

# Package ‘Rnvd3’

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**Type** Package

**Title** An Incomplete Wrapper of the 'nvd3' JavaScript Library

**Version** 1.0.0

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**Description** Creates JavaScript charts with the 'nvd3' library. So far only the multibar chart, the horizontal multibar chart, the line chart and the line chart with focus are available.

**License** GPL-3

**Encoding** UTF-8

**URL** <https://github.com/stla/Rnvd3>

**BugReports** <https://github.com/stla/Rnvd3/issues>

**Imports** lubridate, data.table, htmlwidgets, lazyeval, viridisLite, htmltools, jsonlite, grDevices, utils

**Suggests** reshape2, shiny

**RoxygenNote** 7.1.1

**NeedsCompilation** no

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**Repository** CRAN

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|                |                                  |
|----------------|----------------------------------|
| hMultiBarChart | <i>Horizontal multibar chart</i> |
|----------------|----------------------------------|

---

### Description

HTMLwidget displaying a horizontal multibar chart.

### Usage

```
hMultiBarChart(
  data,
  formula,
  by,
  palette = "viridis",
  xAxisTitle = NULL,
  yAxisTitle = NULL,
  margins = list(b = 100, l = 100),
  duration = 1300,
  groupSpacing = 0.1,
  xAxisTitleDistance = 25,
  yAxisTitleDistance = -5,
  yAxisShowMaxMin = FALSE,
  yAxisTickFormat = ".0f",
  nticks = 5,
  xLabelsFontSize = "1rem",
  yLabelsFontSize = "1rem",
  showValues = FALSE,
  tooltipFormatters = list(value = NULL, header = NULL, key = NULL),
  tooltipTransitions = TRUE,
  tooltipShadow = TRUE,
  width = "100%",
  height = NULL,
  elementId = NULL
)
```

### Arguments

|            |                                                                                                                                                                                                                                                                                                                                |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| data       | dataframe containing the data used for the chart                                                                                                                                                                                                                                                                               |
| formula    | a two-sided formula like $y \sim x$ , where "x" and "y" are two column names of data                                                                                                                                                                                                                                           |
| by         | string, the "by" variable; must be a column name of data                                                                                                                                                                                                                                                                       |
| palette    | this can be either the name of a viridis color palette, e.g. "viridis", "cividis" or "turbo" (see <a href="#">viridis</a> ), or a vector of colors, or a function that takes an integer argument (the required number of colors) and returns a character vector of colors (e.g. you can use <a href="#">colorRampPalette</a> ) |
| xAxisTitle | a title for the x-axis; if NULL, the title is taken from the formula argument                                                                                                                                                                                                                                                  |

