

Package 'slickR'

December 16, 2020

Title Create Interactive Carousels with the 'JavaScript'
'Slick' Library

Version 0.5.0

Date 2020-12-10

Description Create and customize interactive carousels using the 'Slick' 'JavaScript' library and the 'htmlwidgets' package. The carousels can contain plots produced in R, images, 'iframes', videos and other 'htmlwidgets'. These carousels can be created directly from the R console, and viewed in the 'RStudio' internal viewer, in 'Shiny' apps and R Markdown documents.

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URL <https://github.com/yonicd/slickR>

BugReports <https://github.com/yonicd/slickR/issues>

Depends R (>= 3.6.0)

Imports htmltools,utils,tools,lifecycle,stats,xml2,base64enc,htmlwidgets

Suggests jsonlite,
knitr,
pdftools,
rmarkdown,
svglite,
leaflet,
testthat,
covr

VignetteBuilder knitr

RdMacros lifecycle

Encoding UTF-8

LazyData true

Roxygen list(markdown = TRUE)

RoxygenNote 7.1.1

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getHelp	<i>getHelp</i> Deprecated
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Description

return rd help file as html

Usage

```
getHelp(fn, pkg)
```

Arguments

fn	character of function name
pkg	name of package that contains fn

Details

This function has been moved to the iframes vignette

Value

character

nba_player_logo	<i>NBA player logo</i>
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Description

NBA player logo URI

Usage

nba_player_logo

Format

A data frame with 150 rows and 4 variables:

team character, Team name

position factor, Position of the Player

name character, Player Name

uri character, Player Headshot URI

player_home character, Player Homepage URI

Details

Logos harvested from <http://www.espn.com/nba/depth>

See Also

Other data: [nba_team_logo](#)

nba_team_logo	<i>NBA team logo</i>
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Description

NBA team logo URI

Usage

nba_team_logo

Format

A data frame with 30 rows and 2 variables:

team character, Team Name

uri character, Team logo URI

Details

Logos harvested from https://i.cdn.turner.com/nba/nba/.element/img/4.0/global/logos/512x512/bg.white/svg/team_short

See Also

Other data: [nba_player_logo](#)

settings

Modify components of slick settings

Description

Customize non-data components of the carousel.

Usage

```
settings(  
  accessibility,  
  adaptiveHeight,  
  autoplay,  
  autoplaySpeed,  
  arrows,  
  asNavFor,  
  appendArrows,  
  appendDots,  
  prevArrow,  
  nextArrow,  
  centerMode,  
  centerPadding,  
  cssEase,  
  customPaging,  
  dots,  
  dotsClass,  
  draggable,  
  fade,  
  focusOnSelect,  
  easing,  
  edgeFriction,  
  infinite,  
  initialSlide,  
  lazyLoad,  
  mobileFirst,  
  pauseOnFocus,  
  pauseOnHover,  
  pauseOnDotsHover,  
  respondTo,  
  responsive,  
  rows,  
  slide,  
  slidesPerRow,  
  slidesToShow,  
  slidesToScroll,  
  speed,  
  swipe,
```

```

    swipeToSlide,
    touchMove,
    touchThreshold,
    useCSS,
    useTransform,
    variableWidth,
    vertical,
    verticalSwiping,
    rtl,
    waitForAnimate,
    zIndex,
    ...
)

```

Arguments

accessibility	logical, Enables tabbing and arrow key navigation, Default: TRUE
adaptiveHeight	logical, Enables adaptive height for single slide horizontal carousels., Default: FALSE
autoplay	logical, Enables Autoplay, Default: FALSE
autoplaySpeed	numeric, Autoplay Speed in milliseconds, Default: 3000
arrows	logical, Prev/Next Arrows, Default: TRUE
asNavFor	character, Set the slider to be the navigation of other slider (Class or ID Name), Default: null
appendArrows	character, Change where the navigation arrows are attached (Selector, html-String, Array, Element, jQuery object), Default: \$(element)
appendDots	character, Change where the navigation dots are attached (Selector, htmlString, Array, Element, jQuery object), Default: \$(element)
prevArrow	character (htmljQuery selector) object (DOM node jQuery object), Allows you to select a node or customize the HTML for the "Previous" arrow., Default: <button type="button" class="slick-prev">Previous</button>
nextArrow	character (htmljQuery selector) object (DOM node jQuery object), Allows you to select a node or customize the HTML for the "Next" arrow., Default: <button type="button" class="slick-next">Next</button>
centerMode	logical, Enables centered view with partial prev/next slides. Use with odd numbered slidesToShow counts., Default: FALSE
centerPadding	character, Side padding when in center mode (px or \ Default: '50px'
cssEase	character, CSS3 Animation Easing, Default: 'ease'
customPaging	function, Custom paging templates. See source for use example., Default: n/a
dots	logical, Show dot indicators, Default: FALSE
dotsClass	character, Class for slide indicator dots container, Default: 'slick-dots'
draggable	logical, Enable mouse dragging, Default: TRUE
fade	logical, Enable fade, Default: FALSE
focusOnSelect	logical, Enable focus on selected element (click), Default: FALSE
easing	character, Add easing for jQuery animate. Use with easing libraries or default easing methods, Default: 'linear'
edgeFriction	numeric, Resistance when swiping edges of non-infinite carousels, Default: 0.15

