

Package ‘downlit’

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Title Syntax Highlighting and Automatic Linking

Version 0.2.1

Description Syntax highlighting of R code, specifically designed for the needs of 'RMarkdown' packages like 'pkgdown', 'hugodown', and 'bookdown'. It includes linking of function calls to their documentation on the web, and automatic translation of ANSI escapes in output to the equivalent HTML.

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Depends R (>= 3.2.0)

Imports brio, digest, evaluate, fansi, rlang, vctrs, yaml

Suggests rmarkdown, jsonlite, MASS, testthat (>= 3.0.0), covr, pkgload, xml2

Encoding UTF-8

LazyData true

RoxygenNote 7.1.1

URL <https://downlit.r-lib.org/>, <https://github.com/r-lib/downlit>

BugReports <https://github.com/r-lib/downlit/issues>

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NeedsCompilation no

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autolink	<i>Automatically link inline code</i>
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Description

Automatically link inline code

Usage

```
autolink(text)
```

```
autolink_url(text)
```

Arguments

text	String of code to highlight and link.
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Value

If text is linkable, an HTML link for `autolink()`, and or just the URL for `autolink_url()`. Both return NA if the text is not linkable.

Examples

```
autolink("stats::median()")
autolink("vignette('grid', package = 'grid')")

autolink_url("stats::median()")
```

downlit_html_path	<i>Syntax highlight and link an HTML page</i>
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Description

- Code blocks, identified by `<pre>` tags with class `sourceCode` or any `<pre>` tag inside of `<div class='downlit'>`, are processed with `highlight()`.
- Inline code, identified by `<code>` tags that contain only text (and don't have a header tag (e.g. `<h1>`) or `<a>` as an ancestor) are processed with `autolink()`.

Use `downlit_html_path()` to process an `.html` file on disk; use `downlit_html_node()` to process an in-memory `xml_node` as part of a larger pipeline.

Usage

```
downlit_html_path(in_path, out_path, classes = classes_pandoc())
```

```
downlit_html_node(x, classes = classes_pandoc())
```

Arguments

in_path, out_path	Input and output paths for HTML file
classes	A mapping between token names and CSS class names. Bundled classes_pandoc() and classes_chroma() provide mappings that (roughly) match Pandoc and chroma (used by hugo) classes so you can use existing themes.
x	An xml2::xml_node

Value

downlit_html_path() invisibly returns output_path; downlit_html_node() modifies x in place and returns nothing.

Examples

```
node <- xml2::read_xml("<p><code>base::t()</code></p>")
node

# node is modified in place
downlit_html_node(node)
node
```

downlit_md_path	<i>Syntax highlight and link a md document</i>
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Description

downlit_md_* works by traversing the markdown AST generated by Pandoc. It applies [highlight\(\)](#) to CodeBlocks and [autolink\(\)](#) to inline Code.

Use downlit_md_path() to transform a file on disk; use downlit_md_string() to transform a string containing markdown as part of a larger pipeline.

Needs pandoc 1.19 or later.

Usage

```
downlit_md_path(in_path, out_path, format = NULL)
```

```
downlit_md_string(x, format = NULL)
```

Arguments

in_path, out_path	Input and output paths for markdown file.
format	Pandoc format; defaults to "gfm" if you have pandoc 2.0.0 or greater, otherwise "markdown_github".
x	A string containing markdown.

Value

downlit_md_path() invisibly returns output_path; downlit_md_string() returns a string containing markdown.

Examples

```
if (rmarkdown::pandoc_available("1.19")) {
  downlit_md_string("`base::t`")
  downlit_md_string("`base::t`")
  downlit_md_string("* `base::t`")

  # But don't highlight in headings
  downlit_md_string("## `base::t`")
}
```

evaluate_and_highlight

Evaluate code and syntax highlight the results

Description

This function runs code and captures the output using `evaluate::evaluate()`. It syntax highlights code with `highlight()`, and combines all results into a single HTML div.

Usage

```
evaluate_and_highlight(
  code,
  fig_save,
  classes = downlit::classes_pandoc(),
  env = NULL
)
```

Arguments

code	Code to evaluate (as a string).
fig_save	A function with arguments plot and id that is responsible for saving plot to a file (using id to disambiguate multiple plots in the same chunk). It should return a list with components path, width, and height.

classes	A mapping between token names and CSS class names. Bundled <code>classes_pandoc()</code> and <code>classes_chroma()</code> provide mappings that (roughly) match Pandoc and chroma (used by hugo) classes so you can use existing themes.
env	Environment in which to evaluate code; if not supplied, defaults to a child of the global environment.

Value

An string containing HTML.

Examples

```
evaluate_and_highlight("1 + 2")
```

highlight	<i>Highlight and link a code block</i>
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Description

This function:

- syntax highlights code
- links function calls to their documentation (where possible)
- in comments, translates ANSI escapes in to HTML equivalents.

Usage

```
highlight(text, classes = classes_chroma(), pre_class = NULL, code = FALSE)
```

```
classes_pandoc()
```

```
classes_chroma()
```

Arguments

text	String of code to highlight and link.
classes	A mapping between token names and CSS class names. Bundled <code>classes_pandoc()</code> and <code>classes_chroma()</code> provide mappings that (roughly) match Pandoc and chroma (used by hugo) classes so you can use existing themes.
pre_class	Class(es) to give output <code><pre></code> .
code	If TRUE, wrap output in a <code><code></code> block

Value

If text is valid R code, an HTML `<pre>` tag. Otherwise, NA.

A string containing syntax highlighted HTML or NA (if text isn't parseable).

Examples

```
cat(highlight("1 + 1"))
cat(highlight("base::t(1:3)"))

# Unparseable R code returns NA
cat(highlight("base::t("))
```

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