

Package ‘ggiraphExtra’

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Type Package

Title Make Interactive 'ggplot2'. Extension to 'ggplot2' and 'ggiraph'

Version 0.1.0

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URL <https://github.com/cardiomoon/ggiraphExtra>

Depends R (>= 2.10)

Imports ggplot2 (>= 2.2.0), ggiraph (>= 0.3.2), scales, reshape2,
plyr, mycor, XML, grid, mgcv, mapproj, moonBook

Suggests TH.data, maps, gcookbook, knitr, rmarkdown, testthat

Description

Collection of functions to enhance 'ggplot2' and 'ggiraph'. Provides functions for exploratory plots.
All plot can be a 'static' plot or an 'interactive' plot using 'ggiraph'.

License GPL-3

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R topics documented:

browsers	2
coord_radar	3
ggAncova	3
ggBar	4
ggBoxplot	5
ggCatepillar	6

ggChoropleth	7
ggCLE	8
ggCor	9
ggDonut	9
ggDot	10
ggEffect	11
ggErrorBar	13
ggHeatmap	13
ggHSD	14
ggPair	15
ggPieDonut	16
ggPoints	17
ggRadar	18
ggRose	19
ggSpine	19
makeEq	20
model2df	21
num2cut	21
num2factorDf	22
pastecolon	22
rescale_df	23
rose	23
subcolors	24
summarySE	24
taco	25
theme_clean	25
unselectNumeric	26

Index	27
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browsers	<i>Browser market share 2011</i>
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Description

A phony dataset measuring browser market share

Usage

browsers

Format

A data.frame with 12 rows and 3 columns

browser browser

version browser version

share market share, in percentage

`coord_radar`

The radar coordinate system is a modification of polar coordinate system, commly used for radar chart

Description

The radar coordinate system is a modification of polar coordinate system, commly used for radar chart

Usage

```
coord_radar(theta = "x", start = 0, direction = 1)
```

Arguments

theta	variable to map angle to (x or y)
start	offset of starting point from 12 o'clock in radians
direction	1, clockwise; -1, counterclockwise

`ggAncova`

Make an interactive plot for an ANCOVA model

Description

Make an interactive plot for an ANCOVA model

Usage

```
ggAncova(x, ...)

## Default S3 method:
ggAncova(x, mapping, ...)

## S3 method for class 'formula'
ggAncova(x, data, ...)

## S3 method for class 'lm'
ggAncova(x, label = NULL, digits = 1, interactive = FALSE,
...)
```

Arguments

x	an object
...	additional arguments passed to the generic function
mapping	Set of aesthetic mappings created by aes or aes_.
data	a data.frame
label	A character string of column name be assigned to the label
digits	An integer indicating the number of decimal places
interactive	A logical value. If TRUE, an interactive plot will be returned

Methods (by class)

- default: Make an interactive plot for an ANCOVA model
- formula: Make an interactive plot for an ANCOVA model
- lm: Make an interactive plot for an ANCOVA model

Examples

```
require(moonBook)
require(ggplot2)
require(ggiraph)
ggAncova(radial,aes(age,NTAV,color=sex),interactive=TRUE)
fit=lm(NTAV~age+HBP,data=radial)
ggAncova(fit,interactive=TRUE)
ggAncova(NTAV~age+DM,data=radial)
```

ggBar *Draw an interactive barplot*

Description

Draw an interactive barplot

Usage

```
ggBar(data, mapping, stat = "count", position = "stack", palette = NULL,
width = NULL, digits = 1, horizontal = FALSE, yangle = 0,
addlabel = FALSE, polar = FALSE, interactive = FALSE, ...)
```

Arguments

data	A data.frame
mapping	Set of aesthetic mappings created by aes or aes_.
stat	The statistical transformation to use on the data for this layer, as a string c("count","identity")
position	Position adjustment. One of the c("fill","stack","dodge")

palette	A character string indicating the color palette
width	Bar width
digits	integer indicating the number of decimal places
horizontal	A logical value. If TRUE,a horizontal bar plot will be returned
yangle	A integer. The value will be used adjust the angle of axis.text.y
addlabel	A logical value. If TRUE, label will be added to the plot
polar	A logical value. If TRUE, coord_polar() function will be added
interactive	A logical value. If TRUE, an interactive plot will be returned
...	other arguments passed on to geom_bar_interactive.

