bsplus
Using Twitter Bootstrap to extend your Shiny app

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Thanks
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- Organizing committee, Chair
- Eric Bailey – wrote the shinybs package
- You all for being here
Motivation

Why yet-another package to go with Shiny?

- Twitter Bootstrap offers a lot of stuff using HTML
  - collapsible panels
  - accordion panels
  - tooltips & popups
  - modal windows
- Capability already offered through shiny, but requires server side of shiny

http://getbootstrap.com/javascript
Motivation
Why yet-another package to go with Shiny?

- Avoid depending on the server side of shiny
- Can use in rmarkdown html-documents
- Conforming to Twitter Bootstrap API means that I can do less!
- Wanted to write a package that uses (abuses?) pipes
Example: collapsible panel

Start with a collapsible panel

library("bsplus")
library("htmltools")

# create the collapsible panel
bsCollapse(id = "yeah", tags$p("Yeah Yeah Yeah"))
Example: collapsible panel

Attach its id to a button

```r
library("bsplus")
library("htmltools")

# create the collapsible panel
bsCollapse(id = "yeah", tags$p("Yeah Yeah Yeah"))

# create the button, attach the collapsible panel
tags$button(
  type = "button",
  class = "btn btn-default",
  "She Loves You"
) %>%
  bsAttachCollapse("yeah")
```
Example: collapsible panel

You can attach an id to as many buttons (or links) as you like

```r
library("bsplus")
library("htmltools")

# create the collapsible panel
bs_collapse(id = "yeah", tags$p("Yeah Yeah Yeah"))

# create the button, attach the collapsible panel
tags$button(
  type = "button",
  class = "btn btn-default",
  "She Loves You"
) %>%
  bs_attachCollapse("yeah")

# attach panel to another button
tags$button(
  type = "button",
  class = "btn btn-default",
  "Sie Liebe Dich"
) %>%
  bs_attachCollapse("yeah")
```
Example: modal window

Start with a modal window

```r
library("bsplus")
library("htmltools")

# create the modal window
bs_modal(
    id = "its_easy",
    title = "All you need is love",
    body = "Love is all you need"
)
```
Example: modal window

Attach its id to a button (or a link)

```r
library("bsplus")
library("htmltools")

# create the modal window
bs_modal(
  id = "its_easy",
  title = "All you need is love",
  body = "Love is all you need"
)

# create the button, attach the modal window
tags$button(
  type = "button",
  class = "btn btn-default",
  "Love"
) %>%
  bs_attach_modal("its_easy")
```
Example: tooltip (popover)

Start with a button or a link

```r
library("bsplus")
library("htmltools")

# call this function somewhere on your page
use_bs_tooltip()

# create the button
tags$button(
  type = "button",
  class = "btn btn-default",
  "I don't know why you say goodbye"
)
```
Example: tooltip (popover)

Embed the tooltip

```r
library("bsplus")
library("htmltools")

# call this function somewhere on your page
use_bs_tooltip()

# create the button, then embed the tooltip
tags$button(
  type = "button",
  class = "btn btn-default",
  "I don’t know why you say goodbye"
) %>%
  bs_embed_tooltip(
    title = "I say hello",
    placement = "bottom"
  )
```
Example: Shiny-input help link

Let's put a few things together

library("bsplus")
library("shiny")

# call this function somewhere on your page
use_bs_popover()

selectInput(
  inputId = "little_bit_slower",
  label = "You say you want a revolution",
  choices = c("Revolution", "Revolution #1",
              "Revolution #9")
)
Example: Shiny-input help link
Let's put a few things together

library("bsplus")
library("shiny")

# call this function somewhere on your page
use_bs_popover()

selectInput(
  inputId = "little_bit_slower",
  label = "You say you want a revolution",
  choices = c("Revolution", "Revolution #1", "Revolution #9")
)

%>%
shinyInput_label_embed(
  shiny_iconlink() %>%
  bs_embed_popover(
    title = "Well you know",
    content = "We all want to change the world"
  )
)

• create a link using a Shiny icon
• embed a popover into the link
• embed the whole thing into the label of a shiny input
bsplus

Parting thoughts

- The bsplus API tries to conform to the Twitter Bootstrap JavaScript API
  - http://getbootstrap.com/javascript/
  - bs_set_data() makes it easier to customize further

- On CRAN
  - pkgdown site: http://ijlytle.github.io/bsplus
  - Carousel
  - Accordion Sidebar

Introduction

To see all of this in action, you are referred to the overview article at this package’s pkgdown site.

The goals of this package are:
- to provide a framework to use Bootstrap’s JavaScript-markup API: http://getbootstrap.com/javascript/
- to provide functions that work for both markdown HTML documents and for shiny apps - the only exceptions are some functions that work with only the UI side of shiny.
- to promote composition of HTML using pipes.

Highlights

Accordion-sidebar

This family of functions lets you build another dimension to your shiny apps, although you can still use it markdown HTML documents. Rather than explain, you can see it demonstrated in a shiny app. If you would like some explanation, please see this article.