Package: vvdoctor (via r-universe)

August 31, 2024

Title Statistical Test App with R 'shiny'

Version 0.0.1

Description Provides a user-friendly R 'shiny' app for performing
various statistical tests on datasets. It allows users to
upload data in numerous formats and perform statistical
analyses. The app dynamically adapts its options based on the
selected columns and supports both single and multiple column
comparisons. The app's user interface is designed to streamline
the process of selecting datasets, columns, and test options,
making it easy for users to explore and interpret their data.
The underlying functions for statistical tests are
well-organized and can be used independently within other R
scripts.

URL <https://github.com/vusaverse/vvdoctor>,
<https://vusaverse.github.io/vvdoctor/>

License MIT + file LICENSE

Encoding UTF-8

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.1

Imports datamods, DescTools, DT, exact2x2, irr, magrittr, rintrojs,
rstatix, shiny, shinyjs, shinyWidgets

Repository https://vusaverse.r-universe.dev

RemoteUrl https://github.com/vusaverse/vvdoctor

RemoteRef HEAD

RemoteSha 1c99df1544f9662ad28bec13e5a8e51065ac54b5

Contents

---

app_server   *App Server*

Description

App Server

Usage

```
app_server(input, output, session)
```

Arguments

input	The input object from the Shiny app.
output	The output object from the Shiny app.
session	The session object from the Shiny app.

Value

No return value, called for side effects

---

app_ui   *App UI*

Description

App UI

Usage

```
app_ui()
```

Value

A Shiny UI object

---

choose_statistical_test

Choose Statistical Test

Description

Determines the appropriate statistical test based on the characteristics of the dependent and independent variables.

Usage

```
choose_statistical_test(dependent_var, independent_var)
```

Arguments

dependent_var   The dependent variable.

independent_var

  The independent variable.

Value

The name of the chosen statistical test.

---

create_dependent_variable_histogram

Create a Histogram Plot for the Dependent Variable

Description

This function creates a histogram plot for a numeric dependent variable.

Usage

```
create_dependent_variable_histogram(dependent_var)
```

Arguments

dependent_var   A numeric vector representing the dependent variable.

Value

No return value, the function creates a histogram plot.

---

determine_dependent_variable
Determine the Type of Dependent Variable

Description

This function determines the type of the dependent variable based on its data type and distribution.

Usage

```
determine_dependent_variable(dependent_var)
```

Arguments

dependent_var   A vector representing the dependent variable.

Value

A character string indicating the type of the dependent variable.

---

determine_independent_variable
Determine the Type of Independent Variable

Description

This function determines the type of the independent variable based on its data type and the number of unique values.

Usage

```
determine_independent_variable(independent_var)
```

Arguments

independent_var

A vector representing the independent variable.

Value

A character string indicating the type of the independent variable.

---

diagnose *Diagnose Data with Statistical Tests*

Description

This function launches a Shiny application that allows users to upload data and perform various statistical tests on the dataset. Users can select the dependent and independent variables, choose the appropriate statistical test, and view the results.

Usage

```
diagnose()
```

Value

NULL The function does not return a value, but launches the Shiny app.

Examples

```
if (interactive()) {
  diagnose()
}
```

---

display_data_table *Display Data Table*

Description

Helper function to display a data table in a Shiny app.

Usage

```
display_data_table(data)
```

Arguments

data   The data frame to display.

Value

A Shiny output object representing the data table

`get_variable_class_info`
Get Variable Class Information

Description

This function determines the class of the selected variable and additional information.

Usage

```
get_variable_class_info(variable)
```

Arguments

`variable`	The selected variable data.

Value

A character vector containing the variable class and additional information.

`perform_statistical_test`
Perform Statistical Test

Description

This function performs the appropriate statistical test based on the user's input.

Usage

```
perform_statistical_test(data, input)
```

Arguments

`data`	A data frame containing the variables.
`input`	A list containing the user's input, including the selected statistical test, dependent variable, independent variable, identifier variable, and input mean.

Value

The result of the statistical test.

---

run_vvdoctor *Run the Statistical Test App*

Description

This function starts the Shiny app, which allows users to upload data and perform statistical tests on the dataset.

Usage

```
run_vvdoctor()
```

Value

No return value, the function runs the Shiny app

Examples

```
if (interactive()) {
  run_vvdoctor()
}
```

Index