

Package ‘StatisticTeach1’

May 30, 2026

Type Package

Title Interactive Tool for Statistics and Probability Teaching

Version 0.1.0

Description A 'shiny' application designed to support the learning of basic concepts in statistics and probability. Provides an interactive interface that allows students to explore and visualize descriptive statistics, frequency tables, and probability distributions intuitively.

License GPL-3

Imports descriptr, DescTools, dplyr, ggplot2, magrittr, mixdist, RColorBrewer, readxl, rlang, shiny, shinyBS, shinydashboard, shinyjs, shinyWidgets, tibble, tidyr, colourpicker

Suggests knitr, rmarkdown, testthat (>= 3.0.0)

VignetteBuilder knitr

Encoding UTF-8

Config/testthat/edition 3

Config/roxygen2/version 8.0.0

NeedsCompilation no

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Repository CRAN

Date/Publication 2026-05-30 08:20:02 UTC

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runStatisticTeach1 *Shiny GUI for StatisticTeach1 package*

Description

runStatisticTeach1() loads interactive user interface built using R 'shiny'.

Usage

```
runStatisticTeach1(host = "127.0.0.1", port = NULL, launch.browser = TRUE)
```

Arguments

| | |
|----------------|---|
| host | The IPv4 address that the application should listen on. Defaults to the shiny.host option, if set, or "127.0.0.1" if not. |
| port | is the TCP port that the application should listen on. If the port is not specified, and the shiny.port option is set (with options(shiny.port = XX)), then that port will be used. Otherwise, use a random port. |
| launch.browser | If true, the system's default web browser will be launched automatically after the app is started. Defaults to true in interactive sessions only. This value of this parameter can also be a function to call with the application's URL. |

Details

The interactive user interface to provide an easy way for to perform descriptive statistical analysis

Value

No return value

Examples

```
if(interactive()){
  runStatisticTeach1()
}
```

| | |
|----------------|---|
| ST_freq_factor | <i>Frequency table for categorical data Frequency table for categorical data.</i> |
|----------------|---|

Description

Frequency table for categorical data Frequency table for categorical data.

Usage

```
ST_freq_factor(data, variable)
```

Arguments

| | |
|----------|---------------------------|
| data | A data.frame or a tibble. |
| variable | Column (factor) in data. |

Value

A data.frame with frequency, cumulative frequency, frequency percent and cumulative frequency percent.

Examples

```
ST_freq_factor(iris, Species)
```

| | |
|-----------------|--|
| ST_freq_numeric | <i>Frequency table for continuous data</i> <i>Frequency table for continuous data.</i> |
|-----------------|--|

Description

Frequency table for continuous data Frequency table for continuous data.

Usage

```
ST_freq_numeric(data, variable, bins = 5)
```

Arguments

| | |
|----------|--|
| data | A data.frame or a tibble. |
| variable | Column in data. |
| bins | Number of intervals into which the data must be split. |

Value

A data.frame with frequency, cumulative frequency, frequency percent and cumulative frequency percent.

Examples

```
ST_freq_numeric(mtcars, mpg, bins = 5)
```

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