Package 'bslib'

August 11, 2023

Title Custom 'Bootstrap' 'Sass' Themes for 'shiny' and 'rmarkdown'

Version 0.5.1

Description Simplifies custom 'CSS' styling of both 'shiny' and 'rmarkdown' via 'Bootstrap' 'Sass'. Supports 'Bootstrap' 3, 4 and 5 as well as their various 'Bootswatch' themes. An interactive widget is also provided for previewing themes in real time.

License MIT + file LICENSE

URL https://rstudio.github.io/bslib/, https://github.com/rstudio/bslib

BugReports https://github.com/rstudio/bslib/issues

Depends R (>= 2.10)

Imports base64enc, cachem, grDevices, htmltools (>= 0.5.4), jquerylib (>= 0.1.3), jsonlite, memoise (>= 2.0.1), mime, rlang, sass (>= 0.4.0)

Suggests bsicons, curl, fontawesome, ggplot2, knitr, magrittr, rappdirs, rmarkdown (>= 2.7), shiny (>= 1.6.0), testthat, thematic, withr

Encoding UTF-8

RoxygenNote 7.2.3

Collate 'accordion.R' 'breakpoints.R' 'bs-current-theme.R' 'bs-dependencies.R' 'bs-global.R' 'bs-remove.R' 'bs-theme-layers.R' 'bs-theme-preset-bootswatch.R' 'bs-theme-preset-builtin.R' 'bs-theme-preset.R' 'utils.R' 'bs-theme-preview.R' 'bs-theme-update.R' 'bs-theme.R' 'bslib-package.R' 'card.R' 'deprecated.R' 'files.R' 'fill.R' 'imports.R' 'input-switch.R' 'layout.R' 'nav-items.R' 'nav-update.R' 'navs-legacy.R' 'navs.R' 'onLoad.R' 'page.R' 'popover.R' 'precompiled.R' 'print.R' 'shiny-devmode.R' 'sidebar.R' 'staticimports.R' 'tooltip.R' 'utils-deps.R' 'utils-shiny.R' 'utils-tags.R' 'value-box.R' 'version-default.R' 'versions.R'

Config/testthat/edition 3

Config/Needs/routine chromote, desc, renv

Config/Needs/website brio, crosstalk, dplyr, DT, ggplot2, glue, htmlwidgets, leaflet, lorem, palmerpenguins, plotly, purrr, rprojroot, rstudio/htmltools, scales, stringr, tidyr, webshot2

Config/Needs/deploy BH, cpp11, dplyr, DT, ggplot2, ggridges, gt, hexbin, histoslider, lattice, leaflet, lubridate, modelr, nycflights13, plotly, reactable, reshape2, rprojroot, rsconnect, scales

NeedsCompilation no

Author Carson Sievert [aut, cre] (<https://orcid.org/0000-0002-4958-2844>), Joe Cheng [aut], Garrick Aden-Buie [aut] (<https://orcid.org/0000-0002-7111-0077>), Posit Software, PBC [cph, fnd], Bootstrap contributors [ctb] (Bootstrap library), Twitter, Inc [cph] (Bootstrap library), Javi Aguilar [ctb, cph] (Bootstrap colorpicker library), Thomas Park [ctb, cph] (Bootswatch library), PayPal [ctb, cph] (Bootstrap accessibility plugin)

Maintainer Carson Sievert <carson@posit.co>

Repository CRAN

Date/Publication 2023-08-11 16:53:52 UTC

R topics documented:

`accordion` *Create a vertically collapsing accordion*

Description

Create a vertically collapsing accordion

Usage

```
accordion(
  ...,
  id = NULL,
  open = NULL,
  multiple = TRUE,
  class = NULL,
  width = NULL,
  height = NULL
)

accordion_panel(title, ..., value = title, icon = NULL)
```

Arguments

`...`	Named arguments become attributes on the `<div class="accordion">` element. Unnamed arguments should be `accordion_panel()`s.
`id`	If provided, you can use `input$id` in your server logic to determine which of the `accordion_panel()`s are currently active. The value will correspond to the `accordion_panel()`'s `value` argument.
`open`	A character vector of `accordion_panel()` values to open (i.e., show) by default. The default value of `NULL` will open the first `accordion_panel()`. Use a value of `TRUE` to open all (or `FALSE` to open none) of the items. It's only possible to open more than one panel when `multiple=TRUE`.
`multiple`	Whether multiple `accordion_panel()` can be open at once.

class	Additional CSS classes to include on the accordion div.
width, height	Any valid CSS unit; for example, height="100%".
title	A title to appear in the accordion_panel()'s header.
value	A character string that uniquely identifies this panel.
icon	A htmltools::tag child (e.g., bsicons::bs_icon()) which is positioned just before the title.

