

Package ‘ggsoccer’

May 14, 2019

Title Plot Soccer Event Data

Version 0.1.4

Description The 'ggplot2' package provides a powerful set of tools for visualising and investigating data. The 'ggsoccer' package provides a set of functions for elegantly displaying and exploring soccer event data with 'ggplot2'. Providing extensible layers and themes, it is designed to work smoothly with a variety of popular sports data providers.

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URL ggsoccer.statsandsnakeoil.com, github.com/Torvaney/ggsoccer

Depends R (>= 3.3.0)

Imports ggplot2

LazyData true

RoxygenNote 6.1.1

Encoding UTF-8

BugReports <https://github.com/torvaney/ggsoccer/issues>

NeedsCompilation no

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Repository CRAN

Date/Publication 2019-05-14 13:40:02 UTC

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annotate_pitch *Adds soccer pitch markings as a layer for use in a ggplot plot.*

Description

Adds soccer pitch markings as a layer for use in a ggplot plot.

Usage

```
annotate_pitch(colour = "dimgray", fill = "white", limits = TRUE,
              dimensions = pitch_opta)
```

Arguments

colour	Colour of pitch outline.
fill	Colour of pitch fill
limits	Whether to adjust the plot limits to display the whole pitch.
dimensions	A list containing the pitch dimensions to draw. See <code>help(pitch_opta)</code> .

Value

list of ggplot geoms to be added to a ggplot plot

Examples

```
library(ggplot2)

shots_data <- data.frame(x = c(90, 85, 82, 78, 83),
                        y = c(43, 40, 52, 56, 44))

ggplot(shots_data, aes(x = x, y = y)) +
  annotate_pitch() +
  geom_point()
```

direction_label *Adds an arrow indicating the direction of play to a ggplot plot*

Description

Adds an arrow indicating the direction of play to a ggplot plot

Usage

```
direction_label(x_label = 50, y_label = -3, label_length = 20,
              colour = "dimgray")
```

Arguments

x_label	x position of the centre of the arrow on the plot
y_label	y position of the arrow on the plot
label_length	length of arrow (in x axis units)
colour	colour of the arrow and text

Value

list of ggplot layers to be added to a ggplot plot

Examples

```
library(ggplot2)

shots_data <- data.frame(x = c(90, 85, 82, 78, 83),
                        y = c(43, 40, 52, 56, 44))

p <- ggplot(shots_data, aes(x = x, y = y)) +
  annotate_pitch() +
  geom_point()

# Add direction of play label
p + direction_label()
```

pitch_opta

Pitch dimensions

Description

The coordinate system used to generate pitch markings in can be customised by supplying a pitch specification to the dimensions argument of `annotate_pitch`.

ggsoccer provides pitch specifications for a few popular data providers by default. However, user-defined specifications can also be used.

Usage

pitch_opta

pitch_statsbomb

pitch_wyscout

Format

An object of class `list` of length 10.

Details

A "pitch specification" is simply a list of dimensions that define a coordinate system. The required dimensions are:

- "length"The length of the pitch from one goal to the other (x axis)
- "width"The width of the pitch from touchline to the other (y axis)
- "penalty_box_length"The distance from the goalline to the edge of the penalty area
- "penalty_box_width"The width of the penalty area
- "six_yard_box_length"The distance from the goalline to the edge of the six-yard box
- "six_yard_box_width"The width of the six-yard box
- "penalty_spot_distance"The distance from the goalline to the penalty spot
- "goal_width"The distance from one goal post to the other
- "origin_x"The minimum x coordinate of the pitch
- "origin_y"The minimum y coordinate of the pitch

Examples

```
library(ggplot2)
library(ggsoccer)

ggplot() +
  annotate_pitch(dimensions = pitch_statsbomb) +
  theme_pitch()
```

 theme_pitch

Removes background and axes details from a ggplot plot.

Description

Functionally very similar to `ggplot2::theme_void`.

Usage

```
theme_pitch(aspect_ratio = 68/105)
```

Arguments

`aspect_ratio` Aspect ratio (y / x) for the plot. Use NULL to let the plot take any aspect ratio.

Value

list of ggplot themes to be added to a ggplot plot

Examples

```
library(ggplot2)

shots_data <- data.frame(x = c(90, 85, 82, 78, 83),
                        y = c(43, 40, 52, 56, 44))

p <- ggplot(shots_data, aes(x = x, y = y)) +
  annotate_pitch() +
  geom_point()

# Pitch fixed to 68/105 by default
p + theme_pitch()

# Free aspect
p + theme_pitch(aspect_ratio = NULL)
```

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