Package ‘wildcard’

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wildcard-package  

A templating mechanism for data frames

Description

A templating mechanism for data frames

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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 columns. 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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