Package ‘canvasXpress’

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Version 1.27.6-1
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.git

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

Depends R (>= 3.5.0)
Imports htmlwidgets (>= 0.8), httr, stats
RoxygenNote 7.0.2

Suggests shiny (>= 1.0), knitr, rmarkdown, testthat, covr, webshot, png, grid, limma, glue, dplyr, tibble, tidyr

VignetteBuilder knitr

NeedsCompilation no

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R topics documented:

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- renderCanvasXpress

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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

- https://www.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

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`

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
**renderCanvasXpress**

**See Also**
- `canvasXpressOutput`
- `renderCanvasXpress`

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**Description**

Render function for `canvasXpressOutput` in Shiny applications and interactive Rmd documents.

**Usage**

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

**Arguments**

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

**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:

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

**See Also**

- `canvasXpressOutput`
- `cxShinyExample`
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