2::waiver()</code> to keep facet labels untransformed.
<code>facet_na_rm</code>	TRUE or FALSE of whether to include <code>facet_var</code> NA values. Defaults to FALSE.
<code>facet_ncol</code>	The number of columns of faceted plots.
<code>facet_nrow</code>	The number of rows of faceted plots.

facet_rev	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
facet_scales	Whether facet_scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.
model_bw	The bw argument of the stats::density function. Defaults to "nrd0".
model_adjust	The adjust argument of the stats::density function. Defaults to 1.
model_kernel	The kernel argument of the stats::density function. Defaults to "gaussian".
model_n	The n argument of the stats::density function. Defaults to 512.
model_trim	TRUE or FALSE of whether to trim the tails. Defaults to FALSE.

Value

A ggplot object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_density_facet(penguins,
                 x_var = body_mass_g,
                 facet_var = species)
```

gg_hbar

Horizontal bar ggplot.

Description

Horizontal bar ggplot that is not coloured and not faceted.

Usage

```
gg_hbar(
  data,
  x_var,
  y_var,
  text_var = NULL,
  pal = pal_viridis_reorder(1),
  alpha_fill = 1,
  alpha_line = 1,
  size_line = 0.5,
```

```

size_width = NULL,
title = NULL,
title_wrap = 75,
subtitle = NULL,
subtitle_wrap = 75,
x_balance = FALSE,
x_breaks_n = 5,
x_expand = c(0, 0),
x_labels = scales::label_comma(),
x_na_rm = FALSE,
x_title = NULL,
x_title_wrap = 50,
x_zero = TRUE,
x_zero_line = NULL,
y_balance = FALSE,
y_breaks_n = 5,
y_expand = NULL,
y_labels = NULL,
y_na_rm = FALSE,
y_reorder = FALSE,
y_rev = FALSE,
y_title = NULL,
y_title_wrap = 50,
y_zero = FALSE,
y_zero_line = NULL,
caption = NULL,
caption_wrap = 75,
theme = gg_theme(gridlines_v = TRUE),
mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>x_var</code>	Unquoted numeric variable to be on the x scale. Required input.
<code>y_var</code>	Unquoted variable to be on the y scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to <code>NULL</code> .
<code>pal</code>	Character vector of hex codes.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 1.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of bars.
<code>size_width</code>	Width of bars. Defaults to 0.75.

<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 60.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 60.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. Use function(x) x to keep labels untransformed.
<code>x_na_rm</code>	TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to TRUE.
<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre. Defaults to FALSE.
<code>y_breaks_n</code>	For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 5.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use function(x) x to keep labels untransformed.
<code>y_na_rm</code>	TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.
<code>y_reorder</code>	For a categorical y variable, TRUE or FALSE of whether the y variable variable is to be reordered by the y variable. Defaults to FALSE.
<code>y_rev</code>	For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to FALSE.

y_zero_line	For a numeric y variable, TRUE or FALSE of whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 75.
theme	A ggplot2 theme.
mobile	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

```
library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(species) %>%
  summarise(body_mass_g = mean(body_mass_g, na.rm = TRUE))

gg_hbar(plot_data,
        x_var = body_mass_g,
        y_var = species)
```

gg_hbar_col

Horizontal bar ggplot that is coloured.

Description

Horizontal bar ggplot that is coloured, but not faceted.

Usage

```
gg_hbar_col(
  data,
  x_var,
  y_var,
  col_var,
  text_var = NULL,
  stack = FALSE,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 1,
```

```
alpha_line = 1,  
size_line = 0.5,  
size_width = NULL,  
title = NULL,  
title_wrap = 75,  
subtitle = NULL,  
subtitle_wrap = 75,  
x_balance = FALSE,  
x_breaks_n = 5,  
x_expand = c(0, 0),  
x_labels = scales::label_comma(),  
x_na_rm = FALSE,  
x_title = NULL,  
x_title_wrap = 50,  
x_zero = TRUE,  
x_zero_line = NULL,  
y_balance = FALSE,  
y_breaks_n = 5,  
y_expand = NULL,  
y_labels = NULL,  
y_na_rm = FALSE,  
y_rev = FALSE,  
y_title = NULL,  
y_title_wrap = 50,  
y_zero = FALSE,  
y_zero_line = NULL,  
col_breaks_n = 4,  
col_cuts = NULL,  
col_intervals_right = TRUE,  
col_labels = NULL,  
col_legend_none = FALSE,  
col_method = NULL,  
col_na_rm = FALSE,  
col_rev = FALSE,  
col_title = NULL,  
col_title_wrap = 25,  
caption = NULL,  
caption_wrap = 75,  
theme = gg_theme(gridlines_v = TRUE),  
mobile = FALSE  
)
```

Arguments

data	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
x_var	Unquoted numeric variable to be on the x scale. Required input.
y_var	Unquoted variable to be on the y scale (i.e. character, factor, logical, numeric,

	date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
col_var	Unquoted categorical or numeric variable to colour the bars. Required input.
text_var	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to NULL.
stack	TRUE or FALSE of whether bars are to be positioned by "stack". Defaults to FALSE, which positions by "dodge".
pal	Character vector of hex codes.
pal_na	The hex code or name of the NA colour to be used.
pal_rev	Reverses the palette. Defaults to FALSE.
alpha_fill	The opacity of the fill. Defaults to 1.
alpha_line	The opacity of the outline. Defaults to 1.
size_line	The size of the outlines of bars.
size_width	Width of bars. Defaults to 0.75.
title	Title string.
title_wrap	Number of characters to wrap the title to. Defaults to 60.
subtitle	Subtitle string.
subtitle_wrap	Number of characters to wrap the subtitle to. Defaults to 60.
x_balance	For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
x_breaks_n	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
x_expand	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
x_labels	A function or named vector to modify x scale labels. Use <code>function(x) x</code> to keep labels untransformed.
x_na_rm	TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
x_title	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap	Number of characters to wrap the x title to. Defaults to 50.
x_zero	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to TRUE.
x_zero_line	For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_balance	For a numeric y variable, add balance to the y scale so that zero is in the centre. Defaults to FALSE.
y_breaks_n	For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 4.
y_expand	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.

<code>y_labels</code>	A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>function(x) x</code> to keep labels untransformed.
<code>y_na_rm</code>	TRUE or FALSE of whether to include <code>y_var</code> NA values. Defaults to FALSE.
<code>y_rev</code>	For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to FALSE.
<code>y_zero_line</code>	For a numeric y variable, TRUE or FALSE of whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in <code>y_var</code> . Otherwise defaults to FALSE.
<code>col_breaks_n</code>	For a numeric colour variable, the desired number of intervals on the colour scale.
<code>col_cuts</code>	A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.
<code>col_intervals_right</code>	For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut right-closed. Defaults to TRUE.
<code>col_labels</code>	A function or named vector to modify colour scale labels. Defaults to <code>snake-case::to_sentence_case</code> for categorical colour variables and <code>scales::label_comma()</code> for numeric. Use <code>function(x) x</code> to keep labels untransformed.
<code>col_legend_none</code>	TRUE or FALSE of whether to remove the legend.
<code>col_method</code>	The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".
<code>col_na_rm</code>	TRUE or FALSE of whether to include <code>col_var</code> NA values. Defaults to FALSE.
<code>col_rev</code>	TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.
<code>col_title</code>	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>col_title_wrap</code>	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where <code>mobile</code> equals TRUE.
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 75.
<code>theme</code>	A ggplot2 theme.
<code>mobile</code>	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

```
library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(species, sex) %>%
  summarise(body_mass_g = mean(body_mass_g, na.rm = TRUE))

gg_hbar_col(plot_data,
            x_var = body_mass_g,
            y_var = species,
            col_var = sex,
            col_na_rm = TRUE)

gg_hbar_col(plot_data,
            x_var = body_mass_g,
            y_var = species,
            col_var = sex,
            col_na_rm = TRUE,
            stack = TRUE,
            size_width = 0.5)
```

gg_hbar_col_facet *Horizontal bar ggplot that is coloured and faceted.*

Description

Horizontal bar ggplot that is coloured and faceted.

Usage

```
gg_hbar_col_facet(
  data,
  x_var,
  y_var,
  col_var,
  facet_var,
  text_var = NULL,
  stack = FALSE,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 1,
  alpha_line = 1,
  size_line = 0.5,
  size_width = NULL,
```

```
title = NULL,  
title_wrap = 75,  
subtitle = NULL,  
subtitle_wrap = 75,  
x_breaks_n = 2,  
x_balance = FALSE,  
x_expand = c(0, 0),  
x_labels = scales::label_comma(),  
x_na_rm = FALSE,  
x_title = NULL,  
x_title_wrap = 50,  
x_zero = TRUE,  
x_zero_line = NULL,  
y_balance = FALSE,  
y_breaks_n = 3,  
y_expand = NULL,  
y_labels = NULL,  
y_na_rm = FALSE,  
y_rev = FALSE,  
y_title = NULL,  
y_title_wrap = 50,  
y_zero = FALSE,  
y_zero_line = NULL,  
col_breaks_n = 4,  
col_cuts = NULL,  
col_intervals_right = TRUE,  
col_labels = NULL,  
col_legend_none = FALSE,  
col_method = NULL,  
col_na_rm = FALSE,  
col_rev = FALSE,  
col_title = NULL,  
col_title_wrap = 25,  
facet_labels = snakecase::to_sentence_case,  
facet_na_rm = FALSE,  
facet_ncol = NULL,  
facet_nrow = NULL,  
facet_rev = FALSE,  
facet_scales = "fixed",  
caption = NULL,  
caption_wrap = 75,  
theme = gg_theme(gridlines_v = TRUE)  
)
```

Arguments

data An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.

<code>x_var</code>	Unquoted numeric variable to be on the x scale. Required input.
<code>y_var</code>	Unquoted variable to be on the y scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
<code>col_var</code>	Unquoted categorical or numeric variable to colour the bars. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to NULL.
<code>stack</code>	TRUE or FALSE of whether bars are to be positioned by "stack". Defaults to FALSE, which positions by "dodge".
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	TRUE or FALSE of whether to reverse the pal.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 1.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of bars.
<code>size_width</code>	Width of bars. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 60.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 60.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. Use <code>function(x) x</code> to keep labels untransformed.
<code>x_na_rm</code>	TRUE or FALSE of whether to include <code>x_var</code> NA values. Defaults to FALSE.
<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to TRUE.
<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in <code>x_var</code> . Otherwise defaults to FALSE.
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre. Defaults to FALSE.

<code>y_breaks_n</code>	For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 5.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. If <code>NULL</code> , categorical variable labels are converted to sentence case. Use <code>function(x) x</code> to keep labels untransformed.
<code>y_na_rm</code>	<code>TRUE</code> or <code>FALSE</code> of whether to include <code>y_var</code> NA values. Defaults to <code>FALSE</code> .
<code>y_rev</code>	For a categorical variable, <code>TRUE</code> or <code>FALSE</code> of whether the y variable variable is reversed. Defaults to <code>FALSE</code> .
<code>y_title</code>	y scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use <code>""</code> if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, <code>TRUE</code> or <code>FALSE</code> of whether the minimum of the y scale is zero. Defaults to <code>FALSE</code> .
<code>y_zero_line</code>	For a numeric y variable, <code>TRUE</code> or <code>FALSE</code> of whether to add a zero reference line to the y scale. Defaults to <code>TRUE</code> if there are positive and negative values in <code>y_var</code> . Otherwise defaults to <code>FALSE</code> .
<code>col_breaks_n</code>	For a numeric colour variable, the desired number of intervals on the colour scale.
<code>col_cuts</code>	A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either <code>-Inf</code> or <code>0</code> , and the final number <code>Inf</code> . If "quantile" is selected, the first number in the vector should be <code>0</code> and the final number should be <code>1</code> . Defaults to quartiles.
<code>col_intervals_right</code>	For a numeric colour variable, <code>TRUE</code> or <code>FALSE</code> of whether bins or quantiles are to be cut right-closed. Defaults to <code>TRUE</code> .
<code>col_labels</code>	A function or named vector to modify colour scale labels. Defaults to <code>snake-case::to_sentence_case</code> for categorical colour variables and <code>scales::label_comma()</code> for numeric. Use <code>function(x) x</code> to keep labels untransformed.
<code>col_legend_none</code>	<code>TRUE</code> or <code>FALSE</code> of whether to remove the legend.
<code>col_method</code>	The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".
<code>col_na_rm</code>	<code>TRUE</code> or <code>FALSE</code> of whether to include <code>col_var</code> NA values. Defaults to <code>FALSE</code> .
<code>col_rev</code>	<code>TRUE</code> or <code>FALSE</code> of whether the colour scale is reversed. Defaults to <code>FALSE</code> .
<code>col_title</code>	Colour title string for the legend. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use <code>""</code> if you would like no title.
<code>col_title_wrap</code>	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where <code>mobile</code> equals <code>TRUE</code> .
<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>function(x) x</code> to keep labels untransformed.
<code>facet_na_rm</code>	<code>TRUE</code> or <code>FALSE</code> of whether to include <code>facet_var</code> NA values. Defaults to <code>FALSE</code> .

facet_ncol	The number of columns of faceted plots.
facet_nrow	The number of rows of faceted plots.
facet_rev	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
facet_scales	Whether facet_scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 75.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(species, sex, island) %>%
  summarise(body_mass_g = mean(body_mass_g, na.rm = TRUE))

gg_hbar_col_facet(plot_data,
                  x_var = body_mass_g,
                  y_var = species,
                  col_var = island,
                  facet_var = sex)
```

gg_hbar_facet	<i>Horizontal bar ggplot that is faceted.</i>
---------------	---

Description

Horizontal bar ggplot that is faceted, but not coloured.

Usage

```
gg_hbar_facet(
  data,
  x_var,
  y_var,
  facet_var,
  text_var = NULL,
  pal = pal_viridis_reorder(1),
```

```

alpha_fill = 1,
alpha_line = 1,
size_line = 0.5,
size_width = NULL,
title = NULL,
title_wrap = 75,
subtitle = NULL,
subtitle_wrap = 75,
x_balance = FALSE,
x_breaks_n = 2,
x_expand = c(0, 0),
x_labels = scales::label_comma(),
x_na_rm = FALSE,
x_title = NULL,
x_title_wrap = 50,
x_zero = TRUE,
x_zero_line = NULL,
y_balance = FALSE,
y_breaks_n = 3,
y_expand = NULL,
y_labels = NULL,
y_na_rm = FALSE,
y_rev = FALSE,
y_title = NULL,
y_title_wrap = 50,
y_zero = FALSE,
y_zero_line = NULL,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 75,
theme = gg_theme(gridlines_v = TRUE)
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>x_var</code>	Unquoted numeric variable to be on the x scale. Required input.
<code>y_var</code>	Unquoted variable to be on the y scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.

<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to <code>NULL</code> .
<code>pal</code>	Character vector of hex codes.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 1.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of bars.
<code>size_width</code>	Width of bars. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 60.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 60.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. Use <code>function(x) x</code> to keep labels untransformed.
<code>x_na_rm</code>	<code>TRUE</code> or <code>FALSE</code> of whether to include <code>x_var</code> NA values. Defaults to <code>FALSE</code> .
<code>x_title</code>	X scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, <code>TRUE</code> or <code>FALSE</code> of whether the minimum of the x scale is zero. Defaults to <code>TRUE</code> .
<code>x_zero_line</code>	For a numeric x variable, <code>TRUE</code> or <code>FALSE</code> whether to add a zero reference line to the x scale. Defaults to <code>TRUE</code> if there are positive and negative values in <code>x_var</code> . Otherwise defaults to <code>FALSE</code> .
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre. Defaults to <code>FALSE</code> .
<code>y_breaks_n</code>	For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 4.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. If <code>NULL</code> , categorical variable labels are converted to sentence case. Use <code>function(x) x</code> to keep labels untransformed.
<code>y_na_rm</code>	<code>TRUE</code> or <code>FALSE</code> of whether to include <code>y_var</code> NA values. Defaults to <code>FALSE</code> .
<code>y_rev</code>	For a categorical variable, <code>TRUE</code> or <code>FALSE</code> of whether the y variable variable is reversed. Defaults to <code>FALSE</code> .

<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to FALSE.
<code>y_zero_line</code>	For a numeric y variable, TRUE or FALSE of whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in <code>y_var</code> . Otherwise defaults to FALSE.
<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>function(x) x</code> to keep labels untransformed.
<code>facet_na_rm</code>	TRUE or FALSE of whether to include <code>facet_var</code> NA values. Defaults to FALSE.
<code>facet_ncol</code>	The number of columns of faceted plots.
<code>facet_nrow</code>	The number of rows of faceted plots.
<code>facet_rev</code>	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
<code>facet_scales</code>	Whether <code>facet_scales</code> should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 75.
<code>theme</code>	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(species, sex) %>%
  summarise(body_mass_g = mean(body_mass_g, na.rm = TRUE))

gg_hbar_facet(plot_data,
              x_var = body_mass_g,
              y_var = sex,
              facet_var = species)
```

`gg_hboxplot`*Horizontal boxplot ggplot.*

Description

Horizontal boxplot ggplot that is not coloured and not faceted.

Usage

```
gg_hboxplot(  
  data,  
  x_var = NULL,  
  y_var,  
  pal = pal_viridis_reorder(1),  
  alpha_fill = 0.5,  
  alpha_line = 1,  
  alpha_point = 1,  
  size_line = 0.5,  
  size_point = 1.5,  
  size_width = 0.5,  
  title = NULL,  
  title_wrap = 75,  
  subtitle = NULL,  
  subtitle_wrap = 75,  
  x_balance = FALSE,  
  x_breaks_n = 5,  
  x_expand = c(0, 0),  
  x_labels = scales::label_comma(),  
  x_title = NULL,  
  x_title_wrap = 50,  
  x_zero = FALSE,  
  x_zero_line = NULL,  
  y_expand = ggplot2::waiver(),  
  y_labels = snakecase::to_sentence_case,  
  y_na_rm = FALSE,  
  y_rev = FALSE,  
  y_title = NULL,  
  y_title_wrap = 50,  
  caption = NULL,  
  caption_wrap = 75,  
  theme = gg_theme(gridlines_v = TRUE),  
  stat = "boxplot",  
  xmin_var = NULL,  
  xlower_var = NULL,  
  xmiddle_var = NULL,  
  xupper_var = NULL,  
  xmax_var = NULL,  
)
```

```

  mobile = FALSE
)
```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe generally in a structure to be transformed to boxplot statistics (or alternatively in a structure of summary boxplot statistics). Required input.
<code>x_var</code>	Unquoted numeric variable to be on the x scale for when <code>stat = "boxplot"</code> is selected.
<code>y_var</code>	Unquoted categorical variable to be on the y scale (i.e. character, factor, or logical). Required input.
<code>pal</code>	Character vector of hex codes.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 0.5.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>alpha_point</code>	The opacity of the outlier points. Defaults to 1.
<code>size_line</code>	The size of the outlines of boxplots.
<code>size_point</code>	The size of the outlier points. Defaults to 1.5.
<code>size_width</code>	Width of boxes. Defaults to 0.5.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 60.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 60.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_title</code>	X scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use <code>""</code> if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, <code>TRUE</code> or <code>FALSE</code> of whether the minimum of the x scale is zero. Defaults to <code>FALSE</code> .
<code>x_zero_line</code>	For a numeric x variable, <code>TRUE</code> or <code>FALSE</code> whether to add a zero reference line to the x scale. Defaults to <code>TRUE</code> if there are positive and negative values in <code>x_var</code> . Otherwise defaults to <code>FALSE</code> .
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.

<code>y_labels</code>	A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_na_rm</code>	TRUE or FALSE of whether to include <code>y_var</code> NA values. Defaults to FALSE.
<code>y_rev</code>	For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 75.
<code>theme</code>	A ggplot2 theme.
<code>stat</code>	String of "boxplot" or "identity". Defaults to "boxplot".
<code>xmin_var</code>	Unquoted numeric variable for minimum of whisker on the x scale for when <code>stat = "identity"</code> is selected.
<code>xlower_var</code>	Unquoted numeric variable for minimum of box on the x scale for when <code>stat = "identity"</code> is selected.
<code>xmiddle_var</code>	Unquoted numeric variable for middle of box on the x scale for when <code>stat = "identity"</code> is selected.
<code>xupper_var</code>	Unquoted numeric variable for maximum of box on the x scale for when <code>stat = "identity"</code> is selected.
<code>xmax_var</code>	Unquoted numeric variable for maximum of whisker on the x scale for when <code>stat = "identity"</code> is selected.
<code>mobile</code>	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

```
library(simplevis)
library(dplyr)
library(palmerpenguins)

gg_hboxplot(penguins,
            x_var = body_mass_g,
            y_var = species)

plot_data <- penguins %>%
  group_by(species) %>%
  summarise_boxplot_stats(body_mass_g)

outliers <- penguins %>%
  group_by(species) %>%
  summarise_boxplot_outliers(body_mass_g)
```

```
gg_hboxplot(plot_data,
            xmin_var = min,
            xlower_var = lower,
            xmiddle_var = middle,
            xupper_var = upper,
            xmax_var = max,
            y_var = species,
            stat = "identity",
            x_title = "Body mass g",
            x_breaks_n = 4) +
ggplot2::geom_point(ggplot2::aes(x = species, y = body_mass_g),
                    size = 0.75, col = pal_viridis_reorder(1),
                    data = outliers)
```

gg_hboxplot_col	<i>Horizontal boxplot ggplot that is coloured.</i>
-----------------	--

Description

Horizontal boxplot ggplot that is coloured, but not faceted.

Usage

```
gg_hboxplot_col(
  data,
  x_var = NULL,
  y_var,
  col_var,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 0.5,
  alpha_line = 1,
  alpha_point = 1,
  size_line = 0.5,
  size_point = 1.5,
  size_width = 0.5,
  title = NULL,
  title_wrap = 75,
  subtitle = NULL,
  subtitle_wrap = 75,
  x_balance = FALSE,
  x_breaks_n = 5,
  x_expand = c(0, 0),
  x_labels = scales::label_comma(),
  x_title = NULL,
```

```

x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,
y_expand = ggplot2::waiver(),
y_labels = snakecase::to_sentence_case,
y_na_rm = FALSE,
y_rev = FALSE,
y_title = NULL,
y_title_wrap = 50,
col_labels = stringr::str_to_sentence,
col_legend_none = FALSE,
col_na_rm = FALSE,
col_rev = FALSE,
col_title = NULL,
col_title_wrap = 25,
caption = NULL,
caption_wrap = 75,
theme = gg_theme(gridlines_v = TRUE),
stat = "boxplot",
xmin_var = NULL,
xlower_var = NULL,
xmiddle_var = NULL,
xupper_var = NULL,
xmax_var = NULL,
mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe generally in a structure to be transformed to boxplot statistics (or alternatively in a structure of summary boxplot statistics). Required input.
<code>x_var</code>	Unquoted numeric variable to be on the x scale for when <code>stat = "boxplot"</code> is selected.
<code>y_var</code>	Unquoted categorical variable to be on the y scale (i.e. character, factor, or logical). Required input.
<code>col_var</code>	Unquoted categorical or numeric variable to colour the boxplots. Required input.
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to <code>FALSE</code> .
<code>alpha_fill</code>	The opacity of the fill. Defaults to 0.5.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>alpha_point</code>	The opacity of the outlier points. Defaults to 1.
<code>size_line</code>	The size of the outlines of boxplots.
<code>size_point</code>	The size of the outlier points. Defaults to 1.5.

size_width	Width of boxes. Defaults to 0.5.
title	Title string.
title_wrap	Number of characters to wrap the title to. Defaults to 60.
subtitle	Subtitle string.
subtitle_wrap	Number of characters to wrap the subtitle to. Defaults to 60.
x_balance	For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
x_breaks_n	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
x_expand	A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels	A function or named vector to modify x scale labels. Use ggplot2::waiver() to keep x labels untransformed.
x_title	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap	Number of characters to wrap the x title to. Defaults to 50.
x_zero	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line	For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_expand	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels	A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep y labels untransformed.
y_na_rm	TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.
y_rev	For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
y_title	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap	Number of characters to wrap the y title to. Defaults to 50.
col_labels	A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case for categorical colour variables and scales::number for numeric colour variables. Use ggplot2::waiver() to keep colour labels untransformed.
col_legend_none	TRUE or FALSE of whether to remove the legend.
col_na_rm	TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
col_rev	TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.
col_title	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

<code>col_title_wrap</code>	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where <code>mobile</code> equals <code>TRUE</code> .
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 75.
<code>theme</code>	A <code>ggplot2</code> theme.
<code>stat</code>	String of "boxplot" or "identity". Defaults to "boxplot".
<code>xmin_var</code>	Unquoted numeric variable for minimum of whisker on the x scale for when <code>stat = "identity"</code> is selected.
<code>xlower_var</code>	Unquoted numeric variable for minimum of box on the x scale for when <code>stat = "identity"</code> is selected.
<code>xmiddle_var</code>	Unquoted numeric variable for middle of box on the x scale for when <code>stat = "identity"</code> is selected.
<code>xupper_var</code>	Unquoted numeric variable for maximum of box on the x scale for when <code>stat = "identity"</code> is selected.
<code>xmax_var</code>	Unquoted numeric variable for maximum of whisker on the x scale for when <code>stat = "identity"</code> is selected.
<code>mobile</code>	Whether the plot is to be displayed on a mobile device. Defaults to <code>FALSE</code> .