References

https://getbootstrap.com/docs/5.2/components/accordion/

See Also

accordion_panel_set()

Examples

```
items <- lapply(LETTERS, function(x) {
  accordion_panel(paste("Section", x), paste("Some narrative for section", x))
})

# First shown by default
accordion(!!!items)
# Nothing shown by default
accordion(!!!items, open = FALSE)
# Everything shown by default
accordion(!!!items, open = TRUE)

# Show particular sections
accordion(!!!items, open = "Section B")
accordion(!!!items, open = c("Section A", "Section B"))

# Provide an id to create a shiny input binding
library(shiny)

ui <- page_fluid(
  accordion(!!!items, id = "acc")
)

server <- function(input, output) {
  observe(print(input$acc))
}

shinyApp(ui, server)
```

accordion_panel_set *Dynamically update accordions*

Description

Dynamically (i.e., programmatically) update/modify accordion()s in a Shiny app. These functions require an id to be provided to the accordion() and must also be called within an active Shiny session.

Usage

```
accordion_panel_set(id, values, session = get_current_session())

accordion_panel_open(id, values, session = get_current_session())

accordion_panel_close(id, values, session = get_current_session())

accordion_panel_insert(
  id,
  panel,
  target = NULL,
  position = c("after", "before"),
  session = get_current_session()
)

accordion_panel_remove(id, target, session = get_current_session())

accordion_panel_update(
  id,
  target,
  ...,
  title = NULL,
  value = NULL,
  icon = NULL,
  session = get_current_session()
)
```

Arguments

id	an character string that matches an existing accordion()'s id.
values	either a character string (used to identify particular accordion_panel()s by their value) or TRUE (i.e., all values).
session	a shiny session object (the default should almost always be used).
panel	an accordion_panel().
target	The value of an existing panel to insert next to. If removing: the value of the accordion_panel() to remove.

position	Should panel be added before or after the target? When target is NULL (the default), "after" will append after the last panel and "before" will prepend before the first panel.
...	Named arguments become attributes on the element. Unnamed arguments should be accordion_panel()s.
title	A title to appear in the accordion_panel()'s header.
value	A character string that uniquely identifies this panel.
icon	A htmltools::tag child (e.g., bsicons::bs_icon()) which is positioned just before the title.

Functions

- accordion_panel_set(): same as accordion_panel_open(), except it also closes any currently open panels.
- accordion_panel_open(): open accordion_panel()s.
- accordion_panel_close(): close accordion_panel()s.
- accordion_panel_insert(): insert a new accordion_panel()
- accordion_panel_remove(): remove accordion_panel()s.
- accordion_panel_update(): update a accordion_panel().

---

as_fill_carrier *Test and/or coerce fill behavior*

Description

Filling layouts in bslib are built on the foundation of fillable containers and fill items (fill carriers are both fillable and fill). This is why most bslib components (e.g., card(), card_body(), layout_sidebar()) possess both fillable and fill arguments (to control their fill behavior). However, sometimes it's useful to add, remove, and/or test fillable/fill properties on arbitrary htmltools::tag(), which these functions are designed to do.

Usage

```
as_fill_carrier(
  x,
  ...,
  min_height = NULL,
  max_height = NULL,
  gap = NULL,
  class = NULL,
  style = NULL,
  css_selector = NULL
)
```

```
as_fillable_container(
  x,
  ...,
  min_height = NULL,
  max_height = NULL,
  gap = NULL,
  class = NULL,
  style = NULL,
  css_selector = NULL
)

as_fill_item(
  x,
  ...,
  min_height = NULL,
  max_height = NULL,
  class = NULL,
  style = NULL,
  css_selector = NULL
)

remove_all_fill(x)

is_fill_carrier(x)

is_fillable_container(x)

is_fill_item(x)
```

Arguments

x	a htmltools::tag().
...	currently ignored.
min_height, max_height	Any valid CSS unit (e.g., 150).
gap	Any valid CSS unit.
class	A character vector of class names to add to the tag.
style	A character vector of CSS properties to add to the tag.
css_selector	A character string containing a CSS selector for targeting particular (inner) tag(s) of interest. For more details on what selector(s) are supported, see tagAppendAttributes().