Value

An interactive barplot

Examples

```
require(moonBook)
require(ggplot2)
require(ggiraph)
ggBar(acs,aes(x=Dx,fill=smoking),interactive=TRUE,width=1,colour="white",size=0.2,polar=TRUE)
ggBar(acs,aes(x=Dx,fill=smoking),position="fill",addlabel=TRUE,horizontal=TRUE,width=0.5)
ggBar(acs,aes(x=Dx,fill=smoking),position="dodge",interactive=TRUE)
ggBar(rose,aes(x=Month,fill=group,y=value),stat="identity",polar=TRUE,palette="Reds",width=1,
      color="black",size=0.1,interactive=TRUE)
```

ggBoxplot

*Draw boxplots of a data.frame***Description**

Draw boxplots of a data.frame

Usage

```
ggBoxplot(data, mapping = NULL, rescale = FALSE, horizontal = FALSE,
          interactive = FALSE, ...)
```

Arguments

data	a data.frame
mapping	Set of aesthetic mappings created by aes or aes_.
rescale	if true, rescale the data.frame
horizontal	if true, horizontal boxplots will be made
interactive	A logical value. If TRUE, an interactive plot will be returned
...	other arguments passed on to geom_boxplot_interactive

Examples

```
require(ggplot2)
require(ggiraph)
require(reshape2)
ggBoxplot(mtcars, rescale=TRUE)
ggBoxplot(mtcars, aes(x=c(mpg, cyl, disp, hp, drat), color=am), rescale=TRUE)
ggBoxplot(mtcars, rescale=TRUE, interactive=TRUE)
ggBoxplot(mtcars, horizontal=TRUE, interactive=TRUE)
```

ggCatepillar

Make an interactive catepillar plot

Description

Make an interactive catepillar plot

Usage

```
ggCatepillar(data, mapping, errorbar = "se", interactive = FALSE,
             digits = 1, flip = FALSE)
```

Arguments

<code>data</code>	a data.frame
<code>mapping</code>	Set of aesthetic mappings created by <code>aes</code> or <code>aes_</code> .
<code>errorbar</code>	which value is displayed with <code>errorbar</code> :"se" or "sd"
<code>interactive</code>	A logical value. If TRUE, an interactive plot will be returned
<code>digits</code>	An integer indicating the number of decimal places
<code>flip</code>	Logical cvalue. If TRUE, <code>coord_flip()</code> function is used to make a horizontal plot

Value

An interactive catepillar plot

Examples

```
require(moonBook)
require(ggiraph)
require(ggplot2)
ggCatepillar(acs, aes(Dx, age, color=HBP), interactive=TRUE)
ggCatepillar(acs, aes(c(Dx, sex), age, color=HBP), interactive=TRUE, flip=TRUE)
ggCatepillar(acs, aes(age, height, color=sex), errorbar=FALSE, interactive=TRUE)
```

ggChoropleth*Draw an interactive choropleth map*

Description

Draw an interactive choropleth map

Usage

```
ggChoropleth(data, mapping, map, colors = c("white", "orange", "red"),
  palette = NULL, title = "", digits = 1, interactive = FALSE, ...)
```

Arguments

<code>data</code>	a data.frame
<code>mapping</code>	Set of aesthetic mappings created by <code>aes</code> or <code>aes_</code> . Passed on <code>geom_map_interactive</code> . Required mappings are <code>map_id</code> and <code>fill</code> . Possible mapping is <code>facet</code> .
<code>map</code>	a map maybe a result of <code>map_data()</code>
<code>colors</code>	A vector of colours used as a parameter of <code>scale_fill_gradientn()</code>
<code>palette</code>	A palette name used for discrete fill var
<code>title</code>	A title
<code>digits</code>	An integer indicating the number of decimal places
<code>interactive</code>	Logical. If positive an interactive map will be made
<code>...</code>	other arguments passed on to <code>geom_map_interactive</code>