Value

A `ggplot` object.

Examples

```
library(simplevis)
library(dplyr)
library(palmerpenguins)

gg_hboxplot_col(penguins,
  x_var = body_mass_g,
  y_var = species,
  col_var = sex,
  col_na_rm = TRUE)

#For ggplotly, pipe in plotly::layout(boxmode = "group") layer

plot_data <- penguins %>%
  group_by(species, sex) %>%
  summarise_boxplot_stats(body_mass_g)

outliers <- penguins %>%
  group_by(species, sex) %>%
  summarise_boxplot_outliers(body_mass_g)

size_width <- 0.5

gg_hboxplot_col(plot_data,
  xmin_var = min,
```

```

xlower_var = lower,
xmiddle_var = middle,
xupper_var = upper,
xmax_var = max,
y_var = species,
col_var = sex,
size_width = size_width,
stat = "identity",
x_title = "Body mass g",
x_breaks_n = 4,
col_na_rm = TRUE) +
ggplot2::geom_point(ggplot2::aes(x = species, y = body_mass_g, col = sex),
  size = 0.75,
  position = ggplot2::position_dodge(width = size_width),
  data = outliers)

```

gg_hboxplot_col_facet *Horizontal boxplot ggplot that is coloured and faceted.*

Description

Horizontal boxplot ggplot that is coloured and faceted.

Usage

```

gg_hboxplot_col_facet(
  data,
  x_var = NULL,
  y_var,
  col_var,
  facet_var,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 0.5,
  alpha_line = 1,
  alpha_point = 1,
  size_line = 0.5,
  size_point = 1.5,
  size_width = 0.5,
  title = NULL,
  title_wrap = 75,
  subtitle = NULL,
  subtitle_wrap = 75,
  x_breaks_n = 2,
  x_balance = FALSE,
  x_expand = c(0, 0),

```

```

x_labels = scales::label_comma(),
x_title = NULL,
x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,
y_expand = ggplot2::waiver(),
y_labels = snakecase::to_sentence_case,
y_na_rm = FALSE,
y_rev = FALSE,
y_title = NULL,
y_title_wrap = 50,
col_labels = stringr::str_to_sentence,
col_legend_none = FALSE,
col_na_rm = FALSE,
col_rev = FALSE,
col_title = NULL,
col_title_wrap = 25,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 75,
theme = gg_theme(gridlines_v = TRUE),
stat = "boxplot",
xmin_var = NULL,
xlower_var = NULL,
xmiddle_var = NULL,
xupper_var = NULL,
xmax_var = NULL
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe generally in a structure to be transformed to boxplot statistics (or alternatively in a structure of summary boxplot statistics). Required input.
<code>x_var</code>	Unquoted numeric variable to be on the x scale for when <code>stat = "boxplot"</code> is selected.
<code>y_var</code>	Unquoted categorical variable to be on the y scale (i.e. character, factor, or logical). Required input.
<code>col_var</code>	Unquoted categorical or numeric variable to colour the boxplots. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>pal</code>	Character vector of hex codes.

pal_na	The hex code or name of the NA colour to be used.
pal_rev	TRUE or FALSE of whether to reverse the pal.
alpha_fill	The opacity of the fill. Defaults to 0.5.
alpha_line	The opacity of the outline. Defaults to 1.
alpha_point	The opacity of the outlier points. Defaults to 1.
size_line	The size of the outlines of boxplots.
size_point	The size of the outlier points. Defaults to 1.5.
size_width	Width of boxes. Defaults to 0.5.
title	Title string.
title_wrap	Number of characters to wrap the title to. Defaults to 60.
subtitle	Subtitle string.
subtitle_wrap	Number of characters to wrap the subtitle to. Defaults to 60.
x_breaks_n	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
x_balance	For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
x_expand	A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels	A function or named vector to modify x scale labels. Use ggplot2::waiver() to keep x labels untransformed.
x_title	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap	Number of characters to wrap the x title to. Defaults to 50.
x_zero	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line	For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_expand	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels	A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep y labels untransformed.
y_na_rm	TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.
y_rev	For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
y_title	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap	Number of characters to wrap the y title to. Defaults to 50.

<code>col_labels</code>	A function or named vector to modify colour scale labels. Defaults to <code>snake-case::to_sentence_case</code> for categorical colour variables and <code>scales::number</code> for numeric colour variables. Use <code>ggplot2::waiver()</code> to keep colour labels untransformed.
<code>col_legend_none</code>	TRUE or FALSE of whether to remove the legend.
<code>col_na_rm</code>	TRUE or FALSE of whether to include <code>col_var</code> NA values. Defaults to FALSE.
<code>col_rev</code>	TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.
<code>col_title</code>	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>col_title_wrap</code>	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where <code>mobile</code> equals TRUE.
<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>ggplot2::waiver()</code> to keep facet labels untransformed.
<code>facet_na_rm</code>	TRUE or FALSE of whether to include <code>facet_var</code> NA values. Defaults to FALSE.
<code>facet_ncol</code>	The number of columns of faceted plots.
<code>facet_nrow</code>	The number of rows of faceted plots.
<code>facet_rev</code>	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
<code>facet_scales</code>	Whether <code>facet_scales</code> should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 75.
<code>theme</code>	A <code>ggplot2</code> theme.
<code>stat</code>	String of "boxplot" or "identity". Defaults to "boxplot".
<code>xmin_var</code>	Unquoted numeric variable for minimum of whisker on the x scale for when <code>stat = "identity"</code> is selected.
<code>xlower_var</code>	Unquoted numeric variable for minimum of box on the x scale for when <code>stat = "identity"</code> is selected.
<code>xmiddle_var</code>	Unquoted numeric variable for middle of box on the x scale for when <code>stat = "identity"</code> is selected.
<code>xupper_var</code>	Unquoted numeric variable for maximum of box on the x scale for when <code>stat = "identity"</code> is selected.
<code>xmax_var</code>	Unquoted numeric variable for maximum of whisker on the x scale for when <code>stat = "identity"</code> is selected.

Value

A `ggplot` object.

Examples

```

library(simplevis)
library(palmerpenguins)

penguins %>%
  dplyr::mutate(year = as.character(year)) %>%
  gg_hboxplot_col_facet(x_var = body_mass_g,
                       y_var = year,
                       col_var = sex,
                       facet_var = species,
                       col_na_rm = TRUE)

#For ggplotly, pipe in plotly::layout(boxmode = "group") layer

```

gg_hboxplot_facet	<i>Horizontal boxplot ggplot that is faceted.</i>
-------------------	---

Description

Horizontal boxplot ggplot that is faceted, but not coloured.

Usage

```

gg_hboxplot_facet(
  data,
  x_var = NULL,
  y_var,
  facet_var,
  pal = pal_viridis_reorder(1),
  alpha_fill = 0.5,
  alpha_line = 1,
  alpha_point = 1,
  size_line = 0.5,
  size_point = 1.5,
  size_width = 0.5,
  title = NULL,
  title_wrap = 75,
  subtitle = NULL,
  subtitle_wrap = 75,
  x_balance = FALSE,
  x_breaks_n = 2,
  x_expand = c(0, 0),
  x_labels = scales::label_comma(),
  x_title = NULL,
  x_title_wrap = 50,
  x_zero = FALSE,

```

```

x_zero_line = NULL,
y_expand = ggplot2::waiver(),
y_labels = snakecase::to_sentence_case,
y_na_rm = FALSE,
y_rev = FALSE,
y_title = NULL,
y_title_wrap = 50,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 75,
theme = gg_theme(gridlines_v = TRUE),
stat = "boxplot",
xmin_var = NULL,
xlower_var = NULL,
xmiddle_var = NULL,
xupper_var = NULL,
xmax_var = NULL
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe generally in a structure to be transformed to boxplot statistics (or alternatively in a structure of summary boxplot statistics). Required input.
<code>x_var</code>	Unquoted numeric variable to be on the x scale for when <code>stat = "boxplot"</code> is selected.
<code>y_var</code>	Unquoted categorical variable to be on the y scale (i.e. character, factor, or logical). Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>pal</code>	Character vector of hex codes.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 0.5.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>alpha_point</code>	The opacity of the outlier points. Defaults to 1.
<code>size_line</code>	The size of the outlines of boxplots.
<code>size_point</code>	The size of the outlier points. Defaults to 1.5.
<code>size_width</code>	Width of boxes. Defaults to 0.5.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 60.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 60.

<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in <code>x_var</code> . Otherwise defaults to FALSE.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_na_rm</code>	TRUE or FALSE of whether to include <code>y_var</code> NA values. Defaults to FALSE.
<code>y_rev</code>	For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>ggplot2::waiver()</code> to keep facet labels untransformed.
<code>facet_na_rm</code>	TRUE or FALSE of whether to include <code>facet_var</code> NA values. Defaults to FALSE.
<code>facet_ncol</code>	The number of columns of faceted plots.
<code>facet_nrow</code>	The number of rows of faceted plots.
<code>facet_rev</code>	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
<code>facet_scales</code>	Whether <code>facet_scales</code> should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 75.
<code>theme</code>	A ggplot2 theme.
<code>stat</code>	String of "boxplot" or "identity". Defaults to "boxplot".

xmin_var	Unquoted numeric variable for minimum of whisker on the x scale for when stat = "identity" is selected.
xlower_var	Unquoted numeric variable for minimum of box on the x scale for when stat = "identity" is selected.
xmiddle_var	Unquoted numeric variable for middle of box on the x scale for when stat = "identity" is selected.
xupper_var	Unquoted numeric variable for maximum of box on the x scale for when stat = "identity" is selected.
xmax_var	Unquoted numeric variable for maximum of whisker on the x scale for when stat = "identity" is selected.

Value

A ggplot object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_hboxplot_facet(penguins,
                  x_var = body_mass_g,
                  y_var = sex,
                  facet_var = species,
                  y_na_rm = TRUE)
```

gg_histogram

Histogram ggplot.

Description

histogram ggplot that is not coloured and not faceted.

Usage

```
gg_histogram(
  data,
  x_var,
  pal = pal_viridis_reorder(1),
  alpha_fill = 0.5,
  alpha_line = 1,
  size_line = 0.5,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
```

```

x_bins_n = 30,
x_breaks_n = 5,
x_expand = c(0, 0),
x_labels = scales::label_comma(),
x_title = NULL,
x_title_wrap = 50,
y_breaks_n = 5,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_title = NULL,
y_title_wrap = 50,
caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE),
mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be transformed to histogram statistics. Required input.
<code>x_var</code>	Unquoted numeric variable to be on the x scale. Required input.
<code>pal</code>	Character vector of hex codes.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 0.5.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of histogram areas.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 75.
<code>x_bins_n</code>	Number of bins to aim for. Defaults to 30.
<code>x_breaks_n</code>	For a numeric x variable, the desired number of intervals on the x scale, as calculated by the
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. If <code>NULL</code> , categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_title</code>	X scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use <code>""</code> if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>y_breaks_n</code>	For a numeric y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 5.

y_expand	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels	A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.
y_title	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap	Number of characters to wrap the y title to. Defaults to 50.
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.
mobile	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_histogram(penguins,
             x_var = body_mass_g)
```

gg_histogram_col *Histogram ggplot that is coloured.*

Description

histogram ggplot that is coloured but not faceted.

Usage

```
gg_histogram_col(
  data,
  x_var,
  col_var,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 0.5,
  alpha_line = 1,
  size_line = 0.5,
  title = NULL,
  title_wrap = 80,
```

```

  subtitle = NULL,
  subtitle_wrap = 80,
  x_bins_n = 30,
  x_breaks_n = 5,
  x_expand = c(0, 0),
  x_labels = scales::label_comma(),
  x_title = NULL,
  x_title_wrap = 50,
  y_breaks_n = 5,
  y_expand = c(0, 0),
  y_labels = scales::label_comma(),
  y_title = NULL,
  y_title_wrap = 50,
  col_labels = snakecase::to_sentence_case,
  col_legend_none = FALSE,
  col_na_rm = FALSE,
  col_title = NULL,
  col_title_wrap = 25,
  caption = NULL,
  caption_wrap = 80,
  theme = gg_theme(gridlines_h = TRUE),
  mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be transformed to histogram statistics. Required input.
<code>x_var</code>	Unquoted numeric variable to be on the x scale. Required input.
<code>col_var</code>	Unquoted categorical variable to colour histogram areas. Required input.
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to FALSE.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 0.5.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of histogram areas.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 75.
<code>x_bins_n</code>	Number of bins to aim for. Defaults to 30.
<code>x_breaks_n</code>	For a numeric x variable, the desired number of intervals on the x scale, as calculated by the
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 <code>expand</code> argument in ggplot2 scales functions.

<code>x_labels</code>	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>y_breaks_n</code>	For a numeric y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 5.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>col_labels</code>	A function or named vector to modify colour scale labels. Use <code>ggplot2::waiver()</code> to keep colour labels untransformed.
<code>col_legend_none</code>	TRUE or FALSE of whether to remove the legend.
<code>col_na_rm</code>	TRUE or FALSE of whether to include <code>col_var</code> NA values. Defaults to FALSE.
<code>col_title</code>	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>col_title_wrap</code>	Number of characters to wrap the colour title to. Defaults to 25.
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 80.
<code>theme</code>	A <code>ggplot2</code> theme.
<code>mobile</code>	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A `ggplot` object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_histogram_col(penguins,
  x_var = body_mass_g,
  col_var = sex,
  col_na_rm = TRUE)
```

`gg_histogram_col_facet`*Histogram ggplot that is coloured and faceted.*

Description

histogram ggplot that is coloured and faceted.

Usage

```
gg_histogram_col_facet(  
  data,  
  x_var,  
  col_var,  
  facet_var,  
  pal = NULL,  
  pal_na = "#7F7F7F",  
  pal_rev = FALSE,  
  alpha_fill = 0.5,  
  alpha_line = 1,  
  size_line = 0.5,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  x_bins_n = 30,  
  x_breaks_n = 2,  
  x_expand = c(0, 0),  
  x_labels = scales::label_comma(),  
  x_title = NULL,  
  x_title_wrap = 50,  
  y_breaks_n = 3,  
  y_expand = c(0, 0),  
  y_labels = scales::label_comma(),  
  y_title = NULL,  
  y_title_wrap = 50,  
  col_labels = snakecase::to_sentence_case,  
  col_legend_none = FALSE,  
  col_na_rm = FALSE,  
  col_title = NULL,  
  col_title_wrap = 25,  
  facet_labels = snakecase::to_sentence_case,  
  facet_na_rm = FALSE,  
  facet_ncol = NULL,  
  facet_nrow = NULL,  
  facet_rev = FALSE,  
  facet_scales = "fixed",
```

```

caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE)
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be transformed to histogram statistics. Required input.
<code>x_var</code>	Unquoted numeric variable to be on the x scale. Required input.
<code>col_var</code>	Unquoted categorical variable to colour histogram areas. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to FALSE.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 0.5.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of histogram areas.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 75.
<code>x_bins_n</code>	Number of bins to aim for. Defaults to 30.
<code>x_breaks_n</code>	For a numeric x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>y_breaks_n</code>	For a numeric y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 4.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>col_labels</code>	A function or named vector to modify colour scale labels. Use <code>ggplot2::waiver()</code> to keep colour labels untransformed.
<code>col_legend_none</code>	TRUE or FALSE of whether to remove the legend.
<code>col_na_rm</code>	TRUE or FALSE of whether to include <code>col_var</code> NA values. Defaults to FALSE.
<code>col_title</code>	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>col_title_wrap</code>	Number of characters to wrap the colour title to. Defaults to 25.
<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>ggplot2::waiver()</code> to keep facet labels untransformed.
<code>facet_na_rm</code>	TRUE or FALSE of whether to include <code>facet_var</code> NA values. Defaults to FALSE.
<code>facet_ncol</code>	The number of columns of faceted plots.
<code>facet_nrow</code>	The number of rows of faceted plots.
<code>facet_rev</code>	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
<code>facet_scales</code>	Whether <code>facet_scales</code> should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 80.
<code>theme</code>	A <code>ggplot2</code> theme.

Value

A `ggplot` object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_histogram_col_facet(penguins,
  x_var = body_mass_g,
  col_var = sex,
  facet_var = species,
  col_na_rm = TRUE)
```

gg_histogram_facet *Histogram ggplot that is faceted.*

Description

histogram ggplot that is faceted, but not coloured.

Usage

```
gg_histogram_facet(  
  data,  
  x_var,  
  facet_var,  
  pal = pal_viridis_reorder(1),  
  alpha_fill = 0.5,  
  alpha_line = 1,  
  size_line = 0.5,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  x_bins_n = 30,  
  x_breaks_n = 2,  
  x_expand = c(0, 0),  
  x_labels = scales::label_comma(),  
  x_title = NULL,  
  x_title_wrap = 50,  
  y_breaks_n = 3,  
  y_expand = c(0, 0),  
  y_labels = scales::label_comma(),  
  y_title = NULL,  
  y_title_wrap = 50,  
  facet_labels = snakecase::to_sentence_case,  
  facet_na_rm = FALSE,  
  facet_ncol = NULL,  
  facet_nrow = NULL,  
  facet_rev = FALSE,  
  facet_scales = "fixed",  
  caption = NULL,  
  caption_wrap = 80,  
  theme = gg_theme(gridlines_h = TRUE)  
)
```

Arguments

data An ungrouped summarised tibble or dataframe in a structure to be transformed to histogram statistics. Required input.

<code>x_var</code>	Unquoted numeric variable to be on the x scale. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>pal</code>	Character vector of hex codes.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 0.5.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of histogram areas.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 75.
<code>x_bins_n</code>	Number of bins to aim for. Defaults to 30.
<code>x_breaks_n</code>	For a numeric x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>y_breaks_n</code>	For a numeric y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 4.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>ggplot2::waiver()</code> to keep facet labels untransformed.
<code>facet_na_rm</code>	TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.
<code>facet_ncol</code>	The number of columns of faceted plots.
<code>facet_nrow</code>	The number of rows of faceted plots.
<code>facet_rev</code>	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
<code>facet_scales</code>	Whether facet_scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 80.
<code>theme</code>	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_histogram_facet(penguins,
                   x_var = body_mass_g,
                   facet_var = species)
```

gg_hpointrange	<i>Horizontal pointrange ggplot.</i>
----------------	--------------------------------------

Description

Horizontal pointrange ggplot that is not coloured and not faceted.

Usage

```
gg_hpointrange(
  data,
  xmiddle_var,
  xmin_var,
  xmax_var,
  y_var,
  text_var = NULL,
  pal = pal_viridis_reorder(1),
  alpha_line = 1,
  alpha_point = 1,
  size_point = 1.5,
  size_line = 0.5,
  title = NULL,
  title_wrap = 75,
  subtitle = NULL,
  subtitle_wrap = 75,
  x_balance = FALSE,
  x_breaks_n = 5,
  x_expand = c(0, 0),
  x_labels = scales::label_comma(),
  x_na_rm = FALSE,
  x_title = "",
  x_title_wrap = 50,
  x_zero = FALSE,
  x_zero_line = NULL,
```

```

  y_balance = FALSE,
  y_breaks_n = 5,
  y_expand = NULL,
  y_labels = NULL,
  y_na_rm = FALSE,
  y_rev = FALSE,
  y_title = NULL,
  y_title_wrap = 50,
  y_zero = FALSE,
  y_zero_line = NULL,
  caption = NULL,
  caption_wrap = 75,
  theme = gg_theme(gridlines_v = TRUE),
  mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>xmiddle_var</code>	Unquoted numeric variable to be on the x scale. Required input.
<code>xmin_var</code>	Unquoted numeric variable to be the minimum of the x vertical line. Required input.
<code>xmax_var</code>	Unquoted numeric variable to be the maximum of the x vertical line. Required input.
<code>y_var</code>	Unquoted variable to be on the y scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to NULL.
<code>pal</code>	Character vector of hex codes.
<code>alpha_line</code>	The opacity of the line. Defaults to 1.
<code>alpha_point</code>	The opacity of the points.
<code>size_point</code>	Size of points. Defaults to 1.5.
<code>size_line</code>	Size of lines. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 60.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 60.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.

<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. Use <code>function(x) x</code> to keep labels untransformed.
<code>x_na_rm</code>	TRUE or FALSE of whether to include <code>xmiddle_var</code> NA values. Defaults to FALSE.
<code>x_title</code>	X scale title string. Defaults to "".
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in <code>xmiddle_var</code> . Otherwise defaults to FALSE.
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre. Defaults to FALSE.
<code>y_breaks_n</code>	For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 5.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>function(x) x</code> to keep labels untransformed.
<code>y_na_rm</code>	TRUE or FALSE of whether to include <code>y_var</code> NA values. Defaults to FALSE.
<code>y_rev</code>	For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to FALSE.
<code>y_zero_line</code>	For a numeric y variable, TRUE or FALSE of whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in <code>y_var</code> . Otherwise defaults to FALSE.
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 75.
<code>theme</code>	A <code>ggplot2</code> theme.
<code>mobile</code>	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A `ggplot` object.

Examples

```
library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(sex) %>%
  summarise(middle = median(body_mass_g, na.rm = TRUE),
            lower = quantile(body_mass_g, probs = 0.25, na.rm = TRUE),
            upper = quantile(body_mass_g, probs = 0.75, na.rm = TRUE))

gg_hpoitrance(
  plot_data,
  xmiddle_var = middle,
  xmin_var = lower,
  xmax_var = upper,
  y_var = sex,
  x_title = "Body mass g",
  y_na_rm = TRUE)
```

gg_hpoitrance_col *Horizontal pointrange ggplot that is coloured.*

Description

Horizontal pointrange ggplot that is coloured, but not faceted.

Usage

```
gg_hpoitrance_col(
  data,
  xmiddle_var,
  xmin_var,
  xmax_var,
  y_var,
  col_var,
  text_var = NULL,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_line = 1,
  alpha_point = 1,
  size_point = 1.5,
  size_line = 0.5,
  title = NULL,
  title_wrap = 75,
  subtitle = NULL,
```

```

  subtitle_wrap = 75,
  x_balance = FALSE,
  x_breaks_n = 5,
  x_expand = c(0, 0),
  x_labels = scales::label_comma(),
  x_na_rm = FALSE,
  x_title = "",
  x_title_wrap = 50,
  x_zero = FALSE,
  x_zero_line = NULL,
  y_balance = FALSE,
  y_breaks_n = 5,
  y_dodge = 0,
  y_expand = NULL,
  y_labels = NULL,
  y_na_rm = FALSE,
  y_rev = FALSE,
  y_title = NULL,
  y_title_wrap = 50,
  y_zero = FALSE,
  y_zero_line = NULL,
  col_breaks_n = 4,
  col_cuts = NULL,
  col_intervals_right = TRUE,
  col_labels = NULL,
  col_legend_none = FALSE,
  col_method = NULL,
  col_na_rm = FALSE,
  col_rev = FALSE,
  col_title = NULL,
  col_title_wrap = 25,
  caption = NULL,
  caption_wrap = 75,
  theme = gg_theme(gridlines_v = TRUE),
  mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>xmiddle_var</code>	Unquoted numeric variable to be on the x scale. Required input.
<code>xmin_var</code>	Unquoted numeric variable to be the minimum of the x vertical line. Required input.
<code>xmax_var</code>	Unquoted numeric variable to be the maximum of the x vertical line. Required input.
<code>y_var</code>	Unquoted variable to be on the y scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are

	mutually exclusive and equidistant. Required input.
col_var	Unquoted categorical or numeric variable to colour the pointranges. Required input.
text_var	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to NULL.
pal	Character vector of hex codes.
pal_na	The hex code or name of the NA colour to be used.
pal_rev	Reverses the palette. Defaults to FALSE.
alpha_line	The opacity of the line. Defaults to 1.
alpha_point	The opacity of the points.
size_point	Size of points. Defaults to 1.5.
size_line	Size of lines. Defaults to 0.75.
title	Title string.
title_wrap	Number of characters to wrap the title to. Defaults to 60.
subtitle	Subtitle string.
subtitle_wrap	Number of characters to wrap the subtitle to. Defaults to 60.
x_balance	For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
x_breaks_n	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
x_expand	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
x_labels	A function or named vector to modify x scale labels. Use <code>function(x) x</code> to keep labels untransformed.
x_na_rm	TRUE or FALSE of whether to include <code>xmiddle_var</code> NA values. Defaults to FALSE.
x_title	X scale title string. Defaults to "".
x_title_wrap	Number of characters to wrap the x title to. Defaults to 50.
x_zero	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line	For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in <code>xmiddle_var</code> . Otherwise defaults to FALSE.
y_balance	For a numeric y variable, add balance to the y scale so that zero is in the centre. Defaults to FALSE.
y_breaks_n	For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 4.
y_dodge	The amount to dodge pointranges by along the y axis. Defaults to 0 (i.e. identity).
y_expand	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.

