Package 'namedropR'

October 13, 2022

Type Package

Title Create Visual Citations for Presentations and Posters

Version 2.4.1

Description Provides 'visual citations' containing the metadata of a
scientific paper and a 'QR' code. A 'visual citation' is a banner
containing title, authors, journal and year of a publication. This
package can create such banners based on 'BibTeX' and 'BibLaTeX'
references or call the reference metadata from 'Crossref'-API. The
banners include a QR code pointing to the 'DOI'. The resulting HTML
object or PNG image can be included in a presentation to point the
audience to good resources for further reading. Styling is possible
via predefined designs or via custom 'CSS'. This package is not
intended as replacement for proper reference manager packages, but a
tool to enrich scientific presentation slides and conference posters.

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URL https://github.com/nucleic-acid/namedropR

BugReports https://github.com/nucleic-acid/namedropR/issues

Imports bib2df, dplyr, htmltools, lubridate, qrcode (>= 0.1.4),
R.utils, readr, stringr, webshot

Suggests knitr, rcrossref, rmarkdown, testthat (>= 3.0.0), withr

VignetteBuilder knitr

Config/testthat/edition 3

Encoding UTF-8

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R **topics documented:**

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drop_html   *drop_html*

Description

Accepts bibliographic information and returns a htmltools tagList for printing/display.

Usage

```
drop_html(
  work_item,
  include_qr,
  qr_size = 250,
  qr_color = "#000000",
  qr_hyperlink = FALSE,
  vc_width = 600,
  output_dir,
  style,
  use_xaringan = FALSE,
  style_args = list()
)
```

Arguments

work_item	A data.frame or tibble with nrow(work_item) == 1 containing the data for one reference to create the visual citation.
include_qr	Character string specifying the way the QR code should be included or if no QR code should be included. 'embed' results in a stand alone <img> tag within the HTML object, other options are ignored for the time being. 'link' (default) creates a PNG of the QR code and stores it in a subfolder of the HTML file's location. The HTML <img> tag links to this file then. 'link_svg' creates a SVG of the QR code and stores it in a subfolder of the HTML file's location. The HTML <img> tag links to this file then. 'none' creates no QR code.
qr_size	Specifies the height/width of the rendered QR code in px. Default: 250px, minimum: 150px. Ignored for SVG output.

qr_color	Specifies the foreground color of the QR code as hex-string, e.g. "#00FF00".
qr_hyperlink	Logical. Should the QR code be a hyperlink?
vc_width	Specifies the width of the text part of the visual citation in px. This can be adjusted to accommodate e.g. untypically long or short titles. Default: 600px
output_dir	A string specifying the relative path, where the rendered output files should be stored.
style	A string specifying the desired style for the visual citation. Possible values are: "modern", "classic", "clean", "none". If "none" is given, the returned html can use a custom css file provided by the user. This custom CSS file must specify styles for <div> classes "top-row", "title-row" and "author-row".
use_xaringan	Boolean to specify if an HTML output is intended to be included in an HTML presentation (like e.g. xaringan) or not. When including the visual citation via htmltools::includeHTML(), the QR code needs to be in a subfolder relative to the rendered presentation, not relative to the visual citation.
style_args	Custom style arguments can be passed by drop_name for individual styles. These are passed on to get_css_styles(). Style arguments are combinations of 'author_', 'title_', 'journal_' with either one of: 'font', 'size', 'weight' and 'color'. E.g. 'author_weight = "bold"'.

Value

A htmltools taglist containing the visual citation as HTML representation including style.

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drop_name	*drop_name*

Description

Extracts metadata from a .bib file and exports the visual citation in the specified format.

Usage

```
drop_name(
  bib,
  cite_key,
  output_dir = "visual_citations",
  export_as = "html",
  max_authors = 3,
  include_qr = "link",
  qr_size = 250,
  qr_color = "#000000",
  qr_hyperlink = FALSE,
  vc_width = 600,
  style = "modern",
  path_absolute = FALSE,
```

```
  use_xaringan = FALSE,
  clean_strings = TRUE,
  ...
)
```

Arguments

bib   Accepts one of the following: 1) A data.frame or tibble containing the columns
                YEAR, JOURNAL, AUTHOR, TITLE, BIBTEXKEY (all mandatory) and DOI,
                URL (optional). 2) A file path to a bibliography file in BibTeX/BibLaTeX for-
                mat (usually *.bib file).

cite_key   If given, either a character string or a vector of strings are accepted. Specifies
                the reference items within the bibliography for which visual citations should be
                created. If no key is specified, a visual citation is created for ALL reference
                items within the bibliography. In other words, either one, many or no BibTeX
                citation keys can be specified.