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| yAxisTitle         | a title for the y-axis; if NULL, the title is taken from the formula argument                                                                                                                                                                                                                                                                                                                                      |
| margins            | a named list defining the margins, with names "t", "r", "b" and "l", for "top", "right", "bottom" and "left" respectively; you can specify only certain margins in the list to change just those parts                                                                                                                                                                                                             |
| duration           | duration of the transition, a number of milliseconds                                                                                                                                                                                                                                                                                                                                                               |
| groupSpacing       | a number, controls the distance between groups of bars                                                                                                                                                                                                                                                                                                                                                             |
| xAxisTitleDistance | a number, controls the distance between the x-axis and its title                                                                                                                                                                                                                                                                                                                                                   |
| yAxisTitleDistance | a number, controls the distance between the y-axis and its title                                                                                                                                                                                                                                                                                                                                                   |
| yAxisShowMaxMin    | Boolean, whether to show the min and the max on the y-axis                                                                                                                                                                                                                                                                                                                                                         |
| yAxisTickFormat    | a d3 formatting string for the y-axis; see <a href="#">d3.format</a>                                                                                                                                                                                                                                                                                                                                               |
| nticks             | integer, the number of ticks on the y-axis                                                                                                                                                                                                                                                                                                                                                                         |
| xLabelsFontSize    | a CSS measure, the font size of the labels on the x-axis                                                                                                                                                                                                                                                                                                                                                           |
| yLabelsFontSize    | a CSS measure, the font size of the labels on the y-axis                                                                                                                                                                                                                                                                                                                                                           |
| showValues         | Boolean, whether to show the values next to the bars                                                                                                                                                                                                                                                                                                                                                               |
| tooltipFormatters  | formatters for the tooltip; each formatter must be NULL for the default formatting, otherwise a JavaScript function created with <a href="#">JS</a> ; there are three possible formatters (see the example):<br><b>value</b> formatter for the y-value displayed in the tooltip<br><b>header</b> formatter for the tooltip header (this is the x-value)<br><b>key</b> formatter for the value of the 'by' variable |
| tooltipTransitions | Boolean, whether to style the tooltip with a fade effect                                                                                                                                                                                                                                                                                                                                                           |
| tooltipShadow      | Boolean, whether to style the tooltip with a shadow                                                                                                                                                                                                                                                                                                                                                                |
| width              | width of the chart container, must be a valid CSS measure                                                                                                                                                                                                                                                                                                                                                          |
| height             | height of the chart container, must be a valid CSS measure                                                                                                                                                                                                                                                                                                                                                         |
| elementId          | an id for the chart container; commonly useless                                                                                                                                                                                                                                                                                                                                                                    |

**Value**

A htmlwidget displaying a grouped/stacked bar chart.

**Examples**

```
library(Rnvd3)
dat <- aggregate(breaks ~ wool + tension, data = warpbreaks, mean)
levels(dat[["tension"]]) <- c("Low", "Medium", "High")
```

```

hMultiBarChart(
  dat, breaks ~ wool, "tension", yAxisShowMaxMin = TRUE,
  yAxisTitle = "Mean of breaks", yAxisTickFormat = ".01f"
)

# the axis titles are small, let's make them bigger
library(htmltools)
CSS <- HTML(
  ".nvd3 .nv-axis.nv-x text.nv-axislabel,
  .nvd3 .nv-axis.nv-y text.nv-axislabel {
    font-size: 1rem;
  }"
)
prependContent(
  hMultiBarChart(
    dat, breaks ~ wool, "tension", yAxisShowMaxMin = TRUE,
    yAxisTitle = "Mean of breaks", yAxisTickFormat = ".01f"
  ),
  tags$style(CSS)
)

```

---

lineChart

*Line chart*


---

### Description

Create a HTML widget displaying a line chart.

### Usage

```

lineChart(
  data,
  xAxisTitle = "x",
  yAxisTitle = "y",
  margins = list(l = 90),
  duration = 500,
  useInteractiveGuideline = TRUE,
  xAxisTickFormat = ".0f",
  yAxisTickFormat = ".02f",
  xLabelsFontSize = "0.75rem",
  yLabelsFontSize = "0.75rem",
  legendPosition = "top",
  interpolate = "linear",
  xRange = NULL,
  yRange = NULL,
  rightAlignYaxis = FALSE,
  tooltipFormatters = list(value = NULL, header = NULL, key = NULL),
  tooltipTransitions = TRUE,
  tooltipShadow = TRUE,

```

```

    width = "100%",
    height = NULL,
    elementId = NULL
  )