<code>y_labels</code>	A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>function(x) x</code> to keep labels untransformed.
<code>y_na_rm</code>	TRUE or FALSE of whether to include <code>y_var</code> NA values. Defaults to FALSE.
<code>y_rev</code>	For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to FALSE.
<code>y_zero_line</code>	For a numeric y variable, TRUE or FALSE of whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in <code>y_var</code> . Otherwise defaults to FALSE.
<code>col_breaks_n</code>	For a numeric colour variable, the desired number of intervals on the colour scale.
<code>col_cuts</code>	A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.
<code>col_intervals_right</code>	For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut right-closed. Defaults to TRUE.
<code>col_labels</code>	A function or named vector to modify colour scale labels. Defaults to <code>snake-case::to_sentence_case</code> for categorical colour variables and <code>scales::label_comma()</code> for numeric. Use <code>function(x) x</code> to keep labels untransformed.
<code>col_legend_none</code>	TRUE or FALSE of whether to remove the legend.
<code>col_method</code>	The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".
<code>col_na_rm</code>	TRUE or FALSE of whether to include <code>col_var</code> NA values. Defaults to FALSE.
<code>col_rev</code>	TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.
<code>col_title</code>	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>col_title_wrap</code>	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where <code>mobile</code> equals TRUE.
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 75.
<code>theme</code>	A <code>ggplot2</code> theme.
<code>mobile</code>	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A `ggplot` object.

Examples

```
library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(sex, species) %>%
  summarise(middle = median(body_mass_g, na.rm = TRUE),
            lower = quantile(body_mass_g, probs = 0.25, na.rm = TRUE),
            upper = quantile(body_mass_g, probs = 0.75, na.rm = TRUE))

gg_hpointrange_col(
  plot_data,
  xmiddle_var = middle,
  xmin_var = lower,
  xmax_var = upper,
  y_var = species,
  col_var = sex,
  col_na_rm = TRUE,
  x_title = "Body mass g",
  y_dodge = 0.2)
```

gg_hpointrange_col_facet

Horizontal pointrange ggplot that is coloured and faceted.

Description

Horizontal pointrange ggplot that is coloured and faceted.

Usage

```
gg_hpointrange_col_facet(
  data,
  xmiddle_var,
  xmin_var,
  xmax_var,
  y_var,
  col_var,
  facet_var,
  text_var = NULL,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_line = 1,
  alpha_point = 1,
  size_point = 1.5,
```

```
size_line = 0.5,  
title = NULL,  
title_wrap = 75,  
subtitle = NULL,  
subtitle_wrap = 75,  
x_breaks_n = 2,  
x_balance = FALSE,  
x_expand = c(0, 0),  
x_labels = scales::label_comma(),  
x_na_rm = FALSE,  
x_title = "",  
x_title_wrap = 50,  
x_zero = FALSE,  
x_zero_line = NULL,  
y_balance = FALSE,  
y_breaks_n = 3,  
y_dodge = 0,  
y_expand = NULL,  
y_labels = NULL,  
y_na_rm = FALSE,  
y_rev = FALSE,  
y_title = NULL,  
y_title_wrap = 50,  
y_zero = FALSE,  
y_zero_line = NULL,  
col_breaks_n = 4,  
col_cuts = NULL,  
col_intervals_right = TRUE,  
col_labels = NULL,  
col_legend_none = FALSE,  
col_method = NULL,  
col_na_rm = FALSE,  
col_rev = FALSE,  
col_title = NULL,  
col_title_wrap = 25,  
facet_labels = snakecase::to_sentence_case,  
facet_na_rm = FALSE,  
facet_ncol = NULL,  
facet_nrow = NULL,  
facet_rev = FALSE,  
facet_scales = "fixed",  
caption = NULL,  
caption_wrap = 75,  
theme = gg_theme(gridlines_v = TRUE)  
)
```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>xmiddle_var</code>	Unquoted numeric variable to be on the x scale. Required input.
<code>xmin_var</code>	Unquoted numeric variable to be the minimum of the x vertical line. Required input.
<code>xmax_var</code>	Unquoted numeric variable to be the maximum of the x vertical line. Required input.
<code>y_var</code>	Unquoted variable to be on the y scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
<code>col_var</code>	Unquoted categorical or numeric variable to colour the pointranges. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to NULL.
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	TRUE or FALSE of whether to reverse the pal.
<code>alpha_line</code>	The opacity of the line. Defaults to 1.
<code>alpha_point</code>	The opacity of the points.
<code>size_point</code>	Size of points. Defaults to 1.5.
<code>size_line</code>	Size of lines. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 60.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 60.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. Use <code>function(x) x</code> to keep labels untransformed.
<code>x_na_rm</code>	TRUE or FALSE of whether to include <code>xmiddle_var</code> NA values. Defaults to FALSE.
<code>x_title</code>	X scale title string. Defaults to "".
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.

<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in <code>xmiddle_var</code> . Otherwise defaults to FALSE.
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre. Defaults to FALSE.
<code>y_breaks_n</code>	For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 5.
<code>y_dodge</code>	The amount to dodge pointranges by along the y axis. Defaults to 0 (i.e. identity).
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>function(x) x</code> to keep labels untransformed.
<code>y_na_rm</code>	TRUE or FALSE of whether to include <code>y_var</code> NA values. Defaults to FALSE.
<code>y_rev</code>	For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to FALSE.
<code>y_zero_line</code>	For a numeric y variable, TRUE or FALSE of whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in <code>y_var</code> . Otherwise defaults to FALSE.
<code>col_breaks_n</code>	For a numeric colour variable, the desired number of intervals on the colour scale.
<code>col_cuts</code>	A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either <code>-Inf</code> or 0, and the final number <code>Inf</code> . If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.
<code>col_intervals_right</code>	For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut right-closed. Defaults to TRUE.
<code>col_labels</code>	A function or named vector to modify colour scale labels. Defaults to <code>snake-case::to_sentence_case</code> for categorical colour variables and <code>scales::label_comma()</code> for numeric. Use <code>function(x) x</code> to keep labels untransformed.
<code>col_legend_none</code>	TRUE or FALSE of whether to remove the legend.
<code>col_method</code>	The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".

col_na_rm	TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
col_rev	TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.
col_title	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
col_title_wrap	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.
facet_labels	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use function(x) x to keep labels untransformed.
facet_na_rm	TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.
facet_ncol	The number of columns of faceted plots.
facet_nrow	The number of rows of faceted plots.
facet_rev	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
facet_scales	Whether facet_scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 75.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  mutate(year = as.character(year)) %>%
  group_by(year, sex, species) %>%
  summarise(middle = median(body_mass_g, na.rm = TRUE),
            lower = quantile(body_mass_g, probs = 0.25, na.rm = TRUE),
            upper = quantile(body_mass_g, probs = 0.75, na.rm = TRUE))

gg_hpointrange_col_facet(
  plot_data,
  y_var = year,
  xmiddle_var = middle,
  xmin_var = lower,
  xmax_var = upper,
  col_var = sex,
  facet_var = species,
  col_na_rm = TRUE,
  x_title = "Body mass g",
  y_labels = function(x) stringr::str_sub(x, 3, 4),
  y_dodge = 0.2)
```

gg_hpoitrangle_facet *Horizontal pointrange ggplot that is faceted.*

Description

Horizontal pointrange ggplot that is faceted, but not coloured.

Usage

```
gg_hpoitrangle_facet(  
  data,  
  xmiddle_var,  
  xmin_var,  
  xmax_var,  
  y_var,  
  facet_var,  
  text_var = NULL,  
  pal = pal_viridis_reorder(1),  
  alpha_line = 1,  
  alpha_point = 1,  
  size_point = 1.5,  
  size_line = 0.5,  
  title = NULL,  
  title_wrap = 75,  
  subtitle = NULL,  
  subtitle_wrap = 75,  
  x_balance = FALSE,  
  x_breaks_n = 2,  
  x_expand = c(0, 0),  
  x_labels = scales::label_comma(),  
  x_na_rm = FALSE,  
  x_title = "",  
  x_title_wrap = 50,  
  x_zero = FALSE,  
  x_zero_line = NULL,  
  y_balance = FALSE,  
  y_breaks_n = 3,  
  y_expand = NULL,  
  y_labels = NULL,  
  y_na_rm = FALSE,  
  y_rev = FALSE,  
  y_title = NULL,  
  y_title_wrap = 50,  
  y_zero = FALSE,  
  y_zero_line = NULL,  
  facet_labels = snakecase::to_sentence_case,  
  facet_na_rm = FALSE,
```

```

facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 75,
theme = gg_theme(gridlines_v = TRUE)
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>xmiddle_var</code>	Unquoted numeric variable to be on the x scale. Required input.
<code>xmin_var</code>	Unquoted numeric variable to be the minimum of the x vertical line. Required input.
<code>xmax_var</code>	Unquoted numeric variable to be the maximum of the x vertical line. Required input.
<code>y_var</code>	Unquoted variable to be on the y scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to NULL.
<code>pal</code>	Character vector of hex codes.
<code>alpha_line</code>	The opacity of the line. Defaults to 1.
<code>alpha_point</code>	The opacity of the points.
<code>size_point</code>	Size of points. Defaults to 1.5.
<code>size_line</code>	Size of lines. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 60.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 60.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. Use <code>function(x) x</code> to keep labels untransformed.
<code>x_na_rm</code>	TRUE or FALSE of whether to include <code>xmiddle_var</code> NA values. Defaults to FALSE.

<code>x_title</code>	X scale title string. Defaults to "".
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in <code>xmiddle_var</code> . Otherwise defaults to FALSE.
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre. Defaults to FALSE.
<code>y_breaks_n</code>	For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 4.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>function(x) x</code> to keep labels untransformed.
<code>y_na_rm</code>	TRUE or FALSE of whether to include <code>y_var</code> NA values. Defaults to FALSE.
<code>y_rev</code>	For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to FALSE.
<code>y_zero_line</code>	For a numeric y variable, TRUE or FALSE of whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in <code>y_var</code> . Otherwise defaults to FALSE.
<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>function(x) x</code> to keep labels untransformed.
<code>facet_na_rm</code>	TRUE or FALSE of whether to include <code>facet_var</code> NA values. Defaults to FALSE.
<code>facet_ncol</code>	The number of columns of faceted plots.
<code>facet_nrow</code>	The number of rows of faceted plots.
<code>facet_rev</code>	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
<code>facet_scales</code>	Whether <code>facet_scales</code> should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 75.
<code>theme</code>	A <code>ggplot2</code> theme.

Value

A `ggplot` object.

Examples

```
library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(sex, species) %>%
  summarise(middle = median(body_mass_g, na.rm = TRUE),
            lower = quantile(body_mass_g, probs = 0.25, na.rm = TRUE),
            upper = quantile(body_mass_g, probs = 0.75, na.rm = TRUE))

gg_hpointrange_facet(
  plot_data,
  y_var = species,
  xmiddle_var = middle,
  xmin_var = lower,
  xmax_var = upper,
  facet_var = sex,
  facet_na_rm = TRUE,
  x_title = "Body mass g")
```

`gg_hviolin`*Horizontal violin ggplot.*

Description

Horizontal violin ggplot that is not coloured and not faceted.

Usage

```
gg_hviolin(
  data,
  x_var = NULL,
  y_var,
  pal = pal_viridis_reorder(1),
  alpha_fill = 1,
  alpha_line = 1,
  size_line = 0.5,
  size_width = 0.75,
  title = NULL,
  title_wrap = 75,
  subtitle = NULL,
  subtitle_wrap = 75,
  x_balance = FALSE,
  x_breaks_n = 5,
  x_expand = c(0, 0),
  x_labels = scales::label_comma(),
```

```

x_title = NULL,
x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,
y_expand = ggplot2::waiver(),
y_labels = snakecase::to_sentence_case,
y_na_rm = FALSE,
y_rev = FALSE,
y_title = NULL,
y_title_wrap = 50,
caption = NULL,
caption_wrap = 75,
theme = gg_theme(gridlines_v = TRUE),
model_scale = "area",
model_bw = "nrd0",
model_adjust = 1,
model_kernel = "gaussian",
model_trim = TRUE,
mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be transformed to density statistics. Required input.
<code>x_var</code>	Generally an unquoted numeric variable to be on the x scale. However if <code>stat = "identity"</code> is selected, a list-column with min, lower, middle, upper, and max variable names.
<code>y_var</code>	Unquoted categorical variable to be on the y scale (i.e. character, factor, or logical). Required input.
<code>pal</code>	Character vector of hex codes.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 1.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of violins. Defaults to 0.5.
<code>size_width</code>	Width of boxes. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 60.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 60.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 <code>expand</code> argument in ggplot2 scales functions.

<code>x_labels</code>	A function or named vector to modify x scale labels. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_title</code>	X scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use <code>""</code> if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, <code>TRUE</code> or <code>FALSE</code> of whether the minimum of the x scale is zero. Defaults to <code>FALSE</code> .
<code>x_zero_line</code>	For a numeric x variable, <code>TRUE</code> or <code>FALSE</code> whether to add a zero reference line to the x scale. Defaults to <code>TRUE</code> if there are positive and negative values in <code>x_var</code> . Otherwise defaults to <code>FALSE</code> .
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. If <code>NULL</code> , categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_na_rm</code>	<code>TRUE</code> or <code>FALSE</code> of whether to include <code>y_var</code> NA values. Defaults to <code>FALSE</code> .
<code>y_rev</code>	For a categorical variable, <code>TRUE</code> or <code>FALSE</code> of whether the y variable variable is reversed. Defaults to <code>FALSE</code> .
<code>y_title</code>	y scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use <code>""</code> if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 75.
<code>theme</code>	A <code>ggplot2</code> theme.
<code>model_scale</code>	Per <code>ggplot2::geom_violin</code> , if <code>"area"</code> (default), all violins have the same area (before trimming the tails). If <code>"count"</code> , areas are scaled proportionally to the number of observations. If <code>"width"</code> , all violins have the same maximum width.
<code>model_bw</code>	The <code>bw</code> argument of the <code>stats::density</code> function. Defaults to <code>"nrd0"</code> .
<code>model_adjust</code>	The <code>adjust</code> argument of the <code>stats::density</code> function. Defaults to 1.
<code>model_kernel</code>	The kernel argument of the <code>stats::density</code> function. Defaults to <code>"gaussian"</code> .
<code>model_trim</code>	<code>TRUE</code> or <code>FALSE</code> of whether to trim the tails. Defaults to <code>FALSE</code> .
<code>mobile</code>	Whether the plot is to be displayed on a mobile device. Defaults to <code>FALSE</code> .

Value

A `ggplot` object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_hviolin(penguins,
           x_var = body_mass_g,
           y_var = species)
```

gg_hviolin_col	<i>Horizontal violin ggplot that is coloured.</i>
----------------	---

Description

Horizontal violin ggplot that is coloured, but not faceted.

Usage

```
gg_hviolin_col(  
  data,  
  x_var = NULL,  
  y_var,  
  col_var,  
  pal = NULL,  
  pal_na = "#7F7F7F",  
  pal_rev = FALSE,  
  alpha_fill = 1,  
  alpha_line = 1,  
  size_line = 0.5,  
  size_width = 0.75,  
  title = NULL,  
  title_wrap = 75,  
  subtitle = NULL,  
  subtitle_wrap = 75,  
  x_balance = FALSE,  
  x_breaks_n = 5,  
  x_expand = c(0, 0),  
  x_labels = scales::label_comma(),  
  x_title = NULL,  
  x_title_wrap = 50,  
  x_zero = FALSE,  
  x_zero_line = NULL,  
  y_expand = ggplot2::waiver(),  
  y_labels = snakecase::to_sentence_case,  
  y_na_rm = FALSE,  
  y_rev = FALSE,  
  y_title = NULL,  
  y_title_wrap = 50,  
  col_labels = stringr::str_to_sentence,  
  col_legend_none = FALSE,  
  col_na_rm = FALSE,  
  col_rev = FALSE,  
  col_title = NULL,  
  col_title_wrap = 25,  
  caption = NULL,  
  caption_wrap = 75,
```

```

theme = gg_theme(gridlines_v = TRUE),
model_scale = "area",
model_bw = "nrd0",
model_adjust = 1,
model_kernel = "gaussian",
model_trim = TRUE,
mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be transformed to density statistics. Required input.
<code>x_var</code>	Generally an unquoted numeric variable to be on the x scale. However if <code>stat = "identity"</code> is selected, a list-column with <code>min</code> , <code>lower</code> , <code>middle</code> , <code>upper</code> , and <code>max</code> variable names.
<code>y_var</code>	Unquoted categorical variable to be on the y scale (i.e. character, factor, or logical). Required input.
<code>col_var</code>	Unquoted categorical or numeric variable to colour the boxplots. Required input.
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to <code>FALSE</code> .
<code>alpha_fill</code>	The opacity of the fill. Defaults to 1.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of violins. Defaults to 0.5.
<code>size_width</code>	Width of boxes. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 60.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 60.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_title</code>	X scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use <code>""</code> if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.

<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in <code>x_var</code> . Otherwise defaults to FALSE.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_na_rm</code>	TRUE or FALSE of whether to include <code>y_var</code> NA values. Defaults to FALSE.
<code>y_rev</code>	For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>col_labels</code>	A function or named vector to modify colour scale labels. Defaults to <code>snake-case::to_sentence_case</code> for categorical colour variables and <code>scales::number</code> for numeric colour variables. Use <code>ggplot2::waiver()</code> to keep colour labels untransformed.
<code>col_legend_none</code>	TRUE or FALSE of whether to remove the legend.
<code>col_na_rm</code>	TRUE or FALSE of whether to include <code>col_var</code> NA values. Defaults to FALSE.
<code>col_rev</code>	TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.
<code>col_title</code>	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>col_title_wrap</code>	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where <code>mobile</code> equals TRUE.
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 75.
<code>theme</code>	A <code>ggplot2</code> theme.
<code>model_scale</code>	Per <code>ggplot2::geom_violin</code> , if "area" (default), all violins have the same area (before trimming the tails). If "count", areas are scaled proportionally to the number of observations. If "width", all violins have the same maximum width.
<code>model_bw</code>	The <code>bw</code> argument of the <code>stats::density</code> function. Defaults to "nrd0".
<code>model_adjust</code>	The <code>adjust</code> argument of the <code>stats::density</code> function. Defaults to 1.
<code>model_kernel</code>	The <code>kernel</code> argument of the <code>stats::density</code> function. Defaults to "gaussian".
<code>model_trim</code>	TRUE or FALSE of whether to trim the tails. Defaults to FALSE.
<code>mobile</code>	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A `ggplot` object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_hviolin_col(penguins,
               x_var = body_mass_g,
               y_var = species,
               col_var = sex,
               col_na_rm = TRUE)
```

gg_hviolin_col_facet *Horizontal violin ggplot that is coloured and faceted.*

Description

Horizontal violin ggplot that is coloured and faceted.