Examples

```
#crimes <- data.frame(state = tolower(rownames(USArrests)), USArrests)
#require(ggplot2)
#require(ggiraph)
#require(maps)
#require(mapproj)
#states_map <- map_data("state")
#ggChoropleth(crimes,aes(fill=Murder, map_id=state),map=states_map,interactive=TRUE)
#ggChoropleth(crimes,aes(fill=c(Murder,Rape), map_id=state),map=states_map,interactive=TRUE)
#ggChoropleth(crimes,aes(map_id=state),map=states_map,interactive=TRUE)
```

ggCLE

Draw a cleveland dot plot

Description

Draw a cleveland dot plot

Usage

```
ggCLE(data, mapping, reorderByX = TRUE, no = NULL, start = 0.99,
      interactive = FALSE, decreasing = TRUE, ...)
```

Arguments

data	a data.frame
mapping	Set of aesthetic mappings created by aes or aes_.
reorderByX	If true, the data is reordered by x variable
no	Number of data be drawn in plot
start	start point of x axis as ratio to minimum x variable
interactive	A logical value. If TRUE, an interactive plot will be returned
decreasing	Should the sort order be increasing or decreasing?
...	other arguments passed on to geom_point_interactive

Examples

```
require(ggplot2)
require(ggiraph)
mtcars$name=rownames(mtcars)
ggCLE(data=mtcars,aes(x=mpg,y=name))
ggCLE(data=mtcars,aes(x=mpg,y=name,color=am,facet=am),interactive=TRUE)
if(requireNamespace("gcookbook",quietly=TRUE)){
  require(gcookbook)
  ggCLE(data=tophitters2001,aes(x=avg,y=name),no=20,interactive=TRUE)
  ggCLE(data=tophitters2001,aes(x=avg,y=name,color=lg,facet=lg),no=20)
}
```

ggCor	<i>Draw a heatmap of correlation test</i>
-------	---

Description

Draw a heatmap of correlation test

Usage

```
ggCor(data, label = 0, colors = NULL, title = FALSE,  
       interactive = FALSE, ...)
```

Arguments

data	A data.frame
label	if 0, no label(default), if 1, use r value as label, if 2, use r value with significant mark as label
colors	colors for low, mid and high correlation values
title	if true, add title to the heatmap
interactive	A logical value. If TRUE, an interactive plot will be returned
...	further arguments to be passed to cor.test

Examples

```
require(mycor)  
require(ggplot2)  
require(ggiraph)  
ggCor(iris)  
ggCor(iris,label=2,interactive=TRUE)  
ggCor(mtcars,interactive=TRUE)  
ggCor(iris,method="pearson",interactive=TRUE)
```

ggDonut	<i>Draw a Donut plot</i>
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Description

Draw a Donut plot

Usage

```
ggDonut(data, mapping, addDonutLabel = TRUE, showRatio = TRUE,  
        polar = TRUE, labelposition = 1, title = "", interactive = FALSE)
```

Arguments

<code>data</code>	A <code>data.frame</code>
<code>mapping</code>	Set of aesthetic mappings created by <code>aes</code> or <code>aes_</code> .
<code>addDonutLabel</code>	A logical value. If TRUE, labels are added to the Donuts
<code>showRatio</code>	A logical value. If TRUE, Ratios are added to the DonutLabels
<code>polar</code>	A logical value. If TRUE, <code>coord_polar()</code> function will be added
<code>labelposition</code>	A number indicating the label position
<code>title</code>	Plot title
<code>interactive</code>	A logical value. If TRUE, an interactive plot will be returned

Value

An interactive Pie and Donut plot

Examples

```
require(ggplot2)
require(ggiraph)
require(plyr)
ggDonut(browsers,aes(donuts=version,count=share))
```

<code>ggDot</code>	<i>Draw a Wilkinson dot plot</i>
--------------------	----------------------------------

Description

Draw a Wilkinson dot plot

Usage

```
ggDot(data, mapping, stackdir = "center", binaxis = "y", binwidth = 0.5,
      method = "dotdensity", position = 0.2, boxwidth = 0.25,
      boxfill = NULL, ...)
```

