Package 'wyz.code.rdoc'

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Type Package

Title Wizardry Code Offensive Programming R Documentation

Version 1.1.16

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Description Allows to generate on-demand or by batch, any R documentation file, whatever is kind, data, function, class or package. It populates documentation sections, either automatically or by considering your input. Input code could be standard R code or offensive programming code. Documentation content completeness depends on the type of code you use. With offensive programming code, expect generated documentation to be fully completed, from a format and content point of view. With some standard R code, you will have to activate post processing to fill-in any section that requires complements. Produced manual page validity is automatically tested against R documentation compliance rules. Documentation language proficiency, wording style, and phrasal adjustments remains your job.

Encoding UTF-8

LazyData true

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Depends R (>= 3.6)

Imports methods, data.table (>= 1.11.8), tidyr, wyz.code.offensiveProgramming (>= 1.1.17), stringr (>= 1.4.0), R6 (>= 2.4.0), crayon (>= 1.3.4), digest (>= 0.6.23)

Suggests testthat, knitr, rmarkdown, lubridate

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R topics documented:

auditDocumentationFiles *Audit Documentation Files*

Description

Audit documentation files from a set of folders

Usage

```
auditDocumentationFiles(folder_s_1m)
```

Arguments

folder_s_1m	An length-1 or more vector of existing folder names

Value

Provides a named list with two entries named correct and incorrect. All entries are file names.

Incorrect entries are the ones that has length issues as detected by function computeDocumentationStatistics.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

See Also

Function verifyDocumentationFile allows to check documentation content using standard R function tools:checkRd.

Examples

```
auditDocumentationFiles('man')
```

beautify *Beautify* R *documentation content*

Description

R documentation beautifying functions

Usage

```
beautify(escapeBraces_b_1 = FALSE)
```

Arguments

escapeBraces_b_1
: A single boolean value, allowing to escape braces also

Value

A named list of R vectorized functions. See examples below.

Content provided to function will be processed by function generateMarkup.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

Examples

```
b <- beautify()
cat('length', length(b), '\n')
#25

cat(names(b), '\n')
# acronym bold cite code dQuote email emph enc env figure file format kbd link
# option pkg preformatted samp source sQuote strong url var verb codelink

x <- 'some content'
cat(x, ':', b$code(x), '\n')
#some content : \code{some content}
```

---

completeManualPage *Complete Manual Page*

Description

Complete a manual page

Usage

```
completeManualPage(filename_s_1, processingContext_o,
                   add_b_1 = TRUE, verbosity_b_1 = FALSE)
```

Arguments

filename_s_1
: A single string value that is a file name

processingContext_o
: a single processing object. See ***codeProcessingContext***. Only postProcessing_l parameter is considered by this function.

add_b_1
: a boolean flag. When TRUE add content to existing content. Otherwise patch content.

verbosity_b_1
: a single boolean flag, to set or unset verbosity

Value

This function adds or patches on-demand sections of a manual page file.

You may consider twice prior using this function. It is a convenience that aims to sustain your productivity. You may get very quick results using it, but at the probable cost of non reproducibility in comparison with manual pages produced using function ManualPageBuilder.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

Examples

```
f <- function() {}
ic <- InputContext(NULL, 'f')
p <- produceManualPage(ic)
# WARNING: File /tmp/Rtmpvk4BG5/f.Rd
# checkRd: (5) /tmp/Rtmpvk4BG5/f.Rd:0-9: Must have a \description


completeManualPage(p$context$filename,
   ProcessingContext(postProcessing_l = list(
      details = function(content_s) 'some more details',
      concept = function(content_s) 'yet another concept'
   )), verbosity = TRUE
)
# adding details
# adding concept
# [1] TRUE
```

---

computeDocumentationStatistics

Compute Documentation Statistics

Description

Compute documentation statistics, providing section length in lines and identifying too long lines.

Usage

```
computeDocumentationStatistics(filename_s_1, maxLineLength_pi_1 = 100L)
```

Arguments

filename_s_1	A single string value
maxLineLength_pi_1	A single positive integer value

Details

Wherever a line_length_issue is not NA, you should correct the faulty line by editing the file. Not doing so will very probably imply a failure during check package procedure execution.

Value

A data.table with three columns.

keywords	the section names embedded in the file
lines	the number of lines for the section
line_length_issue	the line numbers where issues are found or NA.