Details

Although as_fill(), as_fillable(), and as_fill_carrier() can work with non-tag objects that have a as.tags method (e.g., htmlwidgets), they return the "tagified" version of that object.

Value

- For `as_fill()`, `as_fillable()`, and `as_fill_carrier()`: the *tagified* version `x`, with relevant tags modified to possess the relevant fill properties.
- For `is_fill()`, `is_fillable()`, and `is_fill_carrier()`: a logical vector, with length matching the number of top-level tags that possess the relevant fill properties.

References

https://rstudio.github.io/bslib/articles/filling.html

Examples

```
library(shiny)
shinyApp(
  page_fillable(
    # without `as_fill_carrier()`, the plot won't fill the page because
    # `uiOutput()` is neither a fillable container nor a fill item by default.
    as_fill_carrier(uiOutput("ui"))
  ),
  function(input, output) {
    output$ui <- renderUI({
      div(
        class = "bg-info text-white",
        as_fill_item(),
        "A fill item"
      )
    })
  }
)
```

---

bootswatch_themes *Obtain a list of all available bootswatch themes.*

Description

Obtain a list of all available bootswatch themes.

Usage

```
bootswatch_themes(version = version_default(), full_path = FALSE)
```

Arguments

`version`	the major version of Bootswatch.
`full_path`	whether to return a path to the installed theme.

Value

a character vector of Bootswatch themes.

`breakpoints` *Define breakpoint values*

Description

A generic constructor for responsive breakpoints.

Usage

```
breakpoints(..., sm = NULL, md = NULL, lg = NULL)
```

Arguments

`...`	Other breakpoints (e.g., `xl`).
`sm`	Values to apply at the `sm` breakpoint.
`md`	Values to apply at the `md` breakpoint.
`lg`	Values to apply at the `lg` breakpoint.

References

https://getbootstrap.com/docs/5.3/layout/breakpoints/

See Also

`layout_columns()`

`bs_add_variables` *Add low-level theming customizations*

Description

Compared to higher-level theme customization available in `bs_theme()`, these functions are a more direct interface to Bootstrap Sass, and therefore, do nothing to ensure theme customizations are portable between major Bootstrap versions.

Usage

```
bs_add_variables(
  theme,
  ...,
  .where = "defaults",
  .default_flag = identical(.where, "defaults")
)

bs_add_rules(theme, rules)

bs_add_functions(theme, functions)

bs_add_mixins(theme, mixins)

bs_bundle(theme, ...)
```

Arguments

theme	a bs_theme() object.
...	• bs_add_variables(): Should be named Sass variables or values that can be passed in directly to the defaults argument of a sass::sass_layer(). • bs_bundle(): Should be arguments that can be handled by sass::sass_bundle() to be appended to the theme
.where	Whether to place the variable definitions before other Sass "defaults", after other Sass "declarations", or after other Sass "rules".
.default_flag	Whether or not to add a !default flag (if missing) to variable expressions. It's recommended to keep this as TRUE when .where = "defaults".
rules	Sass rules. Anything understood by sass::as_sass() may be provided (e.g., a list, character vector, sass::sass_file(), etc)
functions	A character vector or sass::sass_file() containing functions definitions.
mixins	A character vector or sass::sass_file() containing mixin definitions.

Value

a modified bs_theme() object.

Functions

- bs_add_variables(): Add Bootstrap Sass variable defaults
- bs_add_rules(): Add additional Sass rules
- bs_add_functions(): Add additional Sass functions
- bs_add_mixins(): Add additional Sass mixins
- bs_bundle(): Add additional sass::sass_bundle() objects to an existing theme.