```

### Arguments

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| data                    | data used for the chart; it must be a list created with <a href="#">lineChartData</a> , or a list of such lists (for multiple lines)                                                                                                                                                                                                                                                                                   |
| xAxisTitle              | string, the title of the x-axis                                                                                                                                                                                                                                                                                                                                                                                        |
| yAxisTitle              | string, the title of the y-axis                                                                                                                                                                                                                                                                                                                                                                                        |
| margins                 | a named list defining the margins, with names "t", "r", "b" and "l", for "top", "right", "bottom" and "left" respectively; you can specify only certain margins in the list to change just those parts                                                                                                                                                                                                                 |
| duration                | transition duration in milliseconds                                                                                                                                                                                                                                                                                                                                                                                    |
| useInteractiveGuideline | Boolean, a guideline and synchronized tooltips                                                                                                                                                                                                                                                                                                                                                                         |
| xAxisTickFormat         | a d3 formatting string for the ticks on the x-axis; a d3 <i>time</i> formatting string if the x-values are dates, see <a href="#">d3.time.format</a>                                                                                                                                                                                                                                                                   |
| yAxisTickFormat         | a d3 formatting string for the ticks on the y-axis                                                                                                                                                                                                                                                                                                                                                                     |
| xLabelsFontSize         | a CSS measure, the font size of the labels on the x-axis                                                                                                                                                                                                                                                                                                                                                               |
| yLabelsFontSize         | a CSS measure, the font size of the labels on the y-axis                                                                                                                                                                                                                                                                                                                                                               |
| legendPosition          | string, the legend position, "top" or "right"                                                                                                                                                                                                                                                                                                                                                                          |
| interpolate             | interpolation type, a string among "linear", "step-before", "step-after", "basis", "basis-open", "basis-closed", "bundle", "cardinal", "cardinal-open", "cardinal-closed", "monotone"                                                                                                                                                                                                                                  |
| xRange                  | the x-axis range, a length two vector of the same type as the x-values, or NULL to derive it from the data                                                                                                                                                                                                                                                                                                             |
| yRange                  | the y-axis range, a numeric vector of length 2, or NULL to derive it from the data                                                                                                                                                                                                                                                                                                                                     |
| rightAlignYaxis         | Boolean, whether to put the y-axis on the right side instead of the left                                                                                                                                                                                                                                                                                                                                               |
| tooltipFormatters       | formatters for the tooltip; each formatter must be NULL for the default formatting, otherwise a JavaScript function created with <a href="#">JS</a> ; there are three possible formatters (see the example):<br><br><b>value</b> formatter for the y-value displayed in the tooltip<br><b>header</b> formatter for the tooltip header (this is the x-value)<br><b>key</b> formatter for the value of the 'by' variable |
| tooltipTransitions      | Boolean, whether to style the tooltip with a fade effect                                                                                                                                                                                                                                                                                                                                                               |

|               |                                                            |
|---------------|------------------------------------------------------------|
| tooltipShadow | Boolean, whether to style the tooltip with a shadow        |
| width         | width of the chart container, must be a valid CSS measure  |
| height        | height of the chart container, must be a valid CSS measure |
| elementId     | an id for the chart container, usually useless             |

## Value

A HTML widget displaying a line chart.

## Examples

```
library(Rnvd3)

dat1 <-
  lineChartData(x = ~ 1:100, y = ~ sin(1:100/10), key = "Sine wave", color = "lime")
dat2 <-
  lineChartData(x = ~ 1:100, y = ~ sin(1:100/10)*0.25 + 0.5,
               key = "Another sine wave", color = "red")
dat <- list(dat1, dat2)

lineChart(dat)

# with a date x-axis ####
dat1 <-
  lineChartData(
    x = ~ Sys.Date() + 1:100, y = ~ sin(1:100/10), key = "Sine wave", color = "lime"
  )
dat2 <-
  lineChartData(x = ~ Sys.Date() + 1:100, y = ~ sin(1:100/10)*0.25 + 0.5,
               key = "Another sine wave", color = "darkred")
dat <- list(dat1, dat2)

lineChart(
  dat,
  margins = list(t = 100, r = 100, b = 100, l = 100),
  xAxisTickFormat = "%Y-%m-%d"
)

# with a datetime x-axis

dat <- data.frame(
  x = Sys.time() + (1:300),
  y1 = sin(1:300/10),
  y2 = sin(1:300/10)*0.25 + 0.5
)
dat1 <-
  lineChartData(x = ~x, y = ~y1, data = dat, key = "Sine wave", color = "lime")
dat2 <-
  lineChartData(x = ~x, y = ~y2, data = dat,
               key = "Another sine wave", color = "darkred")
dat12 <- list(dat1, dat2)
```

```
lineChart(  
  dat12,  
  margins = list(t = 100, r = 100, b = 100, l = 100),  
  xAxisTickFormat = "%H:%M:%S",  
  xAxisTitle = "Time", yAxisTitle = "Energy"  
)
```

---

|               |                        |
|---------------|------------------------|
| lineChartData | <i>Line chart data</i> |
|---------------|------------------------|

---

### Description

Make line chart data.