Note

This function should be use when prior package delivery, to ensure documentation lines meet the R documentation specifications.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

Examples

```
# computeDocumentationStatistics('myfile.Rd')
```

---

convertExamples *Convert Examples*

Description

Generate example section content from R code.

Usage

```
convertExamples(examples_l, captureOutput_b_1n = TRUE,
                mode_s_1n = c(NA, "donttest", "dontrun", "dontshow")[1])
```

Arguments

examples_l	An unconstrained list of functions
captureOutput_b_1n	a length-1 or N boolean vector
mode_s_1n	An length-1 or N vector of string values taken amongst valid values. See examples below.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

Examples

```
someComputation <- function(numberAsString_s_1) {
  suppressWarnings(sum(as.integer(strsplit(numberAsString_s_1, '')[[1]]), na.rm = TRUE))
}

examples <- list(
  function() {
    someComputation("145")
  },
  function() {
    someComputation("1547215")
  },
  function() {
    someComputation(NA_character_)
  },
  function() {
    invisible(someComputation("0x145ABC"))
  }
)

cat(convertExamples(examples, TRUE , c(NA_character_, 'donttest', 'dontrun', 'dontshow')))
# ------- example 1 -------
# someComputation("145")
# 10

# \\donttest{
# ------- example 2 -------
someComputation("1547215")
# 25
# }
# \\dontrun{
# ------- example 3 -------
# someComputation(NA)
# 0
# }
# \dontshow{
# ------- example 4 -------
#invisible(someComputation("0x145ABC"))
# }"
```

---

dummy *Data set dummy*

Description

Data set to be used as example for demo purpose.

Usage

```
dummy
```

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

Source

Data set generated by NEONIRA

---

escapeContent *Escape Specials Characters In Content*

Description

Manage characters to be escaped in R documentation text

Usage

```
escapeContent(content_s_1, escapeBraces_b_1 = FALSE)
```

Arguments

`content_s_1`	A single `string` value that is the content to consider
`escapeBraces_b_1`	A single `boolean` value, allowing also to escape braces

Value

A single `string` with character '@' and '%' escaped.

When `escapeBraces_b_1` is set, characters '{' and '}' are also escaped.

Author(s)

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Maintainer: Fabien Gelineau <neonira@gmail.com>

Examples

```
escapeContent('www@xxx.com')
# "www@@xxx.com"

escapeContent('\\code{ x %% y }', TRUE)
# "\\code\{ x \%\% y \}"
```

`family` *Data set family*

Description

Data set to be used as example for demo purpose.

Usage

```
family
```

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

Source

Data set generated by NEONIRA

`generateEnc` *Generate Enc*

Description

Generate special markup for encoding text in R documentation

Usage

```
generateEnc(entries_l)
```

Arguments

`entries_l`	An unconstrained named `list` of `list`with `text` and `ascii` names, holding respectively international text and ASCII equivalent.

Value

A `list` of `strings`

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

Examples

```
generateEnc(list(list(text = 'Français', ascii = 'Francais')))
# [[1]]
# [1] "\enc{Français}{Francais}"

generateEnc(list(list(text = 'é', ascii = 'e'), list(text = 'è', ascii = 'e')))
# [[1]]
# [1] "\enc{é}{e}"

# [[2]]
# [1] "\enc{è}{e}"
```

---

generateEnumeration *Generate Enumeration*

Description

Generate enumeration for R documentation

Usage

```
generateEnumeration(entries_s, itemize_b_1 = FALSE)
```

Arguments

entries_s	An unconstrained vector of strings
itemize_b_1	A single boolean value

Value

A special character vector to mimic either enumerate or itemize accordingly to R documentation specification.

Set itemize_b_1 to TRUE if you want an item list, instead of an enumeration.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

Examples

```
generateEnumeration(LETTERS[1:3])
# [1] "\enumerate{\item  A\n\item  B\n\item  C}"

generateEnumeration(LETTERS[1:3], TRUE)
# [1] "\itemize{\item  A\n\item  B\n\item  C}"
```

`generateMarkup` *Generate* R *documentation atomic piece*

Description

Generate R documentation atomic pieces, managing various parameters to fulfil R documentation requirements.

