Package 'ggimage'

June 19, 2023

Title Use Image in 'ggplot2'

Version 0.3.3

Description Supports image files and graphic objects to be visualized in 'ggplot2' graphic system.

Depends R (>= 3.4.0), ggplot2

Imports ggfun, ggplotify, grid, jsonlite, magick, methods, scales, tibble, tools, utils, withr

Suggests ape, ggtree, gridGraphics, httr, rsvg

ByteCompile true

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URL <https://github.com/GuangchuangYu/ggimage> (devel), <https://yulab-smu.top/pkgdocs/ggimage.html> (vignette)

BugReports <https://github.com/GuangchuangYu/ggimage/issues>

Encoding UTF-8

RoxygenNote 7.2.3

NeedsCompilation no

Author Guangchuang Yu [aut, cre] (<<https://orcid.org/0000-0002-6485-8781>>)

Maintainer Guangchuang Yu <guangchuangyu@gmail.com>

Repository CRAN

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R topics documented:

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autocomplete_name   *autocomplete_name*

Description

obtaion suggestions for full names based on partial text name

Usage

```
autocomplete_name(name, ...)
```

Arguments

name	partial text name
...	additional parameters

Value

scientific name

---

download_phylopic   *download_phylopic*

Description

download phylopic images

Usage

```
download_phylopic(id, destdir = ".", ...)
```

Arguments

id	phylopic id
destdir	directory where the downloaded images are to be saved.
...	additional parameters passed to download.file

Details

This function allows users to download phylopic images using phylopic id

Value

a character string (or vector) with downloaded file path

Author(s)

Guangchuang Yu

---

draw_key   *key drawing function*

Description

key drawing function

Usage

```
draw_key_image(data, params, size)
```

Arguments

data	A single row data frame containing the scaled aesthetics to display in this key
params	A list of additional parameters supplied to the geom.
size	Width and height of key in mm

Value

A grid grob

---

geom_bgimage	*geom_bgimage*

Description

add image as background to plot panel.

Usage

```
geom_bgimage(image)
```

Arguments

image   image file

Value

ggplot

Author(s)

Guangchuang Yu

---

geom_emoji	*geom_emoji*

Description

geom layer for using emoji image

Usage

```
geom_emoji(
  mapping = NULL,
  data = NULL,
  inherit.aes = TRUE,
  na.rm = FALSE,
  by = "width",
  ...
)
```

Arguments

`mapping`	aes mapping
`data`	data
`inherit.aes`	whether inherit aes mapping from ggplot()
`na.rm`	whether remove NA values
`by`	one of 'width' or 'height' for specifying size
`...`	additional parameter

Value

ggplot2 layer

Author(s)

Guangchuang Yu

`geom_flag`	*geom_flag*

Description

geom layer for using flag image

Usage

```
geom_flag(
  mapping = NULL,
  data = NULL,
  inherit.aes = TRUE,
  na.rm = FALSE,
  by = "width",
  ...
)
```

Arguments

`mapping`	aes mapping
`data`	data
`inherit.aes`	whether inherit aes mapping from ggplot()
`na.rm`	whether remove NA values
`by`	one of 'width' or 'height' for specifying size
`...`	additional parameter

Value

ggplot2 layer

Author(s)

Guangchuang Yu

---

geom_icon   *geom_icon*

Description

geom layer for using icon

Usage

```
geom_icon(
  mapping = NULL,
  data = NULL,
  inherit.aes = TRUE,
  na.rm = FALSE,
  by = "width",
  ...
)
```

Arguments

mapping	aes mapping
data	data
inherit.aes	whether inherit aes mapping from ggplot()
na.rm	whether remove NA values
by	one of 'width' or 'height' for specifying size
...	additional parameter

Value

ggplot2 layer

Author(s)

guangchuang yu

geom_image	*geom_image*

Description

geom layer for visualizing image files

Usage

```
geom_image(
  mapping = NULL,
  data = NULL,
  stat = "identity",
  position = "identity",
  inherit.aes = TRUE,
  na.rm = FALSE,
  by = "width",
  nudge_x = 0,
  ...
)
```

Arguments

mapping	aes mapping
data	data
stat	stat
position	position
inherit.aes	logical, whether inherit aes from ggplot()
na.rm	logical, whether remove NA values
by	one of 'width' or 'height'
nudge_x	horizontal adjustment to nudge image
...	additional parameters

Value

geom layer

Author(s)

Guangchuang Yu

Examples

```
## Not run:
library("ggplot2")
library("ggimage")
set.seed(2017-02-21)
d <- data.frame(x = rnorm(10),
                y = rnorm(10),
                image = sample(c("https://www.r-project.org/logo/Rlogo.png",
                                 "https://jeroenooms.github.io/images/frink.png"),
                               size=10, replace = TRUE)
               )
ggplot(d, aes(x, y)) + geom_image(aes(image=image))

## End(Not run)
```

---

geom_phylopic   *geom_phylopic*

Description

geom layer for using phylopic image

Usage

```
geom_phylopic(
  mapping = NULL,
  data = NULL,
  inherit.aes = TRUE,
  na.rm = FALSE,
  by = "width",
  ...
)
```

