Package ‘radarchart’

December 20, 2016

Title Radar Chart from 'Chart.js'

Version 0.3.1

Description Create interactive radar charts using the 'Chart.js' 'JavaScript' library and the 'htmlwidgets' package. 'Chart.js' <http://www.chartjs.org/> is a lightweight library that supports several types of simple chart using the 'HTML5' canvas element. This package provides an R interface specifically to the radar chart, sometimes called a spider chart, for visualising multivariate data.

Depends R (>= 3.1.2)

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LazyData true

URL https://github.com/mangothecat/radarchart

BugReports https://github.com/mangothecat/radarchart/issues

Imports htmlwidgets, htmltools, grDevices

RoxygenNote 5.0.1

Suggests testthat, knitr, rmarkdown, tidyr, shiny

VignetteBuilder knitr

NeedsCompilation no

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Repository CRAN

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chartJSRadar

Description

R bindings to the radar plot in the chartJS library

Usage

chartJSRadar(scores, labs, width = NULL, height = NULL, main = NULL,
maxScale = NULL, scaleStepWidth = NULL, scaleStartValue = 0,
responsive = TRUE, labelSize = 18, showLegend = TRUE, addDots = TRUE,
colMatrix = NULL, polyAlpha = 0.2, lineAlpha = 0.8,
showToolTipLabel = TRUE, ...)

Arguments

scores Data frame or named list of scores for each axis. If labs is not specified then labels are taken from the first column (or element).
labs Labels for each axis. If left unspecified labels are taken from the scores data set. If set to NA then labels are left blank.
width Width of output plot
height Height of output plot
main Character: Title to be displayed
maxScale Max value on each axis
scaleStepWidth Spacing between rings on radar
scaleStartValue Value at the centre of the radar
responsive Logical. whether or not the chart should be responsive and resize when the browser does
labelSize Numeric. Point label font size in pixels
showLegend Logical whether to show the legend
addDots Logical. Whether to show a dot for each point
colMatrix Numeric matrix of rgb colour values. If NULL defaults are used
polyAlpha  Alpha value for the fill of polygons
lineAlpha  Alpha value for the outlines
showTooltipLabel  Logical. If TRUE then data set labels are shown in the tooltip hover over
...

Extra options passed straight to chart.js. Names must match existing options
http://www.chartjs.org/docs/#getting-started-global-chart-configuration

Examples

# Using the data frame interface
chartJSRadar(scores=skills)

# Or using a list interface
labs <- c("Communicator", "Data Wrangler", "Programmer", "Technologist", "Modeller", "Visualizer")
scores <- list("Rich" = c(9, 7, 4, 5, 3, 7),
"Andy" = c(7, 6, 6, 2, 6, 9),
"Aimee" = c(6, 5, 8, 4, 7, 6))

# Default settings
chartJSRadar(scores=scores, labs=labs)

# Fix the max score
chartJSRadar(scores=scores, labs=labs, maxScale=10)

# Fix max and spacing
chartJSRadar(scores=scores, labs=labs, maxScale=12, scaleStepWidth = 2)

# Change title and remove legend
chartJSRadar(scores=scores, labs=labs, main = "Data Science Radar", showLegend = FALSE)

# Add pass through settings for extra options
chartJSRadar(scores=scores, labs=labs, maxScale =10, scaleLineWidth=5)

chartJSRadarOutput  Widget output function for use in Shiny

Description

Widget output function for use in Shiny

Usage

chartJSRadarOutput(outputId, width = "450", height = "300")
**Arguments**

- **outputId**
  - output variable to read from

- **width**
  - Must be valid CSS unit

- **height**
  - Must be valid CSS unit

---

**chartJSRadar_html**

*Tell htmltools where to output the chart*

---

**Description**

Tell htmltools where to output the chart

**Usage**

```r
chartJSRadar_html(id, style, class, width, height, ...)
```

**Arguments**

- **id**
  - The id of the target object

- **style**
  - css stylings

- **class**
  - class of the target

- **width**
  - width of target

- **height**
  - height of target

- **...**
  - extra arguments currently unused

---

**colourMatrix**

*Check and prep the colour matrix*

---

**Description**

Check and prep the colour matrix

**Usage**

```r
colourMatrix(colMatrix)
```

**Arguments**

- **colMatrix**
  - A 3 x n matrix of integers between 0-255

**Value**

The checked and prepped matrix of the same size
Examples

radarchart:::colourMatrix(diag(255, nrow=3))

renderChartJSRadar

Widget render function for use in Shiny

Description

Widget render function for use in Shiny

Usage

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

Arguments

- **expr**: expression passed to `shinyRenderWidget`
- **env**: environment in which to evaluate expression
- **quoted**: Logical. Is expression quoted?

runExampleApp

Run an example Shiny app

Description

The radarchart package contains a number of demo Shiny apps to illustrate how to use the plots. The code is in `inst/shiny-examples/` and running this function will allow quick access to the apps.

Usage

runExampleApp(example)

Arguments

- **example**: the name of the example. Choose from "basic" or "options".

Examples

```r
## Not run:
runExample("basic")
## End(Not run)```
**setRadarScale**  
*Autoscale the radar plot*

**Description**  
Autoscale the radar plot

**Usage**

```r
setRadarScale(maxScale = NULL, scaleStepWidth = NULL, scaleStartValue = 0)
```

**Arguments**

- `maxScale` Numeric length 1. Desired max limit
- `scaleStepWidth` Numeric length 1. Spacing between rings
- `scaleStartValue` Numeric length 1. Value of the centre

**Value**

A list containing the scale options for chartjs

**Examples**

```r
## Not run:
setRadarScale(15, 3)
setRadarScale(15, 5, 2)

## End(Not run)
```

---

**skills**  
*Skills in a team*

**Description**

A dataset containing the skills vectors for three people

**Usage**

```r
skills
```
Format
A data frame with 6 rows and 4 columns

<table>
<thead>
<tr>
<th>Label</th>
<th>The axis label for chartJSRadar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aimee</td>
<td>Vector of skills for Aimee</td>
</tr>
<tr>
<td>Andy</td>
<td>Vector of skills for Andy</td>
</tr>
<tr>
<td>Rich</td>
<td>Vector of skills for Rich</td>
</tr>
</tbody>
</table>

Source
Simulated

<table>
<thead>
<tr>
<th>skillsByName</th>
<th>Rotated version of skills data</th>
</tr>
</thead>
</table>

Description
A dataset containing the skills vectors for three people but by row rather than column. This data set is used to show how to rotate the data into a format accepted by `chartJSRadar`.

Usage

```
skillsByName
```

Format
A data frame with 6 rows and 4 columns

<table>
<thead>
<tr>
<th>Name</th>
<th>Name of the team member</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicator</td>
<td>Their Communicator score: 0-10</td>
</tr>
<tr>
<td>Data Wangler</td>
<td>Their Data Wangler score: 0-10</td>
</tr>
<tr>
<td>Modeller</td>
<td>Their Modeller score: 0-10</td>
</tr>
<tr>
<td>Programmer</td>
<td>Their Programmer score: 0-10</td>
</tr>
<tr>
<td>Technologist</td>
<td>Their Technologist score: 0-10</td>
</tr>
<tr>
<td>Visualizer</td>
<td>Their Visualizer score: 0-10</td>
</tr>
</tbody>
</table>

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