

Package ‘highlightr’

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Title Highlight Conserved Edits Across Versions of a Document

Version 1.1.2

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/>>.

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Encoding UTF-8

RoxygenNote 7.3.2

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

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

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Contents

collocate_comments	2
collocate_comments_fuzzy	3
collocation_plot	4
comment_example	4
highlighted_text	5
token_comments	6
token_transcript	6
transcript_example	7
transcript_frequency	7
wiki_pages	8
Index	9

collocate_comments	<i>Collocation of Comments</i>
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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[1:100,])
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,
  n_bands = 50,
  threshold = 0.7
)
```

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
n_bands	number of bands used in MinHash algorithm passed to <code>zoomerjoin::jaccard_right_join()</code> . Default is 50
threshold	considered a match in for Jaccard distance passed to <code>zoomerjoin::jaccard_right_join()</code> . Default is 0.7

Value

data frame of the transcript and corresponding note frequency

Examples

```
comment_example_rename <- dplyr::rename(comment_example[1:10,], 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)
fuzzy_object <- collocate_comments_fuzzy(toks_transcript, toks_comment)
```

collocation_plot	<i>Map collocation to ggplot object</i>
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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 <code>c("#f251fc", "#f8ff1b")</code>

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(tok_s_transcript, toks_comment)
merged_frequency <- transcript_frequency(transcript_example_rename, collocation_object)
freq_plot <- collocation_plot(merged_frequency)
```

comment_example	<i>Comment Example Dataset</i>
-----------------	--------------------------------

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	Create Highlighted Testimony
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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 `collocation_plot()`
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(toks_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>
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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>
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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>
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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/> and Garrett et. al. (2020) [doi:10.1037/lhb0000423](https://doi.org/10.1037/lhb0000423))

transcript_frequency	<i>Mapping Collocation Frequency to Transcript Document</i>
----------------------	---

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(toks_transcript, toks_comment)
merged_frequency <- transcript_frequency(transcript_example_rename, collocation_object)
```

wiki_pages	<i>Wikipedia Edit History for "Highlighter"</i>
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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, [7](#)
- wiki_pages, [8](#)

- collocate_comments, [2](#)
- collocate_comments(), [6](#), [7](#)
- collocate_comments_fuzzy, [3](#)
- collocate_comments_fuzzy(), [6](#), [7](#)
- collocation_plot, [4](#)
- collocation_plot(), [5](#)
- comment_example, [4](#)

- highlighted_text, [5](#)

- token_comments, [6](#)
- token_comments(), [2](#), [3](#)
- token_transcript, [6](#)
- token_transcript(), [2](#), [3](#)
- transcript_example, [7](#)
- transcript_frequency, [7](#)
- transcript_frequency(), [4](#)

- wiki_pages, [8](#)