Usage

```
gg_hviolin_col_facet(
  data,
  x_var = NULL,
  y_var,
  col_var,
  facet_var,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 1,
  alpha_line = 1,
  size_line = 0.5,
  size_width = 0.75,
  title = NULL,
  title_wrap = 75,
  subtitle = NULL,
  subtitle_wrap = 75,
  x_breaks_n = 2,
  x_balance = FALSE,
  x_expand = c(0, 0),
  x_labels = scales::label_comma(),
  x_title = NULL,
  x_title_wrap = 50,
  x_zero = FALSE,
  x_zero_line = NULL,
  y_expand = ggplot2::waiver(),
  y_labels = snakecase::to_sentence_case,
```

```

y_na_rm = FALSE,
y_rev = FALSE,
y_title = NULL,
y_title_wrap = 50,
col_labels = stringr::str_to_sentence,
col_legend_none = FALSE,
col_na_rm = FALSE,
col_rev = FALSE,
col_title = NULL,
col_title_wrap = 25,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 75,
theme = gg_theme(gridlines_v = TRUE),
model_scale = "area",
model_bw = "nrd0",
model_adjust = 1,
model_kernel = "gaussian",
model_trim = TRUE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be transformed to density statistics. Required input.
<code>x_var</code>	Generally an unquoted numeric variable to be on the x scale. However if <code>stat = "identity"</code> is selected, a list-column with <code>min</code> , <code>lower</code> , <code>middle</code> , <code>upper</code> , and <code>max</code> variable names.
<code>y_var</code>	Unquoted categorical variable to be on the y scale (i.e. character, factor, or logical). Required input.
<code>col_var</code>	Unquoted categorical or numeric variable to colour the boxplots. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	TRUE or FALSE of whether to reverse the pal.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 1.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of violins. Defaults to 0.5.
<code>size_width</code>	Width of boxes. Defaults to 0.75.

<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 60.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 60.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_title</code>	X scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use <code>""</code> if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, <code>TRUE</code> or <code>FALSE</code> of whether the minimum of the x scale is zero. Defaults to <code>FALSE</code> .
<code>x_zero_line</code>	For a numeric x variable, <code>TRUE</code> or <code>FALSE</code> whether to add a zero reference line to the x scale. Defaults to <code>TRUE</code> if there are positive and negative values in <code>x_var</code> . Otherwise defaults to <code>FALSE</code> .
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. If <code>NULL</code> , categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_na_rm</code>	<code>TRUE</code> or <code>FALSE</code> of whether to include <code>y_var</code> NA values. Defaults to <code>FALSE</code> .
<code>y_rev</code>	For a categorical variable, <code>TRUE</code> or <code>FALSE</code> of whether the y variable variable is reversed. Defaults to <code>FALSE</code> .
<code>y_title</code>	y scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use <code>""</code> if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>col_labels</code>	A function or named vector to modify colour scale labels. Defaults to <code>snake-case::to_sentence_case</code> for categorical colour variables and <code>scales::number</code> for numeric colour variables. Use <code>ggplot2::waiver()</code> to keep colour labels untransformed.
<code>col_legend_none</code>	<code>TRUE</code> or <code>FALSE</code> of whether to remove the legend.
<code>col_na_rm</code>	<code>TRUE</code> or <code>FALSE</code> of whether to include <code>col_var</code> NA values. Defaults to <code>FALSE</code> .
<code>col_rev</code>	<code>TRUE</code> or <code>FALSE</code> of whether the colour scale is reversed. Defaults to <code>FALSE</code> .
<code>col_title</code>	Colour title string for the legend. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use <code>""</code> if you would like no title.

<code>col_title_wrap</code>	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where <code>mobile</code> equals <code>TRUE</code> .
<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>ggplot2::waiver()</code> to keep facet labels untransformed.
<code>facet_na_rm</code>	<code>TRUE</code> or <code>FALSE</code> of whether to include <code>facet_var</code> NA values. Defaults to <code>FALSE</code> .
<code>facet_ncol</code>	The number of columns of faceted plots.
<code>facet_nrow</code>	The number of rows of faceted plots.
<code>facet_rev</code>	<code>TRUE</code> or <code>FALSE</code> of whether the facet variable variable is reversed. Defaults to <code>FALSE</code> .
<code>facet_scales</code>	Whether <code>facet_scales</code> should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 75.
<code>theme</code>	A <code>ggplot2</code> theme.
<code>model_scale</code>	Per <code>ggplot2::geom_violin</code> , if "area" (default), all violins have the same area (before trimming the tails). If "count", areas are scaled proportionally to the number of observations. If "width", all violins have the same maximum width.
<code>model_bw</code>	The <code>bw</code> argument of the <code>stats::density</code> function. Defaults to "nrd0".
<code>model_adjust</code>	The <code>adjust</code> argument of the <code>stats::density</code> function. Defaults to 1.
<code>model_kernel</code>	The kernel argument of the <code>stats::density</code> function. Defaults to "gaussian".
<code>model_trim</code>	<code>TRUE</code> or <code>FALSE</code> of whether to trim the tails. Defaults to <code>FALSE</code> .

Value

A `ggplot` object.

Examples

```
library(simplevis)
library(palmerpenguins)

penguins %>%
  dplyr::mutate(year = as.character(year)) %>%
  gg_hviolin_col_facet(x_var = body_mass_g,
                      y_var = year,
                      col_var = sex,
                      facet_var = species,
                      col_na_rm = TRUE)
```

gg_hviolin_facet	<i>Horizontal violin ggplot that is faceted.</i>
------------------	--

Description

Horizontal violin ggplot that is faceted, but not coloured.

Usage

```
gg_hviolin_facet(  
  data,  
  x_var = NULL,  
  y_var,  
  facet_var,  
  pal = pal_viridis_reorder(1),  
  alpha_fill = 1,  
  alpha_line = 1,  
  size_line = 0.5,  
  size_width = 0.75,  
  title = NULL,  
  title_wrap = 75,  
  subtitle = NULL,  
  subtitle_wrap = 75,  
  x_balance = FALSE,  
  x_breaks_n = 2,  
  x_expand = c(0, 0),  
  x_labels = scales::label_comma(),  
  x_title = NULL,  
  x_title_wrap = 50,  
  x_zero = FALSE,  
  x_zero_line = NULL,  
  y_expand = ggplot2::waiver(),  
  y_labels = snakecase::to_sentence_case,  
  y_na_rm = FALSE,  
  y_rev = FALSE,  
  y_title = NULL,  
  y_title_wrap = 50,  
  facet_labels = snakecase::to_sentence_case,  
  facet_na_rm = FALSE,  
  facet_ncol = NULL,  
  facet_nrow = NULL,  
  facet_rev = FALSE,  
  facet_scales = "fixed",  
  caption = NULL,  
  caption_wrap = 75,  
  theme = gg_theme(gridlines_v = TRUE),  
  model_scale = "area",
```

```

  model_bw = "nrd0",
  model_adjust = 1,
  model_kernel = "gaussian",
  model_trim = TRUE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be transformed to density statistics. Required input.
<code>x_var</code>	Generally an unquoted numeric variable to be on the x scale. However if stat = "identity" is selected, a list-column with min, lower, middle, upper, and max variable names.
<code>y_var</code>	Unquoted categorical variable to be on the y scale (i.e. character, factor, or logical). Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>pal</code>	Character vector of hex codes.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 1.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of violins. Defaults to 0.5.
<code>size_width</code>	Width of boxes. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 60.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 60.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. Use ggplot2::waiver() to keep x labels untransformed.
<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.

<code>y_labels</code>	A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_na_rm</code>	TRUE or FALSE of whether to include <code>y_var</code> NA values. Defaults to FALSE.
<code>y_rev</code>	For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>ggplot2::waiver()</code> to keep facet labels untransformed.
<code>facet_na_rm</code>	TRUE or FALSE of whether to include <code>facet_var</code> NA values. Defaults to FALSE.
<code>facet_ncol</code>	The number of columns of faceted plots.
<code>facet_nrow</code>	The number of rows of faceted plots.
<code>facet_rev</code>	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
<code>facet_scales</code>	Whether <code>facet_scales</code> should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 75.
<code>theme</code>	A <code>ggplot2</code> theme.
<code>model_scale</code>	Per <code>ggplot2::geom_violin</code> , if "area" (default), all violins have the same area (before trimming the tails). If "count", areas are scaled proportionally to the number of observations. If "width", all violins have the same maximum width.
<code>model_bw</code>	The <code>bw</code> argument of the <code>stats::density</code> function. Defaults to "nrd0".
<code>model_adjust</code>	The <code>adjust</code> argument of the <code>stats::density</code> function. Defaults to 1.
<code>model_kernel</code>	The kernel argument of the <code>stats::density</code> function. Defaults to "gaussian".
<code>model_trim</code>	TRUE or FALSE of whether to trim the tails. Defaults to FALSE.

Value

A `ggplot` object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_hviolin_facet(penguins,
  x_var = body_mass_g,
  y_var = sex,
  facet_var = species,
  y_na_rm = TRUE)
```

`gg_line`*Line ggplot.*

Description

Line ggplot that is not coloured and not faceted.

Usage

```
gg_line(  
  data,  
  x_var,  
  y_var,  
  text_var = NULL,  
  pal = pal_viridis_reorder(1),  
  alpha_line = 1,  
  alpha_point = 1,  
  size_point = 1.5,  
  size_line = 0.5,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  x_balance = FALSE,  
  x_breaks_n = 5,  
  x_expand = NULL,  
  x_labels = NULL,  
  x_na_rm = FALSE,  
  x_rev = FALSE,  
  x_title = NULL,  
  x_title_wrap = 50,  
  x_zero = FALSE,  
  x_zero_line = NULL,  
  y_balance = FALSE,  
  y_breaks_n = 5,  
  y_expand = c(0, 0),  
  y_labels = scales::label_comma(),  
  y_na_rm = FALSE,  
  y_title = NULL,  
  y_title_wrap = 50,  
  y_zero = FALSE,  
  y_zero_line = NULL,  
  caption = NULL,  
  caption_wrap = 80,  
  theme = gg_theme(gridlines_h = TRUE),  
  mobile = FALSE  
)
```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>x_var</code>	Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). Required input.
<code>y_var</code>	Unquoted numeric variable to be on the y scale. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to NULL.
<code>pal</code>	Character vector of hex codes.
<code>alpha_line</code>	The opacity of the line. Defaults to 1.
<code>alpha_point</code>	The opacity of the points.
<code>size_point</code>	Size of points. Defaults to 1.5.
<code>size_line</code>	Size of lines. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where <code>mobile</code> equals TRUE.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_na_rm</code>	TRUE or FALSE of whether to include <code>x_var</code> NA values. Defaults to FALSE.
<code>x_rev</code>	For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in <code>x_var</code> . Otherwise defaults to FALSE.
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.

y_breaks_n	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
y_expand	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels	A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.
y_na_rm	TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.
y_title	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap	Number of characters to wrap the y title to. Defaults to 50.
y_zero	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
y_zero_line	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.
mobile	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

```
library(simplevis)
library(dplyr)

plot_data <- storms %>%
  group_by(year) %>%
  summarise(wind = mean(wind))

gg_line(plot_data,
        x_var = year,
        y_var = wind)
```

 gg_line_col

Line ggplot that is coloured.

Description

Line ggplot that is coloured, but not faceted.

Usage

```
gg_line_col(  
  data,  
  x_var,  
  y_var,  
  col_var,  
  text_var = NULL,  
  pal = NULL,  
  pal_na = "#7F7F7F",  
  pal_rev = FALSE,  
  alpha_line = 1,  
  alpha_point = 1,  
  size_point = 1.5,  
  size_line = 0.5,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  x_balance = FALSE,  
  x_breaks_n = 5,  
  x_expand = NULL,  
  x_labels = NULL,  
  x_na_rm = FALSE,  
  x_rev = FALSE,  
  x_title = NULL,  
  x_title_wrap = 50,  
  x_zero = FALSE,  
  x_zero_line = NULL,  
  y_balance = FALSE,  
  y_breaks_n = 5,  
  y_expand = c(0, 0),  
  y_labels = scales::label_comma(),  
  y_na_rm = FALSE,  
  y_title = NULL,  
  y_title_wrap = 50,  
  y_zero = FALSE,  
  y_zero_line = NULL,  
  col_labels = snakecase::to_sentence_case,  
  col_legend_none = FALSE,  
  col_na_rm = FALSE,  
  col_title = NULL,  
  col_title_wrap = 25,  
  caption = NULL,  
  caption_wrap = 80,  
  theme = gg_theme(gridlines_h = TRUE),  
  mobile = FALSE  
)
```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>x_var</code>	Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). Required input.
<code>y_var</code>	Unquoted numeric variable to be on the y scale. Required input.
<code>col_var</code>	Unquoted categorical variable for lines and points to be coloured by. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to NULL.
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to FALSE.
<code>alpha_line</code>	The opacity of the line. Defaults to 1.
<code>alpha_point</code>	The opacity of the points.
<code>size_point</code>	Size of points. Defaults to 1.5.
<code>size_line</code>	Size of lines. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where <code>mobile</code> equals TRUE.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_na_rm</code>	TRUE or FALSE of whether to include <code>x_var</code> NA values. Defaults to FALSE.
<code>x_rev</code>	For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.

<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in <code>x_var</code> . Otherwise defaults to FALSE.
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
<code>y_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_na_rm</code>	TRUE or FALSE of whether to include <code>y_var</code> NA values. Defaults to FALSE.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
<code>y_zero_line</code>	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in <code>y_var</code> . Otherwise defaults to FALSE.
<code>col_labels</code>	A function or named vector to modify colour scale labels. Use <code>ggplot2::waiver()</code> to keep colour labels untransformed.
<code>col_legend_none</code>	TRUE or FALSE of whether to remove the legend.
<code>col_na_rm</code>	TRUE or FALSE of whether to include <code>col_var</code> NA values. Defaults to FALSE.
<code>col_title</code>	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>col_title_wrap</code>	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where <code>mobile</code> equals TRUE.
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 80.
<code>theme</code>	A <code>ggplot2</code> theme.
<code>mobile</code>	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A `ggplot` object.

Examples

```
library(simplevis)
library(dplyr)

plot_data <- storms %>%
```

```
group_by(year, status) %>%
  summarise(wind = mean(wind))

gg_line_col(plot_data,
            x_var = year,
            y_var = wind,
            col_var = status)
```

gg_line_col_facet *Line ggplot that is coloured and faceted.*

Description

Line ggplot that is coloured and faceted.

Usage

```
gg_line_col_facet(
  data,
  x_var,
  y_var,
  col_var,
  facet_var,
  text_var = NULL,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_line = 1,
  alpha_point = 1,
  size_point = 1.5,
  size_line = 0.5,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_balance = FALSE,
  x_breaks_n = 2,
  x_expand = NULL,
  x_labels = NULL,
  x_na_rm = FALSE,
  x_rev = FALSE,
  x_title = NULL,
  x_title_wrap = 50,
  x_zero = FALSE,
  x_zero_line = NULL,
  y_balance = FALSE,
  y_breaks_n = 3,
```

```

y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_na_rm = FALSE,
y_title = NULL,
y_title_wrap = 50,
y_zero = FALSE,
y_zero_line = NULL,
col_labels = snakecase::to_sentence_case,
col_legend_none = FALSE,
col_na_rm = FALSE,
col_title = NULL,
col_title_wrap = 25,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE)
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>x_var</code>	Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). Required input.
<code>y_var</code>	Unquoted numeric variable to be on the y scale. Required input.
<code>col_var</code>	Unquoted categorical variable for lines and points to be coloured by. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to <code>NULL</code> .
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to <code>FALSE</code> .
<code>alpha_line</code>	The opacity of the line. Defaults to 1.
<code>alpha_point</code>	The opacity of the points.
<code>size_point</code>	Size of points. Defaults to 1.5.
<code>size_line</code>	Size of lines. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 100.

<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 100.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_na_rm</code>	TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
<code>x_rev</code>	For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
<code>y_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_na_rm</code>	TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
<code>y_zero_line</code>	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.
<code>col_labels</code>	A function or named vector to modify colour scale labels. Use <code>ggplot2::waiver()</code> to keep colour labels untransformed.

col_legend_none	TRUE or FALSE of whether to remove the legend.
col_na_rm	TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
col_title	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
col_title_wrap	Number of characters to wrap the colour title to. Defaults to 25.
facet_labels	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use ggplot2::waiver() to keep facet labels untransformed.
facet_na_rm	TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.
facet_ncol	The number of columns of faceted plots.
facet_nrow	The number of rows of faceted plots.
facet_rev	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
facet_scales	Whether facet_scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(simplevis)
library(dplyr)

plot_data <- storms %>%
  group_by(year, status) %>%
  summarise(wind = mean(wind))

gg_line_col_facet(plot_data,
  x_var = year,
  y_var = wind,
  col_var = status,
  facet_var = status)
```

gg_line_facet	<i>Line ggplot that is faceted.</i>
---------------	-------------------------------------

Description

Line ggplot that is faceted, but not coloured.

Usage

```
gg_line_facet(  
  data,  
  x_var,  
  y_var,  
  facet_var,  
  text_var = NULL,  
  pal = pal_viridis_reorder(1),  
  alpha_line = 1,  
  alpha_point = 1,  
  size_point = 1.5,  
  size_line = 0.5,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  x_balance = FALSE,  
  x_breaks_n = 2,  
  x_expand = NULL,  
  x_labels = NULL,  
  x_na_rm = FALSE,  
  x_rev = FALSE,  
  x_title = NULL,  
  x_title_wrap = 50,  
  x_zero = FALSE,  
  x_zero_line = NULL,  
  y_balance = FALSE,  
  y_breaks_n = 3,  
  y_expand = c(0, 0),  
  y_labels = scales::label_comma(),  
  y_na_rm = FALSE,  
  y_title = NULL,  
  y_title_wrap = 50,  
  y_zero = FALSE,  
  y_zero_line = NULL,  
  facet_labels = snakecase::to_sentence_case,  
  facet_na_rm = FALSE,  
  facet_ncol = NULL,  
  facet_nrow = NULL,  
)
```

```

  facet_rev = FALSE,
  facet_scales = "fixed",
  caption = NULL,
  caption_wrap = 80,
  theme = gg_theme(gridlines_h = TRUE)
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>x_var</code>	Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). Required input.
<code>y_var</code>	Unquoted numeric variable to be on the y scale. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to <code>NULL</code> .
<code>pal</code>	Character vector of hex codes.
<code>alpha_line</code>	The opacity of the line. Defaults to 1.
<code>alpha_point</code>	The opacity of the points.
<code>size_point</code>	Size of points. Defaults to 1.5.
<code>size_line</code>	Size of lines. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 100.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 100.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to <code>FALSE</code> .
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. If <code>NULL</code> , categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_na_rm</code>	<code>TRUE</code> or <code>FALSE</code> of whether to include <code>x_var</code> NA values. Defaults to <code>FALSE</code> .
<code>x_rev</code>	For a categorical x variable, <code>TRUE</code> or <code>FALSE</code> of whether the x variable variable is reversed. Defaults to <code>FALSE</code> .
<code>x_title</code>	X scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.

<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in <code>x_var</code> . Otherwise defaults to FALSE.
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
<code>y_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_na_rm</code>	TRUE or FALSE of whether to include <code>y_var</code> NA values. Defaults to FALSE.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
<code>y_zero_line</code>	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in <code>y_var</code> . Otherwise defaults to FALSE.
<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>ggplot2::waiver()</code> to keep facet labels untransformed.
<code>facet_na_rm</code>	TRUE or FALSE of whether to include <code>facet_var</code> NA values. Defaults to FALSE.
<code>facet_ncol</code>	The number of columns of faceted plots.
<code>facet_nrow</code>	The number of rows of faceted plots.
<code>facet_rev</code>	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
<code>facet_scales</code>	Whether <code>facet_scales</code> should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 80.
<code>theme</code>	A <code>ggplot2</code> theme.

Value

A `ggplot` object.

Examples

```
library(simplevis)
library(dplyr)

plot_data <- storms %>%
  group_by(year, status) %>%
  summarise(wind = mean(wind))

gg_line_facet(plot_data,
              x_var = year,
              y_var = wind,
              facet_var = status)
```

gg_point

Point ggplot.

Description

Point ggplot that is not coloured and not faceted.

Usage

```
gg_point(
  data,
  x_var,
  y_var,
  text_var = NULL,
  pal = pal_viridis_reorder(1),
  alpha_point = 1,
  size_point = 1.5,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_balance = FALSE,
  x_breaks_n = 5,
  x_expand = NULL,
  x_jitter = 0,
  x_labels = NULL,
  x_rev = FALSE,
  x_title = NULL,
  x_title_wrap = 50,
  x_zero = FALSE,
  x_zero_line = NULL,
  y_balance = FALSE,
  y_breaks_n = 5,
```

```

y_expand = c(0, 0),
y_jitter = 0,
y_labels = scales::label_comma(),
y_title = NULL,
y_title_wrap = 50,
y_zero = FALSE,
y_zero_line = NULL,
caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE, gridlines_v = TRUE),
mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>x_var</code>	Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or POSIXt). Required input.
<code>y_var</code>	Unquoted numeric variable to be on the y scale. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to <code>NULL</code> .
<code>pal</code>	Character vector of hex codes.
<code>alpha_point</code>	The opacity of the points.
<code>size_point</code>	Size of points. Defaults to 1.5.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where <code>mobile</code> equals <code>TRUE</code> .
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to <code>FALSE</code> .
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_jitter</code>	Amount of horizontal jitter to be added in positive and negative directions. Defaults to 0. See <code>ggplot2::position_jitter</code> for further information.
<code>x_labels</code>	A function or named vector to modify x scale labels. Use <code>function(x) x</code> to keep labels untransformed.
<code>x_rev</code>	For a categorical x variable, <code>TRUE</code> or <code>FALSE</code> of whether the x variable variable is reversed. Defaults to <code>FALSE</code> .
<code>x_title</code>	X scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use <code>""</code> if you would like no title.

x_title_wrap	Number of characters to wrap the x title to. Defaults to 50.
x_zero	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_balance	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
y_breaks_n	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
y_expand	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_jitter	Amount of vertical jitter to be added in positive and negative directions. Defaults to 0. See ggplot2::position_jitter for further information.
y_labels	A function or named vector to modify y scale labels. Use function(x) x to keep labels untransformed.
y_title	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap	Number of characters to wrap the y title to. Defaults to 50.
y_zero	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
y_zero_line	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.
mobile	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_point(penguins,
         x_var = bill_length_mm,
         y_var = body_mass_g)
```

gg_pointrange *Pointrange ggplot.*

Description

Pointrange ggplot that is not coloured and not faceted.

Usage

```
gg_pointrange(  
  data,  
  x_var,  
  ymiddle_var,  
  ymin_var,  
  ymax_var,  
  text_var = NULL,  
  pal = pal_viridis_reorder(1),  
  alpha_line = 1,  
  alpha_point = 1,  
  size_point = 1.5,  
  size_line = 0.5,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  x_balance = FALSE,  
  x_breaks_n = 5,  
  x_expand = NULL,  
  x_labels = NULL,  
  x_na_rm = FALSE,  
  x_rev = FALSE,  
  x_title = NULL,  
  x_title_wrap = 50,  
  x_zero = FALSE,  
  x_zero_line = NULL,  
  y_balance = FALSE,  
  y_breaks_n = 5,  
  y_expand = c(0, 0),  
  y_labels = scales::label_comma(),  
  y_na_rm = FALSE,  
  y_title = "",  
  y_title_wrap = 50,  
  y_zero = FALSE,  
  y_zero_line = NULL,  
  caption = NULL,  
  caption_wrap = 80,  
  theme = gg_theme(gridlines_h = TRUE),
```

```

  mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>x_var</code>	Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). Required input.
<code>ymiddle_var</code>	Unquoted numeric variable to be on the y scale. Required input.
<code>ymin_var</code>	Unquoted numeric variable to be the minimum of the y vertical line. Required input.
<code>ymax_var</code>	Unquoted numeric variable to be the maximum of the y vertical line. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to NULL.
<code>pal</code>	Character vector of hex codes.
<code>alpha_line</code>	The opacity of the line. Defaults to 1.
<code>alpha_point</code>	The opacity of the points.
<code>size_point</code>	Size of points. Defaults to 1.5.
<code>size_line</code>	Size of lines. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where <code>mobile</code> equals TRUE.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_na_rm</code>	TRUE or FALSE of whether to include <code>x_var</code> NA values. Defaults to FALSE.
<code>x_rev</code>	For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.

<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in <code>x_var</code> . Otherwise defaults to FALSE.
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
<code>y_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_na_rm</code>	TRUE or FALSE of whether to include <code>ymiddle_var</code> NA values. Defaults to FALSE.
<code>y_title</code>	y scale title string. Defaults to "".
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
<code>y_zero_line</code>	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in <code>ymiddle_var</code> . Otherwise defaults to FALSE.
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 80.
<code>theme</code>	A <code>ggplot2</code> theme.
<code>mobile</code>	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A `ggplot` object.

Examples

```
library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(sex) %>%
  summarise(middle = median(body_mass_g, na.rm = TRUE),
            lower = quantile(body_mass_g, probs = 0.25, na.rm = TRUE),
            upper = quantile(body_mass_g, probs = 0.75, na.rm = TRUE))

gg_pointrange(
  plot_data,
  x_var = sex,
```

```
ymiddle_var = middle,  
ymin_var = lower,  
ymax_var = upper,  
y_title = "Body mass g")
```

gg_pointrange_col *Pointrange ggplot that is coloured.*

Description

Pointrange ggplot that is coloured, but not faceted.

Usage

```
gg_pointrange_col(  
  data,  
  x_var,  
  ymiddle_var,  
  ymin_var,  
  ymax_var,  
  col_var,  
  text_var = NULL,  
  pal = NULL,  
  pal_na = "#7F7F7F",  
  pal_rev = FALSE,  
  alpha_line = 1,  
  alpha_point = 1,  
  size_point = 1.5,  
  size_line = 0.5,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  x_balance = FALSE,  
  x_breaks_n = 5,  
  x_dodge = 0,  
  x_expand = NULL,  
  x_labels = NULL,  
  x_na_rm = FALSE,  
  x_rev = FALSE,  
  x_title = NULL,  
  x_title_wrap = 50,  
  x_zero = FALSE,  
  x_zero_line = NULL,  
  y_balance = FALSE,  
  y_breaks_n = 5,
```

```

y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_na_rm = FALSE,
y_title = "",
y_title_wrap = 50,
y_zero = FALSE,
y_zero_line = NULL,
col_labels = snakecase::to_sentence_case,
col_legend_none = FALSE,
col_na_rm = FALSE,
col_title = NULL,
col_title_wrap = 25,
caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE),
mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>x_var</code>	Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). Required input.
<code>ymiddle_var</code>	Unquoted numeric variable to be on the y scale. Required input.
<code>ymin_var</code>	Unquoted numeric variable to be the minimum of the y vertical line. Required input.
<code>ymax_var</code>	Unquoted numeric variable to be the maximum of the y vertical line. Required input.
<code>col_var</code>	Unquoted categorical variable for lines and points to be coloured by. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to <code>NULL</code> .
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to <code>FALSE</code> .
<code>alpha_line</code>	The opacity of the line. Defaults to 1.
<code>alpha_point</code>	The opacity of the points.
<code>size_point</code>	Size of points. Defaults to 1.5.
<code>size_line</code>	Size of lines. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.

subtitle_wrap	Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where mobile equals TRUE.
x_balance	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
x_breaks_n	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
x_dodge	The amount to dodge pointranges by along the x axis. Defaults to 0 (i.e. identity).
x_expand	A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.
x_na_rm	TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
x_rev	For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
x_title	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap	Number of characters to wrap the x title to. Defaults to 50.
x_zero	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_balance	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
y_breaks_n	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
y_expand	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels	A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.
y_na_rm	TRUE or FALSE of whether to include ymiddle_var NA values. Defaults to FALSE.
y_title	y scale title string. Defaults to "".
y_title_wrap	Number of characters to wrap the y title to. Defaults to 50.
y_zero	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
y_zero_line	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in ymiddle_var. Otherwise defaults to FALSE.
col_labels	A function or named vector to modify colour scale labels. Use ggplot2::waiver() to keep colour labels untransformed.

col_legend_none	TRUE or FALSE of whether to remove the legend.
col_na_rm	TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
col_title	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
col_title_wrap	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.
mobile	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

```
library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(sex, species) %>%
  summarise(middle = median(body_mass_g, na.rm = TRUE),
            lower = quantile(body_mass_g, probs = 0.25, na.rm = TRUE),
            upper = quantile(body_mass_g, probs = 0.75, na.rm = TRUE))

gg_pointrange_col(
  plot_data,
  x_var = species,
  ymiddle_var = middle,
  ymin_var = lower,
  ymax_var = upper,
  col_var = sex,
  col_na_rm = TRUE,
  y_title = "Body mass g",
  x_dodge = 0.2)
```

```
gg_pointrange_col_facet
```

Pointrange ggplot that is coloured and faceted.

