

Package: lulab.utils (via r-universe)

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Title Supporting Functions Maintained by Zhen Lu

Version 0.0.4

Description Miscellaneous functions commonly used by LuLab. This package aims to help more researchers on epidemiology to perform data management and visualization more efficiently.

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URL <https://leslie-lu.github.io/>

BugReports <https://github.com/Leslie-Lu/lulab.utils/issues>

Encoding UTF-8

RoxygenNote 7.3.1

Imports boot, car, descr, dplyr, httr2, magrittr, openxlsx, purrr, rappdirs, stringr, table1, utils

Suggests knitr, rmarkdown, testthat (>= 3.0.0)

VignetteBuilder knitr

Config/testthat/edition 3

NeedsCompilation no

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Config/pak/sysreqs cmake make libicu-dev libssl-dev

Contents

check_cha	2
check_wget	3
Table1	3
test_mirror	4
use_wget	5

Index	7
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check_cha	<i>check_cha</i>
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Description

Check for missing values for character columns

Usage

```
check_cha(col, df, verbose = TRUE)
```

Arguments

col	a character variable name
df	a data.frame
verbose	logical, controlling the output

Details

This function is used to check the distribution of character variables in the data frame.

Value

a distribution table of the character variable in the data frame

Author(s)

Zhen Lu

Examples

```
data("melanoma", package = "boot")
melanoma2 <- melanoma
check_cha('status', melanoma2)
# or
mapply(check_cha, 'status', MoreArgs= list(melanoma2))
```

check_wget	<i>check_wget</i>
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Description

Check if wget is installed

Usage

```
check_wget()
```

Details

This function is used to check if wget is installed on the system.

Value

a logical value indicating whether wget is installed

Author(s)

Zhen Lu

Examples

```
check_wget()
```

Table1	<i>Table1</i>
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Description

Make Table1

Usage

```
Table1(df, ycol, xcol, xlabel, result_dir, verbose = TRUE)
```

Arguments

df	a data.frame
ycol	a grouping variable
xcol	variables to be compared
xlabels	levels of ycol
result_dir	directory to save the result
verbose	logical, controlling the output

Details

This function is used to make Table1 and return excel file.

Value

excel file

Author(s)

Zhen Lu

Examples

```
data("melanoma", package = "boot")
melanoma2 <- melanoma
# Factor the basic variables that
# we're interested in
melanoma2$status <-
  factor(melanoma2$status,
         levels=c(2,1,3),
         labels=c("Alive", # Reference
                  "Melanoma death",
                  "Non-melanoma death"))
test= Table1(
  df= melanoma2,
  xcol= setdiff(names(melanoma2), "status"),
  ycol= "status",
  result_dir= tempdir()
)
```

test_mirror

test_mirror

Description

Test speed of CRAN mirror

Usage

```
test_mirror(region, verbose = TRUE)
```

Arguments

region	a character string, the region of the CRAN mirror, e.g. 'China'
verbose	logical, controlling the output

Details

This function is used to test the speed of CRAN mirror.

Value

a data.frame with the name, URL, and download time of the fastest CRAN mirror

Author(s)

Zhen Lu

Examples

```
test_mirror('China')
```

<i>use_wget</i>	<i>use_wget</i>
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Description

Use wget to download files

Usage

```
use_wget(use = TRUE)
```

Arguments

use a logical value, controlling the download method

Details

This function is used to set the download method.

Value

a logical value indicating whether wget is used

Author(s)

Zhen Lu

Examples

```
use_wget(use = TRUE)
getOption("download.file.method")
getOption("download.file.extra")
test_url <- "https://eternallybored.org/misc/wget/1.21.4/64/wget.exe"
test_destfile <- tempfile()
download.file(test_url, destfile = test_destfile)
```

Index

check_cha, 2
check_wget, 3

Table1, 3
test_mirror, 4

use_wget, 5