Arguments

<code>data</code>	a <code>data.frame</code>
<code>mapping</code>	Set of aesthetic mappings created by <code>aes</code> or <code>aes_</code> .
<code>stackdir</code>	which direction to stack the dots. "up" (default), "down", "center", "centerhole" (centered, but with dots aligned)
<code>binaxis</code>	The axis to bin along, "x" (default) or "y"
<code>binwidth</code>	When <code>method</code> is "dotdensity", this specifies maximum bin width. When <code>method</code> is "histodot", this specifies bin width. Defaults to 1/30 of the range of the data

method	"dotdensity" (default) for dot-density binning, or "histodot" for fixed bin widths (like stat_bin)
position	Position adjustment. If 0, no adjustment.
boxwidth	The width of boxplot
boxfill	Fill color of boxplot
...	other arguments passed on to geom_dotplot

Examples

```
require(ggplot2)
if(requireNamespace("gcookbook", quietly=TRUE)){ # for data heightweight
  require(gcookbook)
  ggDot(heightweight, aes(sex, heightIn, fill=sex), boxfill="white", binwidth=0.4)
  ggDot(heightweight, aes(heightIn))
  ggDot(heightweight, aes(x=heightIn, fill=sex))
}
require(moonBook) #for use data radial
ggDot(radial, aes(x=sex, y=height, fill=sex), boxfill="white", position=0, binwidth=1, boxwidth=1)
ggDot(radial, aes(x=height, fill=sex), binwidth=1)
```

ggEffect

Visualize the effect of interaction between two continuous independent variables on a response variable

Description

Visualize the effect of interaction between two continuous independent variables on a response variable

Usage

```
ggEffect(x, ...)
## Default S3 method:
ggEffect(x, mapping, ...)

## S3 method for class 'formula'
ggEffect(x, data, ...)

## S3 method for class 'lm'
ggEffect(x, no = 1, probs = c(0.1, 0.5, 0.9), point = TRUE,
  xvalue = NULL, digits = 2, use.rownames = FALSE, interactive = FALSE,
  ...)
```

Arguments

<code>x</code>	Object to <code>ggEffect</code>
<code>...</code>	additional arguments passed to the generic function
<code>mapping</code>	Set of aesthetic mappings created by <code>aes</code> or <code>aes_</code> .
<code>data</code>	A <code>data.frame</code>
<code>no</code>	an integer
<code>probs</code>	A vector of probability weights for obtaining the elements of the vector being sampled. Default value is <code>c(0.10,0.5,0.90)</code>
<code>point</code>	A logical value. If <code>TRUE</code> , draw points
<code>xvalue</code>	A numeric vector
<code>digits</code>	An integer indicating the number of decimal places
<code>use.rownames</code>	If <code>TRUE</code> , use rownames in label
<code>interactive</code>	A logical value. If <code>TRUE</code> , an interactive plot will be returned

Value

An interactive plot showing interaction

Methods (by class)

- `default`: Visualize the effect of interaction between two continuous independent variables on a response variable
- `formula`: Visualize the effect of interaction between two continuous independent variables on a response variable
- `lm`: Visualize the effect of interaction between two continuous independent variables on a response variable

Examples

```
require(ggplot2)
require(ggiraph)
ggEffect(mtcars,aes(x=wt,y=mpg,color=hp),use.rownames=TRUE,interactive=TRUE)
require(moonBook)
ggEffect(NTAV~age*smoking,data=radial,interactive=TRUE)
fit=lm(age~sex*smoking,data=acs)
ggEffect(fit,interactive=TRUE)
```

ggErrorBar*Make an interactive bar plot with error bar*

Description

Make an interactive bar plot with error bar

Usage

```
ggErrorBar(data, mapping, interactive = FALSE, digits = 1, mode = 2,  
           errorbar = "se")
```

Arguments

data	A data.frame
mapping	Set of aesthetic mappings created by aes or aes_.
interactive	A logical value. If TRUE, an interactive plot will be returned
digits	An integer indicating the number of decimal places
mode	if 2, two-sided error bar will be displayed, if 1 one-sided errorbar will be displayed
errorbar	which value is displayed with errorbar :"se" or "sd"

