Package ‘carbonate’

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Title Interact with 'carbon.js'

Version 0.1.4

Description Create beautiful images of source code using 'carbon.js'<https://carbon.now.sh/about>.

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URL https://github.com/yonicd/carbonate

BugReports https://github.com/yonicd/carbonate/issues

Depends R (>= 3.2.0)

Imports clipr,
details,
httpuv,
httr,
magick,
R6,
RSelenium,
rtweet,
utils,
wdman,
jsonlite,
yaml

Suggests covr,
knitr,
rmarkdown,
testthat

VignetteBuilder knitr

RdMacros details

Encoding UTF-8

Roxygen list(markdown = TRUE,old_usage = TRUE,r6 = FALSE)

RoxygenNote 7.2.1

R topics documented:

`.browse` *open $uri to in browser window*

Description

opens the uri address in $uri in the browser window.

Usage

```
.browse(self, private)
```

Arguments

`self`	carbon self object
`private`	carbon private object

See Also

carbon

Examples

```
x <- carbon$new('x <- 1')
if(interactive())
 x$browse()
```

.carbonate *Carbonate script lines to a carbon image*

Description

Main function of the package that invokes RSelenium to open a browser to the carbon.js uri, create an image and download the file.

Usage

```
.carbonate(self, private, file, path, code, rD, driver)
```

Arguments

self	carbon self object
private	carbon private object
file	character, name of file to save image as
path	character, path to save the image
code	character, lines of script to make carbon image from
rD	RSelenium driver
driver	character, select either ’firefox’ or ’chrome’ driver

Details

Script is passed to `https://carbon.now.sh/` is downloaded to the `tempdir()` and appended to the list $carbons using RSelenium and Chrome.

Value

image object

See Also

carbon, rsDriver

Examples

```
if(interactive()){
 x <- carbon$new('x <- 1')
 x$carbonate()
 }
```

`.chromeOptions` *chrome webdriver functions*

Description

Functions to open,close,set chrome webdriver

Usage

```
.chromeOptions(self, private)
```

Arguments

`self`	carbon self object
`private`	carbon private object

See Also

carbon, chrome

`.encode` *encode uri for carbon.js*

Description

encode uri string for carbon.js. Augmented version of than URLencode

Usage

```
.encode(self, private, URL, reserved, repeated)
```

Arguments

`self`	carbon self object
`private`	carbon private object
`URL`	character, uri string to url encode
`reserved`	boolean, should ‘reserved’ characters be encoded?
`repeated`	boolean, should apparently already-encoded URLs be encoded again?

Value

character

See Also

URLencode, carbon

`.firefoxOptions` *gecko webdriver functions*

Description

Functions to open,close,set gecko webdriver

Usage

```
.firefoxOptions(self, private)
```

Arguments

`self`	carbon self object
`private`	carbon private object

See Also

carbon, gecko

`.get_windows_control_themes` *carbon get functions*

Description

function that gets the available list of aesthetic values of fields

Usage

```
.get_windows_control_themes(self, private)

.get_font_families(self, private)

.get_templates(self, private)
```

Arguments

`self`	carbon self object
`private`	carbon private object

See Also

carbon

`.options` *concatenate the carbon options to a string*

Description

combine all the carbon options into a carbon.js valid string

Usage

```
.options(self, private, code)
```

Arguments

`self`	carbon self object
`private`	carbon private object
`code`	character, script to embed into the uri

Value

OUTPUT_DESCRIPTION

See Also

carbon

`.rtweet` *send tweets using carbonate outputs*

Description

wrapper for post_tweet to send tweets with media created using carbonate.

Usage

```
.rtweet(self, private, media, status = self$tweet_status,
  media_format = c("png", "gif"), ...)
```

Arguments

`self`	carbon self object
`private`	carbon private object
`media`	magick-image object or path to image
`status`	character, status to attach to post, Default: self$tweet_status
`media_format`	character, type of media to tweet, Default: c('png','gif')
`...`	arguments to pass to post_tweet

Details

If multiple images are passed they can be either converted to a gif by setting media_format to 'gif' or attached each one to the post.

Value

outcome from rtweet

See Also

image_write post_tweet

Examples

```
## Not run:
x <- carbonate::carbon$new()
x$carbonate(code = readLines(system.file('DESCRIPTION',package='carbonate')))
x$carbonate(code = 'x+2')

# using default status value (x$tweet_status)
x$rtweet(system.file('figures/hex_black_small.png',package='carbonate'))

x$rtweet(status = 'these are two pngs',media = x$carbons,media_format='png')
x$rtweet(status = 'this is a gif', media = x$carbons,media_format='gif')


## End(Not run)
```

.set_template *carbon set functions*

Description

function that set the aesthetics of the carbon image output

Usage

```
.set_template(self, private, template)

.set_window_control_theme(self, private, theme)

.set_font_family(self, private, family)
```

Arguments

self	carbon self object
private	carbon private object
template	character, name of template to set $template to
theme	character, theme to set $theme to
family	character, font family to set $font_family to

See Also

carbon

.start	*RSelenium webdriver functions*

Description

Functions to open,stop, stop_all RSelenium sessions

Usage

```
.start(self, private, eCap, driver = c("firefox", "chrome"))

.driver_start(self, private, driver = c("chrome", "firefox"))

.driver_stop(self, private)

.stop(self, private)

.stop_all(self, private)

.set_port(self, private, port = NULL)

.get_port(self, private)
```

Arguments

`self`	carbon self object
`private`	carbon private object
`eCap`	chromeOptions passed into rsDriver
`driver`	character, select either 'firefox' or 'chrome' driver
`port`	integer, port for the rsDriver to use, if NULL then a random port is selected

See Also

carbon

`.tiny` *convert carbon uri to tinyurl*

Description

convert carbon uri to tinyurl with option to attach to clipboard.