### Usage

```
lineChartData(x, y, data = NULL, key, color, area = FALSE)
```

### Arguments

|       |                                                                                                                                  |
|-------|----------------------------------------------------------------------------------------------------------------------------------|
| x     | a right-sided formula giving the variable on the x-axis, numeric or date type                                                    |
| y     | a right-sided formula giving the variable on the x-axis, numeric type                                                            |
| data  | dataframe containing the data for the chart; if not NULL, the variables passed to x and y are searched among the columns of data |
| key   | string, the title of the line chart                                                                                              |
| color | string, the color of the line chart                                                                                              |
| area  | Boolean, whether to turn the line chart into a filled area chart                                                                 |

### Value

A list, for usage in [lineChart](#).

### Note

The color can be given by the name of a R color, the name of a CSS color, e.g. "lime" or "fuchsia", an HEX code like "#ff009a", a RGB code like "rgb(255,100,39)", or a HSL code like "hsl(360,11,255)".

---

|                |                              |
|----------------|------------------------------|
| lineFocusChart | <i>Line chart with focus</i> |
|----------------|------------------------------|

---

## Description

Create a HTML widget displaying a line chart with a focus tool.

## Usage

```
lineFocusChart(
  data,
  xAxisTitle = "x",
  yAxisTitle = "y",
  margins = list(l = 90),
  duration = 500,
  useInteractiveGuideline = FALSE,
  xAxisTickFormat = ".0f",
  yAxisTickFormat = ".02f",
  xLabelsFontSize = "0.75rem",
  yLabelsFontSize = "0.75rem",
  legendPosition = "top",
  interpolate = "linear",
  xRange = NULL,
  yRange = NULL,
  rightAlignYaxis = FALSE,
  tooltipFormatters = list(value = NULL, header = NULL, key = NULL),
  tooltipTransitions = TRUE,
  tooltipShadow = TRUE,
  width = "100%",
  height = NULL,
  elementId = NULL
)
```

## Arguments

|                         |                                                                                                                                                                                                        |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| data                    | data used for the chart; it must be a list created with <a href="#">lineChartData</a> , or a list of such lists (for multiple lines)                                                                   |
| xAxisTitle              | string, the title of the x-axis                                                                                                                                                                        |
| yAxisTitle              | string, the title of the y-axis                                                                                                                                                                        |
| margins                 | a named list defining the margins, with names "t", "r", "b" and "l", for "top", "right", "bottom" and "left" respectively; you can specify only certain margins in the list to change just those parts |
| duration                | transition duration in milliseconds                                                                                                                                                                    |
| useInteractiveGuideline | Boolean, a guideline and synchronized tooltips                                                                                                                                                         |