<code>infinite</code>	logical, Infinite loop sliding, Default: TRUE
<code>initialSlide</code>	numeric, Slide to start on, Default: 0
<code>lazyLoad</code>	character, Set lazy loading technique. Accepts 'ondemand' or 'progressive', Default: 'ondemand'
<code>mobileFirst</code>	logical, Responsive settings use mobile first calculation, Default: FALSE
<code>pauseOnFocus</code>	logical, Pause Autoplay On Focus, Default: TRUE
<code>pauseOnHover</code>	logical, Pause Autoplay On Hover, Default: TRUE
<code>pauseOnDotsHover</code>	logical, Pause Autoplay when a dot is hovered, Default: FALSE
<code>respondTo</code>	character, Width that responsive object responds to. Can be 'window', 'slider' or 'min' (the smaller of the two), Default: 'window'
<code>responsive</code>	object, Object containing breakpoints and settings objects (see demo). Enables settings sets at given screen width. Set settings to "unslick" instead of an object to disable slick at a given breakpoint., Default: none
<code>rows</code>	numeric, Setting this to more than 1 initializes grid mode. Use slidesPerRow to set how many slides should be in each row., Default: 1
<code>slide</code>	element, Element query to use as slide, Default: ''
<code>slidesPerRow</code>	numeric, With grid mode intialized via the rows option, this sets how many slides are in each grid row. dver, Default: 1
<code>slidesToShow</code>	numeric, # of slides to show, Default: 1
<code>slidesToScroll</code>	numeric, # of slides to scroll, Default: 1
<code>speed</code>	numeric, Slide/Fade animation speed in milliseconds, Default: 300
<code>swipe</code>	logical, Enable swiping, Default: TRUE
<code>swipeToSlide</code>	logical, Allow users to drag or swipe directly to a slide irrespective of slidesToScroll, Default: FALSE
<code>touchMove</code>	logical, Enable slide motion with touch, Default: TRUE
<code>touchThreshold</code>	numeric, To advance slides, the user must swipe a length of (1/touchThreshold) * the width of the slider, Default: 5
<code>useCSS</code>	logical, Enable/Disable CSS Transitions, Default: TRUE
<code>useTransform</code>	logical, Enable/Disable CSS Transforms, Default: TRUE
<code>variableWidth</code>	logical, Variable width slides, Default: FALSE
<code>vertical</code>	logical, Vertical slide mode, Default: FALSE
<code>verticalSwiping</code>	logical, Vertical swipe mode, Default: FALSE
<code>rtl</code>	logical, Change the slider's direction to become right-to-left, Default: FALSE
<code>waitForAnimate</code>	logical, Ignores requests to advance the slide while animating, Default: TRUE
<code>zIndex</code>	numeric, Set the zIndex values for slides, useful for IE9 and lower, Default: 1000
<code>...</code>	unused

Details

To find further information on the attributes that can be used please refer to <http://kenwheeler.github.io/slick/>.

Value

list of class c('setting','slickR')

Examples

```
if(interactive()){  
  slick <- slickR(obj=nba_team_logo$uri)  
  slick  
  
  # Use settings function to manipulate the slick object  
  
  # Add dots  
  
  slick + settings(dots = TRUE)  
  
  # Autoplay elements in the carousel  
  
  slick + settings(autoplay = TRUE, autoplaySpeed = 1000)  
}
```

slickpdf

slickpdf **Deprecated**

Description

convert multiple pdfs or a multipage pdf to a slick carousel

Usage

```
slickpdf(obj, obj2 = NULL, synch = TRUE, img_format = "png", ...)
```

Arguments

obj	character, path to pdf(s)
obj2	character, path to pdf(s) to compare to obj, Default: NULL
synch	boolean, if TRUE then obj and obj2 images are synchronized, Default: TRUE
img_format	format of image to convert to, Default: 'png'
...	arguments passed to slickR

Details

This function has been replaced with the example in the PDF vignette.

