

Package ‘fdistr’

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Type Package

Title Frequency Distribution Tables

Version 0.1.0

Date 2019-11-06

Description Provides functionality to generate a frequency distribution table from a set of observations and plot the frequency distribution using a Pareto chart.

Depends R (>= 3.6)

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URL <https://github.com/dtminnick/fdistr>

BugReports <https://github.com/dtminnick/fdistr/issues>

Encoding UTF-8

LazyData true

Imports dplyr (>= 0.8.3), ggplot2 (>= 3.2.1), magrittr (>= 1.5), stats (>= 3.6.1), usethis (>= 1.5.1), utils (>= 3.6.1)

Suggests knitr (>= 1.22), rmarkdown (>= 1.12), testthat (>= 2.2.1)

RoxygenNote 7.0.0

NeedsCompilation no

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create_pareto	<i>Create Pareto Chart</i>
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Description

create_pareto generates a Pareto chart using the group, frequency and cumulative frequency columns of a frequency distribution table.

Usage

```
create_pareto(df, title = "Pareto Chart", subtitle = "",
  caption = "", x_label = "Groups", y_label = "Frequency")
```

Arguments

df	Data frame containing a frequency distribution table.
title	Character string; title to be displayed on Pareto chart. Default is "Pareto Chart".
subtitle	Character string; subtitle to be displayed on chart. Default is "".
caption	Character string; caption to be displayed on the chart. Default is "".
x_label	Character string; x axis label to be displayed on the chart. Default is "Groups".
y_label	Character string; y axis label to be displayed on the chart. Default is "Frequency".

Value

A plot containing a Pareto chart. If an error or warning occurs, a message will be printed to the console and the function will return NULL.

Examples

```
source <- c(1, 1, 1, 1, 2, 2, 2, 3, 3, 4)
table <- create_table(source, dec_pos = 3)
plot <- create_pareto(table)
```

create_table	<i>Create Table</i>
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Description

create_table generates a frequency distribution table from a vector, list or data frame input.

Usage

```
create_table(source, dec_pos = 2)
```

Arguments

source	Vector, list or data frame input. If the source is of class list, it will be simplified to a vector using <code>unlist</code> .
dec_pos	Number of positions to return in the frequency and cumulative frequency variables. Defaults to two positions following the decimal.

Details

`create_table` returns a data frame that includes five variables: group, count, frequency, cumulative count and cumulative frequency.

Value

A data frame containing the frequency distribution table. If an error or warning occurs, a message will be printed to the console and the function will return `NULL`.

Examples

```
source <- c(1, 1, 1, 1, 2, 2, 2, 3, 3, 4)
table <- create_table(source, dec_pos = 3)
```

words

Words Dataset

Description

A sample set of words taken from the first paragraph of James Joyce's short story "The Dead" to demonstrate the functionality in this package.

Usage

```
data(words)
```

Format

A data frame with 55 observations and 4 variables.

Details

The dataset includes the four variables.

`word` Character, word in the sample.

`first_letter` Character, first letter of the word.

`last_letter` Character, last letter of the word.

`letter_count` Integer, number of letters in the word.

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