|                    |                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| xAxisTickFormat    | a d3 formatting string for the ticks on the x-axis; a d3 <i>time</i> formatting string if the x-values are dates, see <a href="#">d3.time.format</a>                                                                                                                                                                                                                                              |
| yAxisTickFormat    | a d3 formatting string for the ticks on the y-axis                                                                                                                                                                                                                                                                                                                                                |
| xLabelsFontSize    | a CSS measure, the font size of the labels on the x-axis                                                                                                                                                                                                                                                                                                                                          |
| yLabelsFontSize    | a CSS measure, the font size of the labels on the y-axis                                                                                                                                                                                                                                                                                                                                          |
| legendPosition     | string, the legend position, "top" or "right"                                                                                                                                                                                                                                                                                                                                                     |
| interpolate        | interpolation type, a string among "linear", "step-before", "step-after", "basis", "basis-open", "basis-closed", "bundle", "cardinal", "cardinal-open", "cardinal-closed", "monotone"                                                                                                                                                                                                             |
| xRange             | the x-axis range, a length two vector of the same type as the x-values, or NULL to derive it from the data                                                                                                                                                                                                                                                                                        |
| yRange             | the y-axis range, a numeric vector of length 2, or NULL to derive it from the data                                                                                                                                                                                                                                                                                                                |
| rightAlignYaxis    | Boolean, whether to put the y-axis on the right side instead of the left                                                                                                                                                                                                                                                                                                                          |
| tooltipFormatters  | formatters for the tooltip; each formatter must be NULL for the default formatting, otherwise a JavaScript function created with JS; there are three possible formatters (see the example):<br><b>value</b> formatter for the y-value displayed in the tooltip<br><b>header</b> formatter for the tooltip header (this is the x-value)<br><b>key</b> formatter for the value of the 'by' variable |
| tooltipTransitions | Boolean, whether to style the tooltip with a fade effect                                                                                                                                                                                                                                                                                                                                          |
| tooltipShadow      | Boolean, whether to style the tooltip with a shadow                                                                                                                                                                                                                                                                                                                                               |
| width              | width of the chart container, must be a valid CSS measure                                                                                                                                                                                                                                                                                                                                         |
| height             | height of the chart container, must be a valid CSS measure                                                                                                                                                                                                                                                                                                                                        |
| elementId          | an id for the chart container, usually useless                                                                                                                                                                                                                                                                                                                                                    |

## Value

A HTML widget displaying a line chart with a focus tool.

## Examples

```
library(Rnvd3)

dat1 <-
  lineChartData(x = ~ 1:100, y = ~ sin(1:100/10), key = "Sine wave", color = "lime")
dat2 <-
  lineChartData(x = ~ 1:100, y = ~ sin(1:100/10)*0.25 + 0.5,
               key = "Another sine wave", color = "red")
dat <- list(dat1, dat2)

lineFocusChart(dat)
```

---

|               |                       |
|---------------|-----------------------|
| multiBarChart | <i>Multibar chart</i> |
|---------------|-----------------------|

---

### Description

HTMLwidget displaying a multibar chart.

### Usage

```
multiBarChart(
  data,
  formula,
  by,
  palette = "viridis",
  xAxisTitle = NULL,
  yAxisTitle = NULL,
  margins = list(b = 100, l = 70),
  duration = 1300,
  rotateLabels = 0,
  groupSpacing = 0.1,
  xAxisTitleDistance = 35,
  yAxisTitleDistance = -5,
  yAxisShowMaxMin = FALSE,
  yAxisTickFormat = ".0f",
  xLabelsFontSize = "1rem",
  yLabelsFontSize = "1rem",
  rightAlignYaxis = FALSE,
  reduceXticks = FALSE,
  staggerLabels = FALSE,
  wrapLabels = FALSE,
  useInteractiveGuideline = FALSE,
  tooltipFormatters = list(value = NULL, header = NULL, key = NULL),
  tooltipTransitions = TRUE,
  tooltipShadow = TRUE,
  radioButtonMode = FALSE,
  legendTitle = NULL,
  legendHjust = -20,
  width = "100%",
  height = NULL,
  elementId = NULL
)
```

### Arguments

|         |                                                                                      |
|---------|--------------------------------------------------------------------------------------|
| data    | dataframe used for the chart                                                         |
| formula | a two-sided formula like $y \sim x$ , where "x" and "y" are two column names of data |

