Package 'pairsD3'

October 14, 2022

Title D3 Scatterplot Matrices

Version 0.1.3

Description Creates an interactive scatterplot matrix using the D3 JavaScript library. See <https://d3js.org/> for more information on D3.

Depends R (>= 3.1.2)

License GPL (>= 3)

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URL https://github.com/garthtarr/pairsD3/

Imports htmlwidgets (>= 0.3.2), shiny

Suggests knitr

RoxygenNote 7.2.0

Encoding UTF-8

NeedsCompilation no

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R topics documented:

pairsD3 *D3 scatterplot matrices*

Description

An interactive matrix of scatterplots is produced.

Usage

```
pairsD3(
  x,
  group = NULL,
  subset = NULL,
  labels = NULL,
  cex = 3,
  width = NULL,
  col = NULL,
  big = FALSE,
  theme = "colour",
  opacity = 0.9,
  tooltip = NULL,
  leftmar = 35,
  topmar = 2,
  diag = FALSE
)
```

Arguments

x	the coordinates of points given as numeric columns of a matrix or data frame. Logical and factor columns are converted to numeric in the same way that data.matrix does.
group	a optional vector specifying the group each observation belongs to. Used for tooltips and colouring the observations.
subset	an optional vector specifying a subset of observations to be used for plotting. Useful when you have a large number of observations, you can specify a random subset.
labels	the names of the variables (column names of x used by default).
cex	the magnification of the plotting symbol (default=3)
width	the width (and height) of the plot when viewed externally.
col	an optional (hex) colour for each of the levels in the group vector.
big	a logical parameter. Prevents inadvertent plotting of huge data sets. Default limit is 10 variables, to plot more than 10 set big=TRUE.
theme	a character parameter specifying whether the theme should be colour colour (default) or black and white bw.

opacity	numeric between 0 and 1. The opacity of the plotting symbols (default 0.9).
tooltip	an optional vector with the tool tip to be displayed when hovering over an observation. You can include basic html.
leftmar	space on the left margin
topmar	space on the bottom margin
diag	logical, whether or not the main diagonal is plotted (scatter plot of variables against themselves).

Examples

```
data(iris)
## Not run:
pairsD3(iris[,1:4],group=iris[,5],
         labels=gsub(pattern = "\\.",replacement = " ", names(iris)))

## End(Not run)
```

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pairsD3Output *Widget output function for use in Shiny*

Description

Widget output function for use in Shiny

Usage

```
pairsD3Output(outputId, width = "100%", height = "400px")
```

Arguments

outputId	Shiny output ID
width	width default '100%'
height	height default '400px'

renderPairsD3 *Widget render function for use in Shiny*

Description

Widget render function for use in Shiny

Usage

```
renderPairsD3(expr, env = parent.frame(), quoted = FALSE)
```

Arguments

expr	pairsD3 expression
env	environment
quoted	logical, default = FALSE

savePairs *Save a pairs plot to an HTML file*

Description

Save a pairsD3 graph to an HTML file for sharing with others. The HTML can include it's dependencies in an adjacent directory or can bundle all dependencies into the HTML file (via base64 encoding).

Usage

```
savePairs(pairs, file, selfcontained = TRUE)
```

Arguments

pairs	plot to save (e.g. result of calling the function pairsD3).
file	File to save HTML into
selfcontained	Whether to save the HTML as a single self-contained file (with external resources base64 encoded) or a file with external resources placed in an adjacent directory.

shinypairs *Shiny interface to the pairsD3 function*

Description

Opens a shiny GUI to facilitate interaction with the pairsD3 function

Usage

```
shinypairs(x, group = NULL, subset = NULL, labels = NULL)
```

Arguments

x	the coordinates of points given as numeric columns of a matrix or data frame. Logical and factor columns are converted to numeric in the same way that data.matrix does.
group	a optional vector specifying the group each observation belongs to. Used for tooltips and colouring the observations.
subset	an optional vector specifying a subset of observations to be used for plotting. Useful when you have a large number of observations, you can specify a random subset.
labels	the names of the variables (column names of x used by default).

Examples

```
data(iris)
## Not run:
shinypairs(iris)

## End(Not run)
```

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