Description

Pointrange ggplot that is coloured and faceted.

Usage

```
gg_pointrange_col_facet(  
  data,  
  x_var,  
  ymiddle_var,  
  ymin_var,  
  ymax_var,  
  col_var,  
  facet_var,  
  text_var = NULL,  
  pal = NULL,  
  pal_na = "#7F7F7F",  
  pal_rev = FALSE,  
  alpha_line = 1,  
  alpha_point = 1,  
  size_point = 1.5,  
  size_line = 0.5,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  x_balance = FALSE,  
  x_breaks_n = 2,  
  x_dodge = 0,  
  x_expand = NULL,  
  x_labels = NULL,  
  x_na_rm = FALSE,  
  x_rev = FALSE,  
  x_title = NULL,  
  x_title_wrap = 50,  
  x_zero = FALSE,  
  x_zero_line = NULL,  
  y_balance = FALSE,  
  y_breaks_n = 3,  
  y_expand = c(0, 0),  
  y_labels = scales::label_comma(),  
  y_na_rm = FALSE,  
  y_title = "",  
  y_title_wrap = 50,  
  y_zero = FALSE,  
  y_zero_line = NULL,  
  col_labels = snakecase::to_sentence_case,  
  col_legend_none = FALSE,  
  col_na_rm = FALSE,  
  col_title = NULL,  
  col_title_wrap = 25,  
  facet_labels = snakecase::to_sentence_case,  
  facet_na_rm = FALSE,
```

```

facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE)
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>x_var</code>	Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). Required input.
<code>ymiddle_var</code>	Unquoted numeric variable to be on the y scale. Required input.
<code>ymin_var</code>	Unquoted numeric variable to be the minimum of the y vertical line. Required input.
<code>ymax_var</code>	Unquoted numeric variable to be the maximum of the y vertical line. Required input.
<code>col_var</code>	Unquoted categorical variable for lines and points to be coloured by. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to <code>NULL</code> .
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to <code>FALSE</code> .
<code>alpha_line</code>	The opacity of the line. Defaults to 1.
<code>alpha_point</code>	The opacity of the points.
<code>size_point</code>	Size of points. Defaults to 1.5.
<code>size_line</code>	Size of lines. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 100.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 100.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to <code>FALSE</code> .
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
<code>x_dodge</code>	The amount to dodge pointranges by along the x axis. Defaults to 0 (i.e. identity).

x_expand	A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.
x_na_rm	TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
x_rev	For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
x_title	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap	Number of characters to wrap the x title to. Defaults to 50.
x_zero	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_balance	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
y_breaks_n	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.
y_expand	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels	A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.
y_na_rm	TRUE or FALSE of whether to include ymiddle_var NA values. Defaults to FALSE.
y_title	y scale title string. Defaults to "".
y_title_wrap	Number of characters to wrap the y title to. Defaults to 50.
y_zero	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
y_zero_line	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in ymiddle_var. Otherwise defaults to FALSE.
col_labels	A function or named vector to modify colour scale labels. Use ggplot2::waiver() to keep colour labels untransformed.
col_legend_none	TRUE or FALSE of whether to remove the legend.
col_na_rm	TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
col_title	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
col_title_wrap	Number of characters to wrap the colour title to. Defaults to 25.

<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>ggplot2::waiver()</code> to keep facet labels untransformed.
<code>facet_na_rm</code>	TRUE or FALSE of whether to include <code>facet_var</code> NA values. Defaults to FALSE.
<code>facet_ncol</code>	The number of columns of faceted plots.
<code>facet_nrow</code>	The number of rows of faceted plots.
<code>facet_rev</code>	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
<code>facet_scales</code>	Whether <code>facet_scales</code> should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 80.
<code>theme</code>	A <code>ggplot2</code> theme.

Value

A `ggplot` object.

Examples

```
library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  mutate(year = as.character(year)) %>%
  group_by(year, sex, species) %>%
  summarise(middle = median(body_mass_g, na.rm = TRUE),
            lower = quantile(body_mass_g, probs = 0.25, na.rm = TRUE),
            upper = quantile(body_mass_g, probs = 0.75, na.rm = TRUE))

gg_pointrange_col_facet(
  plot_data,
  x_var = year,
  ymiddle_var = middle,
  ymin_var = lower,
  ymax_var = upper,
  col_var = sex,
  facet_var = species,
  col_na_rm = TRUE,
  y_title = "Body mass g",
  x_labels = function(x) stringr::str_sub(x, 3, 4),
  x_dodge = 0.2)
```

gg_pointrange_facet *Pointrange ggplot that is faceted.*

Description

Pointrange ggplot that is faceted, but not coloured.

Usage

```
gg_pointrange_facet(  
  data,  
  x_var,  
  ymiddle_var,  
  ymin_var,  
  ymax_var,  
  facet_var,  
  text_var = NULL,  
  pal = pal_viridis_reorder(1),  
  alpha_line = 1,  
  alpha_point = 1,  
  size_point = 1.5,  
  size_line = 0.5,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  x_balance = FALSE,  
  x_breaks_n = 2,  
  x_expand = NULL,  
  x_labels = NULL,  
  x_na_rm = FALSE,  
  x_rev = FALSE,  
  x_title = NULL,  
  x_title_wrap = 50,  
  x_zero = FALSE,  
  x_zero_line = NULL,  
  y_balance = FALSE,  
  y_breaks_n = 3,  
  y_expand = c(0, 0),  
  y_labels = scales::label_comma(),  
  y_na_rm = FALSE,  
  y_title = "",  
  y_title_wrap = 50,  
  y_zero = FALSE,  
  y_zero_line = NULL,  
  facet_labels = snakecase::to_sentence_case,  
  facet_na_rm = FALSE,  
)
```

```

facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE)
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>x_var</code>	Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). Required input.
<code>ymiddle_var</code>	Unquoted numeric variable to be on the y scale. Required input.
<code>ymin_var</code>	Unquoted numeric variable to be the minimum of the y vertical line. Required input.
<code>ymax_var</code>	Unquoted numeric variable to be the maximum of the y vertical line. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to NULL.
<code>pal</code>	Character vector of hex codes.
<code>alpha_line</code>	The opacity of the line. Defaults to 1.
<code>alpha_point</code>	The opacity of the points.
<code>size_point</code>	Size of points. Defaults to 1.5.
<code>size_line</code>	Size of lines. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 100.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 100.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_na_rm</code>	TRUE or FALSE of whether to include <code>x_var</code> NA values. Defaults to FALSE.

x_rev	For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
x_title	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap	Number of characters to wrap the x title to. Defaults to 50.
x_zero	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_balance	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
y_breaks_n	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.
y_expand	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels	A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.
y_na_rm	TRUE or FALSE of whether to include ymiddle_var NA values. Defaults to FALSE.
y_title	y scale title string. Defaults to "".
y_title_wrap	Number of characters to wrap the y title to. Defaults to 50.
y_zero	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
y_zero_line	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in ymiddle_var. Otherwise defaults to FALSE.
facet_labels	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use ggplot2::waiver() to keep facet labels untransformed.
facet_na_rm	TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.
facet_ncol	The number of columns of faceted plots.
facet_nrow	The number of rows of faceted plots.
facet_rev	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
facet_scales	Whether facet_scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(sex, species) %>%
  summarise(middle = median(body_mass_g, na.rm = TRUE),
            lower = quantile(body_mass_g, probs = 0.25, na.rm = TRUE),
            upper = quantile(body_mass_g, probs = 0.75, na.rm = TRUE))

gg_pointrange_facet(
  plot_data,
  x_var = species,
  ymiddle_var = middle,
  ymin_var = lower,
  ymax_var = upper,
  facet_var = sex,
  facet_na_rm = TRUE,
  y_title = "Body mass g")
```

gg_point_col

Point ggplot that is coloured.

Description

Point ggplot that is coloured, but not faceted.

Usage

```
gg_point_col(
  data,
  x_var,
  y_var,
  col_var,
  text_var = NULL,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_point = 1,
  size_point = 1.5,
  title = NULL,
  title_wrap = 80,
```

```

  subtitle = NULL,
  subtitle_wrap = 80,
  x_balance = FALSE,
  x_breaks_n = 5,
  x_expand = NULL,
  x_jitter = 0,
  x_labels = NULL,
  x_rev = FALSE,
  x_title = NULL,
  x_title_wrap = 50,
  x_zero = FALSE,
  x_zero_line = NULL,
  y_balance = FALSE,
  y_breaks_n = 5,
  y_expand = c(0, 0),
  y_jitter = 0,
  y_labels = scales::label_comma(),
  y_title = NULL,
  y_title_wrap = 50,
  y_zero = FALSE,
  y_zero_line = NULL,
  col_breaks_n = 4,
  col_cuts = NULL,
  col_labels = NULL,
  col_legend_none = FALSE,
  col_method = NULL,
  col_intervals_right = TRUE,
  col_na_rm = FALSE,
  col_title = NULL,
  col_title_wrap = 25,
  caption = NULL,
  caption_wrap = 80,
  theme = gg_theme(gridlines_h = TRUE, gridlines_v = TRUE),
  mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>x_var</code>	Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or POSIXt). Required input.
<code>y_var</code>	Unquoted numeric variable to be on the y scale. Required input.
<code>col_var</code>	Unquoted variable for points to be coloured by. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to <code>NULL</code> .
<code>pal</code>	Character vector of hex codes.

<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to <code>FALSE</code> .
<code>alpha_point</code>	The opacity of the points.
<code>size_point</code>	Size of points. Defaults to 1.5.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where <code>mobile</code> equals <code>TRUE</code> .
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to <code>FALSE</code> .
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_jitter</code>	Amount of horizontal jitter to be added in positive and negative directions. Defaults to 0. See <code>ggplot2::position_jitter</code> for further information.
<code>x_labels</code>	A function or named vector to modify x scale labels. Use <code>function(x) x</code> to keep labels untransformed.
<code>x_rev</code>	For a categorical x variable, <code>TRUE</code> or <code>FALSE</code> of whether the x variable variable is reversed. Defaults to <code>FALSE</code> .
<code>x_title</code>	X scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use <code>""</code> if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, <code>TRUE</code> or <code>FALSE</code> of whether the minimum of the x scale is zero. Defaults to <code>FALSE</code> .
<code>x_zero_line</code>	For a numeric x variable, <code>TRUE</code> or <code>FALSE</code> of whether to add a zero reference line to the x scale. Defaults to <code>TRUE</code> if there are positive and negative values in <code>x_var</code> . Otherwise defaults to <code>FALSE</code> .
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
<code>y_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_jitter</code>	Amount of vertical jitter to be added in positive and negative directions. Defaults to 0. See <code>ggplot2::position_jitter</code> for further information.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>function(x) x</code> to keep labels untransformed.
<code>y_title</code>	y scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use <code>""</code> if you would like no title.

y_title_wrap	Number of characters to wrap the y title to. Defaults to 50.
y_zero	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
y_zero_line	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.
col_breaks_n	For a numeric colour variable. If "bin" col_method, the intervals on the colour scale for the pretty algorithm to aim for. If "quantile" col_method, the number of equal quantiles. Defaults to 4.
col_cuts	A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.
col_labels	A function or named vector to modify the colour scale labels. Defaults to stringr::str_to_sentence if categorical, and scales::label_comma() if numeric.
col_legend_none	TRUE or FALSE of whether to remove the legend.
col_method	The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".
col_intervals_right	For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut right-closed. Defaults to TRUE.
col_na_rm	TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
col_title	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
col_title_wrap	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.
mobile	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_point_col(penguins,
             x_var = bill_length_mm,
             y_var = body_mass_g,
             col_var = species)
```

`gg_point_col_facet` *Point ggplot that is coloured and faceted.*

Description

Point ggplot that is coloured and faceted.

Usage

```
gg_point_col_facet(  
  data,  
  x_var,  
  y_var,  
  col_var,  
  facet_var,  
  text_var = NULL,  
  pal = NULL,  
  pal_na = "#7F7F7F",  
  pal_rev = FALSE,  
  alpha_point = 1,  
  size_point = 1.5,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  x_balance = FALSE,  
  x_breaks_n = 2,  
  x_expand = NULL,  
  x_jitter = 0,  
  x_labels = NULL,  
  x_rev = FALSE,  
  x_title = NULL,  
  x_title_wrap = 50,  
  x_zero = FALSE,  
  x_zero_line = NULL,  
  y_balance = FALSE,  
  y_breaks_n = 3,  
  y_expand = c(0, 0),  
  y_jitter = 0,  
  y_labels = scales::label_comma(),  
  y_title = NULL,  
  y_title_wrap = 50,  
  y_zero = FALSE,  
  y_zero_line = NULL,  
  col_breaks_n = 4,  
  col_cuts = NULL,  
  col_intervals_right = TRUE,
```

```

col_labels = NULL,
col_legend_none = FALSE,
col_method = NULL,
col_na_rm = FALSE,
col_title = NULL,
col_title_wrap = 25,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE, gridlines_v = TRUE)
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>x_var</code>	Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or POSIXt). Required input.
<code>y_var</code>	Unquoted numeric variable to be on the y scale. Required input.
<code>col_var</code>	Unquoted variable for points to be coloured by. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to NULL.
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to FALSE.
<code>alpha_point</code>	The opacity of the points.
<code>size_point</code>	Size of points. Defaults to 1.5.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 100.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 100.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.

<code>x_jitter</code>	Amount of horizontal jitter to be added in positive and negative directions. Defaults to 0. See <code>ggplot2::position_jitter</code> for further information.
<code>x_labels</code>	A function or named vector to modify x scale labels. Use <code>function(x) x</code> to keep labels untransformed.
<code>x_rev</code>	For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in <code>x_var</code> . Otherwise defaults to FALSE.
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
<code>y_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_jitter</code>	Amount of vertical jitter to be added in positive and negative directions. Defaults to 0. See <code>ggplot2::position_jitter</code> for further information.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>function(x) x</code> to keep labels untransformed.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
<code>y_zero_line</code>	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in <code>y_var</code> . Otherwise defaults to FALSE.
<code>col_breaks_n</code>	For a numeric colour variable, the desired number of intervals on the colour scale.
<code>col_cuts</code>	A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.
<code>col_intervals_right</code>	For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut right-closed. Defaults to TRUE.
<code>col_labels</code>	A function or named vector to modify colour scale labels. Defaults to <code>snake-case::to_sentence_case</code> for categorical colour variables and <code>scales::label_comma()</code> for numeric. Use <code>function(x) x</code> to keep labels untransformed.

col_legend_none	TRUE or FALSE of whether to remove the legend.
col_method	The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".
col_na_rm	TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
col_title	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
col_title_wrap	Number of characters to wrap the colour title to. Defaults to 25.
facet_labels	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use function(x) x to keep labels untransformed.
facet_na_rm	TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.
facet_ncol	The number of columns of faceted plots.
facet_nrow	The number of rows of faceted plots.
facet_rev	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
facet_scales	Whether facet_scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_point_col_facet(penguins,
  x_var = bill_length_mm,
  y_var = body_mass_g,
  col_var = sex,
  facet_var = species)
```

gg_point_facet	<i>Point ggplot that is faceted.</i>
----------------	--------------------------------------

Description

Point ggplot that is faceted, but not coloured.

Usage

```
gg_point_facet(  
  data,  
  x_var,  
  y_var,  
  facet_var,  
  text_var = NULL,  
  pal = pal_viridis_reorder(1),  
  alpha_point = 1,  
  size_point = 1.5,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  x_balance = FALSE,  
  x_breaks_n = 2,  
  x_expand = NULL,  
  x_jitter = 0,  
  x_labels = NULL,  
  x_rev = FALSE,  
  x_title = NULL,  
  x_title_wrap = 50,  
  x_zero = FALSE,  
  x_zero_line = NULL,  
  y_balance = FALSE,  
  y_breaks_n = 3,  
  y_expand = c(0, 0),  
  y_jitter = 0,  
  y_labels = scales::label_comma(),  
  y_title = NULL,  
  y_title_wrap = 50,  
  y_zero = FALSE,  
  y_zero_line = NULL,  
  facet_labels = snakecase::to_sentence_case,  
  facet_na_rm = FALSE,  
  facet_ncol = NULL,  
  facet_nrow = NULL,  
  facet_rev = FALSE,  
  facet_scales = "fixed",  
  caption = NULL,  
  caption_wrap = 80,  
  theme = gg_theme(gridlines_h = TRUE, gridlines_v = TRUE)  
)
```

Arguments

data	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
------	---

x_var	Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or POSIXt). Required input.
y_var	Unquoted numeric variable to be on the y scale. Required input.
facet_var	Unquoted categorical variable to facet the data by. Required input.
text_var	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to NULL.
pal	Character vector of hex codes.
alpha_point	The opacity of the points.
size_point	Size of points. Defaults to 1.5.
title	Title string.
title_wrap	Number of characters to wrap the title to. Defaults to 100.
subtitle	Subtitle string.
subtitle_wrap	Number of characters to wrap the subtitle to. Defaults to 100.
x_balance	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
x_breaks_n	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
x_expand	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
x_jitter	Amount of horizontal jitter to be added in positive and negative directions. Defaults to 0. See <code>ggplot2::position_jitter</code> for further information.
x_labels	A function or named vector to modify x scale labels. Use <code>function(x) x</code> to keep labels untransformed.
x_rev	For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
x_title	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap	Number of characters to wrap the x title to. Defaults to 50.
x_zero	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in <code>x_var</code> . Otherwise defaults to FALSE.
y_balance	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
y_breaks_n	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.
y_expand	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
y_jitter	Amount of vertical jitter to be added in positive and negative directions. Defaults to 0. See <code>ggplot2::position_jitter</code> for further information.

<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>function(x) x</code> to keep labels untransformed.
<code>y_title</code>	y scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use <code>""</code> if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, <code>TRUE</code> or <code>FALSE</code> of whether the minimum of the y scale is zero. Defaults to <code>TRUE</code> .
<code>y_zero_line</code>	For a numeric y variable, <code>TRUE</code> or <code>FALSE</code> whether to add a zero reference line to the y scale. Defaults to <code>TRUE</code> if there are positive and negative values in <code>y_var</code> . Otherwise defaults to <code>FALSE</code> .
<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>function(x) x</code> to keep labels untransformed.
<code>facet_na_rm</code>	<code>TRUE</code> or <code>FALSE</code> of whether to include <code>facet_var</code> NA values. Defaults to <code>FALSE</code> .
<code>facet_ncol</code>	The number of columns of faceted plots.
<code>facet_nrow</code>	The number of rows of faceted plots.
<code>facet_rev</code>	<code>TRUE</code> or <code>FALSE</code> of whether the facet variable variable is reversed. Defaults to <code>FALSE</code> .
<code>facet_scales</code>	Whether <code>facet_scales</code> should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 80.
<code>theme</code>	A <code>ggplot2</code> theme.

Value

A `ggplot` object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_point_facet(penguins,
               x_var = bill_length_mm,
               y_var = body_mass_g,
               facet_var = species)
```

gg_sf

*Simple feature ggplot map.***Description**

Map of simple features in ggplot that is not coloured and not faceted.

Usage

```
gg_sf(
  data,
  text_var = NULL,
  borders = NULL,
  borders_on_top = NULL,
  pal = pal_viridis_reorder(1),
  pal_borders = "#7F7F7F",
  alpha_fill = NULL,
  alpha_line = 1,
  alpha_point = 1,
  alpha_borders = 0.5,
  size_line = 0.5,
  size_point = 1.5,
  size_borders = 0.2,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  caption = NULL,
  caption_wrap = 80,
  theme = gg_theme(void = TRUE),
  mobile = FALSE
)
```

Arguments

data	A sf object with defined coordinate reference system in a structure to be plotted untransformed. Required input.
text_var	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to NULL.
borders	A sf object as administrative boundaries (or coastlines). Defaults to no boundaries added. The <code>rnatualearth</code> package is a useful source of country and state boundaries.
borders_on_top	TRUE or FALSE as to whether the borders are on top of the sf object supplied to the data argument. Defaults to TRUE for points and lines, but FALSE for polygons..
pal	Character vector of hex codes.

pal_borders	Colour of the borders. Defaults to "#7F7F7F".
alpha_fill	The opacity of the fill.
alpha_line	The alpha of lines and outlines.
alpha_point	The alpha of points.
alpha_borders	Opacity of the borders. Defaults to 0.5.
size_line	Size of lines. Defaults to 0.5.
size_point	Size of points. Defaults to 1.5.
size_borders	Size of the borders. Defaults to 0.2.
title	Title string.
title_wrap	Number of characters to wrap the title to. Defaults to 75.
subtitle	Subtitle string.
subtitle_wrap	Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where mobile equals TRUE.
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.
mobile	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

```
gg_sf(example_point,  
      borders = example_borders)
```

gg_sf_col

Simple feature ggplot map that is coloured.

Description

Map of simple features in ggplot that is coloured, but not faceted.

Usage

```
gg_sf_col(
  data,
  col_var,
  text_var = NULL,
  borders = NULL,
  borders_on_top = NULL,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  pal_borders = "#7F7F7F",
  alpha_fill = NULL,
  alpha_line = 1,
  alpha_point = 1,
  alpha_borders = 0.5,
  size_line = 0.5,
  size_point = 1.5,
  size_borders = 0.2,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  col_breaks_n = 4,
  col_cuts = NULL,
  col_intervals_right = TRUE,
  col_labels = NULL,
  col_legend_none = FALSE,
  col_na_rm = FALSE,
  col_method = NULL,
  col_title = NULL,
  col_title_wrap = 25,
  caption = NULL,
  caption_wrap = 80,
  theme = gg_theme(void = TRUE),
  mobile = FALSE
)
```

Arguments

<code>data</code>	A sf object with defined coordinate reference system in a structure to be plotted untransformed. Required input.
<code>col_var</code>	Unquoted variable for points to be coloured by. Required input.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to NULL.
<code>borders</code>	A sf object as administrative boundaries (or coastlines). Defaults to no boundaries added. The <code>rnaturalearth</code> package is a useful source of country and state boundaries.

