Package 'ympes'

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Type Package

Title Collection of Helper Functions

Version 1.0.0

Description Provides a collection of lightweight helper functions (imps) both for interactive use and for inclusion within other packages. These include functions for visualising colour palettes, quoting user input, searching rows of a data frame and capturing string tokens.

License GPL-3

Encoding UTF-8

RoxygenNote 7.2.3

Suggests clipr, tinytest

URL https://sr.ht/~tim-taylor/ympes/

BugReports https://lists.sr.ht/~tim-taylor/ympes

Imports methods, utils

NeedsCompilation no

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R topics documented:

cc *Quote names*

Description

`cc()` quotes comma separated names whilst trimming outer whitespace. It is intended for interactive use only.

Usage

```
cc(..., .clip = getOption("imp.clipboard", FALSE))
```

Arguments

`...`	Unquoted names (separated by commas) that you wish to quote. Empty arguments (e.g. third item in `one,two,,four`) will be returned as `""`.
`.clip`	`[bool]` Should the code to generate the constructed character vector be copied to your system clipboard. Defaults to FALSE unless the option "imp.clipboard" is set to TRUE. Note that copying to clipboard requires the availability of package clipr.

Value

A character vector of the quoted input.

Examples

```
cc(dale, audrey, laura, hawk)
```

fstrcapture *Capture string tokens into a data frame*

Description

`fstrcapture()` is a replacement for `strcapture()` with better performance when `perl = TRUE`.

Usage

```
fstrcapture(pattern, x, proto, perl = TRUE, useBytes = FALSE)
```

Arguments

pattern	The regular expression with the capture expressions.
x	A character vector in which to capture the tokens.
proto	A data.frame or S4 object that behaves like one. See details.
perl	Should Perl-compatible regexps be used?
useBytes	If TRUE the matching is done byte-by-byte rather than character-by-character.

Value

A tabular data structure of the same type as proto, so typically a data.frame, containing a column for each capture expression. The column types and names are inherited from proto. Cases in x that do not match pattern have NA in every column.

Note

Compared to strcapture(), fstrcapture() sets the default value for perl to TRUE. Apart from this it can be used as a drop-in replacement.

See Also

strcapture() for further details.

Examples

```
x <- "chr1:1-1000"
pattern <- "(.*?):([[:digit:]]+)-([[:digit:]]+)"
proto <- data.frame(chr=character(), start=integer(), end=integer())
fstrcapture(pattern, x, proto)
```

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greprows *Pattern matching on data frame rows*

Description

greprows() searches for pattern matches within a data frames columns and returns the related rows or row indices.

Usage

```
greprows(
  dat,
  pattern,
  cols = NULL,
  value = TRUE,
```

```
  ignore.case = FALSE,
  perl = FALSE,
  fixed = FALSE,
  invert = FALSE
)
```

Arguments

dat	Data frame
pattern	character string containing a regular expression (or character string for fixed = TRUE) to be matched in the given character vector. Coerced by as.character to a character string if possible. If a character vector of length 2 or more is supplied, the first element is used with a warning. Missing values are allowed except for regexpr, gregexpr and regexec.
cols	[character] Character vector of columns to search. If NULL (default) all character and factor columns will be searched.
value	[logical] Should a data frame of rows be returned. If FALSE row indices will be returned instead of the rows themselves.
ignore.case	if FALSE, the pattern matching is *case sensitive* and if TRUE, case is ignored during matching.
perl	logical. Should Perl-compatible regexps be used?
fixed	logical. If TRUE, pattern is a string to be matched as is. Overrides all conflicting arguments.
invert	logical. If TRUE return indices or values for elements that do *not* match.

Value

A data frame of the corresponding rows or, if value = FALSE, the corresponding row numbers.

See Also

grep()

Examples

```
dat <- data.frame(
    first = letters,
    second = factor(rev(LETTERS)),
    third = "Q"
)
greprows(dat, "A|b")
greprows(dat, "A|b", ignore.case = TRUE)
greprows(dat, "c", value = FALSE)
```

new_package *Create a package skeleton*

Description

new_package() create a package skeleton based on my preferred folder structure.

Usage

```
new_package(
  name = "mypackage",
  dir = ".",
  firstname = getOption("ympes.firstname", "Joe"),
  surname = getOption("ympes.surname", "Bloggs"),
  email = getOption("ympes.email", "Joe.Bloggs@missing.com"),
  orcid = getOption("ympes.orcid", default = NULL),
  enter = TRUE
)

np(
  name = "mypackage",
  dir = ".",
  firstname = getOption("ympes.firstname", "Joe"),
  surname = getOption("ympes.surname", "Bloggs"),
  email = getOption("ympes.email", "Joe.Bloggs@missing.com"),
  orcid = getOption("ympes.orcid", default = NULL),
  enter = TRUE
)
```

Arguments

name	[character] Package name
dir	[character] Directory to start in.
firstname	[character] Maintainer's firstname.
surname	[character] Maintainer's surname.
email	[character] Maintainer's email address.
orcid	[character] Maintainer's ORCID.
enter	[bool] Should you move in to the package directory after creation. Only applicable in interactive sessions.

Value

Created directory (invisibly)

Examples

```
# usage without entering directory
p <- new_package("my_package_1", dir = tempdir(), enter = FALSE)

# clean up
unlink(p, recursive = TRUE)
```

`plot_palette` *Plot a colour palette*

Description

`plot_palette()` plots a palette from a vector of colour values (name or hex).

Usage

```
plot_palette(values, label = TRUE, square = FALSE)
```

Arguments

`values`	`[character]`
	Vector of named or hex colours.
`label`	`[bool]`
	Do you want to label the plot or not?
	If `values` is a named vector the names are used for labels, otherwise, the values.
`square`	`[bool]`
	Display palette as square?

Value

The input (invisibly).

Examples

```
plot_palette(c("#5FE756", "red", "black"))
plot_palette(c("#5FE756", "red", "black"), square=TRUE)
```

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