Roxygen Quick Reference

roxygen2 is an R package that allows you to write in-source documentation for your package functions and objects.

Write documentation above your package functions with the #' comment prefix.

Documenting Functions

Example

```
#' This is the title.
#' This is the description.
#' These are further details.
#' @section A Custom Section:
#'
#' Text accompanying the custom section.
#'
#' @param x A description of the parameter 'x'. The
     description can span multiple lines.
#' @param y A description of the parameter 'y'.
#'
#' @export
#'
#' @examples
#' add_numbers(1, 2) ## returns 3
#' ## don't run this in calls to 'example(add_numbers)'
#' \dontrun{
#'
      add_numbers(2, 3)
#'}
#' ## don't test this during 'R CMD check'
#' \donttest{
      add_numbers(4, 5)
add_numbers <- function(x, y) {</pre>
     x + y
```

Common Tags

Ananam (nama) (description)	Decument a function parameter
<pre>@param <name> <description></description></name></pre>	Document a function parameter.
@export	Make this function available to users of your package.
<pre>@examples <r-code></r-code></pre>	Inline R code showing how the function is used.
	Wrap code blocks in to prevent them from running on calls to example(). Use to disable running this code in R CMD check.
@return	Describe what this function returns.
<pre>@family <family-name></family-name></pre>	Automatically generate links to other functions within this family in the documentation's See Also section.
@seealso	Provide links to other resources that could help users understand how to use your

	function.
@inheritParams <function></function>	Re-use parameter documentation from another function.
	Use @inheritParams <package::function> to re-use documentation from a function in a separate package.</package::function>
<pre>@section <name>:</name></pre>	Provide a custom section with the name <name>. The line must end with a colon (:).</name>

In addition, you can use **@keywords internal** to ensure that documentation for a particular function is generated, but not added to the package index.

Documenting Packages

By convention, package documentation is usually included in a file R/<package-name>-package.R. The roxygen block providing package documentation should contain the @docType package field declaration, and should end with NULL.

Example

```
#' Package Name
#'
#' Package description.
#'
#' @docType package
#' @name <package-name>
#' @import assertthat
#' @importFrom utils head tail
#' @useDynLib <package-name>
NULL
```

Common Tags

@import <pkg></pkg>	Import all symbols from a package, for use in your own package's functions.
@importFrom <pkg> <symbols></symbols></pkg>	Selectively import symbols from a package, for use in your own package's functions.
@useDynLib <own-pkg></own-pkg>	Include this if your package contains C / C++ code.

Rd Markup

Use R Documentation LaTeX-style markup to further style your documentation.

	For italicized text.
	For bold text.
	For code or otherwise pre-formatted text.
<pre>\link{object} \link[=class]{object} \linkS4class{S4Class}</pre>	Used to link to other R documentation. For example, use \code{\link{rnorm}} to link to the documentation associated with the rnorm function.
\url{URL} \href{URL}{text}	Link to content on the internet; for example, external documentation. Use \href{URL}{text} if you want the displayed text to differ from the linked URL.

```
\enumerate{<items...>}
                                              Provide a list of items. \enumerate{} delimits
\itemize{<items...>}
                                              entries with sequential numbers, while
\describe{<items...>}
                                              \itemize{} delimits entries with bullets.
                                                 \enumerate{
                                                    \item Item 1.
                                                    \item Item 2.
                                                    \item Item 3.
                                                 }
                                              \describe{} differs in that items are specified
                                              with labels as well as text, e.g.
                                                 \describe{
                                                    \item{label-1}{text-1}
                                                    \item{label-2}{text-2}
                                                 }
                                              Provide a table of text.
\tabular{alignment}{text}
                                              Separate fields with \tab, and rows with \cr.
                                              alignment is a string of 1 / c / r, indicating
                                              left, center, and right alignment respectively.
                                              There should be one letter for each column in
                                              the table.
                                                 \tabular{rl}{
                                                    Entry 1 \tab Entry 2 \cr
                                                    Entry 3 \tab Entry 4 \cr
                                                 }
```

Learning More

Read Hadley Wickham's guide in <u>R Packages</u> to learn more about how to use roxygen2 and devtools to produce documentation for your R packages.

Read the <u>roxygen</u> vignettes: start with the introductory vignette with vignette("roxygen2"), and view other available vignettes with vignette(package = "roxygen2").

Read $\underline{\text{R-exts}}$ for a comprehensive guide to .Rd documentation and the set of available tags (which are understood by roxygen as well).