Package 'wildcard'

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Title Templates for Data Frames

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Description Generate data frames from templates.

License GPL (>= 3)

Depends R (>= 3.0.0)

Imports magrittr, stringi

Suggests knitr, rmarkdown, testthat

URL https://github.com/wlandau/wildcard

BugReports https://github.com/wlandau/wildcard/issues

Encoding UTF-8

RoxygenNote 6.0.1

VignetteBuilder knitr

NeedsCompilation no

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R topics documented:

wildcard-package *A templating mechanism for data frames*

Description

A templating mechanism for data frames

Author(s)

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References

https://github.com/wlandau/wildcard

Examples

```
myths <- data.frame(
  myth = c('Bigfoot', 'UFO', 'Loch Ness Monster'),
  claim = c('various', 'day', 'day'),
  note = c('various', 'pictures', 'reported day'))
wildcard(myths, wildcard = 'day', values = c('today', 'yesterday'))
wildcard(myths, wildcard = 'day', values = c('today', 'yesterday'),
  expand = FALSE)
locations <- data.frame(
  myth = c('Bigfoot', 'UFO', 'Loch Ness Monster'),
  origin = 'where')
rules <- list(
  where = c('North America', 'various', 'Scotland'),
  UFO = c('spaceship', 'saucer'))
wildcard(locations, rules = rules, expand = c(FALSE, TRUE))
numbers <- data.frame(x = 4, y = 3, z = 4444, w = 4.434)
wildcard(numbers, wildcard = 4, values = 7)
df <- data.frame(
  ID = c('24601', 'Javert', 'Fantine'),
  fate = c('fulfillment', 'confusion', 'misfortune'))
expandrows(df, n = 2, type = 'each')
expandrows(df, n = 2, type = 'times')
```

expandrows *Function* expand

Description

Expand the rows of a data frame Copied and modified from `remakeGenerator::expand()` under GPL>=3: https://github.com/wlandau/remakeGenerator

Usage

```
expandrows(df, n = 2, type = c("each", "times"))
```

Arguments

df	data frame
n	number of duplicates per row
type	character scalar. If 'each', rows will be duplicated in place. If 'times', the data frame itself will be repeated n times.

See Also

wildcard]

Examples

```
df <- data.frame(
  ID = c('24601', 'Javert', 'Fantine'),
  fate = c('fulfillment', 'confusion', 'misfortune'))
expandrows(df, n = 2, type = 'each')
expandrows(df, n = 2, type = 'times')
```

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nofactors *Function* nofactors

Description

Turn all the factors of a data frame into characters.

Usage

```
nofactors(df)
```

Arguments

df	data frame

See Also

wildcard

Examples

```
class(iris$Species)
str(iris)
out <- nofactors(iris)
class(out$Species)
str(out)
```

wildcard *Function* wildcard

Description

Main function of the package. Evaluate a wildcard to fill in or expand a data frame. Copied and modified from remakeGenerator::evaluate() under GPL-3: https://github.com/wlandau/remakeGenerator

Usage

```
wildcard(df, rules = NULL, wildcard = NULL, values = NULL,
  expand = TRUE, include = NULL, exclude = NULL)
```

Arguments

df	data frame
rules	list with names a wildcards and elements as vectors of values to substitute in place of the wildcards.
wildcard	character scalar, a wildcard found in a data frame
values	vector of values to substitute in place of a wildcard
expand	logical, whether to expand the rows of the data frame to substitute each value for each wildcard in turn. If FALSE, no new rows will be added to df when the values are substituted in place of wildcards. Can be a vector of length length(rules) if using the rules argument.
include	character vector of columns of df to be included in the wildcard evaluation. The values will replace the wildcards in these columns but not in any of the other colums. All columns are included by default. You may use include or exclude (or neither), but not both.
exclude	character vector of columns of df to be EXCLUDED from the wildcard evaluation. The values will NOT replace the wildcards in any of these columns, but wildcard evaluation will occur in all the other columns. By default, no columns are excluded (all columns are used for wildcard evaluation). You may use include or exclude (or neither), but not both.

Examples

```
myths <- data.frame(
  myth = c('Bigfoot', 'UFO', 'Loch Ness Monster'),
  claim = c('various', 'day', 'day'),
 note = c('various', 'pictures', 'reported day'))
wildcard(myths, wildcard = 'day', values = c('today', 'yesterday'))
wildcard(myths, wildcard = 'day', values = c('today', 'yesterday'),
  expand = FALSE)
locations <- data.frame(
  myth = c('Bigfoot', 'UFO', 'Loch Ness Monster'),
```

```
  origin = 'where')
rules <- list(
  where = c('North America', 'various', 'Scotland'),
  UFO = c('spaceship', 'saucer'))
wildcard(locations, rules = rules, expand = c(FALSE, TRUE))
numbers <- data.frame(x = 4, y = 3, z = 4444, w = 4.434)
wildcard(numbers, wildcard = 4, values = 7)
# Inclusion and exclusion
wildcard(myths, wildcard = "day", values = c("today", "yesterday"),
  include = "claim")
wildcard(myths, wildcard = "day", values = c("today", "yesterday"),
  exclude = c("claim", "note"))
# Wildcards should not also be replacement values.
# Otherwise, the output will be strange
# and will depend on the order of the wildcards.
## Not run:
df <- data.frame(x = "a", y = "b")
rules <- list(a = letters[1:3], b = LETTERS[1:3])
wildcard(df, rules = rules)

## End(Not run)
```

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