References

https://getbootstrap.com/docs/4.4/getting-started/theming/

https://rstudio.github.io/sass/articles/sass.html#layering

Examples

```
# Function to preview the styling a (primary) Bootstrap button
library(htmltools)
button <- tags$a(class = "btn btn-primary", href = "#", role = "button", "Hello")
preview_button <- function(theme) {
  if (interactive()) {
    browsable(tags$body(bs_theme_dependencies(theme), button))
  }
}

# Here we start with a theme based on a Bootswatch theme,
# then override some variable defaults
theme <- bs_add_variables(
  bs_theme(bootswatch = "sketchy", primary = "orange"),
  "body-bg" = "#EEEEEE",
  "font-family-base" = "monospace",
  "font-size-base" = "1.4rem",
  "btn-padding-y" = ".16rem",
  "btn-padding-x" = "2rem"
)

preview_button(theme)

# If you need to set a variable based on another Bootstrap variable
theme <- bs_add_variables(theme, "body-color" = "$success", .where = "declarations")
preview_button(theme)

# Start a new global theme and add some custom rules that
# use Bootstrap variables to define a custom styling for a
# 'person card'
person_rules <- system.file("custom", "person.scss", package = "bslib")
theme <- bs_add_rules(bs_theme(), sass::sass_file(person_rules))
# Include custom CSS that leverages bootstrap Sass variables
person <- function(name, title, company) {
  tags$div(
    class = "person",
    h3(class = "name", name),
    div(class = "title", title),
    div(class = "company", company)
  )
}
if (interactive()) {
  browsable(shiny::fluidPage(
    theme = theme,
    person("Andrew Carnegie", "Owner", "Carnegie Steel Company"),
    person("John D. Rockefeller", "Chairman", "Standard Oil")
```

```
  ))
}
```

`bs_current_theme` *Obtain the currently active theme at render time*

Description

Intended for advanced use by developers to obtain the currently active theme *at render time* and primarily for implementing themable widgets that can't otherwise be themed via `bs_dependency_defer()`.

Usage

```
bs_current_theme(session = get_current_session(FALSE))
```

Arguments

`session`	The current Shiny session (if any).

Details

This function should generally only be called at print/render time. For example:

- Inside the `preRenderHook` of `htmlwidgets::createWidget()`.
- Inside of a custom print method that generates htmltools::tags.
- Inside of a `htmltools::tagFunction()`

Calling this function at print/render time is important because it does different things based on the context in which it's called:

- If a reactive context is active, `session$getCurrentTheme()` is called (which is a reactive read).
- If no reactive context is active, `shiny::getCurrentTheme()` is called (which returns the current app's `theme`, if relevant).
- If `shiny::getCurrentTheme()` comes up empty, then `bs_global_get()` is called, which is relevant for `rmarkdown::html_document()`, and possibly other static rendering contexts.

Value

a `bs_theme()` object.

bs_dependency *Themeable HTML components*

Description

Themeable HTML components use Sass to generate CSS rules from Bootstrap Sass variables, functions, and/or mixins (i.e., stuff inside of `theme`). `bs_dependencies()` makes it a bit easier to create themeable components by compiling `sass::sass()` (`input`) together with Bootstrap Sass inside of a `theme`, and packaging up the result into an `htmlDependency()`.

Themable components can also be *dynamically* themed inside of Shiny (i.e., they may be themed in 'real-time' via `bs_themer()`, and more generally, update their styles in response to shiny::session's `setCurrentTheme()` method). Dynamically themeable components provide a "recipe" (i.e., a function) to `bs_dependency_defer()`, describing how to generate new CSS stylesheet(s) from a new `theme`. This function is called when the HTML page is first rendered, and may be invoked again with a new `theme` whenever shiny::session's `setCurrentTheme()` is called.

Usage

```
bs_dependency(
  input = list(),
  theme,
  name,
  version,
  cache_key_extra = NULL,
  .dep_args = list(),
  .sass_args = list()
)

bs_dependency_defer(func, memoise = TRUE)
```

Arguments

`input`	Sass rules to compile, using `theme`.
`theme`	A `bs_theme()` object.
`name`	Library name
`version`	Library version
`cache_key_extra`	Extra information to add to the sass cache key. It is useful to add the version of your package.
`.dep_args`	A list of additional arguments to pass to `htmltools::htmlDependency()`. Note that `package` has no effect and `script` must be absolute path(s).
`.sass_args`	A list of additional arguments to pass to `sass::sass_partial()`.
`func`	a *non-anonymous* function, with a *single* argument. This function should accept a `bs_theme()` object and return a single `htmlDependency()`, a list of them, or `NULL`.

memoise — whether or not to memoise (i.e., cache) func results for a short period of time. The default, TRUE, can have large performance benefits when many instances of the same themable widget are rendered. Note that you may want to avoid memoisation if func relies on side-effects (e.g., files on-disk) that need to change for each themable widget instance.