Usage

```
.tiny(self, private, clip = FALSE)
```

Arguments

`self`	carbon self object
`private`	carbon private object
`clip`	boolean, write tinyurl to clipboard, Default: FALSE

Details

If clip is set to TRUE write_clip will put the tinyurl on the clipboard.

Value

character

`.uri` *URI constructor*

Description

Function that is called in a carbon object to construct valid uri to send to browser

Usage

```
.uri(self, private, code)
```

Arguments

`self`	carbon self object
`private`	carbon private object
`code`	character, script to embbed into the uri

See Also

carbon

Examples

```
if(interactive()){

x <- carbon$new('x <- 1')

# populate from self$code
x$uri()

# enter manually
x$uri(code = 'x <- y + 3')

}
```

`carbon` *Carbon R6 class*

Description

The Carbon generator creates a new `Carbon`-object, which is the class containing all the app logic. The class is based on the R6 OO-system and is thus reference-based with methods and data attached to each object, in contrast to the more well known S3 and S4 systems.

Initialization

A new 'Carbon'-object is initialized using the `new()` method on the generator:

```
x <- carbon$new(code = clipr::read_clip())
```

Fields

Description of fields of the R6 object that can be set by the user can be found in the following page.

Methods

$carbonate	Using RSelenium fetch the carbon image output
$browse	open $uri in the browser

$set_template	set $template
$get_templates	get a list of possible templates
$set_window_control_theme	set $windows_control_theme
$get_windows_control_themes	get a list of possible window control themes
$set_font_family	set $font_family
$get_font_families	get a list of possible fonts

$uri	construct valid carbon.js uri
$options	return all current carbon options
$encode	URL encode a string for the $uri
$tiny	Create tinyurl from $uri
$rtweet	Send tweets containing media generated from carbon

$chromeOptions	construct a chromeOptions object
$chrome_start	start a chrome session
$chrome_stop	stop a chrome session
$start	start a RSelenium session
$stop	stop a RSelenium session
$stop_all	stop all active RSelenium sessions
$get_port	Get active port
$set_port	Set new port

`carbon_fields` *Carbon object fields*

Description

Fields that can be changed in the Carbon object

Arguments

`code` character, script to embbed, Default: NULL

`palette` numeric, layout pallete, Default: c(r=171,g=184,b=195,a=1)

`template` character, layout template, Default: 'seti'

`add_window_control`
boolean, add/remove window controls (circles on top left corner), Default: TRUE

`window_control_theme`
character, change window control themes, Default: 'none'

`language` character, language, Default: 'r'

`add_drop_shadow`
boolean, add/remove dropshadow, Default: TRUE

`drop_shadow_offset_y`
numeric, shadow vertical offset (px), Default: 20

`drop_shadow_blur_radius`
numeric, shadow blur radius (px), Default: 68

`auto_adjust_width`
boolean, auto-audjust output width, Default: TRUE

`padding_vertical`
numeric, vertical padding (px), Default: 48

`padding_horizontal`
numeric, horizontal padding (px), Default: 32

`add_line_number`
boolean, add/remove line numbers, Default: FALSE

`font_family` character, layout font family, Default: 'Hack'

`font_size` numeric, font size (px), Default: 14

`line_height_percent`
numeric, relative space between lines (percent), Default: 133

`square_image` boolean, output image is square, Default: FALSE

`relative_export_size` numeric, image size in export relative to what is in the preview (1,2 or 4), Default: 1

`add_watermark` boolean, add official carbon.js watermark, Default: FALSE

`add_tinyurl` boolean, add tinyurl link to image directing to the carbon page that created the image, Default: FALSE

`tinyurl_location` character, string with gravity value to place the annotate tinyurl address on image, Default: 'southeast'

`tweet` boolean, tweet out the image using post_tweet

`tweet_status` character, status to add to the tweet. If add_tinyurl is TRUE then a link to the url will be appended to the status automatically, Default: 'Created in R using the Carbonate (Package Icon)'

`add_timestamp` boolean, add timestamp to output filename, Default: FALSE

`carbons` list, storage of rendered carbon images, Default: NULL

`download_path` character, path to download the images, Default: tempdir()

`chrome_args` character, arguments passed to chrome browser, Default: c('–disable-gpu', '–window-size=1280,800')

`chrome_pref` list, preferences passed to chrome browser, Default: list("profile.default_content_settings.popups" = 0L,"download.prompt_for_download" = FALSE,"download.default_directory" = tempdir())

`rD` RSelenium Driver object

`cDrv` Chrome Driver object from wdman

See Also

carbon

`tinyurl` *convert uri to tinyurl*

Description

convert uri to tinyurl.

Usage

```
tinyurl(uri)
```

Arguments

`uri` character, the uri to convert

Value

character