

Package ‘tidycode’

December 10, 2019

Type Package

Title Analyze Lines of R Code the Tidy Way

Version 0.1.1

Description Analyze lines of R code using tidy principles. This allows you to input lines of R code and output a data frame with one row per function included. Additionally, it facilitates code classification via included lexicons.

License MIT + file LICENSE

Encoding UTF-8

LazyData true

RoxygenNote 6.1.1

Imports purrr, pryr, tibble, rlang, glue, matahari

URL <https://github.com/LucyMcGowan/tidycode>

BugReports <https://github.com/LucyMcGowan/tidycode/issues>

Suggests testthat, covr, knitr, rmarkdown, dplyr

VignetteBuilder knitr

NeedsCompilation no

Author Lucy D'Agostino McGowan [aut, cre]
(<https://orcid.org/0000-0001-7297-9359>),
Jim Hester [ctb],
Jeff Leek [ldr]

Maintainer Lucy D'Agostino McGowan <lucydagostino@gmail.com>

Repository CRAN

Date/Publication 2019-12-10 19:30:02 UTC

R topics documented:

get_classifications	2
get_stopfuncs	3
ls_packages	3

read_rfiles	4
tidycode_example	5
unnest_calls	5

Index	7
--------------	----------

get_classifications	<i>Get a tidy data frame of classifications of all functions used in your analysis</i>
---------------------	--

Description

Get a tidy data frame of classifications of all functions used in your analysis

Usage

```
get_classifications(lexicon = NULL, include_duplicates = TRUE)
```

Arguments

lexicon	Character. The classification lexicon to retrieve. Either "crowdsource" or "leeklab". If NULL (default), will return all lexicons.
include_duplicates	Logical. Indicates whether to include all functions and classifications along with their score (default, TRUE) - this may result in multiple lines (with multiple classifications) for a single function. If FALSE, the most prevalent classification will be selected.

Value

A `tbl_df` with columns:

- `func`: the function
- `classification`: the classification

If `include_duplicates = TRUE`, will include a column:

- `score`: the score

If `lexicon` is NULL, will include a column:

- `lexicon`: the classification lexicon

Examples

```
# Get a data frame of all classifications
get_classifications()

# Get a data frame of the most prevalent classifications
get_classifications(include_duplicates = FALSE)

# Get a data frame of only `leeklab` classifications
get_classifications("leeklab")
```

get_stopfuncs	<i>Get a tidy data frame of a "stopword" lexicon for R functions</i>
---------------	--

Description

Get a data frame listing one function per row.

Usage

```
get_stopfuncs()
```

Value

A `tbl_df` with one column:

- `func`: the function identified as a "stopword"

Examples

```
get_stopfuncs()
```

ls_packages	<i>List packages</i>
-------------	----------------------

Description

List packages

Usage

```
ls_packages(x)
```

Arguments

`x` an R call or list of R calls

Value

Character. Vector of packages called.

Examples

```
ls_packages(  
  list(  
    quote(library(tidycode)),  
    quote(library(purrr))  
  )  
)
```

read_rfiles	<i>Read R file(s) as a tidy data frame</i>
-------------	--

Description

Read R file(s) as a tidy data frame

Usage

```
read_rfiles(...)
```

Arguments

... One or more quoted R file paths to read

Value

A tidy data frame, a `tbl_df`, with one row per R call. There will be three columns,

- `file`: the path of the original R file
- `expr`: the R call
- `line`: the line of the R call

Examples

```
d <- read_rfiles(  
  tidycode_example("example_plot.R"),  
  tidycode_example("example_analysis.R")  
)
```

tidycode_example	<i>Get path to example file</i>
------------------	---------------------------------

Description

tidycode comes bundled with a few small files to use in examples. This function makes them easy to access.

Usage

```
tidycode_example(path = NULL)
```

Arguments

path Name of file. If NULL, the example files will be listed.

Examples

```
tidycode_example()  
tidycode_example("example_plot.R")
```

unnest_calls	<i>Unnest R calls</i>
--------------	-----------------------

Description

Unnest R calls

Usage

```
unnest_calls(.data, input, drop = TRUE)
```

Arguments

.data A data frame
input Input column that contains an R call or list of R calls to be split into individual functions
drop logical. Whether the original input column should be dropped.

Value

The original data frame with an additional three columns:

- line: the line number of the call
- func: the name of the function called
- args: a list of arguments

Examples

```
d <- read_rfiles(tidycode_example("example_plot.R"))

# Unnest a model call
d %>%
  unnest_calls(expr)

# Unnest a model call and keep the call itself using the drop parameter
d %>%
  unnest_calls(expr, drop = FALSE)
```

Index

`get_classifications`, 2

`get_stopfuncs`, 3

`ls_packages`, 3

`read_rfiles`, 4

`tidycode_example`, 5

`unnest_calls`, 5