output_dir   A string specifying the relative path, where the rendered output files should be
                stored.

export_as   A string specifying the desired output format. For now supports PNG and
                HTML. Use "html" to include the 'bare' taglist (recommended for inclusion in
                Rmarkdown documents) or "html_full" to write a standalone .html file including
                <head> etc. The PNG is a screenshot of the rendered HTML via the 'webshot'
                package. The filename represents this two step approach on purpose. For web-
                shot you need to install phantomJS once (see 'webshot' documentation).

max_authors   Integer number of maximum authors to print. If the number of authors exceeds
                this, the list is cropped accordingly.

include_qr   Character string specifying the way the QR code should be included or if no
                QR code should be included. 'embed' results in a stand alone <img> tag within
                the HTML object, other options are ignored for the time being. 'link' (default)
                creates a PNG of the QR code and stores it in a subfolder of the HTML file's
                location. The HTML <img> tag links to this file then. 'link_svg' creates a SVG
                of the QR code and stores it in a subfolder of the HTML file's location. The
                HTML <img> tag links to this file then. 'none' creates no QR code.

qr_size   Specifies the height/width of the rendered QR code in px. Default: 250px, min-
                imum: 150px. Ignored for SVG output.

qr_color   Specifies the foreground color of the QR code as hex-string, e.g. "#00FF00";
                default is black: "#000000".

qr_hyperlink   Logical. Should the QR code be a hyperlink?

vc_width   Specifies the width of the text part of the visual citation in px. This can be
                adjusted to accommodate e.g. untypically long or short titles. Default: 600px

style   A string specifying the desired style for the visual citation. Possible values are:
                "modern", "classic", "clean", "fancy", "newspaper", "compact" and "none". If
                "compact" is given, the rendered VC contains only the last name of the first
                author and the publication year, next to the QR code. If "none" is given, the
                returned html can use a custom css file provided by the user. This custom CSS
                file must specify styles for <div> classes "top-row", "title-row" and "author-
                row". (see vignette)

path_absolute	Boolean to specify, whether the returned output path is a relative path or an absolute path.
use_xaringan	Boolean to specify if an HTML output is intended to be included in an HTML presentation (like e.g. xaringan) or not. When including the visual citation via htmltools::includeHTML(), the QR code needs to be in a subfolder relative to the rendered presentation, not relative to the visual citation.
clean_strings	Removes curly braces from titles and journal names, as they are often present in BibTeX strings, but not needed for the rendering. TRUE by default, but can be set to FALSE, if the are needed.
...	Allows for custom style arguments to override predefined styles. Supported are: author_size, author_font, author_weight, author_color, title_size, title_font, title_weight, title_color, journal_size, journal_font, journal_weight, journal_color. Fonts need to be installed on the system.

Value

A character string with the file path to the created visual citation in the specified output format.

Examples

```
# create sample data
## Not run:
bib_tbl <- dplyr::tribble(
  ~TITLE, ~AUTHOR, ~JOURNAL, ~BIBTEXKEY, ~YEAR,
  "Some title", c("Alice", "Bob", "Charlie"),
  "Journal of Unnecessary R Packages",
  "Alice2022", "2022"
)

# create visual citation
drop_name(
  bib = bib_tbl,
  cite_key = "Alice2022",
  export_as = "png",
  max_authors = 2,
  style = "clean",
  output_dir = "visual_citations",
  author_color = "#FF0000",
  author_weight = "normal",
  author_size = "12pt",
  author_font = "Roboto",
  title_color = "#00FF00",
  title_weight = "bold",
  title_size = "2.5rem",
  title_font = "Playfair Display",
  journal_color = "#0000FF",
  journal_weight = "bold",
  journal_size = "8pt",
  journal_font = "Fira Sans",
  qr_size = 150,
```

```
    qr_color = "#AAAAAA"
)

## End(Not run)
```

---

drop_name_crossref   *Create visual citation from Crossref data*

Description

Takes one or several dois and extracts information from Crossref, then processes them into visual citations with [drop_name](#). Requires rcrossref > v1.1, see README for further details.

Usage

```
drop_name_crossref(dois, ...)
```

Arguments

dois   One or several dois to create visual citations for. If they are named, these names
                are used as filenames; otherwise they are generated based on authors and years.