Arguments

mapping	aes mapping
data	data
inherit.aes	whether inherit aes mapping from ggplot()
na.rm	whether remove NA values
by	one of 'width' or 'height' for specifying size
...	additional parameter

Value

ggplot2 layer

Author(s)

Guangchuang Yu

---

geom_pokemon   *geom_pokemon*

Description

geom layer for using pokemon image

Usage

```
geom_pokemon(
  mapping = NULL,
  data = NULL,
  inherit.aes = TRUE,
  na.rm = FALSE,
  by = "width",
  ...
)
```

Arguments

mapping	aes mapping
data	data
inherit.aes	whether inherit aes mapping from ggplot()
na.rm	whether remove NA values
by	one of 'width' or 'height' for specifying size
...	additional parameter

Value

ggplot2 layer

Author(s)

guangchuang yu

---

geom_subview   *geom_subview*

Description

subview geom

Usage

```
geom_subview(
  mapping = NULL,
  data = NULL,
  width = 0.1,
  height = 0.1,
  x = NULL,
  y = NULL,
  subview = NULL
)
```

Arguments

mapping	aes mapping, requires 'x', 'y' and 'subview'
data	data frame
width	width
height	height
x	x position of subview. This parameter works if mapping and data is not provided
y	y position of subview. This parameter works if mapping and data is not provided
subview	subview to plot, if not provided in data and specify by mapping

Value

layer

Author(s)

guangchuang yu

---

geom_twitchemote   *geom_twitchemotes*

Description

geom layer for using Twitch emotes

Usage

```
geom_twitchemote(
  mapping = NULL,
  data = NULL,
  inherit.aes = TRUE,
  na.rm = FALSE,
  by = "width",
  ...
)
```

Arguments

mapping	aes mapping
data	data
inherit.aes	whether inherit aes mapping from ggplot()
na.rm	whether remove NA values
by	one of 'width' or 'height' for specifying size
...	additional parameter

Value

ggplot2 layer

Author(s)

Brendan Rocks

---

geom_worldcup2018   *geom_worldcup2018*

Description

geom layer for wordcup 2018

Usage

```
geom_worldcup2018(
  mapping = NULL,
  data = NULL,
  inherit.aes = TRUE,
  na.rm = FALSE,
  by = "width",
  ...
)
```

Arguments

`mapping`	aes mapping
`data`	data
`inherit.aes`	whether inherit aes mapping from ggplot()
`na.rm`	whether remove NA values
`by`	one of 'width' or 'height' for specifying size
`...`	additional parameter

Value

ggplot2 layer

Author(s)

Guangchuang Yu

---

ggbackground	*ggbackground*

Description

set background for ggplot

Usage

```
ggbackground(gg, background, ...)
```

Arguments

`gg`	gg object
`background`	background image
`...`	additional parameter to manipulate background image, see also geom_image

Value

gg object

Author(s)

guangchuang yu

---

ggpreview	*ggpreview*

Description

preview a plot befor saving it to a file.

Usage

```
ggpreview(
  filename = NULL,
  plot = last_plot(),
  width = NA,
  height = NA,
  units = "in",
  ...
)
```

Arguments

filename	If it is not NULL, the previewed figure will be save to the file
plot	any plot that supported by the 'ggplotify' package
width	width of the figure
height	height of the figure
units	units of the 'width' and 'height'
...	additional parameters pass to ggsave() if filename is not NULL

Value

a preview of the figure

Author(s)

Guangchuang Yu

---

image_read2   *image_read2*

Description

read image (by magick::image_read) with the ability to remove marginal empty space

Usage

```
image_read2(path, ..., cut_empty_space = TRUE)
```

Arguments

path   file path

...   additional parameters that pass to magick::image_read

cut_empty_space

         whether remove marginal empty space

Value

magick-image object

Author(s)

Guangchuang Yu

---

list.flag   *list.flag*

Description

list available flag

Usage

```
list.flag()
```

Value

flag vector

Author(s)

Guangchuang Yu

---

list.icon *list.icon*

Description

list available icon

Usage

```
list.icon()
```

Value

icon vector

Author(s)

guangchuang yu

---

list.pokemon *list.pokemon*

Description

list available pokemon

Usage

```
list.pokemon()
```

Value

pokemon vector

Author(s)

guangchuang yu

---

list.worldcup2018 *list.worldcup2018*

Description

list flags of worldcup 2018

Usage

```
list.worldcup2018()
```

Value

flag vector

Author(s)

Guangchuang Yu

---

phylopic_uid *phylopic_uid*

Description

query phylopic to get uid from scientific name

Usage

```
phylopic_uid(name, seed = 123)
```

Arguments

name	scientific name
seed	The random seed to use to generate the same uid, because a name might have many uid, the function will extract one of them randomly, default is 123.

Value

phylopic uid

Author(s)

Guangchuang Yu

---

theme_nothing *theme_nothing*

Description

A theme that only show the plot panel

Usage

```
theme_nothing(base_size = 11, base_family = "")
```

Arguments

base_size   font size

base_family   font family

Value

ggplot2 theme

Author(s)

Guangchuang Yu

---

theme_transparent *theme_transparent*

Description

transparent background theme

Usage

```
theme_transparent(...)
```

Arguments

...   additional parameter to tweak the theme

Value

ggplot object

Author(s)

Guangchuang Yu with contributions from Hugo Gruson

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