<code>borders_on_top</code>	TRUE or FALSE as to whether the borders are on top of the sf object supplied to the data argument. Defaults to TRUE for points and lines, but FALSE for polygons..
<code>pal</code>	Character vector of hex codes. Defaults to NULL, which selects the colorbrewer Set1 or viridis.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to FALSE.
<code>pal_borders</code>	Colour of the borders. Defaults to "#7F7F7F".
<code>alpha_fill</code>	The opacity of the fill.
<code>alpha_line</code>	The alpha of lines and outlines.
<code>alpha_point</code>	The alpha of points.
<code>alpha_borders</code>	Opacity of the borders. Defaults to 0.5.
<code>size_line</code>	Size of lines. Defaults to 0.5.
<code>size_point</code>	Size of points. Defaults to 1.5.
<code>size_borders</code>	Size of the borders. Defaults to 0.2.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where mobile equals TRUE.
<code>col_breaks_n</code>	For a numeric colour variable, the desired number of intervals on the colour scale.
<code>col_cuts</code>	A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.
<code>col_intervals_right</code>	For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut right-closed. Defaults to TRUE.
<code>col_labels</code>	A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case for categorical colour variables and scales::comma for numeric colour variables. Use ggplot2::waiver() to keep colour labels untransformed.
<code>col_legend_none</code>	TRUE or FALSE of whether to remove the legend.
<code>col_na_rm</code>	TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
<code>col_method</code>	The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".
<code>col_title</code>	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>col_title_wrap</code>	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.

caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.
mobile	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

```
gg_sf_col(example_point,
          col_var = trend_category,
          borders = example_borders)

gg_sf_col(example_polygon,
          col_var = density,
          borders = example_borders)

gg_sf_col(example_polygon,
          col_var = density,
          col_method = "bin",
          col_breaks_n = 5,
          borders = example_borders)

gg_sf_col(example_polygon,
          col_var = density,
          col_method = "bin",
          col_cuts = c(0, 10, 50, 100, 150, 200, Inf),
          borders = example_borders)

gg_sf_col(example_polygon,
          col_var = density,
          col_method = "quantile",
          col_breaks_n = 4,
          borders = example_borders)

gg_sf_col(example_polygon,
          col_var = density,
          col_method = "quantile",
          col_cuts = c(0, 0.25, 0.5, 0.75, 0.95, 1),
          borders = example_borders)
```

gg_sf_col_facet	<i>Simple feature ggplot map that is coloured and faceted.</i>
-----------------	--

Description

Map of simple features in ggplot that is coloured and faceted.

Usage

```
gg_sf_col_facet(  
  data,  
  col_var,  
  facet_var,  
  text_var = NULL,  
  borders = NULL,  
  borders_on_top = NULL,  
  pal = NULL,  
  pal_na = "#7F7F7F",  
  pal_rev = FALSE,  
  pal_borders = "#7F7F7F",  
  alpha_fill = NULL,  
  alpha_line = 1,  
  alpha_point = 1,  
  alpha_borders = 0.5,  
  size_line = 0.5,  
  size_point = 1.5,  
  size_borders = 0.2,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  col_breaks_n = 4,  
  col_cuts = NULL,  
  col_intervals_right = TRUE,  
  col_labels = NULL,  
  col_legend_none = FALSE,  
  col_method = NULL,  
  col_na_rm = FALSE,  
  col_title = NULL,  
  col_title_wrap = 25,  
  facet_labels = snakecase::to_sentence_case,  
  facet_na_rm = FALSE,  
  facet_ncol = NULL,  
  facet_nrow = NULL,  
  facet_rev = FALSE,  
  caption = NULL,  
  caption_wrap = 80,  
  theme = gg_theme(void = TRUE)  
)
```

Arguments

<code>data</code>	A sf object with defined coordinate reference system in a structure to be plotted untransformed. Required input.
<code>col_var</code>	Unquoted variable for points to be coloured by. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.

<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to <code>NULL</code> .
<code>borders</code>	A <code>sf</code> object as administrative boundaries (or coastlines). Defaults to no boundaries added. The <code>naturalearth</code> package is a useful source of country and state boundaries.
<code>borders_on_top</code>	<code>TRUE</code> or <code>FALSE</code> as to whether the borders are on top of the <code>sf</code> object supplied to the data argument. Defaults to <code>TRUE</code> for points and lines, but <code>FALSE</code> for polygons..
<code>pal</code>	Character vector of hex codes. Defaults to <code>NULL</code> , which selects the <code>colorbrewer Set1</code> or <code>viridis</code> .
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to <code>FALSE</code> .
<code>pal_borders</code>	Colour of the borders. Defaults to <code>"#7F7F7F"</code> .
<code>alpha_fill</code>	The opacity of the fill.
<code>alpha_line</code>	The alpha of lines and outlines.
<code>alpha_point</code>	The alpha of points.
<code>alpha_borders</code>	Opacity of the borders. Defaults to 0.5.
<code>size_line</code>	Size of lines. Defaults to 0.5.
<code>size_point</code>	Size of points. Defaults to 1.5.
<code>size_borders</code>	Size of the borders. Defaults to 0.2.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 100.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 100.
<code>col_breaks_n</code>	For a numeric colour variable. If <code>"bin"</code> <code>col_method</code> , the intervals on the colour scale for the pretty algorithm to aim for. If <code>"quantile"</code> <code>col_method</code> , the number of equal quantiles. Defaults to 4.
<code>col_cuts</code>	A vector of cuts to colour a numeric variable. If <code>"bin"</code> is selected, the first number in the vector should be either <code>-Inf</code> or <code>0</code> , and the final number <code>Inf</code> . If <code>"quantile"</code> is selected, the first number in the vector should be <code>0</code> and the final number should be <code>1</code> . Defaults to quartiles.
<code>col_intervals_right</code>	For a numeric colour variable, <code>TRUE</code> or <code>FALSE</code> of whether bins or quantiles are to be cut right-closed. Defaults to <code>TRUE</code> .
<code>col_labels</code>	A function or named vector to modify colour scale labels. Defaults to <code>snake-case::to_sentence_case</code> for categorical colour variables and <code>scales::comma</code> for numeric colour variables. Use <code>ggplot2::waiver()</code> to keep colour labels untransformed.
<code>col_legend_none</code>	<code>TRUE</code> or <code>FALSE</code> of whether to remove the legend.
<code>col_method</code>	The method of colouring features, either <code>"bin"</code> , <code>"quantile"</code> , <code>"continuous"</code> , or <code>"category"</code> . If numeric, defaults to <code>"bin"</code> .

col_na_rm	TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
col_title	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
col_title_wrap	Number of characters to wrap the colour title to. Defaults to 25.
facet_labels	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use ggplot2::waiver() to keep facet labels untransformed.
facet_na_rm	TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.
facet_ncol	The number of columns of faceted plots.
facet_nrow	The number of rows of faceted plots.
facet_rev	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
gg_sf_col_facet(example_point,
                col_var = trend_category,
                facet_var = trend_category,
                borders = example_borders)
```

gg_sf_facet	<i>Simple feature ggplot map that is faceted.</i>
-------------	---

Description

Map of simple features in ggplot that is faceted, but not coloured.

Usage

```
gg_sf_facet(
  data,
  facet_var,
  text_var = NULL,
  pal = pal_viridis_reorder(1),
  pal_borders = "#7F7F7F",
  borders = NULL,
  borders_on_top = NULL,
```

```

alpha_fill = NULL,
alpha_line = 1,
alpha_point = 1,
alpha_borders = 0.5,
size_line = 0.5,
size_point = 1.5,
size_borders = 0.2,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
title = NULL,
title_wrap = 80,
subtitle = NULL,
subtitle_wrap = 80,
caption = NULL,
caption_wrap = 80,
theme = gg_theme(void = TRUE)
)

```

Arguments

data	A sf object with defined coordinate reference system in a structure to be plotted untransformed. Required input.
facet_var	Unquoted categorical variable to facet the data by. Required input.
text_var	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to NULL.
pal	Character vector of hex codes.
pal_borders	Colour of the borders. Defaults to "#7F7F7F".
borders	A sf object as administrative boundaries (or coastlines). Defaults to no boundaries added. The <code>rnatuarearth</code> package is a useful source of country and state boundaries.
borders_on_top	TRUE or FALSE as to whether the borders are on top of the sf object supplied to the data argument. Defaults to TRUE for points and lines, but FALSE for polygons..
alpha_fill	The opacity of the fill.
alpha_line	The alpha of lines and outlines.
alpha_point	The alpha of points.
alpha_borders	Opacity of the borders. Defaults to 0.5.
size_line	Size of lines. Defaults to 0.5.
size_point	Size of points. Defaults to 1.5.
size_borders	Size of the borders. Defaults to 0.2.

facet_labels	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>ggplot2::waiver()</code> to keep facet labels untransformed.
facet_na_rm	TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.
facet_ncol	The number of columns of faceted plots.
facet_nrow	The number of rows of faceted plots.
facet_rev	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
title	Title string.
title_wrap	Number of characters to wrap the title to. Defaults to 100.
subtitle	Subtitle string.
subtitle_wrap	Number of characters to wrap the subtitle to. Defaults to 100.
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
gg_sf_facet(example_point,
            facet_var = trend_category,
            borders = example_borders)
```

gg_smooth

Smoothed ggplot.

Description

Smoothed ggplot that is not coloured and not faceted.

Usage

```
gg_smooth(
  data,
  x_var,
  y_var,
  pal = pal_viridis_reorder(1),
  alpha_fill = 0.5,
  alpha_line = 1,
  alpha_point = 1,
```

```

size_line = 0.5,
size_point = 1.5,
title = NULL,
title_wrap = 80,
subtitle = NULL,
subtitle_wrap = 80,
x_balance = FALSE,
x_breaks_n = 5,
x_expand = NULL,
x_labels = scales::label_comma(),
x_title = NULL,
x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,
y_balance = FALSE,
y_breaks_n = 5,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_title = NULL,
y_title_wrap = 50,
y_zero = FALSE,
y_zero_line = NULL,
caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE, gridlines_v = TRUE),
model_method = NULL,
model_formula = NULL,
model_se = TRUE,
model_level = 0.95,
model_span = 0.75,
model_n = 80,
mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure for points to be plotted untransformed, and a modelled line and ribbon to plotted based on this data. Required input.
<code>x_var</code>	Unquoted numeric variable to be on the x scale. Required input.
<code>y_var</code>	Unquoted numeric variable to be on the y scale. Required input.
<code>pal</code>	Character vector of hex codes.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 0.5.
<code>alpha_line</code>	The opacity of the line. Defaults to 1.
<code>alpha_point</code>	The opacity of the points. Defaults to 1.5.
<code>size_line</code>	Size of lines. Defaults to 0.5.

<code>size_point</code>	Size of points. Defaults to 1.5.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where <code>mobile</code> equals <code>TRUE</code> .
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to <code>FALSE</code> .
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_title</code>	X scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, <code>TRUE</code> or <code>FALSE</code> of whether the minimum of the x scale is zero. Defaults to <code>FALSE</code> .
<code>x_zero_line</code>	For a numeric x variable, <code>TRUE</code> or <code>FALSE</code> of whether to add a zero reference line to the x scale. Defaults to <code>TRUE</code> if there are positive and negative values in <code>x_var</code> . Otherwise defaults to <code>FALSE</code> .
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
<code>y_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_title</code>	y scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, <code>TRUE</code> or <code>FALSE</code> of whether the minimum of the y scale is zero. Defaults to <code>TRUE</code> .
<code>y_zero_line</code>	For a numeric y variable, <code>TRUE</code> or <code>FALSE</code> whether to add a zero reference line to the y scale. Defaults to <code>TRUE</code> if there are positive and negative values in <code>y_var</code> . Otherwise defaults to <code>FALSE</code> .
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 80.
<code>theme</code>	A <code>ggplot2</code> theme.

model_method	Smoothing algorithm to use. See <code>ggplot2::geom_smooth</code> for further details.
model_formula	Formula to use in smoothing function. See <code>ggplot2::geom_smooth</code> for further details.
model_se	TRUE or FALSE of whether to show confidence as a ribbon.
model_level	The level of confidence to calculate for the ribbon.
model_span	Controls the amount of smoothing for the default loess smoother. See <code>ggplot2::geom_smooth</code> for further details.
model_n	Number of points at which to evaluate smoother.
mobile	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_smooth(penguins,
          x_var = bill_length_mm,
          y_var = body_mass_g)
```

gg_smooth_col	<i>Smoothed ggplot that is coloured.</i>
---------------	--

Description

Smoothed ggplot that is coloured, but not faceted.

Usage

```
gg_smooth_col(
  data,
  x_var,
  y_var,
  col_var,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 0.5,
  alpha_line = 1,
  alpha_point = 1,
  size_line = 0.5,
  size_point = 1.5,
```

```

title = NULL,
title_wrap = 80,
subtitle = NULL,
subtitle_wrap = 80,
x_balance = FALSE,
x_breaks_n = 5,
x_expand = NULL,
x_labels = scales::label_comma(),
x_title = NULL,
x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,
y_balance = FALSE,
y_breaks_n = 5,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_title = NULL,
y_title_wrap = 50,
y_zero = FALSE,
y_zero_line = NULL,
col_labels = snakecase::to_sentence_case,
col_legend_none = FALSE,
col_na_rm = FALSE,
col_title = NULL,
col_title_wrap = 25,
caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE, gridlines_v = TRUE),
model_method = NULL,
model_formula = NULL,
model_se = TRUE,
model_level = 0.95,
model_span = 0.75,
model_n = 80,
mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure for points to be plotted untransformed, and a modelled line and ribbon to plotted based on this data. Required input.
<code>x_var</code>	Unquoted numeric variable to be on the x scale. Required input.
<code>y_var</code>	Unquoted numeric variable to be on the y scale. Required input.
<code>col_var</code>	Unquoted categorical variable for points to be coloured by. Required input.
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.

pal_rev	Reverses the palette. Defaults to FALSE.
alpha_fill	The opacity of the fill. Defaults to 0.5.
alpha_line	The opacity of the line. Defaults to 1.
alpha_point	The opacity of the points. Defaults to 1.5.
size_line	Size of lines. Defaults to 0.5.
size_point	Size of points. Defaults to 1.5.
title	Title string.
title_wrap	Number of characters to wrap the title to. Defaults to 75.
subtitle	Subtitle string.
subtitle_wrap	Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where mobile equals TRUE.
x_balance	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
x_breaks_n	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
x_expand	A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels	A function or named vector to modify x scale labels. Use ggplot2::waiver() to keep x labels untransformed.
x_title	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap	Number of characters to wrap the x title to. Defaults to 50.
x_zero	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_balance	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
y_breaks_n	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
y_expand	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels	A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.
y_title	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap	Number of characters to wrap the y title to. Defaults to 50.
y_zero	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.

<code>y_zero_line</code>	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in <code>y_var</code> . Otherwise defaults to FALSE.
<code>col_labels</code>	A function or named vector to modify colour scale labels. Use <code>ggplot2::waiver()</code> to keep colour labels untransformed.
<code>col_legend_none</code>	TRUE or FALSE of whether to remove the legend.
<code>col_na_rm</code>	TRUE or FALSE of whether to include <code>col_var</code> NA values. Defaults to FALSE.
<code>col_title</code>	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>col_title_wrap</code>	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where <code>mobile</code> equals TRUE.
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 80.
<code>theme</code>	A <code>ggplot2</code> theme.
<code>model_method</code>	Smoothing algorithm to use. See <code>ggplot2::geom_smooth</code> for further details.
<code>model_formula</code>	Formula to use in smoothing function. See <code>ggplot2::geom_smooth</code> for further details.
<code>model_se</code>	TRUE or FALSE of whether to show confidence as a ribbon.
<code>model_level</code>	The level of confidence to calculate for the ribbon.
<code>model_span</code>	Controls the amount of smoothing for the default loess smoother. See <code>ggplot2::geom_smooth</code> for further details.
<code>model_n</code>	Number of points at which to evaluate smoother.
<code>mobile</code>	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A `ggplot` object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_smooth_col(penguins,
              x_var = bill_length_mm,
              y_var = body_mass_g,
              col_var = species)

#if ggplotly legend bug, pipe in plotly::style(showlegend = FALSE, traces = x:y) layer
```

gg_smooth_col_facet *Smoothed ggplot that is coloured and faceted.*

Description

Smoothed ggplot that is coloured and faceted.

Usage

```
gg_smooth_col_facet(  
  data,  
  x_var,  
  y_var,  
  col_var,  
  facet_var,  
  pal = NULL,  
  pal_na = "#7F7F7F",  
  pal_rev = FALSE,  
  alpha_fill = 0.5,  
  alpha_line = 1,  
  alpha_point = 1,  
  size_line = 0.5,  
  size_point = 1.5,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  x_balance = FALSE,  
  x_breaks_n = 2,  
  x_expand = NULL,  
  x_labels = scales::label_comma(),  
  x_title = NULL,  
  x_title_wrap = 50,  
  x_zero = FALSE,  
  x_zero_line = NULL,  
  y_balance = FALSE,  
  y_breaks_n = 3,  
  y_expand = c(0, 0),  
  y_labels = scales::label_comma(),  
  y_title = NULL,  
  y_title_wrap = 50,  
  y_zero = FALSE,  
  y_zero_line = NULL,  
  col_labels = snakecase::to_sentence_case,  
  col_legend_none = FALSE,  
  col_na_rm = FALSE,  
  col_title = NULL,  
)
```

```

col_title_wrap = 25,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE, gridlines_v = TRUE),
model_method = NULL,
model_formula = NULL,
model_se = TRUE,
model_level = 0.95,
model_span = 0.75,
model_n = 80
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure for points to be plotted untransformed, and a modelled line and ribbon to plotted based on this data. Required input.
<code>x_var</code>	Unquoted numeric variable to be on the x scale. Required input.
<code>y_var</code>	Unquoted numeric variable to be on the y scale. Required input.
<code>col_var</code>	Unquoted categorical variable for points to be coloured by. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to FALSE.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 0.5.
<code>alpha_line</code>	The opacity of the line. Defaults to 1.
<code>alpha_point</code>	The opacity of the points. Defaults to 1.5.
<code>size_line</code>	Size of lines. Defaults to 0.5.
<code>size_point</code>	Size of points. Defaults to 1.5.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 100.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 100.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.

<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_title</code>	X scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use <code>""</code> if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, <code>TRUE</code> or <code>FALSE</code> of whether the minimum of the x scale is zero. Defaults to <code>FALSE</code> .
<code>x_zero_line</code>	For a numeric x variable, <code>TRUE</code> or <code>FALSE</code> of whether to add a zero reference line to the x scale. Defaults to <code>TRUE</code> if there are positive and negative values in <code>x_var</code> . Otherwise defaults to <code>FALSE</code> .
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
<code>y_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_title</code>	y scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use <code>""</code> if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, <code>TRUE</code> or <code>FALSE</code> of whether the minimum of the y scale is zero. Defaults to <code>TRUE</code> .
<code>y_zero_line</code>	For a numeric y variable, <code>TRUE</code> or <code>FALSE</code> whether to add a zero reference line to the y scale. Defaults to <code>TRUE</code> if there are positive and negative values in <code>y_var</code> . Otherwise defaults to <code>FALSE</code> .
<code>col_labels</code>	A function or named vector to modify colour scale labels. Use <code>ggplot2::waiver()</code> to keep colour labels untransformed.
<code>col_legend_none</code>	<code>TRUE</code> or <code>FALSE</code> of whether to remove the legend.
<code>col_na_rm</code>	<code>TRUE</code> or <code>FALSE</code> of whether to include <code>col_var</code> NA values. Defaults to <code>FALSE</code> .
<code>col_title</code>	Colour title string for the legend. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use <code>""</code> if you would like no title.
<code>col_title_wrap</code>	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where <code>mobile</code> equals <code>TRUE</code> .
<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>ggplot2::waiver()</code> to keep facet labels untransformed.
<code>facet_na_rm</code>	<code>TRUE</code> or <code>FALSE</code> of whether to include <code>facet_var</code> NA values. Defaults to <code>FALSE</code> .
<code>facet_ncol</code>	The number of columns of faceted plots.

facet_nrow	The number of rows of faceted plots.
facet_rev	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
facet_scales	Whether facet_scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.
model_method	Smoothing algorithm to use. See ggplot2::geom_smooth for further details.
model_formula	Formula to use in smoothing function. See ggplot2::geom_smooth for further details.
model_se	TRUE or FALSE of whether to show confidence as a ribbon.
model_level	The level of confidence to calculate for the ribbon.
model_span	Controls the amount of smoothing for the default loess smoother. See ggplot2::geom_smooth for further details.
model_n	Number of points at which to evaluate smoother.

Value

A ggplot object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_smooth_col_facet(penguins,
  x_var = bill_length_mm,
  y_var = body_mass_g,
  col_var = sex,
  facet_var = species,
  col_na_rm = TRUE)

#if ggplotly legend bug, pipe in plotly::style(showlegend = FALSE, traces = x:y) layer
```

gg_smooth_facet	<i>Smoothed ggplot that is faceted.</i>
-----------------	---

Description

Smoothed ggplot that is faceted, but not coloured.

Usage

```
gg_smooth_facet(  
  data,  
  x_var,  
  y_var,  
  facet_var,  
  pal = pal_viridis_reorder(1),  
  alpha_fill = 0.5,  
  alpha_line = 1,  
  alpha_point = 1,  
  size_line = 0.5,  
  size_point = 1.5,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  x_balance = FALSE,  
  x_breaks_n = 2,  
  x_expand = NULL,  
  x_labels = scales::label_comma(),  
  x_title = NULL,  
  x_title_wrap = 50,  
  x_zero = FALSE,  
  x_zero_line = NULL,  
  y_balance = FALSE,  
  y_breaks_n = 3,  
  y_expand = c(0, 0),  
  y_labels = scales::label_comma(),  
  y_title = NULL,  
  y_title_wrap = 50,  
  y_zero = FALSE,  
  y_zero_line = NULL,  
  facet_labels = snakecase::to_sentence_case,  
  facet_na_rm = FALSE,  
  facet_ncol = NULL,  
  facet_nrow = NULL,  
  facet_rev = FALSE,  
  facet_scales = "fixed",  
  caption = NULL,  
  caption_wrap = 80,  
  theme = gg_theme(gridlines_h = TRUE, gridlines_v = TRUE),  
  model_method = NULL,  
  model_formula = NULL,  
  model_se = TRUE,  
  model_level = 0.95,  
  model_span = 0.75,  
  model_n = 80  
)
```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure for points to be plotted untransformed, and a modelled line and ribbon to plotted based on this data. Required input.
<code>x_var</code>	Unquoted numeric variable to be on the x scale. Required input.
<code>y_var</code>	Unquoted numeric variable to be on the y scale. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>pal</code>	Character vector of hex codes.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 0.5.
<code>alpha_line</code>	The opacity of the line. Defaults to 1.
<code>alpha_point</code>	The opacity of the points. Defaults to 1.5.
<code>size_line</code>	Size of lines. Defaults to 0.5.
<code>size_point</code>	Size of points. Defaults to 1.5.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 100.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 100.
<code>x_balance</code>	For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
<code>x_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>x_zero</code>	For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
<code>x_zero_line</code>	For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in <code>x_var</code> . Otherwise defaults to FALSE.
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
<code>y_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.

<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
<code>y_zero_line</code>	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in <code>y_var</code> . Otherwise defaults to FALSE.
<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>ggplot2::waiver()</code> to keep facet labels untransformed.
<code>facet_na_rm</code>	TRUE or FALSE of whether to include <code>facet_var</code> NA values. Defaults to FALSE.
<code>facet_ncol</code>	The number of columns of faceted plots.
<code>facet_nrow</code>	The number of rows of faceted plots.
<code>facet_rev</code>	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
<code>facet_scales</code>	Whether <code>facet_scales</code> should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 80.
<code>theme</code>	A ggplot2 theme.
<code>model_method</code>	Smoothing algorithm to use. See <code>ggplot2::geom_smooth</code> for further details.
<code>model_formula</code>	Formula to use in smoothing function. See <code>ggplot2::geom_smooth</code> for further details.
<code>model_se</code>	TRUE or FALSE of whether to show confidence as a ribbon.
<code>model_level</code>	The level of confidence to calculate for the ribbon.
<code>model_span</code>	Controls the amount of smoothing for the default loess smoother. See <code>ggplot2::geom_smooth</code> for further details.
<code>model_n</code>	Number of points at which to evaluate smoother.