Usage

```
generateMarkup(content_s, keyword_s_1 = NA_character_,
               content2_s = NA_character_,
               inline_b_1 = TRUE, useSpace_b_1 = FALSE,
               escapeBraces_b_1 = FALSE,
               content3_s = NA_character_)
```

Arguments

`content_s`	a `vector` of strings, that is the content to consider
`keyword_s_1`	a R documentation keyword. See `rdocKeywords`.
`content2_s`	a `vector` of strings that is a second content, useful with some keywords that require two members
`inline_b_1`	a single `boolean` expressing if the result should be printed on a single line or not?
`useSpace_b_1`	a single `boolean` asking for space insertion. When dealing with documentation keywords that requires two members, some may require a space in between to work properly. This parameters allows you to ask for this.
`escapeBraces_b_1`	when `TRUE`, braces characters are escaped
`content3_s`	a `vector` of strings that is a third content, useful with some keywords that require three members

Details

Very convenient function, to customize your R documentation output.

Might be used programmatically to generate pieces or full documentation.

Tested thoroughly with zero, one, two and three contents to cover all the markups of R documentation.

See examples below.

Value

A single `string`, containing one or several lines of text. Provided content is processed by function `escapeContent`.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

References

Refer to Writing R extensions to know more about R documentation requirements.

See Also

Refer to `escapeContent`.

Examples

```
# 0. zero content example
print(generateMarkup(keyword = 'R'))
# "\\R"

# 1. one content example
print(generateMarkup('a title', 'title'))
# "\\title{a title}"

# 2. Two contents examples
print(generateMarkup('https://neonira.github.io/offensiveProgrammingBook/',
'href', 'Offensive Programming Book'))
# "\\href{https://neonira.github.io/offensiveProgrammingBook/}{Offensive Programming Book}"

print(generateMarkup('a', 'item', 'description of a', useSpace_b_1 = TRUE))
# "\\item{a} {description of a}"

print(generateMarkup('a', 'item', 'description of a', useSpace_b_1 = FALSE))
"\\item{a}{description of a}"

# 3. Three contents example
print(generateMarkup('content_1', 'ifelse', 'content_2', content3_s = 'content_3'))
# "\\ifelse{content_1}{content_2}{content_3}"
```

`generateOptionLink` *Generate Option Link*

Description

Generate cross reference in R documentation

Usage

```
generateOptionLink(options_s_1, topicName_s_1, escapeBraces_b_1 = FALSE)
```

Arguments

options_s_1	A single string value that is generally a package name
topicName_s_1	A single string value that is the generally a function name
escapeBraces_b_1	A single boolean value, asking to escape braces

Value

A single string, containing one option link. See references and examples below.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

References

Refer to Writing R extensions section 2.5, to know more about using cross references in R documentation.

Examples

```
# Typical use case
generateOptionLink('myPackage', 'myFunction')
#[1] "\\link[myPackage]{myFunction}"

# Refer to reference R documentation for following case
generateOptionLink('=terms.object', 'terms')
#[1] "\\link[=terms.object]{terms}"
```

---

generateOptionSexpr *Generate Option Sexpr*

Description

Generation option Sexpr in R documentation

Usage

```
generateOptionSexpr(options_s_1, topicName_s_1, escapeBraces_b_1 = FALSE)
```

Arguments

options_s_1	A single string value that is generally R code used to set expression options
topicName_s_1	A single string value that is the generally R code
escapeBraces_b_1	A single boolean value, asking to escape braces

Value

A single string, containing one option Sexpr. See references and examples below.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

References

Refer to Writing R extensions section 2.12, to know more about using Sexpr handling in R documentation.

Examples

```
generateOptionSexpr('echo=TRUE', 'x <- 1')
#[1] "\\Sexpr[echo=TRUE]{x <- 1}"
```

---

generateParagraph *Generate Paragraph*

Description

Generate paragraph, collating provided contents with given string.

Usage

```
generateParagraph(..., collapse_s_1 = "\n", addFinalSeparator_b_1 = FALSE)
```

Arguments

...	additional arguments, content to be collated.
collapse_s_1	The string to be used to collate content
addFinalSeparator_b_1	A single boolean value. When TRUE, a final separator will be added to generated content.

Value

A single string, with possibly many new line character embedded.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

See Also

Functions generateParagraph2NL and generateParagraphCR.

Examples

```
generateParagraph(LETTERS[1:3])
# "A\nB\nC"

generateParagraph(LETTERS[1:3], addFinalSeparator_b_1 = TRUE)
# "A\nB\nC\n"
```

---

generateParagraph2NL *Function generateParagraph2NL*

Description

Generate paragraph, collating provided contents with double new line.

