Package 'leafletCN'

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Type Package

Title An R Gallery for China and Other Geojson Choropleth Map in Leaflet

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Description An R gallery for China and other geojson choropleth map in leaflet. Contains the geojson data for provinces, cities in China.

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LazyData TRUE

Imports htmltools, magrittr, sp, jsonlite, leaflet, rgeos

RoxygenNote 6.0.1

NeedsCompilation no

Repository CRAN

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R topics documented:

amap *Load amap to leaflet*

Description

Simple function like addTiles()

Usage

```
amap(map,attribution = '&copy; <a href="http://amap.com">amp.com</a >',...)
```

Arguments

map	a leaflet object
attribution	attribution of the map
...	other paramter pass to the addTiles function

Examples

```
if(require(leaflet)){
  leaflet() %>% amap()
}
```

demomap *Show the basic shape of the data*

Description

This function create a leaflet map from a name of the mapType like china, city

Usage

```
demomap (mapName)
```

Arguments

mapName	mapName for loading, eg. 'china', 'city', ...

Examples

```
demomap("china")
```

geojsonMap *Load amap to leaflet*

Description

Simple function like addTiles()

Usage

```
geojsonMap(dat, mapName, namevar=NULL, valuevar=NULL,
  palette = "Blues", colorMethod = "numeric",
  na.color = "#808080", popup = NULL, stroke = T, smoothFactor = 1,
   weight = 1, fillOpacity = 0.7, legendTitle = "Legend", tileType, ...)
```

Arguments

dat	a data.frame contain regions and values
mapName	mapName for loading, eg. 'china', 'city', ...
namevar	show which feature is chosen for name variable
valuevar	show which featue is chosen for value variable
palette	The colors or color function that values will be mapped to, see RColorBrewer::display.brewer.all()
colorMethod	set one of the coloe mapping in c("numeric", "bin", "quantile", "Factor")
na.color	The color to return for NA values. Note that na.color=NA is valid.
popup	a character vector of the HTML content for the popups (you are recommended to escape the text using htmlEscape() for security reasons)
stroke	whether to draw stroke along the path (e.g. the borders of polygons or circles)
smoothFactor	how much to simplify the polyline on each zoom level (more means better performance and less accurate representation)
weight	stroke width in pixels
fillOpacity	fill opacity
legendTitle	legend title
tileType	function to define tile like amap or leaflet::addTiles
...	other paramter pass to the color mapping function

Examples

```
dat = data.frame(name = regionNames("china"),
                 value = runif(34))
geojsonMap(dat,"china")

dat$value2 = cut(dat$value, c(0, 0.25, 0.5, 1))
geojsonMap(dat,"china",
  namevar = ~name,
```

```
  valuevar = ~value2,
  palette="Reds",
  colorMethod="factor")

geojsonMap(dat,"china",
  namevar = ~name,
  valuevar = ~value2,
  palette = topo.colors(3),
  colorMethod="factor")
```

`leafletCN-imports` *Objects imported from other packages*

Description

These objects are imported from other packages. Follow the links to their documentation.

magrittr %>%

`leafletGeo` *Create a sp object from a data.frame*

Description

Function for creating a sp object from a data.frame and mapType

Usage

```
leafletGeo(mapName, dat = NULL, namevar = NULL, valuevar = NULL)
```

Arguments

mapName	mapName for loading, eg. 'china', 'city', ...
dat	a data.frame contain regions and values
namevar	show which feature is chosen for name variable
valuevar	show which featue is chosen for value variable

Examples

```
if(require(leaflet)){
  dat = data.frame(regionNames("china"),
                                runif(34))
  map = leafletGeo("china", dat)

   pal <- colorNumeric(
     palette = "Blues",
     domain = map$value)

  leaflet(map) %>% addTiles() %>%
     addPolygons(stroke = TRUE,
     smoothFactor = 1,
     fillOpacity = 0.7,
     weight = 1,
     color = ~pal(value),
     popup = ~htmltools::htmlEscape(popup)
     ) %>%
   addLegend("bottomright", pal = pal, values = ~value,
                         title = "legendTitle",
                labFormat = leaflet::labelFormat(prefix = ""),
                opacity = 1)
}
```

`mapNames` *Demo dataset and other function*

Description

A data file of words and frequency from tm package

Usage

```
mapNames

.triList
```

Format

A data set cities and file names

read.geoShape *Read geoshape file into R*

Description

Function for reading geojson shape file into R, come out to be a SpatialPolygonsDataFrame object

Usage

```
read.geoShape(txt)
```

Arguments

txt	a JSON string, URL or file

Examples

```
if(require(sp)){
  filePath = system.file("geojson/china.json",package = "leafletCN")
  map = read.geoShape(filePath)
  plot(map)
}
```

regionNames *Show regions in submaps*

Description

show regions in the map

Usage

```
regionNames(mapName)
```

Arguments

mapName	for loading, eg. 'china', 'city', ...

Examples

```
regionNames('city')
```

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