Value

bs_dependency() returns an htmltools::htmlDependency() and bs_dependency_defer() returns an htmltools::tagFunction()

References

https://rstudio.github.io/bslib/articles/custom-components.html

Examples

```
## Not run:

myWidgetVersion <- "1.2.3"

myWidgetDependency <- function() {
  list(
    bs_dependency_defer(myWidgetCss),
    htmlDependency(
      name = "mywidget-js",
      version = myWidgetVersion,
      src = system.file(package = "mypackage", "js"),
      script = "mywidget.js"
    )
  )
}

myWidgetCSS <- function(theme) {
  if (!is_bs_theme(theme)) {
    return(
      htmlDependency(
        name = "mywidget-css",
        version = myWidgetVersion,
        src = system.file(package = "mypackage", "css"),
        stylesheet = "mywidget.css"
      )
    )
  }

  # Compile mywidget.scss using the variables and defaults from the theme
  # object.
  sass_input <- sass::sass_file(system.file(package = "mypackage", "scss/mywidget.scss"))

  bs_dependency(
    input = sass_input,
```

```
    theme = theme,
    name = "mywidget",
    version = myWidgetVersion,
    cache_key_extra = utils::packageVersion("mypackage")
  )
}

# Note that myWidgetDependency is not defined inside of myWidget. This is so
# that, if `myWidget()` is called multiple times, Shiny can tell that the
# function objects are identical and deduplicate them.
myWidget <- function(id) {
  div(
    id = id,
    span("myWidget"),
    myWidgetDependency()
  )
}

## End(Not run)
```

`bs_get_variables` *Retrieve Sass variable values from the current theme*

Description

Useful for retriving a variable from the current theme and using the value to inform another R function.

Usage

```
bs_get_variables(theme, varnames)

bs_get_contrast(theme, varnames)
```

Arguments

`theme`	a `bs_theme()` object.
`varnames`	a character string referencing a Sass variable in the current theme.

Value

a character string containing a CSS/Sass value. If the variable(s) are not defined, their value is `NA`.

Examples

```
vars <- c("body-bg", "body-color", "primary", "border-radius")
bs_get_variables(bs_theme(), varnames = vars)
bs_get_variables(bs_theme(bootswatch = "darkly"), varnames = vars)


bs_get_contrast(bs_theme(), c("primary", "dark", "light"))

library(htmltools)
div(
  class = "bg-primary",
  style = css(
    color = bs_get_contrast(bs_theme(), "primary")
  )
)
```

`bs_global_theme` *Global theming*

Description

`bs_global_theme()` creates a new (global) Bootstrap Sass theme which `bs_theme_dependencies()` (or `sass_partial()`) can consume (their `theme` argument defaults to `bs_global_get()`, which get the current global theme).

Usage

```
bs_global_theme(
  version = version_default(),
  bootswatch = NULL,
  bg = NULL,
  fg = NULL,
  primary = NULL,
  secondary = NULL,
  success = NULL,
  info = NULL,
  warning = NULL,
  danger = NULL,
  base_font = NULL,
  code_font = NULL,
  heading_font = NULL,
  ...
)

bs_global_set(theme = bs_theme())

bs_global_get()
```

```
bs_global_clear()

bs_global_add_variables(
  ...,
  .where = "defaults",
  .default_flag = identical(.where, "defaults")
)

bs_global_add_rules(...)

bs_global_bundle(...)

bs_global_theme_update(
  ...,
  preset = NULL,
  bg = NULL,
  fg = NULL,
  primary = NULL,
  secondary = NULL,
  success = NULL,
  info = NULL,
  warning = NULL,
  danger = NULL,
  base_font = NULL,
  code_font = NULL,
  heading_font = NULL,
  bootswatch = NULL
)
```

