

Package: tidycode (via r-universe)

August 28, 2024

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.

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Encoding UTF-8

LazyData true

Roxygen list(markdown = TRUE)

RoxygenNote 7.1.1

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, scales, ggplot2

VignetteBuilder knitr

Repository <https://lucymcgowan.r-universe.dev>

RemoteUrl <https://github.com/lucymcgowan/tidycode>

RemoteRef HEAD

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get_classifications	<i>Get a tidy data frame of classifications of all functions used in your analysis</i>
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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_package_functions *Get Package Functions*

Description

Loads all packages called in a list of R calls and creates a data frame of all functions included in these packages. Packages that were not previously loaded that are loaded as part of this call will be detached.

Usage

```
get_package_functions(x)
```

Arguments

x an R call or list of R calls

Value

a data frame with the following columns:

- package: The name of the package
- func: The name of the function

Examples

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

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

load_packages	<i>Load packages</i>
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Description

Loads all R packages in the list of R calls.

Usage

```
load_packages(x)
```

Arguments

`x` an R call or list of R calls

Examples

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


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` *Get path to example file*

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>
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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)
```

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