Value

An interactive catepillar plot

Examples

```
require(ggplot2)  
require(ggiraph)  
ggErrorBar(mpg,aes(x=drv,y=cty),interactive=TRUE)  
ggErrorBar(mpg,aes(x=drv,y=hwy,color=cyl),mode=1,interactive=TRUE,errorbar="sd")
```

ggHeatmap*Make an interactive Heatmap*

Description

Make an interactive Heatmap

Usage

```
ggHeatmap(data, mapping, stat = "count", gradient_colors = c("white",  
           "steelblue"), addlabel = FALSE, polar = FALSE, interactive = FALSE,  
           yangle = 0, color = "black", size = 0.1, ...)
```

Arguments

<code>data</code>	A <code>data.frame</code>
<code>mapping</code>	Set of aesthetic mappings created by <code>aes</code> or <code>aes_</code> .
<code>stat</code>	The statistical transformation to use on the data for this layer, as a string c("count", "identity")
<code>gradient_colors</code>	A vector of color names used in function <code>scale_fill_gradientn()</code> . Default value is c("white", "steelblue")
<code>addlabel</code>	A logical value. If TRUE, label will be added to the plot
<code>polar</code>	A logical value. If TRUE, <code>coord_polar()</code> function will be added
<code>interactive</code>	A logical value. If TRUE, an interactive plot will be returned
<code>yangle</code>	A integer. The value will be used adjust the angle of <code>axis.text.y</code>
<code>color</code>	Color argument passed on to <code>geom_bar_interactive</code> .
<code>size</code>	Size argument passed on to <code>geom_bar_interactive</code> .
<code>...</code>	other arguments passed on to <code>geom_bar_interactive</code> .

Value

An interactive barplot

Examples

```
require(moonBook)
require(ggplot2)
require(ggiraph)
ggHeatmap(acs,aes(x=Dx,y=smoking),addlabel=TRUE)
ggHeatmap(rose,aes(x=Month,y=group,fill=value),stat="identity",gradient_colors = c("white", "red"))
ggHeatmap(taco,aes(x=AgeGroup,y=Filling,fill=Rating,facet=ShellType),stat="identity")
```

`ggHSD`

Draw Tukey Honest Significant Differences plot

Description

Draw Tukey Honest Significant Differences plot

Usage

```
ggHSD(tukey, no = 1, digits = 2, interactive = FALSE)
```

Arguments

<code>tukey</code>	A object of class "TukeyHSD", the result of <code>TukeyHSD()</code>
<code>no</code>	An integer specify the order of list
<code>digits</code>	integer indicating the number of decimal places
<code>interactive</code>	A logical value. If TRUE, an interactive plot will be returned

Value

A (interactive) ggplot

Examples

```
require(ggplot2)
fm1 <- aov(breaks ~ wool + tension, data = warpbreaks)
result=TukeyHSD(fm1, "tension", ordered = TRUE)
str(result)
ggHSD(result)
```

ggPair

Make an interactive scatter and line plot

Description

Make an interactive scatter and line plot

Usage

```
ggPair(data, mapping = NULL, idcolor = TRUE, horizontal = FALSE,
       interactive = FALSE)
```

Arguments

data	a data.frame
mapping	Set of aesthetic mappings created by aes or aes_.
idcolor	Logical cvalue. If TRUE, row numbers uses as a color variable
horizontal	Logical cvalue. If TRUE, coord_flip() function is used to make a horizontal plot
interactive	Logical cvalue. If TRUE, an interactive plot using ggiraph() function will be returned

Examples

```
require(ggplot2)
require(ggiraph)
ggPair(iris,interactive=TRUE)
ggPair(iris[3:5],interactive=TRUE)
ggPair(iris,aes(color=Species),interactive=TRUE)
ggPair(iris,aes(color=Species),horizontal=TRUE, interactive=TRUE)
ggPair(iris,aes(x=c(Sepal.Length,Sepal.Width)),interactive=TRUE)
ggPair(iris,aes(x=c(Sepal.Length,Sepal.Width),color=Species),interactive=TRUE)
```

