

Package ‘RtutoR’

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Type Package

Title Shiny Apps for Plotting and Exploratory Analysis

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Description Contains Shiny apps for Plotting and Exploratory Analysis.

The plotting app provides an automated interface for generating plots using the 'ggplot2' package. Current version of this app supports 10 different plot types along with options to manipulate specific aesthetics and controls related to each plot type. Exploratory Analysis app helps generates an Exploratory analysis report (in PowerPoint format) comprising of Univariate and Bivariate plots & related summary tables.

Depends R (>= 3.1.0)

License GPL

Imports dplyr (>= 0.7.4), ggplot2 (>= 2.2.1), shiny, shinydashboard, rmarkdown, DT, shinyBS, shinyjs, ggthemes, plotly, rlang, FSelector, officer, colourpicker, tidyr, devtools

LazyData TRUE

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generate_exploratory_analysis_ppt

Generate Exploratory Analysis Report

Description

Generate Exploratory Analysis Report

Usage

```
generate_exploratory_analysis_ppt(df, target_var, output_file_name,
  n_plots_per_slide = 2,
  plot_theme = "ggthemes::theme_fivethirtyeight()", group_names = NULL,
  top_k_features = NULL, f_screen_model = c("chi.squared",
  "information.gain", "gain.ratio", "symmetrical.uncertainty"),
  max_levels_cat_var = 10)
```

Arguments

df	Dataframe object for exploratory analysis
target_var	Dependent Variable Name
output_file_name	File Name for the Output presentation. Saves the output in the current working directory if only the file name is provided
n_plots_per_slide	Presentation Slide Format - Choose between 1 or 2 plots per slide. Default value is 2
plot_theme	Specify a theme for ggplot. Includes themes provided as part of ggplot2 as well as themes available in the ggthemes package. Launch the shiny app to view the valid set of themes available
group_names	Grouping variable (or multiple grouping variables) to be used for analysis. if this argument is supplied, an additional section is added to the Exploratory Analysis report: "Bi variate Analysis with Grouping variable".
top_k_features	Should top k features be selected for analysis instead of all available features in the dataset. If yes, provide a numeric value to this argument. The Top K features are identified based on a filtering approach. Four different filtering options are provided (from the FSelector package)
f_screen_model	Filtering approach for extracting the top k features
max_levels_cat_var	Remove categorical features with more than a specified number of levels. Default is 10

Value

Output presentation with Univariate and Bi-variate analysis and plots

Examples

```
## Not run:  
diamonds_sample <- ggplot2::diamonds[sample(1:nrow(ggplot2::diamonds),size=1000),]  
generate_exploratory_analysis_ppt(df = diamonds_sample, target_var = "price")  
## End(Not run)
```

gen_exploratory_report_app

Launch a Shiny App for Exploratory Analysis

Description

Launch a Shiny App for Exploratory Analysis

Usage

```
gen_exploratory_report_app(df)
```

Arguments

df Dataframe object for exploratory analysis

Value

Launches a Shiny App. Please refer to the ReadMe page of the App to understand how the app works

Examples

```
## Not run:  
diamonds_sample <- ggplot2::diamonds[sample(1:nrow(ggplot2::diamonds),size=1000),]  
gen_exploratory_report_app(diamonds_sample)  
## End(Not run)
```

launch_plotter

Launch Plotter

Description

Launches the plotting app

Usage

```
launch_plotter(list_of_datasets)
```

Arguments

`list_of_datasets`

List of datasets which should be made available for selection when the app is launched

Value

Launches App

Examples

```
## Not run:  
diamonds_sample <- ggplot2::diamonds[sample(1:nrow(diamonds),size=1000),]  
launch_plotter(list(diamonds_sample = diamonds_sample, mtcars = mtcars, iris = iris))  
## End(Not run)
```

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