

Package ‘ggtibble’

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Title Create Tibbles and Lists of 'ggplot' Figures for Reporting

Version 1.0.1

Description Create tibbles and lists of 'ggplot' figures that can be modified as easily as regular 'ggplot' figures. Typical use cases are for creating reports or web pages where many figures are needed with different data and similar formatting.

License GPL (>= 3)

Encoding UTF-8

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Config/testthat/edition 3

Imports dplyr, ggplot2, glue, knitr, purrr, rlang, tibble, tidyr, vctrs

URL <https://billdenney.github.io/ggtibble/>

Language en-US

VignetteBuilder knitr

NeedsCompilation no

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gglist	<i>Generate a list of ggplots from a list of data.frames</i>
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Description

Generate a list of ggplots from a list of data.frames

Usage

```
gglist(  
  data = NULL,  
  mapping = ggplot2::aes(),  
  ...,  
  environment = parent.frame()  
)
```

Arguments

data	A list of data.frames (or similar objects)
mapping	Default list of aesthetic mappings to use for plot. If not specified, must be supplied in each layer added to the plot.
...	Other arguments passed on to methods. Not currently used.
environment	[Deprecated] Used prior to tidy evaluation.

Value

A list of ggplot2 objects

Examples

```
mydata <-  
  list(  
    data.frame(x = 1:3, y = 3:1),  
    data.frame(x = 4:7, y = 7:4)  
  )  
gglist(mydata, ggplot2::aes(x = x, y = y)) +  
  ggplot2::geom_point()
```

ggtibble	<i>Make a tibble where one column is the data to plot, one is the gglist, and one is the caption</i>
----------	--

Description

Make a tibble where one column is the data to plot, one is the gglist, and one is the caption

Usage

```
ggtibble(data, ...)  
  
## S3 method for class 'data.frame'  
ggtibble(  
  data,  
  mapping = ggplot2::aes(),  
  ...,  
  outercols = group_vars(data),  
  labs = list(),  
  caption = ""  
)
```

Arguments

data	The data.frame to plot
...	Passed to subsequent methods (usually passed to gglist())
mapping	Default list of aesthetic mappings to use for plot. If not specified, must be supplied in each layer added to the plot.
outercols	The columns to have outside the nesting
labs	Labels to add via labs_glue()
caption	The glue specification for creating the caption

Value

A data.frame with a column named "data_plot" with the data to plot, "figure" with the gglist, and "caption" with the captions

A ggtibble object which is a tibble with columns named "figure" which is a gglist object (a list of ggplots), "data_plot" which is the a list of data.frames making up the source data used for each individual plot, "caption" which is the text to use for the plot caption, and all of the outercols used for nesting.

Methods (by class)

- ggtibble(data.frame): The default method for a data.frame or tibble

Examples

```
d_plot <-
  data.frame(
    A = rep(c("foo", "bar"), each = 4),
    B = 1:8,
    C = 11:18,
    Bunit = "mg",
    Cunit = "km"
  )
all_plots <-
  ggtibble(
    d_plot,
    ggplot2::aes(x = B, y = C),
    outercols = c("A", "Bunit", "Cunit"),
    caption = "All the {A}",
    labs = list(x = "B ({{Bunit}})", y = "C ({{Cunit}})")
  ) +
  ggplot2::geom_point() +
  ggplot2::geom_line()
knit_print(all_plots)
```

knit_print.gg

Print a ggplot (usually within knit_print.gglist)

Description

Print a ggplot (usually within knit_print.gglist)

Usage

```
## S3 method for class 'gg'
knit_print(
  x,
  ...,
  fig_prefix,
  fig_suffix,
  filename = NULL,
  width = 6,
  height = 4,
  units = "in"
)
```

Arguments

x	The gg object (i.e. a ggplot)
...	Ignored
fig_prefix	Text to cat() before the figure is printed

fig_suffix Any text to add after the figure
filename A filename saving the plot
width, height, units Plot size in units ("in", "cm", "mm", or "px"). If not supplied, uses the size of current graphics device.

Value

The gg object, invisibly

See Also

Other knitters: [knit_print.gglist\(\)](#)

`knit_print.gglist` *Print a list of plots made by gglist*

Description

The filename argument may be given with an `sprintf()` format including "%d" to allow automatic numbering of the output filenames. Specifically, the pattern of "%d" with an optional non-negative integer between the "%" and "d" is searched for and if found, then the filename will be generated using that `sprintf()` format. Note that also means that other requirements for `sprintf()` must be met; for example, if you want a percent sign ("%") in the filename, it must be doubled so that `printf` returns what is desired.

Usage

```
## S3 method for class 'gglist'
knit_print(x, ..., filename = NULL, fig_suffix = "\n\n")

## S3 method for class 'ggtibble'
knit_print(x, ...)
```

Arguments

x The gglist object
... extra arguments to `knit_print()`
filename A filename with an optional "%d" `sprintf` pattern for saving the plots
fig_suffix Any text to add after the figure

Value

The list, invisibly

Functions

- `knit_print(ggtibble)`: Print the plots in a ggtibble object

See Also

Other knitters: [knit_print.gg\(\)](#)

Examples

```
# Ensure that each figure is within its own float area
mydata <-
  list(
    data.frame(x = 1:3, y = 3:1),
    data.frame(x = 4:7, y = 7:4)
  )
p <- gglist(mydata, ggplot2::aes(x = x, y = y)) +
  ggplot2::geom_point()
knit_print(p, fig_suffix = "\n\n\\FloatBarrier\n\n")
```

labs_glue

Generate ggplot2 labels based on data in a ggtibble

Description

Generate ggplot2 labels based on data in a ggtibble

Usage

```
labs_glue(p, ...)
```

Arguments

<code>p</code>	The ggtibble object
<code>...</code>	Named arguments to be used as <code>ggplot2::labs()</code> labels where the value is a glue specification

Value

`p` with the labels modified

new_gglist	<i>Create a new gglist object</i>
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Description

Create a new gglist object

Usage

```
new_gglist(x = list())
```

Arguments

x A list of ggplot2 objects to convert into a gglist

Value

The list verified to be a gglist and with the gglist class

See Also

Other New ggtibble objects: [new_ggtibble\(\)](#)

Examples

```
new_gglist(list(NULL, ggplot2::ggplot(data = data.frame())))
```

new_ggtibble	<i>Create a new ggtibble object</i>
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Description

Create a new ggtibble object

Usage

```
new_ggtibble(x)
```

Arguments

x A data.frame with a column named "figure" and "caption", and where the "figure" column is a ggtibble.

Value

The object with a ggtibble class

See Also

Other New ggtibble objects: [new_gglist\(\)](#)

Examples

```
new_ggtibble(tibble::tibble(figure = list(ggplot2::ggplot()), caption = ""))
```


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