

Package: altcheckr (via r-universe)

August 30, 2024

Title Assess Image Alt Text on a Web Page

Version 0.1.0

Description Scrape image element attributes from a webpage, detect alternative (alt) text and assess it with simple heuristics.
Alt text is important for users of assistive technologies, like screen readers, for understanding the content of images. This package should be used in conjunction with other accessibility assessment tools for more comprehensive coverage.

Depends R (>= 3.5.0)

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URL <https://github.com/matt-dray/altcheckr/>,
<https://matt-dray.github.io/altcheckr/>

BugReports <https://github.com/matt-dray/altcheckr/issues>

Encoding UTF-8

LazyData true

RoxygenNote 7.1.0

Imports dplyr (>= 0.8.3), hunspell (>= 3.0), polite (>= 0.1.0), purrr (>= 0.3.3), rlang (>= 0.4.1), rvest (>= 0.3.4), stringr (>= 1.4.0), tibble (>= 2.1.3), xml2 (>= 1.2.2)

Suggests covr (>= 3.3.2), knitr (>= 1.26.0), testthat (>= 2.0.1), rmarkdown (>= 1.18.0)

VignetteBuilder knitr

Repository <https://matt-dray.r-universe.dev>

RemoteUrl <https://github.com/matt-dray/altcheckr>

RemoteRef HEAD

RemoteSha 44a6d30a6fa340ed5902d9f60c1ebe0b61ea4ec6

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alt_check

Check for Problems with the Alt Text for Images on a Web Page

Description

Infer whether an image's alt tag is missing or could be improved.

Usage

```
alt_check(
  attributes_df,
  max_char = 125,
  min_char = 20,
  file_ext = ".jpg$|.jpeg$|.png$|.svg$|.gif$",
  redundant_pattern = "image|picture|photo|graph|plot|diagram"
)
```

Arguments

<code>attributes_df</code>	A data.frame/tibble with image attributes, produced by alt_get .
<code>max_char</code>	A numeric value. Alt text longer than this is flagged.
<code>min_char</code>	A numeric value. Alt text shorter than this is flagged.
<code>file_ext</code>	A character string. A regular expression of image file extensions.
<code>redundant_pattern</code>	A character string. A regular expression of 'redundant' phrases in alt text.

Value

A tibble object with classes `tbl_df`, `tbl` and `data.frame`. In addition to columns provided by [alt_get](#), also returns:

- `alt_exists` "Exists", "Missing" or intentionally "Empty".
- `nchar_count` Integer. Number of characters.
- `nchar_assess` "Short", "Long" or "OK", depending on inputs to `min_char` and `max_char`.
- `file_ext` Logical. Does it look like the alt text might just be a filename (e.g. ends with ".jpg")?
- `self_evident` Logical. Is a redundant phrase used in the alt text (e.g. "a picture of")?

- `terminal_punct` Logical. Does the alt text end with terminal punctuation, like a period, to allow a screen reader to parse it as a sentence?
- `spellcheck` Character. Words to check for misspelling. These could be misread by a screen-reader.
- `not_basic` Character list column. Words that match to the 850 words of Charles Kay Ogden's Basic English.

Examples

```
## Not run:  
url <- "https://alphagov.github.io/accessibility-tool-audit/test-cases.html#images"  
attr_df <- alt_get(url)  
alt_check(attr_df)  
  
## End(Not run)
```

alt_get

Get HTML Attributes from the Image Elements of a Web Page

Description

Scrape (politely) a web page's HTML and extract the attributes from each image element () on that page.

Usage

```
alt_get(webpage, all_attributes = FALSE)
```

Arguments

<code>webpage</code>	A character string describing the URL of a webpage. Must be a full path including https://www. where appropriate.
<code>all_attributes</code>	Logical. Do you want to return <i>all</i> the image attributes as columns or just <code>src</code> , <code>alt</code> and <code>longdesc</code> (if it exists)?

Value

A tibble object with classes `tbl_df`, `tbl` and `data.frame`. One row per image element and one column per attribute, unless (`all_attributes = FALSE`), which returns only:

- `src` The source of the image as a filepath.
- `alt` The alternative (alt) text for the image.
- `longdesc` The path to a file that contains a longer description for complex images (only returned if present).

Examples

```
## Not run:  
test_url <- "https://www.bbc.co.uk/news"  
alt_get(webpage = test_url)  
  
## End(Not run)
```

example_get

Example of alt_get() Output

Description

A dummy data frame to mimic output from `alt_get`.

Usage

`example_get`

Format

A data frame with 11 rows and 2 variables:

src a fake image source

alt dummy alt text with different types of problems ...

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