Package ‘dashboard’

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Title Interactive Data Visualization with D3.js

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Description The dashboard package allows users to create web pages which display interactive data visualizations working in a standard modern browser. It displays them locally using the Rook server. Nor knowledge about web technologies nor Internet connection are required. D3.js is a JavaScript library for manipulating documents based on data. D3 helps the dashboard package bring data to life using HTML, SVG and CSS.

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dashboard-package *Interactive Data Visualization with D3.js*

Description

The dashboard package allows users to create web pages which display interactive data visualizations working in a standard modern browser. It displays them locally using the Rook server. Nor knowledge about web technologies nor Internet connection are required. D3.js is a JavaScript library for manipulating documents based on data. D3 helps the dashboard package bring data to life using HTML, SVG and CSS.

Author(s)

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dashboard_launch *dashboard_launch generates the dashboard and launchs the local server*

Description

dashboard_launch writes all files for the web page and launchs the local server

Usage

```
dashboard_launch(browse = TRUE)
```

Arguments

browse	boolean for launching the local server

Examples

```
dashboard_open(data=iris) # other options: pathoutput=getwd() ...
dcpiechart(x=names(iris)[5])
dcbarchart(x=names(iris)[1] , gap=75)
dcpiechart(x=names(iris)[2])
dctable(index=names(iris)[5])
dashboard_launch(browse = FALSE) # Just generates files. Server is not launched
```

dashboard_open *dashboard_open innitializes a new dashboard*

Description

dashboard_open sets the configuration for the web page

Usage

```
dashboard_open(data, title = "Dashbord test", filename = "dashboard",
  pathoutput = tempdir(), outerwidth = 960, outerheight = 700)
```

Arguments

data	data frame used for drawing a dashboard
title	character for the title of the generated dashboard
filename	character for the name of the generated html file
pathoutput	character for the output path of generated files
outerwidth	integer for the outer width (in pixel) of the web page
outerheight	integer for the outer height (in pixel) of the web page

Examples

```
dashboard_open(data=iris) # other options: pathoutput=getwd() ...
dcpiechart(x=names(iris)[5])
dcbarchart(x=names(iris)[1] , gap=75)
dcpiechart(x=names(iris)[2])
dctable(index=names(iris)[5])
dashboard_launch(browse = FALSE) # Just generates files. Server is not launched
```

dashboard_stop *dashboard_stop stops the local Rook server*

Description

dashboard_stop stops the Rook server running. Not needed in linux, but required in unix environment

Usage

```
dashboard_stop(dashboard.env = dashboard.env)
```

Arguments

dashboard.env	name of the global environment variable used across the dashboard package

Examples

```
dashboard_open(data=iris) # other options: pathoutput=getwd() ...
dcpiechart(x=names(iris)[5])
dcbarchart(x=names(iris)[1] , gap=75)
dcpiechart(x=names(iris)[2])
dctable(index=names(iris)[5])
dashboard_launch(browse = FALSE) # Just generates files. Server is not launched
dashboard_stop(dashboard.env) # should have a server running
```

---

dcbarchart *dcbarchart adds a bar chart to the dashboard*

Description

dcbarchart generates a bar chart

Usage

```
dcbarchart(x, title = paste(x, "bar chart"), spansize = 4,
  width = dashboard.env$outerwidth * spansize/12, height = 250,
  gap = width/2)
```

Arguments

x	column name of data frame data for drawing a bar chart
title	character for the title of the generated bar chart
spansize	integer between 1 to 12 for the width of the element in the row
width	integer for the width (in pixel) of the element in the web page
height	integer for the height (in pixel) of the element in the web page
gap	integer for adjusting the width of each bar

Examples

```
dashboard_open(data=iris) # other options: pathoutput=getwd() ...
dcpiechart(x=names(iris)[5])
dcbarchart(x=names(iris)[1] , gap=75)
dcpiechart(x=names(iris)[2])
dctable(index=names(iris)[5])
dashboard_launch(browse = FALSE) # Just generates files. Server is not launched
```

dcboxplot *dcboxplot adds a box plot to the dashboard*

Description

dcboxplot generates a box plot

Usage

```
dcboxplot(x, val, title = paste(x, "boxplot: ", val), spansize = 4,
  width = dashboard.env$outerwidth * spansize/12, height = 250)
```

Arguments

x	column name of categorical variable of data frame data for drawing a box plot. One box is drawed for each distinct value of x
val	column name of a single numerical variable in the data frame data for computing the size of the box
title	character for the title of the generated box plot
spansize	integer between 1 to 12 for the width of the element in the row
width	integer for the width in pixel of the element in the web page
height	integer for the height in pixel of the element in the web page