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| by                      | string, the "by" variable; must be a column name of data                                                                                                                                                                                                                                                                                                                                                           |
| palette                 | this can be either the name of a viridis color palette, e.g. "viridis", "cividis" or "turbo" (see <a href="#">viridis</a> ), or a vector of colors, or a function that takes an integer argument (the required number of colors) and returns a character vector of colors (e.g. you can use <a href="#">colorRampPalette</a> )                                                                                     |
| xAxisTitle              | a title for the x-axis; if NULL, the title is taken from the formula argument                                                                                                                                                                                                                                                                                                                                      |
| yAxisTitle              | a title for the y-axis; if NULL, the title is taken from the formula argument                                                                                                                                                                                                                                                                                                                                      |
| margins                 | a named list defining the margins, with names "t", "r", "b" and "l", for "top", "right", "bottom" and "left" respectively; you can specify only certain margins in the list to change just those parts                                                                                                                                                                                                             |
| duration                | duration of the transition, a number of milliseconds                                                                                                                                                                                                                                                                                                                                                               |
| rotateLabels            | a number, the angle of rotation of the labels of the x-axis (in degrees)                                                                                                                                                                                                                                                                                                                                           |
| groupSpacing            | a number, controls the distance between groups of bars                                                                                                                                                                                                                                                                                                                                                             |
| xAxisTitleDistance      | a number, controls the distance between the x-axis and its title                                                                                                                                                                                                                                                                                                                                                   |
| yAxisTitleDistance      | a number, controls the distance between the y-axis and its title                                                                                                                                                                                                                                                                                                                                                   |
| yAxisShowMaxMin         | Boolean, whether to show the min and the max on the y-axis                                                                                                                                                                                                                                                                                                                                                         |
| yAxisTickFormat         | a d3 formatting string for the y-axis; see <a href="#">d3.format</a>                                                                                                                                                                                                                                                                                                                                               |
| xLabelsFontSize         | a CSS measure, the font size of the labels on the x-axis                                                                                                                                                                                                                                                                                                                                                           |
| yLabelsFontSize         | a CSS measure, the font size of the labels on the y-axis                                                                                                                                                                                                                                                                                                                                                           |
| rightAlignYaxis         | Boolean, whether to put the y-axis on the right side instead of the left                                                                                                                                                                                                                                                                                                                                           |
| reduceXTicks            | Boolean, whether to reduce the ticks on the x-axis so that the x-labels are less likely to overlap                                                                                                                                                                                                                                                                                                                 |
| staggerLabels           | Boolean, whether to make the x-labels stagger at different distances from the axis so they're less likely to overlap                                                                                                                                                                                                                                                                                               |
| wrapLabels              | Boolean, whether to split long x-labels by new lines in order to prevent overlapping                                                                                                                                                                                                                                                                                                                               |
| useInteractiveGuideline | Boolean, other kind of tooltips: sets the chart to use a guideline and floating tooltip instead of requiring the user to hover over specific hotspots                                                                                                                                                                                                                                                              |
| tooltipFormatters       | formatters for the tooltip; each formatter must be NULL for the default formatting, otherwise a JavaScript function created with <a href="#">JS</a> ; there are three possible formatters (see the example):<br><b>value</b> formatter for the y-value displayed in the tooltip<br><b>header</b> formatter for the tooltip header (this is the x-value)<br><b>key</b> formatter for the value of the 'by' variable |

|                    |                                                                                                           |
|--------------------|-----------------------------------------------------------------------------------------------------------|
| tooltipTransitions | Boolean, whether to style the tooltip with a fade effect                                                  |
| tooltipShadow      | Boolean, whether to style the tooltip with a shadow                                                       |
| radioButtonMode    | Boolean, whether to authorize only one selection in the legend (i.e. only one level of the 'by' variable) |
| legendTitle        | a title for the legend, or NULL for no title                                                              |
| legendHjust        | horizontal adjustment of the legend title                                                                 |
| width              | width of the chart container, must be a valid CSS measure                                                 |
| height             | height of the chart container, must be a valid CSS measure                                                |
| elementId          | an id for the chart container; commonly useless                                                           |

**Value**

A htmlwidget displaying a grouped/stacked bar chart.

**Note**

In Shiny, you can style the axis titles with the help of CSS; see the [shiny example](#). It is also possible outside of Shiny; see the second example below, where we set the CSS with the help of [prependContent](#).

