# Package 'ggtibble'

February 7, 2024

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

**Version** 1.0.0

**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

**RoxygenNote** 7.3.1

**Depends** R (>= 4.3)

**Suggests** rmarkdown, spelling, testthat (>= 3.0.0), withr

**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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**Repository** CRAN

**Date/Publication** 2024-02-07 18:10:02 UTC

## R topics documented:

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

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

## 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)
```

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`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()

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# 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 sprintf 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")
```

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# 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

| | |
|---|---|
| `p` | The ggtibble object |
| `...` | Named arguments to be used as `ggplot2::labs()` labels where the value is a glue specification |

## Value

`p` with the labels modified

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