<code>ggPieDonut</code>	<i>Draw a Pie and Donut plot</i>
-------------------------	----------------------------------

Description

Draw a Pie and Donut plot

Usage

```
ggPieDonut(data, mapping, addPieLabel = TRUE, addDonutLabel = TRUE,
           showRatioDonut = TRUE, showRatioPie = TRUE, showRatioPieAbove10 = TRUE,
           title = "", labelposition = 1, polar = TRUE, interactive = FALSE)
```

Arguments

<code>data</code>	A data.frame
<code>mapping</code>	Set of aesthetic mappings created by <code>aes</code> or <code>aes_</code> .
<code>addPieLabel</code>	A logical value. If TRUE, labels are added to the Pies
<code>addDonutLabel</code>	A logical value. If TRUE, labels are added to the Donuts
<code>showRatioDonut</code>	A logical value. If TRUE, Ratios are added to the DonutLabels
<code>showRatioPie</code>	A logical value. If TRUE, Ratios are added to the PieLabels
<code>showRatioPieAbove10</code>	A logical value. If TRUE, labels are added to the Pies with ratio above 10.
<code>title</code>	Plot title
<code>labelposition</code>	A number indicating the label position
<code>polar</code>	A logical value. If TRUE, <code>coord_polar()</code> function will be added
<code>interactive</code>	A logical value. If TRUE, an interactive plot will be returned

Value

An interactive Pie and Donut plot

Examples

```
require(ggplot2)
require(ggiraph)
require(plyr)
require(moonBook)
ggPieDonut(acs,aes(pies=Dx,donuts=smoking))
ggPieDonut(browsers,aes(pies=browser,donuts=version,count=share))
ggPieDonut(browsers,aes(x=c(browser,version),y=share),interactive=TRUE)
```

ggPoints	<i>Make an interactive scatterplot with regression line(s)</i>
----------	--

Description

Make an interactive scatterplot with regression line(s)

Usage

```
ggPoints(data, mapping, smooth = TRUE, se = TRUE, method = "auto",
  formula = y ~ x, fullrange = FALSE, level = 0.95, maxfactorno = 6,
  digits = 2, title = NULL, subtitle = NULL, caption = NULL,
  tooltip = NULL, interactive = FALSE, ...)
```

Arguments

data	a data.frame
mapping	Set of aesthetic mappings created by aes or aes_.
smooth	Logical. Add regression lines to the scatter plot
se	Logical. display confidence interval around linear regression? (TRUE by default)
method	smoothing method (function) to use, eg. "lm", "glm", "gam", "loess", "rlm"
formula	formula to use in smoothing function, eg. y ~ x, y ~ poly(x, 2), y ~ log(x)
fullrange	should the fit span the full range of the plot, or just the data
level	level of confidence interval to use (0.95 by default)
maxfactorno	An integer. Maximum unique number of a numeric vector treated as a factor
digits	integer indicating the number of decimal places
title	The text for plot title
subtitle	The text for plot subtitle
caption	The text for plot caption
tooltip	A character string of column name be included in tooltip. Default value is NULL
interactive	A logical value. If TRUE, an interactive plot will be returned
...	other arguments passed on to geom_point

Examples

```
require(ggplot2)
require(ggiraph)
require(plyr)
ggPoints(aes(x=wt,y=mpg,color=carb),data=mtcars,interactive=TRUE,maxfactno=3)
```

ggRadar*Draw a radar chart***Description**

Draw a radar chart

Usage

```
ggRadar(data, mapping = NULL, rescale = TRUE, legend.position = "top",
        colour = "red", alpha = 0.3, size = 3, ylim = NULL,
        interactive = FALSE, ...)
```