Usage

```
generateParagraph2NL(..., addFinalSeparator_b_1 = FALSE)
```

Arguments

...	additional arguments.
addFinalSeparator_b_1	A single boolean value, asking to add an extraneous new line at the end of the computed string.

Value

A single string, with possibly many new line character embedded.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

See Also

Functions generateParagraph and generateParagraphCR.

Examples

```
generateParagraph2NL(LETTERS[1:3])
# "A\n\nB\n\nC"

generateParagraph2NL(LETTERS[1:3], addFinalSeparator_b_1 = TRUE)
# "A\n\nB\n\nC\n\n"
```

`generateParagraphCR` *Function generateParagraphCR*

Description

Data set to be used as example for demo purpose.

Usage

```
generateParagraphCR(..., addFinalSeparator_b_1 = FALSE)
```

Arguments

`...`	additional arguments.
`addFinalSeparator_b_1`	A single `boolean` value

Value

A single `string`, with possibly many embedded '\cr' character sequences.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

Source

Data set generated by NEONIRA

See Also

Functions `generateParagraph` and `generateParagraph2NL`.

Examples

```
generateParagraphCR(LETTERS[1:3])
# "A\\crB\\crC"

generateParagraphCR(LETTERS[1:3], addFinalSeparator_b_1 = TRUE)
# "A\\crB\\crC\cr"
```

`generateReference` *Generate Reference*

Description

Generate text to standardize references.

Usage

```
generateReference(data_l)
```

Arguments

`data_l`	An unconstrained `list`

Value

A single `string`, containing the generated reference text. Can be appended several times to elaborate a multiple reference text.

See references and examples below.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

References

Refer to Writing R extensions to know more about using web references in R documentation.

Examples

```
generateReference(
  list(url = 'https://neonira.github.io/offensiveProgrammingBook/',
       label = 'Offensive Programming Book')
)
# "Refer to
# \\href{https://neonira.github.io/offensiveProgrammingBook/}{Offensive Programming Book}."
```

`generateS3MethodSignature` *Generate S3 method signature*

Description

Function to create easily function signature from an S3 class

Usage

```
generateS3MethodSignature(methodName_s_1, className_s_1, argumentNames_s)
```

Arguments

`methodName_s_1`	a single `string` that is the function/method name to consider
`className_s_1`	a single `string` that is the class name to consider
`argumentNames_s`	a `vector` of strings that are the function/method argument names

Value

A single `string`.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

References

Refer to Writing R extensions to know more about R documentation requirements.

Examples

```
print(generateReference(
         list(url = 'https://neonira.github.io/offensiveProgrammingBook/',
             label = 'Offensive Programming Book')
))
# provides following result
# "Refer to \href{https://neonira.github.io/offensiveProgrammingBook/}{Offensive Programming Book}."
```

`generateSection` *Generate Section*

Description

Generate R documentation section

Usage

```
generateSection(sectionName_s_1, content_s)
```

Arguments

`sectionName_s_1`	A single `string` value
`content_s`	An unconstrained `vector` of string values

Value

A single `string`, containing the generated reference text. Can be appended several times to elaborate a multiple reference text.

See references and examples below.

Note

This function should not be used directly unless you need to write your own manual page generation program.

To generate a manual page directly, you would better use `produceManualPage`.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

References

Refer to Writing R extensions to know more about using web references in R documentation.

Refer to Parsing Rd files by Duncan Murdoch.

Examples

```
generateSection('concept', 'meta programming')
# "\\concept{meta programming}"
```

`generateTable` *Generate Table*

Description

Generate table format in R documentation

Usage

```
generateTable(content_dt, alignement_s_1 = NA_character_,
              numberRows_b_1 = FALSE, showHeader_b_1 = TRUE)
```

Arguments

`content_dt`	A `data.table` to be use a source data
`alignement_s_1`	A single `string` value, expressing the column alignment directive
`numberRows_b_1`	A single `boolean` value. Set it when you want data rows to be automatically numbered.
`showHeader_b_1`	A single `boolean` value. Set it when you want column names to be displayed.

Value

A single `string`, containing potentially many embedded formatting strings.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

References

Refer to Writing R extensions section `Lists` and `Tables` .

