Package ‘slickR’

December 21, 2022

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

Version 0.6.0

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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,checkmate

Suggests jsonlite,
knitr,
pdf tools,
rmarkdown,
svglite,
leaflet,
testthat,
covr

VignetteBuilder knitr

RdMacros lifecycle

Encoding UTF-8

LazyData true

Roxygen list(markdown = TRUE)

RoxygenNote 7.2.1
R topics documented:

nba_player_logo ......................................................... 2
nba_team_logo .......................................................... 3
settings ................................................................. 3
slickR ................................................................. 7
slickR-shiny ............................................................ 8
slick_div ............................................................... 9
slick_list ............................................................... 10
%synch% ............................................................... 11

Index 12

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nba_player_logo | NBA player logo

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
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_name.svg

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,
settings

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)
settings

prevArrow character (html|jQuery 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 (html|jQuery 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

draggable2 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

infinite logical, Infinite loop sliding, Default: TRUE

initialSlide numeric, Slide to start on, Default: 0

lazyLoad character, Set lazy loading technique. Accepts 'ondemand' or 'progressive', Default: 'ondemand'

mobileFirst logical, Responsive settings use mobile first calculation, Default: FALSE

cssEase logical, Pause Autoplay On Focus, Default: TRUE
pauseOnHover logical, Pause Autoplay On Hover, Default: TRUE

rows numeric, Setting this to more than 1 initializes grid mode. Use slidesPerRow to set how many slides should be in each row., Default: 1

slide element, Element query to use as slide, Default: "

slidesPerRow numeric, With grid mode initialized via the rows option, this sets how many slides are in each grid row. dever, Default: 1

slidesToShow numeric, # of slides to show, Default: 1

slidesToScroll numeric, # of slides to scroll, Default: 1

speed numeric, Slide/Fade animation speed in milliseconds, Default: 300

swipe logical, Enable swiping, Default: TRUE

swipeToSlide logical, Allow users to drag or swipe directly to a slide irrespective of slidesToScroll, Default: FALSE
**settings**

- **touchMove**: logical, Enable slide motion with touch, Default: TRUE
- **touchThreshold**: numeric, To advance slides, the user must swipe a length of (1/touchThreshold) * the width of the slider, Default: 5
- **useCSS**: logical, Enable/Disable CSS Transitions, Default: TRUE
- **useTransform**: logical, Enable/Disable CSS Transforms, Default: TRUE
- **variableWidth**: logical, Variable width slides, Default: FALSE
- **vertical**: logical, Vertical slide mode, Default: FALSE
- **verticalSwiping**: logical, Vertical swipe mode, Default: FALSE
- **rtl**: logical, Change the slider’s direction to become right-to-left, Default: FALSE
- **waitForAnimate**: logical, Ignores requests to advance the slide while animating, Default: TRUE
- **zIndex**: numeric, Set the zIndex values for slides, useful for IE9 and lower, Default: 1000
- **...**: unused

**Details**

To find further information on the attributes that can be used please refer to [http://kenwheeler.github.io/slick/](http://kenwheeler.github.io/slick/).

**Value**

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

**Examples**

```r
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)
}
```
slickR

**slick.js image carousel htmlwidget**

**Description**

use slick.js library in R

**Usage**

```r
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.

See Also

Other invoke: `slickR-shiny`

Examples

```r
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.
slick_div

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.

See Also

Other invoke: slickR()

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
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)

See Also

Other html: slick_list()
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
\[
\text{if(interactive())}{ }
\# \text{working with multiple slicks}
\]
\[
\text{sets} <- \text{split(}
\quad \text{sample(nba\_league\_logo\_uri, size = 28, replace = FALSE),}
\quad \text{rep(c(1,2,3,4),each=7)}
\text{)}
\]
\[
\text{slicks} <- \text{lapply(sets,FUN = function(x,...){}
\quad \text{slickR(obj = x,...)}
\text{),height = 100)}
\]
\# \text{independent slicks}
Reduce("\%stack\%",slicks)
\# 1,2 synch stacked on 3,4 synch
\text{(slicks[[1]] \%synch\% slicks[[2]]) \%stack\% (slicks[[3]]%synch%slicks[[4]])}
\]
}
Index

* datasets
  nba_player_logo, 2
  nba_team_logo, 3
* data
  nba_player_logo, 2
  nba_team_logo, 3
* html
  slick_div, 9
  slick_list, 10
* invoke
  slickR, 7
  slickR-shiny, 8
* methods
  %synch%, 11
* settings
  settings, 3
  %stack% (%synch%), 11
  %synch%, 11
  css, 9
  nba_player_logo, 2, 3
  nba_team_logo, 2, 3
  renderSlickR (slickR-shiny), 8
  settings, 3
  slick_div, 9, 10
  slick_list, 10, 10
  slickR, 7, 9
  slickR-shiny, 8
  slickROutput (slickR-shiny), 8
  tagList, 10
  tags, 10