Arguments

<code>data</code>	A data.frame
<code>mapping</code>	Set of aesthetic mappings created by <code>aes</code> or <code>aes_</code> .
<code>rescale</code>	A logical value. If TRUE, all continuous variables in the data.frame are rescaled.
<code>legend.position</code>	Legend position. One of c("top","bottom","left","right","none")
<code>colour</code>	A name of color to be assigned as a color variable
<code>alpha</code>	Any numbers from 0 (transparent) to 1 (opaque)
<code>size</code>	Point size
<code>ylim</code>	A numeric vector of length 2, giving the y coordinates ranges.
<code>interactive</code>	A logical value. If TRUE, an interactive plot will be returned
<code>...</code>	other arguments passed on to <code>geom_point</code>

Value

An interactive radar plot

Examples

```
require(ggplot2)
require(ggiraph)
require(plyr)
require(reshape2)
ggRadar(data=iris,aes(group=Species))
ggRadar(data=mtcars,interactive=TRUE)
ggRadar(data=mtcars,aes(colour=am),interactive=TRUE)
```

ggRose *Draw an interactive Rose plot*

Description

Draw an interactive Rose plot

Usage

```
ggRose(data, mapping, palette = "Reds", color = "black", size = 0.1, ...)
```

Arguments

data	A data.frame
mapping	Set of aesthetic mappings created by aes or aes_.
palette	A character string indicating the color palette
color	Bar colour
size	Bar size
...	other arguments passed on to geom_bar_interactive.

Value

An interactive Rose plot

Examples

```
require(moonBook)
require(ggplot2)
require(ggiraph)
require(plyr)
ggRose(rose,aes(x=Month,fill=group,y=value),interactive=TRUE)
ggRose(acs,aes(x=Dx,fill=smoking),interactive=TRUE)
```

ggSpine *Draw an interactive spinogram*

Description

Draw an interactive spinogram

Usage

```
ggSpine(data, mapping, stat = "count", position = "fill",
        palette = "Blues", interactive = FALSE, polar = FALSE, width = NULL,
        digits = 1, colour = "black", size = 0.2, addlabel = FALSE, ...)
```

Arguments

<code>data</code>	A <code>data.frame</code>
<code>mapping</code>	Set of aesthetic mappings created by <code>aes</code> or <code>aes_</code> .
<code>stat</code>	The statistical transformation to use on the data for this layer, as a string c("count", "identity")
<code>position</code>	Position adjustment. One of the c("fill", "stack", "dodge")
<code>palette</code>	A character string indicating the color palette
<code>interactive</code>	A logical value. If TRUE, an interactive plot will be returned
<code>polar</code>	A logical value. If TRUE, <code>coord_polar()</code> function will be added
<code>width</code>	Bar width
<code>digits</code>	integer indicating the number of decimal places
<code>colour</code>	Bar colour
<code>size</code>	Bar size
<code>addlabel</code>	A logical value. If TRUE, label will be added to the plot
...	other arguments passed on to layer.

Value

An interactive spinogram

Examples

```
require(moonBook)
require(ggplot2)
require(ggiraph)
ggSpine(data=acs,aes(x=age,fill=smoking),interactive=TRUE)
ggSpine(data=acs,aes(x=Dx,fill=smoking),addlabel=TRUE,interactive=TRUE)
ggSpine(data=acs,aes(x=Dx,fill=smoking),position="dodge",addlabel=TRUE,interactive=TRUE)
ggSpine(data=acs,aes(x=Dx,fill=smoking),position="stack",addlabel=TRUE,interactive=TRUE)
```

`makeEq`

Make a regression equation of a model

Description

Make a regression equation of a model

Usage

```
makeEq(model, digits = 2)
```

Arguments

<code>model</code>	A model of class "lm" or "glm" or "loess"
<code>digits</code>	integer indicating the number of decimal places

`model2df`

Make a data.fram of yhat with a model

Description

Make a data.fram of yhat with a model

Usage

```
model2df(model, x = NULL, n = 100)
```

Arguments

model	A model of class "lm" or "glm" or "loess"
x	A optional vector of explanatory variable
n	number of observations.