Value

A ggplot object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_smooth_facet(penguins,
                x_var = bill_length_mm,
                y_var = body_mass_g,
                facet_var = species)
```

gg_stars

*Stars ggplot map.***Description**

Map of an array in ggplot that is not coloured and not faceted.

Usage

```
gg_stars(
  data,
  borders = NULL,
  borders_on_top = TRUE,
  downsample = 0,
  pal = pal_viridis_reorder(1),
  pal_borders = "#323232",
  alpha_fill = 0.5,
  alpha_borders = 0.5,
  size_borders = 0.2,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  caption = NULL,
  caption_wrap = 80,
  theme = gg_theme(void = TRUE),
  mobile = FALSE
)
```

Arguments

data	A stars object with defined coordinate reference system in a structure to be plotted untransformed. Note, it cannot be a stars_proxy object. Required input.
borders	A sf object as administrative boundaries (or coastlines). Defaults to no boundaries added. The rnatualearth package is a useful source of country and state boundaries.
borders_on_top	TRUE or FALSE as to whether the borders are on top of the stars array. Defaults to TRUE.
downsample	downsampling rate: e.g. 3 keeps rows and cols 1, 4, 7, 10 etc. A value of 0 does not downsample. It can be specified for each dimension. E.g. c(5,5,0) to downsample the first two dimensions but not the third.
pal	Character vector of hex codes.
pal_borders	Colour of the borders. Defaults to "#323232".
alpha_fill	The opacity of the fill. Defaults to 0.5.
alpha_borders	Opacity of the borders. Defaults to 0.5.

size_borders	Size of the borders. Defaults to 0.2.
title	Title string.
title_wrap	Number of characters to wrap the title to. Defaults to 75.
subtitle	Subtitle string.
subtitle_wrap	Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where mobile equals TRUE.
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.
mobile	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

```
library(simplevis)

gg_stars(example_stars,
         borders = example_borders)
```

gg_stars_col	<i>Stars ggplot map that is coloured.</i>
--------------	---

Description

Map of an array in ggplot that is coloured, but not faceted.

Usage

```
gg_stars_col(
  data,
  col_var,
  borders = NULL,
  borders_on_top = TRUE,
  downsample = 0,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  pal_borders = "#7F7F7F",
  alpha_fill = 1,
  alpha_borders = 0.5,
  size_borders = 0.2,
```

```

title = NULL,
title_wrap = 80,
subtitle = NULL,
subtitle_wrap = 80,
col_breaks_n = 4,
col_cuts = NULL,
col_intervals_right = TRUE,
col_labels = NULL,
col_legend_none = FALSE,
col_na_rm = FALSE,
col_method = NULL,
col_title = NULL,
col_title_wrap = 25,
caption = NULL,
caption_wrap = 80,
theme = gg_theme(void = TRUE),
mobile = FALSE
)

```

Arguments

<code>data</code>	A stars object with defined coordinate reference system in a structure to be plotted untransformed. Note, it cannot be a stars_proxy object. Required input.
<code>col_var</code>	Unquoted variable for points to be coloured by. Required input.
<code>borders</code>	A sf object as administrative boundaries (or coastlines). Defaults to no boundaries added. The rnatualearth package is a useful source of country and state boundaries.
<code>borders_on_top</code>	TRUE or FALSE as to whether the borders are on top of the stars array. Defaults to TRUE.
<code>downsample</code>	downsampling rate: e.g. 3 keeps rows and cols 1, 4, 7, 10 etc. A value of 0 does not downsample. It can be specified for each dimension. E.g. c(5,5,0) to downsample the first two dimensions but not the third.
<code>pal</code>	Character vector of hex codes. Defaults to NULL, which selects the colorbrewer Set1 or viridis.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to FALSE.
<code>pal_borders</code>	Colour of the borders. Defaults to "#7F7F7F".
<code>alpha_fill</code>	The opacity of the fill. Defaults to 1.
<code>alpha_borders</code>	Opacity of the borders. Defaults to 0.5.
<code>size_borders</code>	Size of the borders. Defaults to 0.2.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where mobile equals TRUE.

col_breaks_n	For a numeric colour variable, the desired number of intervals on the colour scale.
col_cuts	A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.
col_intervals_right	For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut right-closed. Defaults to TRUE.
col_labels	A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case for categorical colour variables and scales::comma for numeric colour variables. Use ggplot2::waiver() to keep colour labels untransformed.
col_legend_none	TRUE or FALSE of whether to remove the legend.
col_na_rm	TRUE or FALSE of whether to visualise col_var NA values. Defaults to FALSE.
col_method	The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".
col_title	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
col_title_wrap	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.
mobile	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

```
library(simplevis)

gg_stars_col(example_stars,
             col_var = nitrate,
             col_na_rm = TRUE,
             borders = example_borders)
```

`gg_theme`*Create a simple theme for a graph.*

Description

Create a simple theme for a graph.

Usage

```
gg_theme(  
  font = "",  
  font_title = NULL,  
  font_subtitle = NULL,  
  font_body = NULL,  
  size_title = 11,  
  size_subtitle = 10,  
  size_body = 10,  
  size_axis = 0.3,  
  size_ticks = 0.3,  
  size_gridlines = 0.2,  
  style_title = "bold",  
  style_subtitle = "plain",  
  style_body = "plain",  
  pal_title = "#000000",  
  pal_subtitle = "#323232",  
  pal_body = "#323232",  
  pal_axis = "#323232",  
  pal_ticks = "#323232",  
  pal_background = c("#ffffff", "#ffffff"),  
  pal_gridlines = "#D3D3D3",  
  gridlines_h = FALSE,  
  gridlines_v = FALSE,  
  void = FALSE  
)
```

Arguments

<code>font</code>	The font for all text to use. Defaults to "".
<code>font_title</code>	The font for the title. If NULL, inherits from font argument.
<code>font_subtitle</code>	The font for the subtitle. If NULL, inherits from font argument.
<code>font_body</code>	The font for the subtitle. If NULL, inherits from font argument.
<code>size_title</code>	The size of the title font. Defaults to 11.
<code>size_subtitle</code>	The size of the subtitle font. Defaults to 10.
<code>size_body</code>	The size of all text other than the title or subtitle. Defaults to 10.
<code>size_axis</code>	The size of the axis. Defaults to 0.3.

size_ticks	The size of the ticks. Defaults to 0.3.
size_gridlines	The size of the vertical major gridlines. Defaults to 0.2.
style_title	The style of the title font. Defaults to "bold".
style_subtitle	The style of the subtitle font. Defaults to "plain".
style_body	The style of all text other than the title or subtitle. Defaults to "plain".
pal_title	The colour palette for the title font. Defaults to "#000000".
pal_subtitle	The colour palette for the subtitle font. Defaults to "#323232".
pal_body	The colour palette for all text other than the title or subtitle. Defaults to "#323232".
pal_axis	The colour palette for the axis. Defaults to "#323232".
pal_ticks	The colour palette for the ticks. Defaults to "#323232".
pal_background	A two colour vector. The first colour is for the panel (and legend key). The second colour is for the rest of the background.
pal_gridlines	The colour palette for the vertical major gridlines. Defaults to "#D3D3D3".
gridlines_h	TRUE or FALSE of whether to show horizontal gridlines.
gridlines_v	TRUE or FALSE of whether to show vertical gridlines.
void	TRUE or FALSE of whether to drop all axis lines, ticks and x and y labels. Useful for maps. Defaults to FALSE.

Value

A ggplot theme.

gg_tile_col	<i>Tile ggplot that is coloured.</i>
-------------	--------------------------------------

Description

Tile ggplot that is coloured, but not faceted.

Usage

```
gg_tile_col(
  data,
  x_var,
  y_var,
  col_var,
  label_var = NULL,
  text_var = NULL,
  pal = NULL,
  pal_label = "#323232",
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 1,
```

```

alpha_line = 1,
size_line = 0.5,
size_label = 3.5,
size_height = 1,
size_width = 1,
title = NULL,
title_wrap = 75,
subtitle = NULL,
subtitle_wrap = 75,
x_expand = c(0, 0),
x_labels = snakecase::to_sentence_case,
x_na_rm = FALSE,
x_rev = FALSE,
x_title = NULL,
x_title_wrap = 50,
y_expand = c(0, 0),
y_labels = snakecase::to_sentence_case,
y_na_rm = FALSE,
y_rev = FALSE,
y_title = NULL,
y_title_wrap = 50,
col_cuts = NULL,
col_intervals_right = TRUE,
col_labels = NULL,
col_legend_none = FALSE,
col_method = NULL,
col_na_rm = FALSE,
col_breaks_n = 4,
col_title = NULL,
col_title_wrap = 25,
caption = NULL,
caption_wrap = 75,
theme = gg_theme(),
mobile = FALSE
)

```

Arguments

data	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
x_var	Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
y_var	Unquoted numeric variable to be on the y scale. Required input.
col_var	Unquoted categorical variable to colour the tiles Required input.
label_var	Unquoted variable to label the tiles.
text_var	Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.

pal	Character vector of hex codes.
pal_label	Hex code for the label font colour. Defaults to "#323232".
pal_na	The hex code or name of the NA colour to be used.
pal_rev	Reverses the palette. Defaults to FALSE.
alpha_fill	The opacity of the fill. Defaults to 1.
alpha_line	The opacity of the outline. Defaults to 1.
size_line	The size of the outlines of bars.
size_label	The size of the of labels. Defaults to 3.5.
size_height	Height of tiles. Defaults to 1.
size_width	Width of tiles. Defaults to 1.
title	Title string.
title_wrap	Number of characters to wrap the title to. Defaults to 60.
subtitle	Subtitle string.
subtitle_wrap	Number of characters to wrap the subtitle to. Defaults to 60.
x_expand	A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use function(x) x to keep labels untransformed.
x_na_rm	TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
x_rev	TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
x_title	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap	Number of characters to wrap the x title to. Defaults to 50.
y_expand	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels	A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use function(x) x to keep labels untransformed.
y_na_rm	TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.
y_rev	TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
y_title	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap	Number of characters to wrap the y title to. Defaults to 50.
col_cuts	A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.

<code>col_intervals_right</code>	For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut right-closed. Defaults to TRUE.
<code>col_labels</code>	A function or named vector to modify colour scale labels. Defaults to <code>snake-case::to_sentence_case</code> for categorical colour variables and <code>scales::label_comma()</code> for numeric. Use <code>function(x) x</code> to keep labels untransformed.
<code>col_legend_none</code>	TRUE or FALSE of whether to remove the legend.
<code>col_method</code>	The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".
<code>col_na_rm</code>	TRUE or FALSE of whether to include <code>col_var</code> NA values. Defaults to FALSE.
<code>col_breaks_n</code>	For a numeric colour variable, the desired number of intervals on the colour scale.
<code>col_title</code>	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>col_title_wrap</code>	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where <code>mobile</code> equals TRUE.
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 75.
<code>theme</code>	A <code>ggplot2</code> theme.
<code>mobile</code>	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A `ggplot` object.

Examples

```
library(simplevis)
library(dplyr)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(species, sex) %>%
  summarise(bill_length_mm = round(mean(bill_length_mm, na.rm = TRUE), 1))

gg_tile_col(plot_data,
  x_var = sex,
  y_var = species,
  col_var = bill_length_mm,
  label_var = bill_length_mm)
```

gg_tile_col_facet *Tile ggplot that is coloured and faceted.*

Description

Tile ggplot that is coloured and faceted.

Usage

```
gg_tile_col_facet(  
  data,  
  x_var,  
  y_var,  
  col_var,  
  facet_var,  
  label_var = NULL,  
  text_var = NULL,  
  pal = NULL,  
  pal_label = "#323232",  
  pal_na = "#7F7F7F",  
  pal_rev = FALSE,  
  alpha_fill = 1,  
  alpha_line = 1,  
  size_line = 0.5,  
  size_label = 3.5,  
  size_height = 1,  
  size_width = 1,  
  title = NULL,  
  title_wrap = 75,  
  subtitle = NULL,  
  subtitle_wrap = 75,  
  x_expand = c(0, 0),  
  x_labels = snakecase::to_sentence_case,  
  x_na_rm = FALSE,  
  x_rev = FALSE,  
  x_title = NULL,  
  x_title_wrap = 50,  
  y_expand = c(0, 0),  
  y_labels = snakecase::to_sentence_case,  
  y_na_rm = FALSE,  
  y_rev = FALSE,  
  y_title = NULL,  
  y_title_wrap = 50,  
  col_breaks_n = 4,  
  col_cuts = NULL,  
  col_intervals_right = TRUE,  
  col_labels = NULL,  
)
```

```

col_legend_none = FALSE,
col_method = NULL,
col_na_rm = FALSE,
col_title = NULL,
col_title_wrap = 25,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 75,
theme = gg_theme()
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be plotted untransformed. Required input.
<code>x_var</code>	Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
<code>y_var</code>	Unquoted numeric variable to be on the y scale. Required input.
<code>col_var</code>	Unquoted categorical variable to colour the tiles. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>label_var</code>	Unquoted variable to label the tiles.
<code>text_var</code>	Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = "text")</code> . Defaults to NULL.
<code>pal</code>	Character vector of hex codes.
<code>pal_label</code>	Hex code for the label font colour. Defaults to "#323232".
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to FALSE.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 1.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of bars.
<code>size_label</code>	The size of the of labels. Defaults to 3.5.
<code>size_height</code>	Height of tiles. Defaults to 1.
<code>size_width</code>	Width of tiles. Defaults to 1.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 60.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 60.

x_expand	A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use function(x) x to keep labels untransformed.
x_na_rm	TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
x_rev	TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
x_title	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap	Number of characters to wrap the x title to. Defaults to 50.
y_expand	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels	A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use function(x) x to keep labels untransformed.
y_na_rm	TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.
y_rev	TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
y_title	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap	Number of characters to wrap the y title to. Defaults to 50.
col_breaks_n	For a numeric colour variable, the desired number of intervals on the colour scale.
col_cuts	A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.
col_intervals_right	For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut right-closed. Defaults to TRUE.
col_labels	A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case for categorical colour variables and scales::label_comma() for numeric. Use function(x) x to keep labels untransformed.
col_legend_none	TRUE or FALSE of whether to remove the legend.
col_method	The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".
col_na_rm	TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
col_title	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
col_title_wrap	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.

facet_labels	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use function(x) x to keep labels untransformed.
facet_na_rm	TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.
facet_ncol	The number of columns of faceted plots.
facet_nrow	The number of rows of faceted plots.
facet_rev	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
facet_scales	Whether facet_scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
caption	Caption title string.
caption_wrap	Number of characters to wrap the caption to. Defaults to 75.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(simplevis)
library(dplyr)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(species, sex, island) %>%
  summarise(bill_length_mm = round(mean(bill_length_mm, na.rm = TRUE), 1))

gg_tile_col_facet(plot_data,
  x_var = sex,
  y_var = island,
  col_var = bill_length_mm,
  facet_var = species,
  label_var = bill_length_mm)
```

 gg_violin

Violin ggplot.

Description

Violin ggplot that is not coloured and not faceted.

Usage

```

gg_violin(
  data,
  x_var,
  y_var = NULL,
  pal = pal_viridis_reorder(1),
  alpha_fill = 1,
  alpha_line = 1,
  size_line = 0.5,
  size_width = 0.75,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_expand = ggplot2::waiver(),
  x_labels = snakecase::to_sentence_case,
  x_na_rm = FALSE,
  x_rev = FALSE,
  x_title = NULL,
  x_title_wrap = 50,
  y_balance = FALSE,
  y_breaks_n = 5,
  y_expand = c(0, 0),
  y_labels = scales::label_comma(),
  y_title = NULL,
  y_title_wrap = 50,
  y_zero = FALSE,
  y_zero_line = NULL,
  caption = NULL,
  caption_wrap = 80,
  theme = gg_theme(gridlines_h = TRUE),
  model_scale = "area",
  model_bw = "nrd0",
  model_adjust = 1,
  model_kernel = "gaussian",
  model_trim = TRUE,
  mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be transformed to density statistics. Required input.
<code>x_var</code>	Unquoted categorical variable to be on the x scale (i.e. character, factor, logical). Required input.
<code>y_var</code>	Generally an unquoted numeric variable to be on the y scale.
<code>pal</code>	Character vector of hex codes.

<code>alpha_fill</code>	The opacity of the fill. Defaults to 1.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of violins. Defaults to 0.5.
<code>size_width</code>	Width of boxes. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 75.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. If <code>NULL</code> , categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_na_rm</code>	<code>TRUE</code> or <code>FALSE</code> of whether to include <code>x_var</code> NA values. Defaults to <code>FALSE</code> .
<code>x_rev</code>	For a categorical x variable, <code>TRUE</code> or <code>FALSE</code> of whether the x variable variable is reversed. Defaults to <code>FALSE</code> .
<code>x_title</code>	X scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
<code>y_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_title</code>	y scale title string. Defaults to <code>NULL</code> , which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, <code>TRUE</code> or <code>FALSE</code> of whether the minimum of the y scale is zero. Defaults to <code>TRUE</code> .
<code>y_zero_line</code>	For a numeric y variable, <code>TRUE</code> or <code>FALSE</code> whether to add a zero reference line to the y scale. Defaults to <code>TRUE</code> if there are positive and negative values in <code>y_var</code> . Otherwise defaults to <code>FALSE</code> .
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 80.
<code>theme</code>	A <code>ggplot2</code> theme.
<code>model_scale</code>	Per <code>ggplot2::geom_violin</code> , if "area" (default), all violins have the same area (before trimming the tails). If "count", areas are scaled proportionally to the number of observations. If "width", all violins have the same maximum width.

model_bw	The bw argument of the stats::density function. Defaults to "nrd0".
model_adjust	The adjust argument of the stats::density function. Defaults to 1.
model_kernel	The kernel argument of the stats::density function. Defaults to "gaussian".
model_trim	TRUE or FALSE of whether to trim the tails. Defaults to FALSE.
mobile	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_violin(penguins,
          x_var = species,
          y_var = body_mass_g)
```

gg_violin_col

Violin ggplot that is coloured

Description

Violin ggplot that is coloured

Usage

```
gg_violin_col(
  data,
  x_var,
  y_var = NULL,
  col_var,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 1,
  alpha_line = 1,
  size_line = 0.5,
  size_width = 0.75,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_expand = ggplot2::waiver(),
  x_labels = snakecase::to_sentence_case,
```

```

x_na_rm = FALSE,
x_rev = FALSE,
x_title = NULL,
x_title_wrap = 50,
y_balance = FALSE,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_breaks_n = 5,
y_title = NULL,
y_title_wrap = 50,
y_zero = FALSE,
y_zero_line = NULL,
col_labels = snakecase::to_sentence_case,
col_legend_none = FALSE,
col_na_rm = FALSE,
col_rev = FALSE,
col_title = NULL,
col_title_wrap = 25,
caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE),
model_scale = "area",
model_bw = "nrd0",
model_adjust = 1,
model_kernel = "gaussian",
model_trim = TRUE,
mobile = FALSE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be transformed to density statistics. Required input.
<code>x_var</code>	Unquoted categorical variable to be on the x scale (i.e. character, factor, logical). Required input.
<code>y_var</code>	Generally an unquoted numeric variable to be on the y scale.
<code>col_var</code>	Unquoted categorical variable to colour the fill of the boxes. Required input.
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to FALSE.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 1.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of violins. Defaults to 0.5.
<code>size_width</code>	Width of boxes. Defaults to 0.75.
<code>title</code>	Title string.

title_wrap	Number of characters to wrap the title to. Defaults to 75.
subtitle	Subtitle string.
subtitle_wrap	Number of characters to wrap the subtitle to. Defaults to 75.
x_expand	A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.
x_na_rm	TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
x_rev	For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
x_title	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap	Number of characters to wrap the x title to. Defaults to 50.
y_balance	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
y_expand	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels	A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.
y_breaks_n	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
y_title	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap	Number of characters to wrap the y title to. Defaults to 50.
y_zero	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
y_zero_line	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.
col_labels	A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case. Use ggplot2::waiver() to keep colour labels untransformed.
col_legend_none	TRUE or FALSE of whether to remove the legend.
col_na_rm	TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
col_rev	TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.
col_title	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
col_title_wrap	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.
caption	Caption title string.

caption_wrap	Number of characters to wrap the caption to. Defaults to 80.
theme	A ggplot2 theme.
model_scale	Per ggplot2::geom_violin, if "area" (default), all violins have the same area (before trimming the tails). If "count", areas are scaled proportionally to the number of observations. If "width", all violins have the same maximum width.
model_bw	The bw argument of the stats::density function. Defaults to "nrd0".
model_adjust	The adjust argument of the stats::density function. Defaults to 1.
model_kernel	The kernel argument of the stats::density function. Defaults to "gaussian".
model_trim	TRUE or FALSE of whether to trim the tails. Defaults to FALSE.
mobile	Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

```
library(simplevis)
library(palmerpenguins)

gg_violin_col(penguins,
              x_var = species,
              y_var = body_mass_g,
              col_var = sex,
              col_na_rm = TRUE)
```

gg_violin_col_facet *Violin ggplot that is coloured and faceted.*

Description

Violin ggplot that is coloured and faceted.

Usage

```
gg_violin_col_facet(
  data,
  x_var,
  y_var = NULL,
  col_var,
  facet_var,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 1,
```

```

alpha_line = 1,
size_line = 0.5,
size_width = 0.75,
title = NULL,
title_wrap = 80,
subtitle = NULL,
subtitle_wrap = 80,
x_expand = ggplot2::waiver(),
x_labels = snakecase::to_sentence_case,
x_na_rm = FALSE,
x_rev = FALSE,
x_title = NULL,
x_title_wrap = 50,
y_balance = FALSE,
y_breaks_n = 3,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_title = NULL,
y_title_wrap = 50,
y_zero = FALSE,
y_zero_line = NULL,
col_labels = snakecase::to_sentence_case,
col_legend_none = FALSE,
col_na_rm = FALSE,
col_rev = FALSE,
col_title = NULL,
col_title_wrap = 25,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE),
model_scale = "area",
model_bw = "nrd0",
model_adjust = 1,
model_kernel = "gaussian",
model_trim = TRUE
)

```

Arguments

<code>data</code>	An ungrouped summarised tibble or dataframe in a structure to be transformed to density statistics. Required input.
<code>x_var</code>	Unquoted categorical variable to be on the x scale (i.e. character, factor, logical).

	Required input.
<code>y_var</code>	Generally an unquoted numeric variable to be on the y scale.
<code>col_var</code>	Unquoted categorical variable to colour the fill of the boxes. Required input.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to FALSE.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 1.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of violins. Defaults to 0.5.
<code>size_width</code>	Width of boxes. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 75.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_na_rm</code>	TRUE or FALSE of whether to include <code>x_var</code> NA values. Defaults to FALSE.
<code>x_rev</code>	For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
<code>y_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.

<code>y_zero_line</code>	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in <code>y_var</code> . Otherwise defaults to FALSE.
<code>col_labels</code>	A function or named vector to modify colour scale labels. Defaults to <code>snake-case::to_sentence_case</code> . Use <code>ggplot2::waiver()</code> to keep colour labels untransformed.
<code>col_legend_none</code>	TRUE or FALSE of whether to remove the legend.
<code>col_na_rm</code>	TRUE or FALSE of whether to include <code>col_var</code> NA values. Defaults to FALSE.
<code>col_rev</code>	TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.
<code>col_title</code>	Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>col_title_wrap</code>	Number of characters to wrap the colour title to. Defaults to 25. Not applicable where <code>mobile</code> equals TRUE.
<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>ggplot2::waiver()</code> to keep facet labels untransformed.
<code>facet_na_rm</code>	TRUE or FALSE of whether to include <code>facet_var</code> NA values. Defaults to FALSE.
<code>facet_ncol</code>	The number of columns of faceted plots.
<code>facet_nrow</code>	The number of rows of faceted plots.
<code>facet_rev</code>	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
<code>facet_scales</code>	Whether <code>facet_scales</code> should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 80.
<code>theme</code>	A <code>ggplot2</code> theme.
<code>model_scale</code>	Per <code>ggplot2::geom_violin</code> , if "area" (default), all violins have the same area (before trimming the tails). If "count", areas are scaled proportionally to the number of observations. If "width", all violins have the same maximum width.
<code>model_bw</code>	The <code>bw</code> argument of the <code>stats::density</code> function. Defaults to "nrd0".
<code>model_adjust</code>	The <code>adjust</code> argument of the <code>stats::density</code> function. Defaults to 1.
<code>model_kernel</code>	The kernel argument of the <code>stats::density</code> function. Defaults to "gaussian".
<code>model_trim</code>	TRUE or FALSE of whether to trim the tails. Defaults to FALSE.

