Package 'roclang'

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Title Functions for Diffusing Function Documentations into 'Roxygen' Comments

Version 0.2.2

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Description Efficient diffusing of content across function documentations. Sections, parameters or dot parameters are extracted from function documentations and turned into valid Rd character strings, which are ready to diffuse into the 'roxygen' comments of another function by inserting inline code.

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URL https://github.com/zhuxr11/roclang

BugReports https://github.com/zhuxr11/roclang/issues

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R topics documented:

`roclang-package` *roclang: A package for diffusing function documentations into 'roxygen' comments*

Description

The 'roclang' package facilitates efficient diffusing of content across function documentations. Sections, parameters or dot parameters are extracted from function documentations and turned into valid Rd character strings, which are ready to diffuse into the 'roxygen' comments of another function by inserting inline code.

Functions

- Text extraction and manipulation function: `extract_roc_text`.
- Rd evaluation and compilation function: `roc_eval_text`.

Note

Change log:

- 0.1.1 Xiurui Zhu - Initiate the document.

Author(s)

Xiurui Zhu

`extract_roc_text` *Extract a section, parameter or set of dot-parameters from a function documentation*

Description

`extract_roc_text` cites sections or parameters from a function documentation in the syntax of `@inherit`, `@inheritSection`, `@inheritParams` or `@inheritDotParams` tag from `roxygen2` package. See details about how to use this function.

Usage

```
extract_roc_text(
  fun,
  type = c("general", "section", "param", "dot_params"),
  select = NULL,
  capitalize = NA
)
```

Arguments

`fun` Function or character (of length 1L) indicating function name.

`type` Type of extraction. Please choose one from the following table according to the `@tag` you would otherwise use if you would like to inherit the section, parameter or set of dot-parameters as a whole:

`@tag` you would use	`type` you should choose
`@inherit`	`"general"`
`@inheritSection`	`"section"`
`@inheritParams`	`"param"`
`@inheritDotParams`	`"dot_params"`

`select` Selection of extraction based on `type`.

- `type = "general"` Character (of length 1L) indicating the section to extract
- `type = "section"` Character (of length 1L) indicating the section title to extract
- `type = "param"` Character (of length 1L) indicating the name of parameter to extract
- `type = "dot_params"` Character (of length 1L) or character vector to add or remove (with `"-"`) parameters as `@inheritDotParams`; if character vector provided, the elements are concatenated with spaces just as `@inheritDotParams` syntax, e.g. `"x y"` to inherit two parameters, `"-z"` to remove a parameter or `c("-x", "-y")` to remove two parameters

`capitalize` Logical (of length 1L) indicating whether the first letter of the return should be capitalized. Default to `capitalize = NA`, in which case the first letter of the return is left as is.

Details

To diffuse the function output into `roxygen2` comments, one may write the function documentation with inline code like this:

```
#' Diffusion of function documentation with inline code
#'
#' @return Same as \code{\link[stats]{lm}}:
#' `r extract_roc_text(stats::lm, type = "general", select = "return")`
my_fun <- function() {}
```

or with code block like this:

```
#' Diffusion of function documentation with code block
#'
#' @param lm_arg Named list of
#' ```{r}
#' extract_roc_text(stats::lm,
#'                  type = "dot_params",
```

```
#'                   select = c("-formula", "-data"),
#'                   capitalize = FALSE)
#' ```
my_fun <- function(lm_arg) {}
```

Value

Character (of length 1L) as a valid Rd character string to diffuse into roxygen2 comments.

Note

Change log:

- 0.1.0 Xiurui Zhu - Initiate the function.
- 0.1.1 Xiurui Zhu - Change the default of `capitalize` from `TRUE` to `NA`.
- 0.1.1 Xiurui Zhu - Improve code security in evaluating the formal arguments of `fun`.
- 0.2.0 Xiurui Zhu - Make changes for `roxygen2` > `7.1.2` while keeping compatibility.

Author(s)

Xiurui Zhu

Examples

```
# Inherit a standard section, and leave the first letter as is
cat(
  extract_roc_text(stats::lm,
                   type = "general",
                   select = "description",
                   capitalize = NA)
)

# Inherit a self-defined section, and capitalize the first letter
cat(
  extract_roc_text(stats::lm,
                   type = "section",
                   select = "Using time series",
                   capitalize = TRUE)
)

# Inherit a parameter, and diffuse it into text
cat(
  paste0(
    "Here is the `formula` argument of `stats::lm`, defined as: ",
    extract_roc_text(stats::lm,
                     type = "param",
                     select = "formula",
                     capitalize = FALSE)
  )
)
```

```
# Inherit a set of dot params, and diffuse it into text
cat(
  paste0(
    "`lm_arg` is a named list of ",
    extract_roc_text(stats::lm,
                     type = "dot_params",
                     select = c("-formula", "-data"),
                     capitalize = FALSE)
  )
)
```

`roc_eval_text` *Generate Rd from text with evaluated inline code and code blocks*

Description

`roc_eval_text` is an upgraded version of `roc_proc_text` that evaluates inline and block code before generating Rd.

Usage

```
roc_eval_text(roclet, input)
```

Arguments

`roclet`	Name of roclet to use for processing.
`input`	Source string

Value

List with names as `fun_name.Rd`, where each element is the `RoxyTopic` for the corresponding function, same as the return of `roc_proc_text`.

Note

Change log:

- 0.1.0 Xiurui Zhu - Initiate the function.

Author(s)

Xiurui Zhu

Examples

```
# Formulate a text version of a function with documentation
fun_text <- '
#\' \\code{iris} is a `r nrow(iris)`-row matrix.
#\'
#\' \\code{iris} matrix has
#\' ```{r results="hold"}
#\' ncol(iris)
#\' ```
#\' columns.
print_iris <- function() iris
'

# Parse the 'roxygen' comments to Rd documentation
roc_eval_text(roxygen2::rd_roclet(), fun_text)[[1L]]
```

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