

Package ‘SDGdetector’

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Title Detecting Sustainable Development Goals (SDGs) in Text

Version 2.7

Description A tool for identifying 17 Sustainable Development Goals (SDGs) and associated 169 targets in text, as described in Yingjie Li (2022) [<https://github.com/Yingjie4Science/SDGdetector/blob/main/paper/paper.pdf>](https://github.com/Yingjie4Science/SDGdetector/blob/main/paper/paper.pdf) . It uses natural language processing to transform unstructured text into normalized and structured data suitable for analysis and visualization. It thus enables a unique way to monitor individuals' and organizations' commitments and efforts towards advancing SDGs and targets.

Imports dplyr, magrittr, stringr, ggplot2, tidyr, grDevices, rnaturalearth, utils

Depends R (>= 3.5.0)

License GPL-3

Encoding UTF-8

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LazyData true

NeedsCompilation no

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country_region_names *Datasets of country and region names.*

Description

Datasets of country and region names.

Usage

country_region_names

Format

country_region_names: A data frame with 644 rows and 3 variables

Author(s)

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detect_region *Detect country or region names in text for further mapping*

Description

Detect country or region names in text for further mapping.

Usage

detect_region(x, col)

Arguments

x	Data frame or a string
col	Column name for text to be assessed

Value

Returns the tool text outputs.

Examples

```
x <- c("This paper explores the method and results from an independent
evidence based assessment of Australia's progress towards the SDGs",
"Last year alone, the United States experienced 14 separate billion-dollar
disasters related to climate change")
col <- data.frame(x)
regions <- detect_region(x, col)
```

plot_sdg_bar	<i>SDG bar plot</i>
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Description

SDG bar plot

Usage

```
plot_sdg_bar(data, sdg = sdg, value = value)
```

Arguments

data	Data frame as the input
sdg	Vector with SDG code to be visualized.
value	The value, e.g., number of SDGs, to be show in the thematic map

Value

Returns the tool text outputs.

Examples

```
data("sdgstat")
plot_sdg_bar(sdgstat, sdg = "SDG", value = "Value")
```

plot_sdg_map	<i>SDG map plot</i>
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Description

SDG map plot

Usage

```
plot_sdg_map(data, sdg = sdg, value = value,
             country = country, by_sdg = TRUE)
```

Arguments

data	Data frame as the input
sdg	Vector with SDG code to be visualized.
value	The value, e.g., number of SDGs, to be show in the thematic map
country	Country that are associated with the SDGs.
by_sdg	If mapping by SDG, TRUE or FALSE.

Value

Returns the tool text outputs.

Examples

```
data("sdgstat")
plot_sdg_map(sdgstat, sdg = "SDG", value = "Value",
             country = "Country", by_sdg = FALSE)
```

SDGdetector	<i>Identify SDGs in text</i>
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Description

Identify 17 Sustainable Development Goals and associated 169 targets in text.

Usage

```
SDGdetector(x, col)
```

Arguments

x	Data frame or a string
col	Column name for text to be assessed

Details

In 2015, leaders worldwide adopted 17 Sustainable Development Goals (SDGs) with 169 targets to be achieved by 2030 (<https://sdgs.un.org>). The framework of SDGs serves as a blueprint for shared prosperity for both people and the earth. SDGdetector identifies both direct and indirect expressions of SDGs and associated targets in chunks of text. It takes a data frame with a specified column of text to process as inputs and outputs a data frame with original columns plus matched SDGs and targets.

Value

Data frame with the same information as `df` and 18 extra columns: 17 columns marking the number of occurrence of each of the 17 SDGs and one column `match_detail` listing details of specific targets.

Examples

```
my_col=c('our goal is to end poverty globally', 'this product
contributes to slowing down climate change')
my_text <- data.frame(my_col)
SDGdetector(my_text, my_col)
```

sdgstat

Datasets of SDG statistics.

Description

Datasets of SDG statistics.

Usage

```
sdgstat
```

Format

sdgstat: A data frame with 62 rows and 4 variables

Author(s)

Yingjie Li <yingjieli.edu@gmail.com>

SDG_keys	<i>Datasets of SDG keys.</i>
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Description

Datasets of SDG keys.

Usage

SDG_keys

Format

SDG_keys: A data frame with 557 rows and 3 variables

Author(s)

Yingjie Li <yingjieli.edu@gmail.com>

shp	<i>Datasets of shapefiles.</i>
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Description

Datasets of shapefiles..

Usage

shp

Format

shp: A data frame with 241 rows and 6 variables

Author(s)

Yingjie Li <yingjieli.edu@gmail.com>

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