

# Package ‘radarchart’

October 14, 2022

**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)

**License** MIT + file LICENSE

**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, tidyverse, shiny

**VignetteBuilder** knitr

**NeedsCompilation** no

**Author** Doug Ashton [aut, cre],  
Shane Porter [aut],  
Nick Downie [ctb] (chart.js library),  
Tanner Linsley [ctb] (chart.js library),  
William Entriken [ctb] (chart.js library)

**Maintainer** Doug Ashton <[dashton@mango-solutions.com](mailto:dashton@mango-solutions.com)>

**Repository** CRAN

**Date/Publication** 2016-12-20 11:47:12

## R topics documented:

chartJSRadar . . . . .	2
chartJSRadarOutput . . . . .	3

chartJSRadar_html . . . . .	4
colourMatrix . . . . .	4
renderChartJSRadar . . . . .	5
runExampleApp . . . . .	5
setRadarScale . . . . .	6
skills . . . . .	6
skillsByName . . . . .	7

<b>Index</b>	<b>8</b>
--------------	----------

---

<b>chartJSRadar</b>	<i>Make a ChartJS Radar Plot</i>
---------------------	----------------------------------

---

## 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

<b>scores</b>	Data frame or named list of scores for each axis. If <b>labs</b> is not specified then labels are taken from the first column (or element).
<b>labs</b>	Labels for each axis. If left unspecified labels are taken from the scores data set. If set to NA then labels are left blank.
<b>width</b>	Width of output plot
<b>height</b>	Height of output plot
<b>main</b>	Character: Title to be displayed
<b>maxScale</b>	Max value on each axis
<b>scaleStepWidth</b>	Spacing between rings on radar
<b>scaleStartValue</b>	Value at the centre of the radar
<b>responsive</b>	Logical. whether or not the chart should be responsive and resize when the browser does
<b>labelSize</b>	Numeric. Point label font size in pixels
<b>showLegend</b>	Logical whether to show the legend
<b>addDots</b>	Logical. Whether to show a dot for each point
<b>colMatrix</b>	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 Wangler", "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	<i>Tell htmltools where to output the chart</i>
-------------------	---

**Description**

Tell htmltools where to output the chart

**Usage**

```
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	<i>Check and prep the colour matrix</i>
--------------	---

**Description**

Check and prep the colour matrix

**Usage**

```
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	<i>Widget render function for use in Shiny</i>
--------------------	--

---

## Description

Widget render function for use in Shiny

## Usage

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

## Arguments

expr	expression passed to <a href="#">shinyRenderWidget</a>
env	environment in which to evaluate expression
quoted	Logical. Is expression quoted?

---

runExampleApp	<i>Run an example Shiny app</i>
---------------	---------------------------------

---

## 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

```
## Not run:  
runExample("basic")  
  
## End(Not run)
```

`setRadarScale`      *Autoscale the radar plot*

### Description

Autoscale the radar plot

### Usage

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

### Arguments

<code>maxScale</code>	Numeric length 1. Desired max limit
<code>scaleStepWidth</code>	Numeric length 1. Spacing between rings
<code>scaleStartValue</code>	Numeric length 1. Value of the centre

### Value

A list containing the scale options for chartjs

### Examples

```
## 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

```
skills
```

**Format**

A data frame with 6 rows and 4 columns

**Label** The axis label for chartJSRadar

**Aimee** Vector of skills for Aimee

**Andy** Vector of skills for Andy

**Rich** Vector of skills for Rich

**Source**

Simulated

---

skillsByName

*Rotated version of skills data*

---

**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

**Name** Name of the team member

**Communicator** Their Communicator score: 0-10

**Data Wangler** Their Data Wangler score: 0-10

**Modeller** Their Modeller score: 0-10

**Programmer** Their Programmer score: 0-10

**Technologist** Their Technologist score: 0-10

**Visualizer** Their Visualizer score: 0-10

**Source**

Simulated

# Index

## \* datasets

skills, [6](#)

skillsByName, [7](#)

chartJSRadar, [2, 7](#)

chartJSRadar\_html, [4](#)

chartJSRadarOutput, [3](#)

colourMatrix, [4](#)

renderChartJSRadar, [5](#)

runExampleApp, [5](#)

setRadarScale, [6](#)

shinyRenderWidget, [5](#)

skills, [6](#)

skillsByName, [7](#)