Examples

```
library(data.table)
dt <- data.table::data.table(x = runif(3), y = letters[1:3])

generateTable(dt)
# "\tabular{ll}{\n0.975343016441911 \tab a \cr\n
#  0.647014946676791 \tab b \cr\n0.576294980244711 \tab c \cr\n}"

generateTable(dt, numberRows_b_1 = TRUE)
# "\tabular{rll}{\n1 \tab 0.11690619844012 \tab a \cr\n
#  2 \tab 0.467709563905373 \tab b \cr\n3 \tab 0.957075224025175 \tab c \cr\n}"
```

GenerationContext-class

Generation Context

Description

Define a generation context to produce a manual page

Usage

```
GenerationContext(targetFolder_s_1 = tempdir(),
                  overwrite_b_1 = FALSE,
                  verbosity_b_1 = FALSE,
                  useMarkers_b_1 = FALSE
)
```

Arguments

targetFolder_s_1	a single string that is the target folder to store produced manual pages. Must exist.
overwrite_b_1	a single boolean value, allowing to overwrite an existing manual page.
verbosity_b_1	a single boolean verbosity flag. Turn on for interactive use. Keep off for programmatic usage.
useMarkers_b_1	A single boolean value, specifying if sections should be generated with special markers whenever possible.

Value

An object instance of class GenerationContext based on environment.

Information

Environment fields:

↦ **overwrite_b_1**	logical
↦ **self**	environment
↦ **targetFolder_s_1**	character
↦ **useMarkers_b_1**	logical
↦ **verbosity_b_1**	logical

offensive programming - semantic naming: Class name compliance is TRUE.

offensive programming - function return types: Class owns no function return type instrumentation.

offensive programming - test case definitions: Class owns no test case definitions.

Author(s)

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Maintainer: Fabien Gelineau <neonira@gmail.com>

See Also

Class `InputContext` class `ProcessingContext` class and class `ManualPageBuilder`.

Examples

```
GenerationContext()

GenerationContext(overwrite = TRUE, verbosity = TRUE)
```

`getStandardSectionNames`

Get Standard Section Names

Description

Get R documentation standard section names

Usage

```
getStandardSectionNames(sort_b_1 = FALSE)
```

Arguments

`sort_b_1`	A single `boolean` value. Result is sorted when set to `TRUE`.

Value

A `vector` of type characters, expressing section names.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

References

Refer to Writing R extensions.

Examples

```
getStandardSectionNames()
# [1]  "name"           "docType"        "alias"          "title"          "description"
# [6]  "usage"          "arguments"      "details"        "value"          "custom_section"
# [11] "references"     "author"         "note"           "seealso"        "examples"
# [16] "keyword"        "concept"        "encoding"       "synopsis"       "Rdversion"
# [21] "RdOpts"         "Sexpr"
```

`identifyReplacementVariables` *Identify Replacement Variables*

Description

Identify replacement variables in the generated manual page to ease their substitutions.

Usage

```
identifyReplacementVariables(filename_s)
```

Arguments

`filename_s`	An unconstrained `vector` of string values that are the source filenames

Value

When producing a manual page using `produceManualPage` function, under format-driven mode, sections will be generated with a very simple content based on format `'XXX_???'` to ease post processing substitutions and hand-crafted replacements.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

See Also

Function `produceManualPage` and class `GenerationContext`.

Examples

```
# identifyReplacementVariables('myfile.Rd')
```

`InputContext-class` *Input Context*

Description

Environment class InputContext. Defines and eases input context management.

Usage

```
InputContext(object_o_1,
             methodName_s_1 = NA_character_,
             packageName_s_1 = NA_character_,
             dataFilename_s_1 = NA_character_
)
```

Arguments

`object_o_1`	a single `object` or `NULL`
`methodName_s_1`	a single `string` value that is the method name to consider
`packageName_s_1`	a single `string` that is the target package name to use
`dataFilename_s_1`	a single `string` that is the data file name

Value

An `object` instance.

