

Package ‘highlightr’

July 31, 2024

Title Highlight Conserved Edits Across Versions of a Document

Version 1.0.0

Description Input multiple versions of a source document, and receive HTML code for a highlighted version of the source document indicating the frequency of occurrence of phrases in the different versions. This method is described in Chapter 3 of Rogers (2024) <<https://digitalcommons.unl.edu/dissertations/AAI31240449/>>.

License MIT + file LICENSE

Encoding UTF-8

RoxygenNote 7.3.1

Imports dplyr, fuzzyjoin, ggplot2, magrittr, purrr, quanteda, quanteda.textstats, stringr, tibble, tidyr, tm

Depends R (>= 2.10)

LazyData true

URL <https://rachelesrogers.github.io/highlightr/>,
<https://github.com/rachelesrogers/highlightr>

Suggests knitr, rmarkdown, testthat (>= 3.0.0)

VignetteBuilder knitr

Config/testthat/edition 3

BugReports <https://github.com/rachelesrogers/highlightr/issues>

NeedsCompilation no

Author Center for Statistics and Applications in Forensic Evidence [aut, cph, fnd],
Rachel Rogers [aut, cre] (<<https://orcid.org/0000-0002-4145-9630/>>),
Susan VanderPlas [aut] (<<https://orcid.org/0000-0002-3803-0972/>>)

Maintainer Rachel Rogers <rrogers.rpackages@gmail.com>

Repository CRAN

Date/Publication 2024-07-31 10:40:23 UTC

Contents

collocate_comments	2
collocate_comments_fuzzy	3
collocation_plot	3
comment_example	4
highlighted_text	5
token_comments	5
token_transcript	6
transcript_example	6
transcript_frequency	7
wiki_pages	8

Index	9
--------------	----------

collocate_comments	<i>Collocation of Comments</i>
--------------------	--------------------------------

Description

This function provides the frequency of collocations in comments that correspond to the provided transcript.

Usage

```
collocate_comments(transcript_token, note_token, collocate_length = 5)
```

Arguments

`transcript_token`
transcript token to act as baseline for notes, resulting from `token_transcript()`

`note_token`
tokenized document of notes, resulting from `token_comments()`

`collocate_length`
the length of the collocation. Default is 5

Value

data frame of the transcript and corresponding note frequency

Examples

```
comment_example_rename <- dplyr::rename(comment_example, page_notes=Notes)
toks_comment <- token_comments(comment_example_rename)
transcript_example_rename <- dplyr::rename(transcript_example, text=Text)
toks_transcript <- token_transcript(transcript_example_rename)
collocation_object <- collocate_comments(toks_transcript, toks_comment)
```

collocate_comments_fuzzy
Collocate Comments Fuzzy

Description

This function provides the frequency of collocations in comments that correspond to the provided transcript, using fuzzy matching.

Usage

```
collocate_comments_fuzzy(transcript_token, note_token, collocate_length = 5)
```

Arguments

`transcript_token`
transcript token to act as baseline for notes, resulting from `token_transcript()`

`note_token`
tokenized document of notes, resulting from `token_comments()`

`collocate_length`
the length of the collocation. Default is 5

Value

data frame of the transcript and corresponding note frequency

Examples

```
comment_example_rename <- dplyr::rename(comment_example, page_notes=Notes)
toks_comment <- token_comments(comment_example_rename)
transcript_example_rename <- dplyr::rename(transcript_example, text=Text)
toks_transcript <- token_transcript(transcript_example_rename)
collocation_object <- collocate_comments_fuzzy(toks_transcript, toks_comment)
```

collocation_plot *Map collocation to ggplot object*

Description

This assigns colors based on frequency to the words in the transcript.

Usage

```
collocation_plot(
  frequency_doc,
  n_scenario = 1,
  colors = c("#f251fc", "#f8ff1b")
)
```

Arguments

frequency_doc document of frequencies (returned from `transcript_frequency()`)
 n_scenario number of scenarios for which this transcript appeared. Default is 1
 colors list for color specification for the gradient. Default is `c("#f251fc", "#f8ff1b")`

Value

list of plot, plot object, and frequency

Examples

```
comment_example_rename <- dplyr::rename(comment_example, page_notes=Notes)
toks_comment <- token_comments(comment_example_rename)
transcript_example_rename <- dplyr::rename(transcript_example, text=Text)
toks_transcript <- token_transcript(transcript_example_rename)
collocation_object <- collocate_comments_fuzzy(tok_s_transcript, toks_comment)
merged_frequency <- transcript_frequency(transcript_example_rename, collocation_object)
freq_plot <- collocation_plot(merged_frequency)
```

comment_example *Comment Example Dataset*

Description

Participant comments for the initial description used in the jury perception study

Usage

```
comment_example
```

Format

comment_example:
 A data frame with 125 rows and 2 columns:
ID Participant Identifier
Notes Participant notes

Source

Jury Perception Study (see Rogers (2024) <https://digitalcommons.unl.edu/dissertations/AAI31240449/>)

highlighted_text	<i>Create Highlighted Testimony</i>
------------------	-------------------------------------

Description

Adds html tags to create a highlighted testimony corresponding to word frequency.