Value

slick

 slickR

slick.js image carousel htmlwidget

Description

use slick.js library in R

Usage

```

slickR(
  obj,
  slideId = "baseDiv",
  slideType = "img",
  objLinks = NULL,
  padding = 1,
  width = "95%",
  height = NULL,
  elementId = NULL,
  slickOpts = NULL,
  synchSlides = NULL,
  dotObj = NULL
)

```

Arguments

obj	character, vector of path or url to images
slideId	character, id of slide, Default: 'baseDiv'
slideType	character, type of object to put in slide, Default: 'img'
objLinks	character, links to attach to images in slide, Default: NULL
padding	numeric, percent of width between each image in the carousel for each slider, Default: 1
width	character, width of htmlwidget, Default: '95%'
height	character, height of htmlwidget, Default: NULL
elementId	character, id tag of htmlwidget, Default: NULL
slickOpts	Deprecated
synchSlides	Deprecated
dotObj	Deprecated

Details

[slick.js](#) is an image carousel javascript library.

To find all the attributes that can be used please refer to the link.

It is possible to stack slides through the `%stack%` operator.

It is possible to synchronize slides through the `%synch%` operator.

To replace the dots with icons use the settings to define the customPaging attribute with the appropriate JS(.) function call.

The `slideType` accepts the type of html DOM you want to be in the slide, eg `img`, `iframe`.

The combination of `slideType = 'img-lazy'` and `settings(lazyLoad = 'ondemand')` will inform the `htmlwidget` that the images are to be loaded lazily. For more information see the slickjs [documentation](#).

Examples

```
if(interactive()){
  slick <- slickR(obj=nba_team_logo$uri)

  slick

  # add dots to the first slick and autoplay at 1 second a slide
  slick + settings(dots = TRUE, autoplay = TRUE, autoplaySpeed = 1000)

  # working with multiple slicks

  sets <- split(
    sample(nba_team_logo$uri, size = 28, replace = FALSE),
    rep(c(1,2,3,4),each=7)
  )

  slicks <- lapply(sets,FUN = function(x,...){
    slickR(obj = x,...)
  },height = 100)

  # independent slicks
  Reduce(`%stack%`,slicks)

  # 1,2 synch stacked on 3,4 synch
  (slicks[[1]] %synch% slicks[[2]]) %stack% (slicks[[3]]%synch%slicks[[4]])
}
```

slickR-shiny

Shiny bindings for slickR

Description

Output and render functions for using `slickR` within Shiny applications and interactive Rmd documents.

Usage

```
slickROutput(outputId, width = "100%", height = "400px")

renderSlickR(expr, env = parent.frame(), quoted = FALSE)
```

Arguments

outputId	output variable to read from
width, height	Must be a valid CSS unit (like '100%', '400px', 'auto') or a number, which will be coerced to a string and have 'px' appended.
expr	An expression that generates a slickR
env	The environment in which to evaluate expr.
quoted	Is expr a quoted expression (with quote())? This is useful if you want to save an expression in a variable.

 slick_div

 Create a DOM element for slickR

Description

Wraps an R object in slickR compatible DOM

Usage

```

slick_div(
  x,
  css = htmltools::css(marginLeft = "auto", marginRight = "auto"),
  type = "img",
  links = NULL
)

```

Arguments

x	object
css	css object, Default: htmltools::css(marginLeft='auto',marginRight='auto')
type	character, type of DOM, Default: 'img'
links	character, links to use on the input object, Default: NULL

Details

Method converts xml_document, htmlwidget, character, or list of objects to a compatible DOM

Value

list of shiny tag objects

See Also

Other html: [slick_list\(\)](#)

Examples

```
# image
slick_div(nba_team_logo$uri[1])

# vector of images
slick_div(nba_team_logo$uri[c(1:5)])

# text
slick_div('abc', type = 'p')
```

slick_list

List of DOM elements

Description

Convert a list of [tags](#) into a list that slickR can render

Usage

```
slick_list(...)
```

Arguments

... Elements to convert

Value

tagList

See Also

[tagList](#), [tags](#)

Other html: [slick_div\(\)](#)

Examples

```
img1 <- htmltools::img(src = nba_player_logo$uri[1])
img2 <- htmltools::img(src = nba_player_logo$uri[2])

slick_list(img1, img2)
```

 %synch%

Slick pipe operators

Description

Pipe operators to combine plots by either stacking or synching multiple sliders.

Usage

```
e1 %synch% e2
```

```
e1 %stack% e2
```

Arguments

e1 slickR htmlwidget to place on top

e2 slickR htmlwidget to place on bottom

Value

htmlwidget

Examples

```
if(interactive()){
  # working with multiple slicks

  sets <- split(
    sample(nba_team_logo$uri, size = 28, replace = FALSE),
    rep(c(1,2,3,4),each=7)
  )

  slicks <- lapply(sets,FUN = function(x,...){
    slickR(obj = x,...)
  },height = 100)

  # independent slicks

  Reduce(`%stack%`,slicks)

  # 1,2 synch stacked on 3,4 synch

  (slicks[[1]] %synch% slicks[[2]]) %stack% (slicks[[3]]%synch%slicks[[4]])
}
```

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