...   Arguments passed on to [drop_name](#)

                export_as A string specifying the desired output format. For now supports
                     PNG and HTML. Use "html" to include the 'bare' taglist (recommended for
                     inclusion in Rmarkdown documents) or "html_full" to write a standalone
                     .html file including <head> etc. The PNG is a screenshot of the rendered
                     HTML via the 'webshot' package. The filename represents this two step
                     approach on purpose. For webshot you need to install phantomJS once (see
                     'webshot' documentation).

                output_dir A string specifying the relative path, where the rendered output
                     files should be stored.

                max_authors Integer number of maximum authors to print. If the number of
                     authors exceeds this, the list is cropped accordingly.

                include_qr Character string specifying the way the QR code should be in-
                     cluded or if no QR code should be included. 'embed' results in a stand
                     alone <img> tag within the HTML object, other options are ignored for the
                     time being. 'link' (default) creates a PNG of the QR code and stores it in
                     a subfolder of the HTML file's location. The HTML <img> tag links to
                     this file then. 'link_svg' creates a SVG of the QR code and stores it in a
                     subfolder of the HTML file's location. The HTML <img> tag links to this
                     file then. 'none' creates no QR code.

                style A string specifying the desired style for the visual citation. Possible
                     values are: "modern", "classic", "clean", "fancy", "newspaper", "compact"
                     and "none". If "compact" is given, the rendered VC contains only the last
                     name of the first author and the publication year, next to the QR code. If
```

"none" is given, the returned html can use a custom css file provided by the user. This custom CSS file must specify styles for <div> classes "top-row", "title-row" and "author-row". (see vignette)

path_absolute  Boolean to specify, whether the returned output path is a relative path or an absolute path.

use_xaringan  Boolean to specify if an HTML output is intended to be included in an HTML presentation (like e.g. xaringan) or not. When including the visual citation via htmltools::includeHTML(), the QR code needs to be in a subfolder relative to the rendered presentation, not relative to the visual citation.

clean_strings  Removes curly braces from titles and journal names, as they are often present in BibTeX strings, but not needed for the rendering. TRUE by default, but can be set to FALSE, if the are needed.

qr_size  Specifies the height/width of the rendered QR code in px. Default: 250px, minimum: 150px. Ignored for SVG output.

qr_color  Specifies the foreground color of the QR code as hex-string, e.g. "#00FF00"; default is black: "#000000".

qr_hyperlink  Logical. Should the QR code be a hyperlink?

vc_width  Specifies the width of the text part of the visual citation in px. This can be adjusted to accommodate e.g. untypically long or short titles. Default: 600px

## Value

A character string with the file path to the created visual citation in the specified output format.

## Examples

```
## Not run:
drop_name_crossref(c(cite1 = "10.1126/science.169.3946.635", cite2 = "10.1111/joms.12670"))

## End(Not run)
```

---

generate_qr   *generate_qr*

Description

Generates a QR code from a supplied string and return as a plot object. This is a wrapper function around qrcode::qr_code().

Usage

```
generate_qr(url)
```

Arguments

url   A string to encode as QR code.

Value

The encoded QR code as matrix.

---

get_css_styles   *get_css_style*

Description

Provides inline CSS code for three distinct visual citation styles. If "none" is given, the returned styles are empty strings.

Usage

```
get_css_styles(style, custom_style = list())
```

Arguments

style   A string specifying the desired style for the visual citation. Possible values are:
                    "modern", "classic", "clean", "none". If "none" is given, the returned html can
                    use a custom css file provided by the user. This custom CSS file must specify
                    styles for <div> classes "top-row", "title-row" and "author-row".
custom_style   Style arguments passed by drop_html(). Can be specified in function call of
                    drop_name().

Value

A list of inline css styles for each element of the visual citation: top row, title row and author row.

---

manage_authors   *manage_authors*

Description

Returns a cleaned and cropped string of authors for the visual citation.

Usage

```
manage_authors(authors, max_authors, style = "any")
```

Arguments

`authors`	Can be a single string or a list of authors.
`max_authors`	Maximum number of authors to be returned from the list.
`style`	Takes the user specified style. Only relevant for "compact" mode. Ignored otherwise.

Value

A single string with the desired maximum number of authors.

`write_vc`	*write_vc*

Description

Takes the data from drop_name and writes the actual outputs to the output directory.

Usage

```
write_vc(work_item, path_absolute, output_dir, export_as)
```

Arguments

`work_item`	A data.frame or tibble with a single row, passed by drop_name()
`path_absolute`	A logical parameter specifying, whether eventually a relative or absolute path should be returned.
`output_dir`	A relative path (in regard to the working directory) where the visual citations should be 'dropped'. (type: character)
`export_as`	Defines the file format of the returned visual citation (see drop_name() for more).

Value

The path to the written file as character.

Examples

```
## Not run:
# not intended for direct call. Please refer to the documentation
# of drop_name() for further assistance.

## End(Not run)
```

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