

Package ‘r6methods’

October 14, 2022

Type Package

Title Make Methods for R6 Classes

Version 0.1.0

Description Generate boilerplate code for R6 classes. Given R6 class create getters and/or setters for selected class fields or use RStudio addins to insert methods straight into class definition.

License MIT + file LICENSE

Encoding UTF-8

LazyData true

RoxygenNote 7.1.1

Imports glue, rstudioapi, miniUI, shiny, dplyr, magrittr, stringr,
purrr

Suggests R6, testthat (>= 3.0.0)

Config/testthat/edition 3

URL <https://github.com/jakubsob/r6methods>

BugReports <https://github.com/jakubsob/r6methods/issues>

NeedsCompilation no

Author Jakub Sobolewski [aut, cre]

Maintainer Jakub Sobolewski <jakupsob@gmail.com>

Repository CRAN

Date/Publication 2021-03-16 08:30:02 UTC

R topics documented:

| | |
|--------------------------------|---|
| extract_class | 2 |
| find_closing | 3 |
| get_cursor_pos | 3 |
| insert_methods | 4 |
| insert_methods_addin | 4 |

| | |
|---------------------------------------|---|
| insert_methods_addin_gadget | 5 |
| make_gadget | 5 |
| make_methods | 6 |
| make_methods_addin | 7 |
| make_methods_addin_gadget | 7 |
| make_method_str | 7 |
| source_class | 8 |

| | |
|--------------|----------|
| Index | 9 |
|--------------|----------|

| | |
|---------------|-------------------------|
| extract_class | <i>Extract R6 Class</i> |
|---------------|-------------------------|

Description

Extract R6 Class

Usage

```
extract_class(content, start_pos = 1)
```

Arguments

| | |
|-----------|--|
| content | Character, content of a file or a string |
| start_pos | Integer, row position of cursor. Serves as starting point to search for class definition |

Value

A list with fields

- class_contentCharacter, extracted class definition
- startInteger, start position of class definition within ‘content’
- endInteger, end position of class definition within ‘content’

| | |
|--------------|---------------------|
| find_closing | <i>Find Closing</i> |
|--------------|---------------------|

Description

Find position of closing character to first encountered opening character

Usage

```
find_closing(text, opening = "\\(", closing = "\\)")
```

Arguments

| | |
|---------|---------------------------|
| text | Character, text to search |
| opening | Opening character |
| closing | Closing character |

Value

Integer, position of closing character

| | |
|----------------|---|
| get_cursor_pos | <i>Get Cursor Position From Active Document</i> |
|----------------|---|

Description

Get Cursor Position From Active Document

Usage

```
get_cursor_pos(context)
```

Arguments

| | |
|---------|-------------------------|
| context | Active document context |
|---------|-------------------------|

Value

Integer, position of cursor in text

| | |
|----------------|-----------------------|
| insert_methods | <i>Insert Methods</i> |
|----------------|-----------------------|

Description

Insert Methods

Usage

```
insert_methods(
  content,
  start_pos = 1,
  field = c("all", "public", "private"),
  method = c("both", "get", "set"),
  add_roxygen = TRUE
)
```

Arguments

| | |
|-------------|--|
| content | Character, content of the file or a string |
| start_pos | Integer, position of cursor within 'content'. Number of characters before the cursor. |
| field | Character, fields for which to create method. May be "all", "public", "private" or name of class field. Multiple values allowed. |
| method | Character, methods to create. One of "both", "get", "set" |
| add_roxygen | Logical, whether to add roxygen description of method |

Value

Character, modified content with injected methods

| | |
|----------------------|---|
| insert_methods_addin | <i>An addin for inserting methods straight into the source file</i> |
|----------------------|---|

Description

An addin for inserting methods straight into the source file

Usage

```
insert_methods_addin()
```

Value

No return value, called for side effects

insert_methods_addin_gadget
Insert methods addin gadget

Description

Insert methods addin gadget

Usage

```
insert_methods_addin_gadget()
```

Value

No return value, called for side effects

make_gadget *Make Gadget*

Description

Create gadget for generating R6 methods. Action after clicking ‘Done’ button is defined by ‘done_fun’.

Usage

```
make_gadget(title, title_bar, done_fun)
```

Arguments

| | |
|-----------|--|
| title | Character, title of gadget window |
| title_bar | Character, gadget title bar |
| done_fun | Function to be used after clicking ‘Done’ button |

Value

Function creating and running a Shiny gadget

| | |
|--------------|---------------------|
| make_methods | <i>Make methods</i> |
|--------------|---------------------|

Description

Make methods

Usage

```
make_methods(  
  r6,  
  field = c("all", "public", "private", names(r6$public_fields),  
           names(r6$private_fields)),  
  method = c("both", "get", "set"),  
  add_roxygen = TRUE  
)
```

Arguments

| | |
|-------------|--|
| r6 | R6 class for which to create methods |
| field | Character, fields for which to create method. May be "all", "public", "private" or name of class field. Multiple values allowed. |
| method | Character, methods to create. One of "both", "get", "set" |
| add_roxygen | Logical, whether to add roxygen description of method |

Value

Character containing generated methods to put into class definition

Examples

```
Example <- R6::R6Class("Example", list(public_field = NULL), list(private_field = NULL))  
make_methods(Example)  
make_methods(Example, "private", "get")  
make_methods(Example, "private_field", c("get", "set"))  
make_methods(Example, "public_field", c("both"))
```

`make_methods_addin` *Make Methods Addin*

Description

Make Methods Addin

Usage

`make_methods_addin()`

Value

No return value, called for side effects

`make_methods_addin_gadget`
Make methods addin gadget

Description

Make methods addin gadget

Usage

`make_methods_addin_gadget()`

Value

No return value, called for side effects

`make_method_str` *Make method string*

Description

Make method string

Usage

`make_getter_method_str(field, is_public = TRUE, add_roxygen = TRUE)`

`make_setter_method_str(field, is_public = TRUE, add_roxygen = TRUE)`

Arguments

| | |
|-------------|---|
| field | Character name of class field |
| is_public | Logical, whether the field is in public list |
| add_roxygen | Logical, whether to add roxygen description of method |

Value

Character containing method definition

| | |
|--------------|---------------------|
| source_class | <i>Source class</i> |
|--------------|---------------------|

Description

Sources R6 class from text, prepends namespace to ‘R6Class’ in order to not require ‘R6’ to be loaded.

Usage

```
source_class(txt)
```

Arguments

| | |
|-----|---|
| txt | Character, text containing class definition |
|-----|---|

Value

R6 class

Index

`extract_class`, 2

`find_closing`, 3

`get_cursor_pos`, 3

`insert_methods`, 4

`insert_methods_addin`, 4

`insert_methods_addin_gadget`, 5

`make_gadget`, 5

`make_getter_method_str`
 (`make_method_str`), 7

`make_method_str`, 7

`make_methods`, 6

`make_methods_addin`, 7

`make_methods_addin_gadget`, 7

`make_setter_method_str`
 (`make_method_str`), 7

`source_class`, 8