Information

Environment fields:

↦ `beautifier`	list
↦ `class_kind`	character
↦ `class_name`	character
↦ `data_name`	NULL
↦ `dataFilename_s_1`	character
↦ `file_name`	character
↦ `hack_description`	logical
↦ `instrumentationLevel`	list
↦ `kind`	double
↦ `kinds`	character
↦ `methodName_s_1`	character
↦ `number_replacements`	integer
↦ `object_o_1`	list
↦ `packageName_s_1`	character
↦ `self`	environment

↦ typeFactory_o_1	environment
↦ use_markers	logical

Environment methods:
→ buildMethodName()
→ generateConditionalMarker(force_b_1 = FALSE)
→ generateConditionalMarker(Generatorforce_b_1 = FALSE)
→ getFilename()
→ getKind()
→ getName()
→ markerGenerator()
→ produceAlias()
→ produceArguments()
→ produceAuthor()
→ produceConcept()
→ produceCustom_section()
→ produceDescription()
→ produceDetails()
→ produceDocType()
→ produceEncoding()
→ produceExamples()
→ produceFormat()
→ produceKeyword()
→ produceName()
→ produceNote()
→ produceRdOpts()
→ produceRdversion()
→ produceReferences()
→ produceSeealso()
→ produceSexpr()
→ produceSource()
→ produceSynopsis()
→ produceTitle()
→ produceUsage()
→ produceValue()
→ retrieveStrategy()
→ setUseMarkers(value_b_1)

offensive programming - semantic naming: Class name compliance is TRUE.

offensive programming - function return types: Class owns no function return type instrumentation.

offensive programming - test case definitions: Class owns no test case definitions.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

See Also

Class GenerationContext class ProcessingContext class and class ManualPageBuilder.

Examples

```
ic1 <- InputContext(NULL)

ic2 <- InputContext(NULL, 'append', package = 'my.package.name')
```

---

interpretResults *Interpret Results*

Description

Interpret results of function ManualPageBuilder

Usage

```
interpretResults(manualPageGenerationResults_l)
```

Arguments

manualPageGenerationResults_l
: A list resulting from ManualPageBuilder function.

Details

This function checks for presence of content that should be present in a well formated and documented function manual page. It provides hints. You could follow those hints to produce great documentation.

Value

Provides output that allows to know which sections has been generated and which sections are missing or probably missing.

Good practice

When producing a manual page using ManualPageBuilder, keeping the result in a R variable allows you to interpret this result at any time in the future. This is helpful when working incrementally to produce a fully automated generation scheme for a given manual page. See examples below.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

Examples

```
ic <- InputContext(NULL, 'append', packageName_s_1 = 'wyz.code.rdoc')

res <- produceManualPage(ic)
# WARNING: File /tmp/RtmpYIampA/append.Rd
# checkRd: (5) /tmp/RtmpYIampA/append.Rd:0-19: Must have a \description

interpretResults(res)
# filename is /tmp/RtmpYIampA/append.Rd [OVERWRITTEN]
# generated 8 sections: name, alias, title, usage, arguments, author, keyword, encoding
# missing 3 sections: description, value, examples
# probably missing 1 section: details
```

ManualPageBuilder-class

Manual Page Builder

Description

Environment class ManualPageBuilder. Creates manual pages according to the given context.

Usage

```
ManualPageBuilder(inputContext_o_1,
                  processingContext_o_1 = ProcessingContext(),
                  generationContext_o_1 = GenerationContext())
```

Arguments

`inputContext_o_1`
: The input context `object` to consider for generation. See `InputContext`.

`processingContext_o_1`
: The processing context `object` to consider for generation. See `ProcessingContext`.

`generationContext_o_1`
: The generation context `object` to consider for generation. See `GenerationContext`.

Value

An object instance of class `ManualPageBuilder`.

Information

Environment fields:

↦ `colorizer`	list
↦ `generationContext_o_1`	environment
↦ `inputContext_o_1`	environment
↦ `processingContext_o_1`	environment

↦ `self`	environment
↦ `strategy`	list

Environment methods:
→ `assembleManualPage(pieces_l)`
→ `buildManualPage()`
→ `documentContent()`
→ `getStrategy`
→ `interpretResults(result_l)`

offensive programming - semantic naming: Class name compliance is `TRUE`.

offensive programming - function return types: Class owns no function return type instrumentation.

offensive programming - test case definitions: Class owns no test case definitions.

Note

As an end-user, you may prefer to use function `produceManualPage` as its usage is much more straightforward.

As a programmer, this class eases programmation of your own manual page builder. See examples below.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

See Also

Class `InputContext` class `ProcessingContext` and class `GenerationContext`.

