Package ‘ggfittext’

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Title  Fit Text Inside a Box in 'ggplot2'
Version  0.9.0
Description  Provides 'ggplot2' geoms to fit text into a box by growing, shrinking or wrapping the text.
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altitudes  

**Description**

Some craft and their altitudes

**Usage**

altitudes

**Format**

A data frame with 4 rows and 2 variables:

- **craft**  the name of the craft
- **altitude**  the craft’s normal cruising altitude in metres

animals  

**Description**

Six animals

**Usage**

animals

**Format**

A data frame with 6 rows and 4 variables:

- **animal**  the name of the animal
- **type**  the type of animal
- **flies**  whether the animal can fly
- **mass**  the average mass of the animal in grams
**Description**

The composition of two espresso-based beverages

**Usage**

coffees

**Format**

A data frame with 6 rows and 3 variables:

- **coffee**: the name of the beverage
- **ingredient**: the ingredient
- **proportion**: the proportion of a cup to fill with the ingredient

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**geom_bar_text**

A `ggplot2` geom to fit text inside a box

**Description**

`geom_fit_text()` shrinks, grows and wraps text to fit inside a defined box. `geom_bar_text()` is a convenience wrapper around `geom_fit_text()` for labelling bar plots generated with `geom_col()` and `geom_bar()`.

**Usage**

```r
geom_bar_text(
    mapping = NULL,
    data = NULL,
    stat = "identity",
    position = "identity",
    na.rm = FALSE,
    show.legend = NA,
    inherit.aes = TRUE,
    padding.x = grid::unit(1, "mm"),
    padding.y = grid::unit(1, "mm"),
    min.size = 8,
    place = NULL,
    grow = FALSE,
    reflow = FALSE,
    hjust = NULL,
)```
vjust = NULL,
fullheight = NULL,
width = NULL,
height = NULL,
formatter = NULL,
contrast = NULL,
outside = NULL,
...
)

geom_fit_text(
  mapping = NULL,
  data = NULL,
  stat = "identity",
  position = "identity",
  na.rm = FALSE,
  show.legend = NA,
  inherit.aes = TRUE,
  padding.x = grid::unit(1, "mm"),
  padding.y = grid::unit(1, "mm"),
  min.size = 4,
  place = "centre",
  outside = FALSE,
  grow = FALSE,
  reflow = FALSE,
  hjust = NULL,
  vjust = NULL,
  fullheight = NULL,
  width = NULL,
  height = NULL,
  formatter = NULL,
  contrast = FALSE,
  ...
)

Arguments

mapping    ggplot2::aes() object as standard in 'ggplot2'. Note that aesthetics specifying the box must be provided. See Details.
data, stat, position, na.rm, show.legend, inherit.aes, ...  
  Standard geom arguments as for ggplot2::geom_text().
padding.x, padding.y  
  Horizontal and vertical padding around the text, expressed in grid::unit() objects. Both default to 1 mm.
min.size  Minimum font size, in points. Text that would need to be shrunk below this size to fit the box will be hidden. Defaults to 4 pt (8 pt for geom_bar_text())
place  Where inside the box to place the text. Default is 'centre'; other options are 'topleft', 'top', 'topright', 'right', 'bottomright', 'bottom', 'bottomleft', 'left',
and 'center'/middle which are both synonyms for 'centre'. For `geom_bar_text()`, will be set heuristically if not specified.

grow If TRUE, text will be grown as well as shrunk to fill the box. Defaults to FALSE.

reflow If TRUE, text will be reflowed (wrapped) to better fit the box. Defaults to FALSE.

hjust, vjust Horizontal and vertical justification of the text. By default, these are automatically set to appropriate values based on place.

fullheight If TRUE, descenders will be counted when resizing and placing text; if FALSE, only the x-height and ascenders will be counted. The main use for this option is for aligning text at the baseline (FALSE) or preventing descenders from spilling outside the box (TRUE). By default this is set automatically depending on place and grow.

width, height When using x and/or y aesthetics, these set the width and/or height of the box. These should be either `grid::unit()` objects or numeric values on the x and y scales.

formatter A function that will be applied to the text before it is drawn. This is useful when using `geom_fit_text()` in context involving interpolated variables, such as with the 'gganimate' package. formatter will be applied serially to each element in the label column, so it does not need to be a vectorised function.

contrast If TRUE and in combination with a fill aesthetic, the colour of the text will be inverted for better contrast against dark background fills. FALSE by default for `geom_fit_text()`, set heuristically for `geom_bar_text()`.

outside If TRUE, text placed in one of 'top', 'right', 'bottom' or 'left' that would need to be shrunk smaller than min.size to fit the box will be drawn outside the box if possible. This is mostly useful for drawing text inside bar/column geoms. Defaults to TRUE for position = "identity" when using `geom_bar_text()`, otherwise FALSE.

Details

Except where noted, `geom_fit_text()` behaves more or less like `ggplot2::geom_text()`.

There are three ways to define the box in which you want the text to be drawn. The extents of the box on the x and y axes are independent, so any combination of these methods can be used:

1. If the x and/or y aesthetics are used to set the location of the box, the width or height will be set automatically based on the number of discrete values in x and/and y.
2. Alternatively, if x and/or y aesthetics are used, the width and/or height of the box can be overridden with a 'width' and/or 'height' argument. These should be `grid::unit()` objects; if not, they will be assumed to use the native axis scale.
3. The boundaries of the box can be set using the aesthetics 'xmin' and 'xmax', and/or 'ymin' and 'ymax'.

If the text is too big for the box, it will be shrunk to fit the box. With `grow = TRUE`, the text will be made to fill the box completely whether that requires shrinking or growing.

`reflow = TRUE` will cause the text to be reflowed (wrapped) to better fit in the box. If the text cannot be made to fit by reflowing alone, it will be reflowed then shrunk to fit the box. Existing line breaks in the text will be respected when reflowing.
geom_fit_text() includes experimental support for drawing text in polar coordinates (by adding `coord_polar()` to the plot), however not all features are available when doing so.

**Aesthetics**

- label (required)
- (xmin AND xmax) OR x (required)
- (ymin AND ymax) OR y (required)
- alpha
- angle
- colour
- family
- fontface
- lineheight
- size

**Examples**

```r
ggplot2::ggplot(ggplot2::presidential, ggplot2::aes(ymin = start, ymax = end, label = name, x = party)) + geom_fit_text(grow = TRUE)
```

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**ggfittext**

'ggfittext': provides a 'ggplot2' geom to fit text inside a box.

**Description**

This package provides only one function, `geom_fit_text()`.

**gold**

*Robert Frost’s poem* Nothing Gold Can Stay

**Description**

*Robert Frost’s poem* Nothing Gold Can Stay

**Usage**

gold
Format

A data frame with 8 rows and 5 variables:

- **label**: a line from the poem
- **xmin**: the xmin coordinate with which to draw the word
- **xmax**: the xmax coordinate with which to draw the word
- **ymin**: the ymin coordinate with which to draw the word
- **ymax**: the ymax coordinate with which to draw the word
- **line**: the line number
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