# Package 'hpackedbubble'

October 13, 2022

Title Create Split Packed Bubble Charts

Version 0.1.0
<b>Description</b> By binding R functions and the 'Highcharts' <a href="http://www.highcharts.com/">http://www.highcharts.com/</a> charting library, 'hpackedbubble' package provides a simple way to draw split packed bubble charts.
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<pre>URL https://github.com/czxa/hpackedbubble</pre>
<pre>BugReports https://github.com/czxa/hpackedbubble/issues</pre>
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R topics documented:
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C02

Carbon emissions around the world (2014)

#### **Description**

Carbon emissions around the world (2014)

#### Usage

C02

#### **Format**

A tibble data frame with 116 rows and 3 variables.

hpackedbubble

Create Split Packed Bubble Charts

#### **Description**

By binding R functions and the 'Highcharts' <a href="http://www.highcharts.com/">http://www.highcharts.com/</a> charting library, 'hpacked-bubble' package provides a simple way to draw split packed bubble charts.

### Usage

```
hpackedbubble(cat, name, value, theme = "sandsignika", width = NULL,
  height = NULL, title = "", titleAlign = "center",
  titleSize = "20px", titleColor = "#333333", subtitle = "",
  subtitleAlign = "center", subtitleSize = "",
  subtitleColor = "#666666",
  pointFormat = "<b>{point.name}:</b> {point.y}", split = 1,
  packedbubbleMinSize = "50%", packedbubbleMaxSize = "250%",
  packedbubbleZMin = 0, packedbubbleZmax = 1000,
  gravitational = 0.0625, seriesInteraction = 1,
  dragBetweenSeries = 1, parentNodeLimit = 1, dataLabels = 1,
  dataLabelsformat = "{point.name}", dataLabelsFilter = 250,
  dataLabelsColor = "black")
```

#### **Arguments**

cat category verctor;
name name vector;
value value vector;

theme chart theme, you can use these themes: darkgreen/darkblue/avocado/darkunica/gray/

gridlight/grid/sandsignika/sunset;

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width chart width, for example, "100%"; height chart height, for example, "400px";

title title;

titleAlign title alignment, left/center/right;

titleSize title size, like "20px"; titleColor title color, like "#333333";

subtitle subtitle;

subtitleAlign subtitle alignment, left/center/right;

subtitleSize subtitle size, like "16px"; subtitleColor subtitle color, like "#666666"

pointFormat The HTML of the point's line in the tooltip.

split Whether to split series into individual groups or to mix all series together. 1

means to split, 0 means to not, defaults to split;

packedbubbleMinSize

Minimum bubble size. Defaults to '50%';

packedbubbleMaxSize

Maximum bubble size. Defaults to '250%';

packedbubbleZMin

The minimum for the Z value range. Defaults to 0, you can use the lowest Z

value in the data;

packedbubbleZmax

The maximum for the Z value range. Defaults to 1000, you can use the highest

Z value in the data;

gravitational Gravitational const used in the barycenter force of the algorithm. Defaults to

0.0625.

seriesInteraction

Whether series should interact with each other or not. 1 means to true, 0 means to false, defaults to 1;

dragBetweenSeries

In case of split series, this option allows user to drag and drop points between series, for changing point related series. 1 means to true, 0 means to false, defaults to 1;

parentNodeLimit

Whether bubbles should interact with their parentNode to keep them inside. 1 means to true, 0 means to false, defaults to 1;

dataLabels Options for the series data labels, appearing next to each data point. 1 means to

true, 0 means to false, defaults to 1;

dataLabelsformat

Data labels' format

dataLabelsFilter

Show data labels while 'value' larger than dataLabelsFilter. defaults to 250.

dataLabelsColor

Data labels' color, defaults to black.

#### **Examples**

```
library(hpackedbubble)
if (interactive()) {
  hpackedbubble(CO2$continent, CO2$country, CO2$CO2)
}
```

hpackedbubble-shiny

Shiny bindings for hpackedbubble

#### **Description**

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

#### Usage

```
hpackedbubbleOutput(outputId, width = "100%", height = "400px")
renderHpackedbubble(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 hpackedbubble

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.

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