`num2cut`

Computing breaks for make a histogram of a continuous variable

Description

Computing breaks for make a histogram of a continuous variable

Usage

```
num2cut(x)
```

Arguments

x	A continuous variables
---	------------------------

Value

A list contains a factor and a numeric vector

num2factorDf	<i>Make numeric column of a data.frame to factor</i>
--------------	--

Description

Make numeric column of a data.frame to factor

Usage

```
num2factorDf(data, colnames, maxfactorno = 6)
```

Arguments

data	a data.frame
colnames	Column names to be converted
maxfactorno	maximum unique value of column

pastecolon	<i>Paste character vectors separated by colon</i>
------------	---

Description

Paste character vectors separated by colon

Usage

```
pastecolon(...)
```

Arguments

...	Arguments passed on to paste()
-----	--------------------------------

rescale_df	<i>Rescale all numeric variables of a data.frame except grouping variable</i>
------------	---

Description

Rescale all numeric variables of a data.frame except grouping variable

Usage

```
rescale_df(data, groupvar = NULL)
```

Arguments

data	A data.frame
groupvar	A column name used as a grouping variable

Value

A rescaled data.frame

rose	<i>Rose sales among 7 groups in a year</i>
------	--

Description

A phony dataset representing rose sales

Usage

```
rose
```

Format

An object of class `data.frame` with 84 rows and 3 columns.

Details

@format A data.frame with 84 rows and 3 columns

group group A to G

Month Month 1 to 12

value Rose sales amount

subcolors

*Make a subcolors according to the mainCol***Description**

Make a subcolors according to the mainCol

Usage

```
subcolors(.dta, main, mainCol)
```

Arguments

.dta	A data.frame
main	A character string of column name used as a main variable
mainCol	A main color

summarySE

*Summarize a continuous variable by groups with mean, sd and SE***Description**

Summarize a continuous variable by groups with mean, sd and SE

Usage

```
summarySE(data = NULL, measurevar, groupvars = NULL, conf.interval = 0.95,
na.rm = TRUE, .drop = TRUE)
```

Arguments

data	A data.frame
measurevar	A name of variable to measure a mean and sd
groupvars	Name(s) of variable used as a grouping variables
conf.interval	confidence interval
na.rm	A logical value indicating whether or not remove NA values
.drop	should combinations of variables that do not appear in the input data be preserved (FALSE) or dropped (TRUE, default)

Value

A data.frame summarized a continuous variable by groups with mean, sd and SE

taco	<i>Taco ratings by age group</i>
------	----------------------------------

Description

Taco ratings by ShellType, AgeGroup and Filling source: [Communicating experiment results with R](#)

Usage

```
taco
```

Format

An object of class `data.frame` with 136 rows and 4 columns.

Details

@format A `data.frame` with 136 rows and 4 columns

ShellType Hard or Soft

Fillings Fillings of taco

AgeGroup AgeGroup One of the `c("<13", "13-20", "21-39", "40+",)`

Rating A numeric. Rating of taco

theme_clean	<i>Clean theme for PieDonut plot</i>
-------------	--------------------------------------

Description

Clean theme for PieDonut plot

Usage

```
theme_clean(base_size = 12)
```

Arguments

<code>base_size</code>	An interger, default 12.
------------------------	--------------------------

`unselectNumeric` *Unselect numeric column of a data.frame*

Description

Unselect numeric column of a data.frame

Usage

```
unselectNumeric(data, colnames, maxfactorno = 6)
```

Arguments

<code>data</code>	a data.frame
<code>colnames</code>	Column names to be converted
<code>maxfactorno</code>	maximum unique value of column

Index

*Topic **datasets**
 browsers, 2
 rose, 23
 taco, 25

browsers, 2

coord_radar, 3

ggAncova, 3
ggBar, 4
ggBoxplot, 5
ggCaterpillar, 6
ggChoropleth, 7
ggCLE, 8
ggCor, 9
ggDonut, 9
ggDot, 10
ggEffect, 11
ggErrorBar, 13
ggHeatmap, 13
ggHSD, 14
ggPair, 15
ggPieDonut, 16
ggPoints, 17
ggRadar, 18
ggRose, 19
ggSpine, 19

makeEq, 20
model2df, 21

num2cut, 21
num2factorDf, 22

pastecolon, 22

rescale_df, 23
rose, 23

subcolors, 24

summarySE, 24

taco, 25
theme_clean, 25

unselectNumeric, 26