

Package ‘canvasXpress’

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Version 1.24.8

Title Visualization Package for CanvasXpress in R

Description Enables creation of visualizations using the CanvasXpress framework in R. CanvasXpress is a standalone JavaScript library for reproducible research with complete tracking of data and end-user modifications stored in a single PNG image that can be played back. See <<http://canvasxpress.org>> for more information.

Type Package

License GPL-3

Encoding UTF-8

Language en-US

URL <https://github.com/neuhausi/canvasXpress.git>

BugReports <https://github.com/neuhausi/canvasXpress/issues>

Depends R (>= 3.3.0)

Imports htmlwidgets (>= 0.8), httr

RoxygenNote 6.1.1

Suggests shiny (>= 0.13.2), knitr, rmarkdown, dplyr, testthat, webshot, png, limma, grDevices, covr, magrittr

VignetteBuilder knitr

NeedsCompilation no

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Repository CRAN

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canvasXpress-package

CanvasXpress Visualization Package

Description

A package to assist in creating visualizations in CanvasXpress in R.

Details

CanvasXpress is a standalone JavaScript library for reproducible research with complete tracking of data and end-user modifications stored in a single PNG image that can be played back for an extensive set of visualizations.

More Information

<http://canvasxpress.org>

`browseVignettes(package = "canvasXpress")`

Author(s)

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See Also

Useful links:

- <https://github.com/neuhausi/canvasXpress.git>
- Report bugs at <https://github.com/neuhausi/canvasXpress/issues>

canvasXpress	<i>canvasXpress</i>
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Description

Custom HTML widget creation function based on widget YAML and JavaScript for use in any html-compatible context

Usage

```
canvasXpress(data = NULL, smpAnnot = NULL, varAnnot = NULL,
  graphType = "Scatter2D", events = NULL, afterRender = NULL,
  pretty = FALSE, digits = 4, width = 600, height = 400,
  destroy = FALSE, ...)
```

Arguments

- data data.frame-, matrix-, or list- classed data object
- smpAnnot additional data that applies to samples (columns)
- varAnnot additional data that applies to variables (rows)
- graphType type of graph to be plotted - default = "Scatter2D"
- events user-defined events (e.g. mousemove, mouseout, click and dblclick)
- afterRender event triggered after rendering
- pretty print tagged code (JSON/HTML) nicely - default = FALSE
- digits display digits - default = 4
- width plot width (valid CSS units) - default = 600px
- height plot height (valid CSS units) - default = 400px
- destroy used to indicate removal of a plot - default = FALSE
- ... additional parameters passed to canvasXpress

Value

htmlwidgets object

canvasXpressOutput *canvasXpressOutput*

Description

Output creation function for canvasXpressOutput in Shiny applications and interactive Rmd documents

Usage

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

Arguments

outputId	shiny unique ID
width	width of the element - default = 100%
height	height of the element - default = 400px

Value

Output function that enables the use of the widget in applications

See Also

renderCanvasXpress
cxShinyExample

cxShinyExample *Create Shiny Example Application*

Description

This function runs one of the available shiny example applications. To see the list of available example applications run the function with no inputs

Usage

```
cxShinyExample(example = NULL)
```

Arguments

example	character name of a valid example application.
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Value

Launches a running shiny example application

See Also

canvasXpressOutput
renderCanvasXpress

`renderCanvasXpress` *renderCanvasXpress*

Description

Render function for canvasXpressOutput in Shiny applications and interactive Rmd documents

Usage

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

Arguments

<code>expr</code>	expression used to render the canvasXpressOutput
<code>env</code>	environment to use - default = <code>parent.frame()</code>
<code>quoted</code>	whether the expression is quoted - default = <code>FALSE</code>

Value

Render function that enables the use of the widget in applications

Destroy

When there exists a need to visually remove a plot from a Shiny application when it is not being immediately replaced with a new plot use the destroy option as in:

```
renderCanvasXpress({canvasXpress(destroy = TRUE)})
```

See Also

canvasXpressOutput
cxShinyExample