Examples

```
ic <- InputContext(NULL, 'append', package = 'my.package.name')
m <- ManualPageBuilder(ic)
r <- m$buildManualPage()
interpretResults(r)
```

opRdocInformation *Offensive Programming R Documentation Information*

Description

List package functions and provide informations about their intented usage.

Usage

```
opRdocInformation()
```

Value

See opInformation value description.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

Examples

```
opRdocInformation()
```

ProcessingContext-class *Processing Context*

Description

Environment class ProcessingContext. Defines and eases processing context management.

Usage

```
ProcessingContext(extraneous_l = list(), postProcessing_l = list())
```

Arguments

extraneous_l	An unconstrained named list. Each entry will be turned into a R documentation section.
postProcessing_l	An unconstrained named list. Each entry will trigger a post processing for the related R documentation section.

Details

If a post processing function returns NULL, related section will be removed from generated content. See examples below.

Post processing aims to put in action simple transformations, as changing letter cases, or applying simple beautifying technics. See beautify.

Value

An object instance of class ProcessingContext.

Information

Environment fields:

↦ extraneous_l	list
↦ postProcessing_l	list
↦ self	environment

Environment methods:
→ verifyExtraneous(extraneous_l)
→ verifyPostProcessing(postProcessing_l)

offensive programming - semantic naming: Class name compliance is TRUE.

offensive programming - function return types: Class owns no function return type instrumentation.

offensive programming - test case definitions: Class owns no test case definitions.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

See Also

Class InputContext class GenerationContext class and class ManualPageBuilder.

Examples

```
pc <- ProcessingContext(
  extraneous_l = list(
    'my section' = "a special dedicace to neonira",
    keyword = 'documentation',
    concept = 'documentation generation'
  ),
  postProcessing_l = list(
    'my section' = function(content_s) {
```

```
        gsub('neonira', 'NEONIRA', content_s, fixed = TRUE)
      },
      author = function(content_s) { NULL } # destroy section
    )
  )
```

`produceAllManualPagesFromObject` *Produce All Manual Pages From Object*

Description

Produce object and methods manual pages from an object.

Usage

```
produceAllManualPagesFromObject(object_o_1,
                                processingContext_o_1 = ProcessingContext(),
                                generationContext_o_1 = GenerationContext(),
                                packageName_s_1 = NA_character_)
```

Arguments

`object_o_1`	The single `object` you want to generate manual pages from.
`processingContext_o_1`	The processing context `object` to consider for generation. See ***\codeProcessingContext***.
`generationContext_o_1`	The generation context `object` to consider for generation. See `GenerationContext`.
`packageName_s_1`	a single `string` that is the target package name to consider for generation. Allows to generate automatically the `author` section content.

Note

This is an **EXPERIMENTAL** function. Prefer usage of function `produceManualPage` instead.

It generates reliable individual manual pages that taken all together are not fully compatible with R way to express documentation.

In particular, expect duplicated aliases to appear, and some name weirdness also.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

`produceDocumentationFile` *Produce Documentation File*

Description

Use this function to save documentation text into a documentation file.

Usage

```
produceDocumentationFile(filename_s_1, content_s, generationContext_o_1)
```

Arguments

`filename_s_1`	the target file name to use
`content_s`	An unconstrained vector of string values
`generationContext_o_1`	The generation context object to consider for generation. See `GenerationContext`.

Classification

STRATUM ⟼ LAYER_1

PHASING ⟼ BUILD

INTENT ⟼ CONTENT_GENERATION

Note

From a end-user perspective, this function should only be used indirectly through a call to `produceManualPage` function.

Direct call is meaningful when crafting your own manual page builder code/program.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

Examples

```
fn <- tempfile()
p <- produceDocumentationFile(basename(fn), c(
  generateSection('name', 'alpha'),
  generateSection('alias', 'alpha'),
  generateSection('keyword', 'documentation generation')
),
GenerationContext(dirname(fn)))

p
```

```
# $filename
# [1] "/tmp/RtmpSWZq4H/filee3c2700207f.Rd"
#
# $overwritten
# [1] TRUE

readLines(p$filename)
# [1] "\name{alpha}" "\alias{alpha}" "\keyword{documentation generation}"
```

`produceManualPage` *Produce Manual Page*

Description

Use this function to produce a manual page.

Usage

```
produceManualPage(inputContext_o_1,
                  processingContext_o_1 = ProcessingContext(),
                  generationContext_o_1 = GenerationContext())
```

Arguments

`inputContext_o_1`
: The input context object to consider for generation. See `InputContext`.

