Package 'boxly'

October 24, 2023

Title Interactive Box Plot

Version 0.1.1

Description Interactive box plot using 'plotly' for clinical trial analysis.

License GPL (>= 3)

URL <https://merck.github.io/boxly/>, <https://github.com/Merck/boxly>

BugReports <https://github.com/Merck/boxly/issues>

Encoding UTF-8

LazyData true

Depends R (>= 4.1.0)

Imports DT, brew, rlang, crosstalk, ggplot2, htmlwidgets, htmltools,
metalite, plotly, uuid

Suggests covr, knitr, rmarkdown, testthat (>= 3.0.0)

VignetteBuilder knitr

Config/testthat/edition 3

RoxygenNote 7.2.3

NeedsCompilation no

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Repository CRAN

Date/Publication 2023-10-24 02:40:02 UTC

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boxly   *Create an interactive box plot*

Description

Create an interactive box plot

Usage

```
boxly(
  outdata,
  color = NULL,
  hover_summary_var = c("n", "min", "q1", "median", "mean", "q3", "max"),
  hover_outlier_label = c("Participant Id", "Parameter value"),
  x_label = "Visit",
  y_label = "Change",
  heading_select_list = "Lab parameter",
  heading_summary_table = "Number of Participants"
)
```

Arguments

outdata	An outdata object created from prepare_ae_forestly().
color	Color for box plot.
hover_summary_var	
	A character vector of statistics to be displayed on hover label of box.
hover_outlier_label	
	A character vector of hover label for outlier.
x_label	x-axis label.
y_label	y-axis label.
heading_select_list	
	Select list menu label.
heading_summary_table	
	Summary table label.

Value

Interactive box plot.

Examples

```
# Only run this example in interactive R sessions
if (interactive()) {
  library(metalite)

  meta_boxly(
    boxly_adsl,
    boxly_adlb,
    population_term = "apat",
    observation_term = "wk12"
  ) |>
    prepare_boxly() |>
    boxly()
}
```

---

boxly_adeg   *An example ADEG dataset*

Description

Definition of each variable can be found in https://github.com/phuse-org/phuse-scripts/tree/master/data/adam/cdisc

Usage

```
boxly_adeg
```

Format

A data frame with 32139 and 35 variables:

Source

https://github.com/phuse-org/phuse-scripts/tree/master/data/adam/cdisc

---

`boxly_adlb`   *An example ADLB dataset*

Description

Definition of each variable can be found in https://github.com/phuse-org/phuse-scripts/tree/master/data/adam/cdisc

Usage

`boxly_adlb`

Format

A data frame with 24746 and 24 variables:

Source

https://github.com/phuse-org/phuse-scripts/tree/master/data/adam/cdisc

---

`boxly_adsl`   *A Subject Level Demographic Dataset*

Description

A dataset containing the demographic information of a clinical trial following CDISC ADaM standard.

Usage

`boxly_adsl`

Format

A data frame with 254 rows and 51 variables.

Details

Definition of each variable can be found in https://github.com/phuse-org/phuse-scripts/tree/master/data/adam/cdisc

Source

https://github.com/phuse-org/phuse-scripts/tree/master/data/adam/cdisc

---

boxly_advs   *An example ADVS dataset*

Description

Definition of each variable can be found in https://github.com/phuse-org/phuse-scripts/tree/master/data/adam/cdisc

Usage

```
boxly_advs
```

Format

A data frame with 32139 and 34 variables:

Source

https://github.com/phuse-org/phuse-scripts/tree/master/data/adam/cdisc

---

meta_boxly   *Create an example metadata object*

Description

Create an example metadata object

Usage

```
meta_boxly(
  dataset_adsl,
  dataset_param,
  population_term,
  population_subset = SAFFL == "Y",
  observation_term,
  observation_subset = SAFFL == "Y",
  parameters = unique(dataset_param$PARAMCD)
)
```

Arguments

`dataset_adsl`	ADSL source dataset.
`dataset_param`	Observation level source dataset for boxplot.
`population_term`	
	A character value of population term name.
`population_subset`	
	An unquoted condition for selecting the populations from ADSL dataset.
`observation_term`	
	A character value of observation term name.
`observation_subset`	
	An unquoted condition for selecting the observations from `dataset_param` dataset.
`parameters`	A chracter vector of parameters defined in `dataset_param$PARAMCD`

Value

A metalite object.

Examples

```
meta_boxly(
  boxly_adsl,
  boxly_adlb,
  population_term = "apat",
  observation_term = "wk12"
)
```

---

prepare_boxly	*Prepare data for interactive box plot*

Description

Prepare data for interactive box plot

Usage

```
prepare_boxly(meta, population = NULL, observation = NULL, analysis = NULL)
```

Arguments

`meta`	A metadata object created by metalite.
`population`	A character value of population term name. The term name is used as key to link information.
`observation`	A character value of observation term name. The term name is used as key to link information.
`analysis`	A character value of analysis term name. The term name is used as key to link information.

Value

Metadata list with plotting dataset.

Metadata list with plotting dataset

Examples

```
library(metalite)

meta <- meta_boxly(
  boxly_adsl,
  boxly_adlb,
  population_term = "apat",
  observation_term = "wk12"
)
prepare_boxly(meta)
```

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