## Package ‘qrage’

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**Type** Package  
**Title** Tools that Create D3 JavaScript Force Directed Graph from R  
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**Description** Tools that create D3 JavaScript force directed graph from R. D3 JavaScript was created by Michael Bostock. See http://d3js.org/ and, more specifically for Force Directed Graph https://github.com/mbostock/d3/wiki/Force-Layout.  
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nodeColor

Description

A data that determine the color of each nodes

nodeColor

Description

A data that determine the color of each nodes

links

A data of the links between the nodes

Details

Package: qrage
Type: Package
Version: 1.0
Date: 2015-07-27
License: MIT + file LICENSE

Description

Tools that creating D3 JavaScript Force Directed Graph for R. D3 JavaScript was created by Michael Bostock. See http://d3js.org/ and, more specifically for Force Directed Graph https://github.com/mbostock/d3/wiki/Force-Layout.

Author(s)


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nodeColor

qrage-package

Tools that Create D3 JavaScript Force Directed Graph from R
**nodeValues**

*A data that determine the relative size of each nodes.*

**Description**

A data that determine the relative size of each nodes.

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**qrage**

*Create a D3 JavaScript Force Directed Graph*

**Description**


**Usage**

```
qrage(links, width = 1400, height = 1000, distance = 6000, nodeValue = NULL
, nodeColor = NULL, linkColor = '00f', arrowColor = '#f00', cut = 0.25, textSize = 12
, linkWidth = c(1, 10), nodeSize = c(5, 20), linkOpacity = c(0.1, 1))
```

**Arguments**

- **links** A data frame object with the links between the nodes. It should include the source and the target and the value for each link. The value in the links is the variable for determining the relative distance between the nodes. Distance of between the nodes becomes shorter as the value is large.
- **nodeColor** A data frame object that determine the color of each nodes. It should include the name and the nodeColor. Defaults to NULL.
- **nodeValue** A data frame object that determine the relative size of each nodes. It should include the name and the nodeValue. Defaults to NULL.
- **distance** Numeric that determine the distance between the links in pixels. The value of the links is converted from 0 to 100, and multiplies the reciprocal of converted value and thie argument, the result is used as the distance between nodes. Defaults to 6000.
- **cut** Numeric to limit the number of records links. links data frame will be limited to records that has value which bigger than value which is multiplication value this argument and the links’s maximum value. Defaults to 0.25.
- **width** Width for the graph area in pixels. Defaults to 1400.
- **height** Height for the graph area in pixels. Defaults to 1000.
- **linkColor** Character string specifying the color you want the link lines to be. Defaults to #00f.
arrowColor  Character string specifying the color you want the link arrows to be. Defaults to 
#f00.
textSize  Numeric specifying the size you want the labels of node to be. Defaults to 12.
linkWidth  Width range of the link lines in pixels. Defaults to from 1 to 10.
nodeSize  Size range of the nodes in pixels. Defaults to from 5 to 20.
linkOpacity  Numeric specifying the opacity range you want the link lines to be. Defaults to from 0.1 to 1.

Examples

#Data to determine the connection between the nodes
data(links)

#Data that determines the color of the nodes
data(nodeColor)

#Data that determines the size of the node
data(nodeValues)

#Create graph
drage(links=links,nodeColor=nodeColor,nodeValue=nodeValues,cut=0.1)

qrageOutput  Create a D3 JavaScript Force Directed Graph output element

Description

Render a renderQrage within an application page. D3 JavaScript was created by Michael Bostock. See http://d3js.org/ and, more specifically for Force Directed Graph https://github.com/mbostock/d3/wiki/Force-Layout.

Usage

qrageOutput(outputId,width='100%',height='400px')

Arguments

outputId  output variable to read the graph object from
width  Width for the graph area in pixels. Defaults to '100%'.
height  Height for the graph area in pixels. Defaults to 400px.

Examples

qrageOutput("d",width='100%',height='400px')
renderQrage

---

**Force Directed Graph Output with the JavaScript**

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**Description**

Makes a reactive version of the given function that returns a graph object of qrage. D3 JavaScript was created by Michael Bostock. See http://d3js.org/ and, more specifically for Force Directed Graph https://github.com/mbostock/d3/wiki/Force-Layout.

**Usage**

```r
renderQrage(exprLenv = parent.frame(),quoted = FALSE)
```

**Arguments**

- `expr` An expression that returns a graph object of qrage package.
- `env` The environment in which to evaluate `expr`.
- `quoted` Is `expr` a quoted expression (with `quote()`)? This is useful if you want to save an expression in a variable.

**Examples**

```r
renderQrage({
  data(links)
  data(nodeColor)
  data(nodeValues)
  w <- qrage(links,nodeColor=nodeColor,nodeValue=nodeValues,cut=0.1)
  return(w)
})
```
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