Package: boxly (via r-universe)

September 14, 2024

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

Roxygen list(markdown = TRUE)

RoxygenNote 7.2.3

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

RemoteUrl https://github.com/merck/boxly

RemoteRef HEAD

RemoteSha f585e7cc70d44645548d640706407fc298beb8b5

Contents

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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. A label from an input data is used if NA for a variable is specified.
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,
  hover_var_outlier = c("USUBJID", metalite::collect_adam_mapping(meta, analysis)$y)
)
```

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.
hover_var_outlier	
	A character vector of hover variables for outlier.

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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