`processingContext_o_1`
: The processing context object to consider for generation. See `ProcessingContext`.

`generationContext_o_1`
: The generation context object to consider for generation. See `GenerationContext`.

Value

A `list` holding generation process information.

Use function `interpretResults` to get knowledge of generated parts and remaining issues.

Classification

STRATUM $\longmapsto$ LAYER_3

PHASING $\longmapsto$ RUN

INTENT $\longmapsto$ QUALITY_CONTROL

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

Examples

```
ic <- InputContext(NULL, 'append', packageName_s_1 = 'wyz.code.rdoc')

res <- produceManualPage(ic)
# WARNING: File /tmp/RtmpYIampA/append.Rd
# checkRd: (5) /tmp/RtmpYIampA/append.Rd:0-19: Must have a \description

interpretResults(res)
# filename is /tmp/RtmpYIampA/append.Rd [OVERWRITTEN]
# generated 8 sections: name, alias, title, usage, arguments, author, keyword, encoding
# missing 3 sections: description, value, examples
# probably missing 1 section: details
```

---

producePackageLink *Produce Package Link*

Description

Generation package cross reference in R documentation

Usage

```
producePackageLink(packageName_s_1, topicName_s_1)
```

Arguments

packageName_s_1	A single string value that represents generally a package name considered as source for the topic
topicName_s_1	A single string value that is generally a documentation topic to link to

Value

A single string, containing the generated package link. See references and examples below.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

References

Refer to Writing R extensions section 2.5, to know more about using cross references in R documentation.

See Also

See option link creation using function generateOptionLink.

Examples

```
producePackageLink('tools', 'checkRd')
#[1] "\\link{tools:checkRd}{tools:checkRd}"
```

`rdocKeywords` *R Documentation Keywords*

Description

Provides all R documentation markup tags a.k.a keywords

Usage

```
rdocKeywords(asList_b_1 = FALSE)
```

Arguments

`asList_b_1`	A single `boolean`.

Value

A `vector` of type characters, containing all R documentation keywords, when parameter `asList_b_1` is `FALSE`. Otherwise a `list` organizing this same content.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

References

Refer to Writing R extensions.

Examples

```
rdocKeywords()
```

`sentensize` *Create sentence*

Description

Create a sentence from given content

Usage

```
sentensize(x_s, ..., punctuationCharacter_s_1 = ".")
```

Arguments

`x_s`	An unconstrained `vector` of string values
`...`	additional arguments (should be convertible to `character` type).
`punctuationCharacter_s_1`	the punctuation `character` to use to end the sentence.

Details

Collate all provided arguments, then normalize spaces.

Finally, ensure capitalization of first letter and final colon.

Value

A single `string`.

Note

There is no way to ask for a different final punctuation mark. If you need to do so, either create your own helper function or simply sub provided result.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

Examples

```
sentensize('a quick brown FOX jumps\tover', 'the     lazy      dog')
#  "A quick brown FOX jumps over the lazy dog."

sentensize('a simple', '  question\t', punctuationCharacter_s_1 = '?')
#  "A simple question?"
```

shortcuts *Function shortcuts*

Description

Use this function to exploit prepared and customized shortcuts.

Usage

```
shortcuts(arguments_s = character(), doubleEscape_b_1 = TRUE)
```

Arguments

arguments_s	A vector of function arguments you would like to get shortcuts for
doubleEscape_b_1	A single boolean asking for double escape. On by default.

Value

A list with following names

doc	very common single R documentation keywords
constants	very common R constants used in R documentation
types	very common R types used in R documentation
args	function arguments ready to use in R documentation

The names are all turned to lowercase.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

Examples

```
shortcuts(formalArgs(GenerationContext))
```

verifyDocumentationFile *Verify Documentation File*

Description

Verify documentation file compliance to R documentation scheme.

Usage

```
verifyDocumentationFile(filename_s_1)
```

Arguments

filename_s_1	A single string value that is the filename holding R documentation to check

Value

Echoes on stdout status of documentation verification, as done by tools:checkRd.

Author(s)

Fabien Gelineau <neonira@gmail.com>

Maintainer: Fabien Gelineau <neonira@gmail.com>

Examples

```
# verifyDocumentationFile("myfile.Rd")
```

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