Value

A `ggplot` object.

Examples

```
library(simplevis)
library(palmerpenguins)

penguins %>%
  dplyr::mutate(year = as.character(year)) %>%
  gg_violin_col_facet(x_var = year,
                    y_var = body_mass_g,
                    col_var = sex,
                    facet_var = species,
                    col_na_rm = TRUE,
                    x_labels = function(x) stringr::str_sub(x, 3, 4))
```

gg_violin_facet

Violin ggplot that is faceted.

Description

Violin ggplot that is faceted, but not coloured.

Usage

```
gg_violin_facet(
  data,
  x_var,
  y_var = NULL,
  facet_var,
  pal = pal_viridis_reorder(1),
  alpha_fill = 1,
  alpha_line = 1,
  size_line = 0.5,
  size_width = 0.75,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_expand = ggplot2::waiver(),
  x_labels = snakecase::to_sentence_case,
  x_na_rm = FALSE,
  x_rev = FALSE,
  x_title = NULL,
  x_title_wrap = 50,
  y_balance = FALSE,
  y_breaks_n = 3,
  y_expand = c(0, 0),
  y_labels = scales::label_comma(),
```

```

y_title = NULL,
y_title_wrap = 50,
y_zero = FALSE,
y_zero_line = NULL,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(gridlines_h = TRUE),
model_scale = "area",
model_bw = "nrd0",
model_adjust = 1,
model_kernel = "gaussian",
model_trim = TRUE
)

```

Arguments

<code>data</code>	An tibble or dataframe. Required input.
<code>x_var</code>	Unquoted categorical variable to be on the x scale (i.e. character, factor, logical). Required input.
<code>y_var</code>	Generally an unquoted numeric variable to be on the y scale.
<code>facet_var</code>	Unquoted categorical variable to facet the data by. Required input.
<code>pal</code>	Character vector of hex codes.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 1.
<code>alpha_line</code>	The opacity of the outline. Defaults to 1.
<code>size_line</code>	The size of the outlines of violins. Defaults to 0.5.
<code>size_width</code>	Width of boxes. Defaults to 0.75.
<code>title</code>	Title string.
<code>title_wrap</code>	Number of characters to wrap the title to. Defaults to 75.
<code>subtitle</code>	Subtitle string.
<code>subtitle_wrap</code>	Number of characters to wrap the subtitle to. Defaults to 75.
<code>x_expand</code>	A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.
<code>x_labels</code>	A function or named vector to modify x scale labels. If <code>NULL</code> , categorical variable labels are converted to sentence case. Use <code>ggplot2::waiver()</code> to keep x labels untransformed.
<code>x_na_rm</code>	<code>TRUE</code> or <code>FALSE</code> of whether to include <code>x_var</code> NA values. Defaults to <code>FALSE</code> .
<code>x_rev</code>	For a categorical x variable, <code>TRUE</code> or <code>FALSE</code> of whether the x variable variable is reversed. Defaults to <code>FALSE</code> .

<code>x_title</code>	X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>x_title_wrap</code>	Number of characters to wrap the x title to. Defaults to 50.
<code>y_balance</code>	For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
<code>y_breaks_n</code>	For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.
<code>y_expand</code>	A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 <code>expand</code> argument in ggplot2 scales functions.
<code>y_labels</code>	A function or named vector to modify y scale labels. Use <code>ggplot2::waiver()</code> to keep y labels untransformed.
<code>y_title</code>	y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
<code>y_title_wrap</code>	Number of characters to wrap the y title to. Defaults to 50.
<code>y_zero</code>	For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
<code>y_zero_line</code>	For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in <code>y_var</code> . Otherwise defaults to FALSE.
<code>facet_labels</code>	A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use <code>ggplot2::waiver()</code> to keep facet labels untransformed.
<code>facet_na_rm</code>	TRUE or FALSE of whether to include <code>facet_var</code> NA values. Defaults to FALSE.
<code>facet_ncol</code>	The number of columns of faceted plots.
<code>facet_nrow</code>	The number of rows of faceted plots.
<code>facet_rev</code>	TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
<code>facet_scales</code>	Whether <code>facet_scales</code> should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>caption</code>	Caption title string.
<code>caption_wrap</code>	Number of characters to wrap the caption to. Defaults to 80. #'
<code>theme</code>	A ggplot2 theme.
<code>model_scale</code>	Per <code>ggplot2::geom_violin</code> , if "area" (default), all violins have the same area (before trimming the tails). If "count", areas are scaled proportionally to the number of observations. If "width", all violins have the same maximum width.
<code>model_bw</code>	The <code>bw</code> argument of the <code>stats::density</code> function. Defaults to "nrd0".
<code>model_adjust</code>	The <code>adjust</code> argument of the <code>stats::density</code> function. Defaults to 1.
<code>model_kernel</code>	The <code>kernel</code> argument of the <code>stats::density</code> function. Defaults to "gaussian".
<code>model_trim</code>	TRUE or FALSE of whether to trim the tails. Defaults to FALSE.

Value

A ggplot object.

Examples

```
library(dplyr)
library(simplevis)
library(palmerpenguins)

gg_violin_facet(penguins,
                x_var = sex,
                y_var = body_mass_g,
                facet_var = species,
                x_na_rm = TRUE)
```

leaf_basemap	<i>Basemap stack in leaflet.</i>
--------------	----------------------------------

Description

Make a stack of leaflet baselayers for use in shiny apps.

Usage

```
leaf_basemap(bounds = NULL, basemap = "light")
```

Arguments

bounds	A bbox object or numeric vector of length four, with xmin, ymin, xmax and ymax values in WGS84 (epsg 4326).
basemap	The first layer to start in the basemap stack. Either "light", "dark", "street", "satellite", or "ocean". Defaults to "light".

Value

A leaflet object.

Examples

```
leaf_basemap(basemap = "dark")

leaf_basemap(bounds = c(166.70047, -34.45676, 178.52966, -47.06345))
```

leaf_clear	<i>In shiny, clear all features, images and legends.</i>
------------	--

Description

In shiny, clear all features, images and legends.

Usage

```
leaf_clear(map_id = "leaf")
```

Arguments

map_id The map id for a leaflet map. Defaults to "leaf".

Value

A map object.

leaf_sf	<i>Simple feature leaflet map.</i>
---------	------------------------------------

Description

Map of simple features in leaflet that is not coloured.

Usage

```
leaf_sf(  
  data,  
  popup = TRUE,  
  popup_vars_vctr = NULL,  
  popup_numeric_format = function(x) prettyNum(x, big.mark = "", scientific = FALSE),  
  popup_vars_rename = snakecase::to_sentence_case,  
  pal = pal_viridis_reorder(1),  
  size_point = 2,  
  size_line = 2,  
  alpha_point = NULL,  
  alpha_line = NULL,  
  alpha_fill = NULL,  
  basemap = "light",  
  layer_id_var = NULL,  
  group_id = NULL,  
  map_id = "leaf"  
)
```

Arguments

<code>data</code>	An sf object of geometry type point/multipoint, linestring/multilinestring or polygon/multipolygon geometry type. Required input.
<code>popup</code>	TRUE or FALSE of whether to have a popup.
<code>popup_vars_vctr</code>	Vector of quoted variable names to include in the popup. If NULL, defaults to making a leafpop::popupTable of all columns.
<code>popup_numeric_format</code>	A function to format all numeric variables within the popup column. Defaults to non-scientific. Use function(x) x to leave as is.
<code>popup_vars_rename</code>	Function to rename column names for the popup. Defaults to snakecase::to_sentence_case. Use function(x) x to leave column names untransformed.
<code>pal</code>	Character vector of hex codes.
<code>size_point</code>	Size of points (i.e. radius). Defaults to 2.
<code>size_line</code>	Size of lines around features (i.e. weight). Defaults to 2.
<code>alpha_point</code>	The opacity of the points.
<code>alpha_line</code>	The opacity of the outline.
<code>alpha_fill</code>	The opacity of the fill.
<code>basemap</code>	The underlying basemap. Either "light", "dark", "satellite", "street", or "ocean". Defaults to "light". Only applicable where shiny equals FALSE.
<code>layer_id_var</code>	Unquoted variable to be used in shiny, so that in the event where a feature is clicked on, the value of this is returned for that feature (e.g. input\$map_marker_click\$id).
<code>group_id</code>	The id name for the sf group.
<code>map_id</code>	The map id for the leaflet map. Defaults to "leaf".

Value

A leaflet object.

Examples

```
## Not run:
leaf_sf(example_point)

leaf_sf(example_polygon)

## End(Not run)
```

leaf_sf_col

*Simple feature leaflet map that is coloured.***Description**

Map of simple features in leaflet that is coloured.

Usage

```
leaf_sf_col(
  data,
  col_var,
  label_var = NULL,
  popup = TRUE,
  popup_vars_vctr = NULL,
  popup_numeric_format = function(x) prettyNum(x, big.mark = "", scientific = FALSE),
  popup_vars_rename = snakecase::to_sentence_case,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_point = NULL,
  alpha_line = NULL,
  alpha_fill = NULL,
  size_point = 2,
  size_line = 2,
  basemap = "light",
  col_breaks_n = 4,
  col_cuts = NULL,
  col_intervals_right = TRUE,
  col_labels = NULL,
  col_legend_none = FALSE,
  col_method = NULL,
  col_na_rm = FALSE,
  col_title = NULL,
  label_numeric_format = function(x) prettyNum(x, big.mark = ",", scientific = FALSE),
  layer_id_var = NULL,
  group_id = NULL,
  legend_id = NULL,
  map_id = "leaf"
)
```

Arguments

data	An sf object of geometry type point/multipoint, linestring/multilinestring or polygon/multipolygon geometry type. Required input.
col_var	Unquoted variable to colour the features by. Required input.

label_var	Unquoted variable to label the features by. If NULL, defaults to using the colour variable.
popup	TRUE or FALSE of whether to have a popup.
popup_vars_vctr	Vector of quoted variable names to include in the popup. If NULL, defaults to making a leafpop::popupTable of all columns.
popup_numeric_format	A function to format all numeric variables within the popup column. Defaults to non-scientific. Use function(x) x to leave as is.
popup_vars_rename	Function to rename column names for the popup. Defaults to snakecase::to_sentence_case. Use function(x) x to leave column names untransformed.
pal	Character vector of hex codes.
pal_na	The hex code or name of the NA colour to be used.
pal_rev	Reverses the palette. Defaults to FALSE.
alpha_point	The opacity of the points.
alpha_line	The opacity of the outline.
alpha_fill	The opacity of the fill.
size_point	Size of points (i.e. radius). Defaults to 2.
size_line	Size of lines around features (i.e. weight). Defaults to 2.
basemap	The underlying basemap. Either "light", "dark", "satellite", "street", or "ocean". Defaults to "light". Only applicable where shiny equals FALSE.
col_breaks_n	For a numeric colour variable, the desired number of intervals on the colour scale.
col_cuts	A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.
col_intervals_right	For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut right-closed. Defaults to TRUE.
col_labels	A function or named vector to modify the colour scale labels. Defaults to snakecase::to_sentence_case if categorical, and scales::label_comma() if numeric. Use function(x) x to keep labels untransformed.
col_legend_none	TRUE or FALSE of whether to remove the legend.
col_method	The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".
col_na_rm	TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
col_title	A title string that will be wrapped into the legend.
label_numeric_format	A function to format the numeric labels. Defaults to adding a comma separator. Use function(x) x to leave as is.

layer_id_var	Unquoted variable to be used in shiny, so that in the event where a feature is clicked on, the value of this is returned for that feature (e.g. input\$map_marker_click\$id).
group_id	The id name for the sf group.
legend_id	The id name for the layerId of the legend.
map_id	The map id for the leaflet map. Defaults to "leaf".

Value

A leaflet object.

Examples

```
## Not run:
leaf_sf_col(example_point,
             col_var = trend_category)

leaf_sf_col(example_polygon,
             col_var = density)

leaf_sf_col(example_polygon,
             col_var = density,
             col_method = "bin",
             col_breaks_n = 5)

leaf_sf_col(example_polygon,
             col_var = density,
             col_method = "bin",
             col_cuts = c(0, 10, 50, 100, 150, 200, Inf))

leaf_sf_col(example_polygon,
             col_var = density,
             col_method = "quantile",
             col_breaks_n = 4)

leaf_sf_col(example_polygon,
             col_var = density,
             col_method = "quantile",
             col_cuts = c(0, 0.25, 0.5, 0.75, 0.95, 1))

## End(Not run)
```

leaf_stars

Stars leaflet map.

Description

Map of stars in leaflet that is not coloured.

Usage

```
leaf_stars(  
  data,  
  pal = pal_viridis_reorder(1),  
  alpha_fill = 0.5,  
  basemap = "light",  
  group_id = NULL,  
  map_id = "map"  
)
```

Arguments

data	A stars object. Required input.
pal	Character vector of hex codes.
alpha_fill	The opacity of the fill. Defaults to 0.5.
basemap	The underlying basemap. Either "light", "dark", "satellite", "street", or "ocean". Defaults to "light". Only applicable where shiny equals FALSE.
group_id	The id name for the stars group.
map_id	The map id for the leaflet map. Defaults to "map".

Value

A leaflet object.

Examples

```
## Not run:  
library(simplevis)  
  
leaf_stars(example_stars)  
  
## End(Not run)
```

leaf_stars_col	<i>Stars leaflet map that is coloured.</i>
----------------	--

Description

Map of stars in leaflet that is coloured.

Usage

```
leaf_stars_col(
  data,
  col_var,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 1,
  basemap = "light",
  col_breaks_n = 4,
  col_cuts = NULL,
  col_intervals_right = TRUE,
  col_labels = NULL,
  col_legend_none = FALSE,
  col_method = NULL,
  col_na_rm = FALSE,
  col_title = NULL,
  group_id = NULL,
  legend_id = NULL,
  map_id = "map"
)
```

Arguments

<code>data</code>	A stars object. Required input.
<code>col_var</code>	Unquoted attribute to colour the features by. Required input.
<code>pal</code>	Character vector of hex codes.
<code>pal_na</code>	The hex code or name of the NA colour to be used.
<code>pal_rev</code>	Reverses the palette. Defaults to FALSE.
<code>alpha_fill</code>	The opacity of the fill. Defaults to 1.
<code>basemap</code>	The underlying basemap. Either "light", "dark", "satellite", "street", or "ocean". Defaults to "light". Only applicable where shiny equals FALSE.
<code>col_breaks_n</code>	For a numeric colour variable, the desired number of intervals on the colour scale.
<code>col_cuts</code>	A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.
<code>col_intervals_right</code>	For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut right-closed. Defaults to TRUE.
<code>col_labels</code>	A function or named vector to modify the colour scale labels. Defaults to <code>stringr::str_to_sentence</code> if categorical, and <code>scales::label_comma</code> if numeric. Use <code>function(x) x</code> to keep labels untransformed.
<code>col_legend_none</code>	TRUE or FALSE of whether to remove the legend.

col_method	The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".
col_na_rm	TRUE or FALSE of whether to visualise col_var NA values. Defaults to FALSE.
col_title	A title string that will be wrapped into the legend.
group_id	The id name for the stars group.
legend_id	The id name for the layerId of the legend.
map_id	The map id for the leaflet map. Defaults to "map".

Value

A leaflet object.

Examples

```
## Not run:
library(simplevis)

leaf_stars_col(example_stars,
               col_var = nitrate,
               col_na_rm = TRUE)

## End(Not run)
```

mutate_text	<i>Add a quick tooltip text column to data.</i>
-------------	---

Description

Add a column of tooltip text which is automatically created based on column names and values.

Usage

```
mutate_text(
  data,
  vars_vctr = NULL,
  numeric_format = function(x) prettyNum(x, big.mark = "", scientific = FALSE)
)
```

Arguments

data	A tibble or dataframe. Required input.
vars_vctr	A vector of quoted variables to include in the tooltip. Defaults to NULL, which adds all variables in.
numeric_format	A function to format all numeric variables within the tooltip text column. Defaults to non-scientific. Use function(x) x to leave as is.

Value

A tibble or data frame with an additional column called text.

Examples

```
library(simplevis)
library(dplyr)

plot_data <- slice_sample(ggplot2::diamonds, prop = 0.05) %>%
  mutate_text(vars_vctr = c("carat", "price"))

plot <- gg_point(data = plot_data,
  x_var = carat,
  y_var = price,
  text_var = text,
  title = "Diamond price by carat",
  x_title = "Carat",
  y_title = "Price ($US thousands)")

plotly::ggplotly(plot, tooltip = "text")
```

pal_d3_reorder	<i>D3 palette reordered.</i>
----------------	------------------------------

Description

A function to retrieve a vector of hex codes for a non-numeric (or non-ordered) variable.

Usage

```
pal_d3_reorder(n)
```

Arguments

n The number of colours (excluding an NA colour).

Value

A character vector of hex codes.

Examples

```
scales::show_col(pal_d3_reorder(9))
```

pal_na	<i>NA palette.</i>
--------	--------------------

Description

A function to retrieve a hex code for a colour to use for NA values.

Usage

```
pal_na(pal = "#7F7F7FFF")
```

Arguments

pal The hex code or name of the NA colour. Defaults to "#7F7F7FFF".

Value

A character vector.

Examples

```
scales::show_col(pal_na())
```

pal_viridis_reorder	<i>Viridis palette reordered.</i>
---------------------	-----------------------------------

Description

A function to retrieve a vector of hex codes for a numeric (or ordered) variable.

Usage

```
pal_viridis_reorder(n)
```

Arguments

n The number of colours (excluding an NA colour).

Value

A character vector of hex codes.

Examples

```
scales::show_col(pal_viridis_reorder(9))
```

plotly_camera	<i>Remove plotly buttons from the mode bar, other than the camera.</i>
---------------	--

Description

Remove plotly buttons from the mode bar, other than the camera and plotly logo.

Usage

```
plotly_camera(plotly, logo = FALSE)
```

Arguments

plotly	A plotly object. Required input.
logo	TRUE or FALSE of whether to display the plotly logo. Defaults to FALSE.

Examples

```
plot_data <- dplyr::sample_frac(ggplot2::diamonds, 0.05)

plot <- gg_point(data = plot_data,
                x_var = carat,
                y_var = price)

plotly::ggplotly(plot) %>%
  plotly_camera()
```

plotly_col_legend	<i>Change colour legend elements order.</i>
-------------------	---

Description

Change colour legend elements order.

Usage

```
plotly_col_legend(plotly, rev = FALSE, order = NULL)
```

Arguments

plotly	A plotly object. Required input.
rev	TRUE or FALSE of whether to reverse the order of elements.
order	A numeric vector specifying the order of elements.

Examples

```
library(dplyr)
plot_data <- dplyr::sample_frac(ggplot2::diamonds, 0.05)

plot <- gg_point_col(data = plot_data,
                    x_var = carat,
                    y_var = price,
                    col_var = color)

plotly::ggplotly(plot)

plotly::ggplotly(plot) %>%
  plotly_col_legend(rev = TRUE)

plotly::ggplotly(plot) %>%
  plotly_col_legend(order = c(2, 1, 3:7))
```

shiny_demo

Shiny demo

Description

Run a shiny demo app with option to download code.

Usage

```
shiny_demo(mobile = FALSE)
```

Arguments

mobile TRUE or FALSE of whether the app and code should also work on mobile devices. Defaults to FALSE.

summarise_boxplot_outliers

Summarise outliers in a dataset or tibble.

Description

Summarise outliers in a dataset or tibble.

Usage

```
summarise_boxplot_outliers(data, var, ...)
```

Arguments

`data` A tibble or dataframe. Required input. Group the dataset as appropriate prior.
`var` Unquoted variable from which to calculate outliers. Required input.
`...` Passed to `boxplot.stats`

Value

A tibble or dataframe.

Examples

```
library(simplevis)
library(dplyr)
library(palmerpenguins)

penguins %>%
  group_by(species) %>%
  summarise_boxplot_outliers(body_mass_g)
```

`summarise_boxplot_stats`

Summarise boxplot stats in a dataset or tibble.

Description

Summarise boxplot stats in a dataset or tibble.

Usage

```
summarise_boxplot_stats(
  data,
  var,
  names_vctr = c("min", "lower", "middle", "upper", "max"),
  ...
)
```

Arguments

`data` A tibble or dataframe. Required input. Group the dataset as appropriate prior.
`var` Unquoted variable from which to calculate boxplot stats. Required input.
`names_vctr` A vector of names for the boxplot stats.
`...` Passed to `boxplot.stats`

Value

A tibble or dataframe.

Examples

```
library(simplevis)
library(dplyr)
library(palmerpenguins)
```

```
penguins %>%
  group_by(species) %>%
  summarise_boxplot_stats(body_mass_g)
```

```
penguins %>%
  group_by(sex, species) %>%
  summarise_boxplot_stats(body_mass_g, names_vctr = LETTERS[1:5])
```

Index

* datasets

- example_borders, 3
 - example_point, 4
 - example_polygon, 4
 - example_stars, 5
- example_borders, 3
example_point, 4
example_polygon, 4
example_stars, 5
- gg_bar, 5
gg_bar_col, 8
gg_bar_col_facet, 12
gg_bar_facet, 16
gg_boxplot, 19
gg_boxplot_col, 23
gg_boxplot_col_facet, 27
gg_boxplot_facet, 31
gg_density, 34
gg_density_col, 36
gg_density_col_facet, 39
gg_density_facet, 42
gg_hbar, 45
gg_hbar_col, 48
gg_hbar_col_facet, 52
gg_hbar_facet, 56
gg_hboxplot, 60
gg_hboxplot_col, 63
gg_hboxplot_col_facet, 67
gg_hboxplot_facet, 71
gg_histogram, 74
gg_histogram_col, 76
gg_histogram_col_facet, 79
gg_histogram_facet, 82
gg_hpointrange, 84
gg_hpointrange_col, 87
gg_hpointrange_col_facet, 91
gg_hpointrange_facet, 96
gg_hviolin, 99
gg_hviolin_col, 102
gg_hviolin_col_facet, 105
gg_hviolin_facet, 109
gg_line, 112
gg_line_col, 114
gg_line_col_facet, 118
gg_line_facet, 122
gg_point, 125
gg_point_col, 142
gg_point_col_facet, 146
gg_point_facet, 149
gg_pointrange, 128
gg_pointrange_col, 131
gg_pointrange_col_facet, 134
gg_pointrange_facet, 139
gg_sf, 153
gg_sf_col, 154
gg_sf_col_facet, 157
gg_sf_facet, 160
gg_smooth, 162
gg_smooth_col, 165
gg_smooth_col_facet, 169
gg_smooth_facet, 172
gg_stars, 176
gg_stars_col, 177
gg_theme, 180
gg_tile_col, 181
gg_tile_col_facet, 185
gg_violin, 188
gg_violin_col, 191
gg_violin_col_facet, 194
gg_violin_facet, 198
- leaf_basemap, 201
leaf_clear, 202
leaf_sf, 202
leaf_sf_col, 204
leaf_stars, 206
leaf_stars_col, 207

`mutate_text`, [209](#)

`pal_d3_reorder`, [210](#)

`pal_na`, [211](#)

`pal_viridis_reorder`, [211](#)

`plotly_camera`, [212](#)

`plotly_col_legend`, [212](#)

`shiny_demo`, [213](#)

`summarise_boxplot_outliers`, [213](#)

`summarise_boxplot_stats`, [214](#)