**Examples**

```
library(Rnvd3)
# in this example we use the tooltip formatters for styling only; we could
# achieve the same result with the help of CSS
dat <- reshape2::melt(
  apply(HairEyeColor, c(1, 2), sum), value.name = "Count"
)
multiBarChart(
  dat, Count ~ Eye, "Hair",
  tooltipFormatters = list(
    value = JS(
      "function(x){",
      "  return '<span style=\"color:red;\">' + x + '</span>';",
      "}"
    ),
    header = JS(
      "function(x){",
      "  return '<span style=\"color:green;\">' + x + '</span>';",
      "}"
    ),
    key = JS(
      "function(x){",
      "  return '<i style=\"color:blue;\">' + x + '</i>';",
      "}"
    )
  )
)
```

```

)

# style axis titles with CSS ####
library(htmltools)

CSS <- HTML(
  ".nvd3 .nv-axis.nv-x text.nv-axislabel,
  .nvd3 .nv-axis.nv-y text.nv-axislabel {
    font-size: 2rem;
    fill: red;
  }"
)

widget <- multiBarChart(
  dat, Count ~ Eye, "Hair", palette = "turbo"
)
prependContent(
  widget,
  tags$style(CSS)
)

```

---

Rnvd3-imports

*Objects imported from other packages*


---

### Description

These objects are imported from other packages. Follow the links to their documentation: [JS](#), [saveWidget](#), [prependContent](#).

---

rnvd3-shiny

*Shiny bindings for rnvd3*


---

### Description

Output and render functions for using rnvd3 widgets within Shiny applications and interactive Rmd documents.

### Usage

```

rnvd3Output(outputId, width = "100%", height = "400px")

renderRnvd3(expr, env = parent.frame(), quoted = FALSE)

```

**Arguments**

|               |                                                                                                                               |
|---------------|-------------------------------------------------------------------------------------------------------------------------------|
| outputId      | output variable to read from                                                                                                  |
| width, height | must be a valid CSS unit (like '100%', '400px', 'auto') or a number, which will be coerced to a string and have 'px' appended |
| expr          | an expression that generates a rnvd3 widget                                                                                   |
| env           | the environment in which to evaluate expr                                                                                     |
| quoted        | is expr a quoted expression (with quote())                                                                                    |

**Value**

rnvd3Output returns an output element that can be included in a Shiny UI definition, and renderRnvd3 returns a shiny.render.function object that can be included in a Shiny server definition.

**Examples**

```
library(Rnvd3)
library(shiny)

dat <- reshape2::melt(
  apply(HairEyeColor, c(1, 2), sum), value.name = "Count"
)

CSS <- HTML(
  "body {
    overflow: overlay;
  }
  /* style axis titles */
  .nvd3 .nv-axis.nv-x text.nv-axislabel,
  .nvd3 .nv-axis.nv-y text.nv-axislabel {
    font-size: 3rem;
    fill: red;
  }
  /* style the tooltip */
  .nvtooltip .value {
    color: red;
  }
  .nvtooltip .x-value {
    color: green;
  }
  .nvtooltip .key {
    color: blue;
    font-style: italic;
  }
  "
)

ui <- fluidPage(
  tags$head(tags$style(CSS)),
  br(),
  fluidRow(
```

```
    column(
      9,
      rnvd3Output("mychart", width = "100%", height = "500px")
    ),
    column(
      3,
      tags$h3("Chart state:"),
      verbatimTextOutput("state")
    )
  )
)

server <- function(input, output, session){

  output[["mychart"]] <- renderRnvd3({
    multiBarChart(
      dat, Count ~ Eye, "Hair", palette = "viridis",
      xLabelsFontSize = "2rem", yLabelsFontSize = "2rem"
    )
  })

  output[["state"]] <- renderPrint({
    input[["mychart_state"]]
  })

}

if(interactive()){
  shinyApp(ui, server)
}
```

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