Package ‘ggBubbles’

Type Package
Title Mini Bubble Plots for Comparison of Discrete Data with 'ggplot2'
Version 0.1.4
VignetteBuilder knitr
Depends R (>= 3.5.0)
Imports dplyr, ggplot2
Suggests BiocStyle, knitr, rmarkdown, tibble
Description When comparing discrete data mini bubble plots allow displaying more information than traditional bubble plots via colour, shape or labels. Exact overlapping coordinates will be transformed so they surround the original point circularly without overlapping. This is implemented as a position_surround() function for 'ggplot2'.
License LGPL (>= 3)
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LazyData true
biocViews
RoxygenNote 6.1.1
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calc_offset

Description

each side has several layers, with a number of positions in the layer

Usage

calc_offset(position, layer, side, offset_x = 0.1, offset_y = 0.1)

Arguments

position number for position at the particular side on the layer
layer number of layer
side side for offset 1 - top 2 - right 3 - bottom 4 - left
offset_x offset for x axis
offset_y offset for y axis

Value

integer vector of length 2 position 1 is new x value, position y is new y value

get_offset_table

Description

Calculates offset table for number of maximum overlapping positions

Usage

get_offset_table(max_positions, offset_x, offset_y)

Arguments

max_positions number of maximal exact overlaps
offset_x offset for position distance
offset_y offset for in-between layer distance

Value

data frame with position, offsets_x and offsets_y
**MusicianInterests**

*Survey about genre interests of some hobby musicians*

**Description**

Tibble of what genre they are interested in, what instrument they play and what level the play their instrument at (1 = beginner, 2 = intermediate, 3 = experienced, 4 = very experienced, 5 = pro). Also there is an ID for the musician.

**Usage**

data(MusicianInterests)

**Format**

An object of class "data.frame";

**Examples**

```r
library(ggBubbles)
data(MusicianInterests)
head(MusicianInterests)
```

**MusicianInterestsSmall**

*Small test data of musician, interest and experience study*

**Description**

Data.frame of what genre they are interested in, what instrument they play and what level the play their instrument at.

**Usage**

data(MusicianInterestsSmall)

**Format**

An object of class "data.frame";

**Examples**

```r
library(ggBubbles)
data(MusicianInterestsSmall)
head(MusicianInterestsSmall)
```
Description

ggproto for position_surround()

position_surround

Surrounds exact overlapping points around the center

Description

Bubble plots sometimes can be hard to interpret, especially if you want to overlay an additional feature. Instead of having to colour one blob with this function you can plot the individuals contributing to the bubble and colour them accordingly.

Usage

position_surround(offset = 0.1)

Arguments

offset setting offset for x and y axis added to the points surrounding the exact position. Default is 0.1

Value

ggproto

Examples

library(ggplot2)
library(ggBubbles)
data(MusicianInterestsSmall)

```r
ggplot(data = MusicianInterestsSmall, aes(x = Instrument, y = Genre, col = Level)) + geom_point(position = position_surround(), size = 4) + scale_colour_manual(values = c("#333333", "#666666", "#999999", "#CCCCCC")) + theme_bw()
```
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