

Package: wrappr (via r-universe)

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Title A Collection of Helper and Wrapper Functions

Version 0.1.0

Description Helper functions to easily add functionality to functions.
The package can assign functions to have an lazy evaluation allowing you to save and update the arguments before and after each function call. You can set a temporary working directory within functions and wrap console messages around other functions.

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Imports methods

NeedsCompilation no

Author John Piper [aut, cre] (<<https://orcid.org/0009-0000-6003-7671>>)

Maintainer John Piper <john.piper.using.r@gmail.com>

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get_cache_or_create *Checks if variable exists in environment and returns back or creates a new variable*

Description

Checks if variable exists in environment and returns back or creates a new variable

Usage

```
get_cache_or_create(  
  var,  
  func,  
  ...,  
  exists_func_args = NA,  
  get_func_args = NA,  
  warning_msg = NA_character_  
)
```

Arguments

var character. The name of the variable to check in the global environment.

func function. A function that returns a value.

... Additional arguments to be passed to the param func.

exists_func_args list. A list of arguments to use in base::exists.

get_func_args list. A list of arguments to use in base::get.

warning_msg character. Message sent to stop function if an error occurs.

Value

Unknown. The return type from the param func or the existing variable in global environment.

Examples

```
## Not run:  
df <- data.frame(col_1 = c("a","b","c"), col_2 = c(1,2,3))  
  
create_blank_df <- function() {  
  data.frame(col_1 = NA_character_, col_2 = NA_integer_)  
}  
  
df_1 <- get_cache_or_create(  
  "df",  
  create_blank_df
```

```

    )

df_2 <- get_cache_or_create(
  "df_2",
  create_blank_df
)

## End(Not run)

```

lazy_eval	<i>save and Delay a function call with the option to change the function and arguments when called</i>
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Description

save and Delay a function call with the option to change the function and arguments when called

Usage

```
lazy_eval(..., .f)
```

Arguments

...	Additional arguments to be passed to the param .f. Also in closure function returned.
.f	function. A function that will be called when needed. Also in closure function returned.

Value

closure function with same param names plus the param names `overwrite_args` Boolean and `return_new_closure` Boolean.

Examples

```

numbers <- c(1,2,3,4,5)

func <- lazy_eval(numbers, .f = sum)

sum_result <- func()

max_result <- func(.f = max)

mean_result <- func(.f = mean)

range_result <- func(.f = function(...) { max(...) - min(...)})

add_more_num_result <- func(4,5,6, NA, na.rm = TRUE)

```

```
updated_func <- func(na.rm = TRUE, return_new_closure = TRUE)
updated_func_result <- updated_func()
```

msg_wrap

Wraps a message before and/or after a function

Description

Wraps a message before and/or after a function

Usage

```
msg_wrap(  
  func,  
  ...,  
  before_func_msg = "",  
  after_func_msg = "",  
  print_func = print,  
  use_msg = "both",  
  print_return_var = FALSE  
)
```

Arguments

`func` function.

`...` Additional arguments to be passed into the param `func`.

`before_func_msg` character.

`after_func_msg` character.

`print_func` function. The default is `print`. Can use related function like `message`.

`use_msg` character. The default is "both". Selects which messages to print in the function. Use before, after, both or none.

`print_return_var` Boolean. The default is `FALSE`. Prints the output from the called `func` using the `print` argument from param `print_func`.

Value

Unknown. The return type from the param `func`.

Examples

```
numbers <- c(1,2,3,4,5)

answer <- msg_wrap(
  sum,
  numbers,
  before_func_msg = "Currently summing the numbers",
  after_func_msg = "Summing the numbers complete"
)

numbers_with_na <- c(1,2,3,NA,5)

answer_na_removed <- msg_wrap(
  sum,
  numbers,
  na.rm = TRUE,
  before_func_msg = "Sum with na.rm set to TRUE",
  use_msg = "before"
)

numbers_to_sum <- c(10,20,30)

msg_wrap((function(x) sum(x[x%%2 == 1])),
  x = numbers_to_sum,
  before_func_msg = "Result from sum of odd numbers",
  use_msg = "before",
  print_return_var = TRUE
)
```

set_temp_wd*Sets a temporary working directory within the function scope*

Description

Sets a temporary working directory within the function scope

Usage

```
set_temp_wd(
  temp_cwd,
  func,
  ...,
  err_msg = "An error has occurred in the function set_temp_wd"
)
```

Arguments

temp_cwd	character. Folder path to temporarily set the working directory
func	function. A function that used a directory path
...	Additional arguments to be passed to the param func.
err_msg	character. Message sent to stop function if an error occurs.

Value

Unknown. The return type from the param func.

Examples

```
## Not run:  
  
temp_wd <- "example/folder/address/to/change"  
  
get_data <- set_temp_wd(temp_wd, read.csv, file = "file.csv")  
  
## End(Not run)
```

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