

Package ‘lulab.utils’

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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 re-searchers on epidemiology to perform data management and visualization more efficiently.
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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, xlabels, 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	<i>test_mirror</i>
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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')
```

use_wget

use_wget

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)
```

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