Examples

```
dashboard_open(data=iris) # other options: pathoutput=getwd() ...
dcpiechart(x=names(iris)[5])
dcboxplot(x=names(iris)[5], val=names(iris)[3] )
dcbarchart(x=names(iris)[1] , gap=75)
dcpiechart(x=names(iris)[2])
dctable(index=names(iris)[5])
dashboard_launch(browse = FALSE) # Just generates files. Server is not launched
```

dcpiechart *dcpiechart adds a pie chart to the dashboard*

Description

dcpiechart generates a pie chart

Usage

```
dcpiechart(x, title = paste(x, "pie chart"), spansize = 4, radius = 100,
  innerradius = 30, width = dashboard.env$outerwidth * spansize/12,
  height = 250)
```

Arguments

`x` column name of data frame `data` for drawing a pie chart

`title` character for the title of the generated pie chart

`spansize` integer between 1 to 12 for the width of the element in the web page

`radius` integer for the size of the radius in pixels of the pie chart

`innerradius` integer for the size of the inner radius in pixels of the pie chart

`width` integer for the width (in pixels) of the chart in the web page

`height` integer for the height (in pixels) of the chart in the web page

Examples

```
dashboard_open(data=iris) # other options: pathoutput=getwd() ...
dcpiechart(x=names(iris)[5])
dcbarchart(x=names(iris)[1] , gap=75)
dcpiechart(x=names(iris)[2])
dctable(index=names(iris)[5])
dashboard_launch(browse = FALSE) # Just generates files. Server is not launched
```

`dcrowchart` *dcrowchart adds a row chart to the dashboard*

Description

`dcrowchart` generates a horizontal bar chart

Usage

```
dcrowchart(x, title = paste(x, "row chart"), spansize = 4,
  width = dashboard.env$outerwidth * spansize/12, height = 250)
```

Arguments

`x` column name of data frame `data` for drawing a row chart

`title` character for the title of the generated row chart

`spansize` integer between 1 to 12 for the width of the element in the web page

`width` integer for the width (in pixels) of the chart in the web page

`height` integer for the height (in pixels) of the chart in the web page

Examples

```
dashboard_open(data=iris) # other options: pathoutput=getwd() ...
dcpiechart(x=names(iris)[5])
dcbarchart(x=names(iris)[1] , gap=75)
dcrowchart(x=names(iris)[5] )
dcpiechart(x=names(iris)[2])
dctable(index=names(iris)[5])
dashboard_launch(browse = FALSE) # Just generates files. Server is not launched
```

dcscatter *dcscatter adds a scatter plot to the dashboard*

Description

dcscatter generates a scatter plot

Usage

```
dcscatter(x, y, title = paste(x, " * ", y), spansize = 4,
  width = dashboard.env$outerwidth * spansize/12, height = 250,
  symbolesize = 2, symboletype = "circle", clipaddingsize = 10,
  hlightedsize = 4)
```

Arguments

x	column name of a single numeric in data frame data for drawing a scatter plot
y	column name of a single numeric in data frame data for drawing a scatter plot
title	character for the title of the generated scatter plot
spansize	integer between 1 to 12 for the width of the element in the web page
width	integer for the width (in pixels) of the element in the web page
height	integer for the height (in pixels) of the element in the web page
symbolesize	integer for adjusting the symbole size
symboletype	character for defining the symbole type
clipaddingsize	integer for adjusting the clipadding size
hlightedsize	integer for adjusting the highlighted size

Examples

```
dashboard_open(data=iris) # other options: pathoutput=getwd() ...
dcpiechart(x=names(iris)[5])
dcscatter(x=names(iris)[1], y=names(iris)[3] )
dcbarchart(x=names(iris)[1] , gap=75)
dcpiechart(x=names(iris)[2])
dctable(index=names(iris)[5])
dashboard_launch(browse = FALSE) # Just generates files and server is not launched
```

dctable *dctable add a data table to the dashboard*

Description

`dctable` displays a data table

Usage

```
dctable(index = listcol[1], listcol = dashboard.env$listcol,
  title = "data list table", spansize = 12)
```

Arguments

`index`	column name of data frame `data` for indexing the data table
`listcol`	vector of column names of data frame `data` to display in the data table
`title`	character for the title of the generated data table
`spansize`	integer between 1 to 12 for the width of the element in the web page

Examples

```
dashboard_open(data=iris) # other options: pathoutput=getwd() ...
dcpiechart(x=names(iris)[5])
dcbarchart(x=names(iris)[1] , gap=75)
dcpiechart(x=names(iris)[2])
dctable(index=names(iris)[5])
dashboard_launch(browse = FALSE) # Just generates files. Server is not launched
```

linebreak *linebreak adds a line break in the dashboard*

Description

`linebreak` generates a line break in the dashboard

Usage

```
linebreak()
```

Examples

```
dashboard_open(data=iris) # other options: pathoutput=getwd() ...
dcpiechart(x=names(iris)[5])
linebreak()
dcbarchart(x=names(iris)[1] , gap=75)
linebreak()
dcpiechart(x=names(iris)[2])
linebreak()
dctable(index=names(iris)[5])
dashboard_launch(browse = FALSE) # Just generates files. Server is not launched
```

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