

Package ‘canvasXpress’

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Version 1.35.0

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 <<https://www.canvasxpress.org>> for more information.

Type Package

License GPL-3

Encoding UTF-8

Language en-US

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

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

Depends R (>= 3.5)

Imports htmlwidgets (>= 1.0), httr, stats

RoxygenNote 7.1.1

Suggests shiny (>= 1.1.0), canvasXpress.data, dplyr, glue, grid,
knitr, png, readr, rmarkdown, testthat, tibble, tidyr, webshot,
limma

VignetteBuilder knitr

NeedsCompilation no

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R topics documented:

canvasXpress-package	2
canvasXpress	3
canvasXpressOutput	4
cxShinyExample	4
renderCanvasXpress	5
Index	6

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

<https://www.canvasxpress.org>

`browseVignettes(package = "canvasXpress")`

Author(s)

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See Also

Useful links:

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

canvasXpress *canvasXpress*

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.
---------	--

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 <code>canvasXpressOutput</code>
<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](#)

Index

`_PACKAGE` (`canvasXpress-package`), [2](#)

`canvasXpress`, [3](#)

`canvasXpress-package`, [2](#)

`canvasXpressOutput`, [4](#), [5](#)

`cxShinyExample`, [4](#), [4](#), [5](#)

`renderCanvasXpress`, [4](#), [5](#), [5](#)