Usage

```
highlighted_text(plot_object, labels = c("", ""))
```

Arguments

plot_object	plot object resulting from <code>collocation_plot()</code>
labels	lower and upper labels for the gradient scale

Value

html code for highlighted text

Examples

```
comment_example_rename <- dplyr::rename(comment_example, page_notes=Notes)
toks_comment <- token_comments(comment_example_rename)
transcript_example_rename <- dplyr::rename(transcript_example, text=Text)
toks_transcript <- token_transcript(transcript_example_rename)
collocation_object <- collocate_comments_fuzzy(tok_s_transcript, toks_comment)
merged_frequency <- transcript_frequency(transcript_example_rename, collocation_object)
freq_plot <- collocation_plot(merged_frequency)
page_highlight <- highlighted_text(freq_plot, merged_frequency)
```

token_comments	<i>Tokenize comments</i>
----------------	--------------------------

Description

This function tokenizes comments that are to be used in `collocate_comments_fuzzy()` or `collocate_comments()`

Usage

```
token_comments(comment_document)
```

Arguments

comment_document	document containing notes by individual, where the column containing the notes is named page_notes
------------------	--

Value

tokenized comments

Examples

```
comment_example_rename <- dplyr::rename(comment_example, page_notes=Notes)
toks_comment <- token_comments(comment_example_rename)
```

token_transcript	<i>Tokenize Transcript</i>
------------------	----------------------------

Description

This function tokenizes a transcript document that is to be used in [collocate_comments_fuzzy\(\)](#) or [collocate_comments\(\)](#)

Usage

```
token_transcript(transcript_file)
```

Arguments

transcript_file
data frame of the transcript, where the transcript text is in a column named text.

Value

a tokenized object

Examples

```
transcript_example_rename <- dplyr::rename(transcript_example, text=Text)
toks_transcript <- token_transcript(transcript_example_rename)
```

transcript_example	<i>Transcript Example</i>
--------------------	---------------------------

Description

Text corresponding to participant comments

Usage

```
transcript_example
```

Format

transcript_example:

A data frame with 1 row and 1 column:

Text Transcript text corresponding to the jury perception study

Source

Jury Perception Study (see Rogers (2024) <https://digitalcommons.unl.edu/dissertations/AAI31240449/>)

transcript_frequency *Mapping Collocation Frequency to Transcript Document*

Description

This function connects the collocation frequency calculated in `collocate_comments_fuzzy()` to the base transcript.

Usage

```
transcript_frequency(transcript, collocate_object)
```

Arguments

transcript transcript document

collocate_object

collocation object (returned from `collocate_comments_fuzzy()` or `collocate_comments()`)

Value

a dataframe of the transcript document with collocation values by word

Examples

```
comment_example_rename <- dplyr::rename(comment_example, page_notes=Notes)
toks_comment <- token_comments(comment_example_rename)
transcript_example_rename <- dplyr::rename(transcript_example, text=Text)
toks_transcript <- token_transcript(transcript_example_rename)
collocation_object <- collocate_comments_fuzzy(toks_transcript, toks_comment)
merged_frequency <- transcript_frequency(transcript_example_rename, collocation_object)
```

wiki_pages

Wikipedia Edit History for "Highlighter"

Description

Text corresponding to versions of the Wikipedia article for Highlighter

Usage

wiki_pages

Format

wiki_pages:

A data frame with 50 rows and 1 column:

page_notes text of the Wikipedia page for Highlighter

Source

Wikipedia: <https://en.wikipedia.org/w/index.php?title=Highlighter&action=history>

Index

* datasets

- comment_example, 4
- transcript_example, 6
- wiki_pages, 8

- collocate_comments, 2
- collocate_comments(), 5-7
- collocate_comments_fuzzy, 3
- collocate_comments_fuzzy(), 5-7
- collocation_plot, 3
- collocation_plot(), 5
- comment_example, 4

- highlighted_text, 5

- token_comments, 5
- token_comments(), 2, 3
- token_transcript, 6
- token_transcript(), 2, 3
- transcript_example, 6
- transcript_frequency, 7
- transcript_frequency(), 4

- wiki_pages, 8