Arguments

version	The major version of Bootstrap to use (see versions() for possible values). Defaults to the currently recommended version for new projects (currently Bootstrap 5).
bootswatch	The name of a bootswatch theme (see bootswatch_themes() for possible values). When provided to bs_theme_update(), any previous Bootswatch theme is first removed before the new one is applied (use bootswatch = "bootstrap" to effectively remove the Bootswatch theme).
bg	A color string for the background.
fg	A color string for the foreground.
primary	A color to be used for hyperlinks, to indicate primary/default actions, and to show active selection state in some Bootstrap components. Generally a bold, saturated color that contrasts with the theme's base colors.
secondary	A color for components and messages that don't need to stand out. (Not supported in Bootstrap 3.)
success	A color for messages that indicate an operation has succeeded. Typically green.

info	A color for messages that are informative but not critical. Typically a shade of blue-green.
warning	A color for warning messages. Typically yellow.
danger	A color for errors. Typically red.
base_font	The default typeface.
code_font	The typeface to be used for code. Be sure this is monospace!
heading_font	The typeface to be used for heading elements.
...	arguments passed along to bs_add_variables().
theme	a bs_theme() object.
.where	Whether to place the variable definitions before other Sass "defaults", after other Sass "declarations", or after other Sass "rules".
.default_flag	Whether or not to add a !default flag (if missing) to variable expressions. It's recommended to keep this as TRUE when .where = "defaults".
preset	The name of a theme preset, either a built-in theme provided by bslib or a Bootswatch theme (see builtin_themes() and bootswatch_themes() for possible values). This argument takes precedence over the bootswatch argument and only one theme or bootswatch can be provided. When provided to bs_theme_update(), any previous preset theme is first removed before the new theme preset is applied. You can use theme = "bootstrap" to remove any preset theme and to revert to a base Bootstrap theme.

Value

functions that modify the global theme (e.g., bs_global_set()) invisibly return the previously set theme. bs_global_get() returns the current global theme.

See Also

bs_theme(), bs_theme_preview()

Examples

```
# Remember the global state now (so we can restore later)
theme <- bs_global_get()
# Use Bootstrap 3 (globally) with some theme customization
bs_global_theme(3, bg = "#444", fg = "#e4e4e4", primary = "#e39777")
if (interactive()) bs_theme_preview(with_themer = FALSE)
# If no global theme is active, bs_global_get() returns NULL
bs_global_clear()
bs_global_get()
# Restore the original state
bs_global_set(theme)
```

bs_remove *Remove or retrieve Sass code from a theme*

Description

Remove or retrieve Sass code from a theme

Usage

```
bs_remove(theme, ids = character(0))

bs_retrieve(theme, ids = character(0), include_unnamed = TRUE)
```

Arguments

theme	a bs_theme() object.
ids	a character vector of ids
include_unnamed	whether or not to include unnamed sass::sass_layer()s (e.g., Bootstrap Sass variables, functions, and mixins).

Value

a modified bs_theme() object.

Examples

```
# Remove CSS rules for print and carousels
bs4 <- bs_theme(version = 4)
bs_remove(bs4, c("_print", "_carousel"))

# Remove BS3 compatibility layer
bs_remove(bs4, "bs3compat")
```

bs_theme *Create a Bootstrap theme*

Description

Creates a Bootstrap theme object, where you can:

- Choose a (major) Bootstrap `version`.
- Choose a Bootswatch theme (optional).
- Customize main colors and fonts via explicitly named arguments (e.g., `bg`, `fg`, `primary`, etc).
- Customize other, lower-level, Bootstrap Sass variable defaults via `...`.

To learn more about how to implement custom themes, as well as how to use them inside Shiny and R Markdown, see here.

Usage

```
bs_theme(
  version = version_default(),
  preset = NULL,
  ...,
  bg = NULL,
  fg = NULL,
  primary = NULL,
  secondary = NULL,
  success = NULL,
  info = NULL,
  warning = NULL,
  danger = NULL,
  base_font = NULL,
  code_font = NULL,
  heading_font = NULL,
  font_scale = NULL,
  bootswatch = NULL
)

bs_theme_update(
  theme,
  ...,
  preset = NULL,
  bg = NULL,
  fg = NULL,
  primary = NULL,
  secondary = NULL,
  success = NULL,
  info = NULL,
  warning = NULL,
  danger = NULL,
  base_font = NULL,
  code_font = NULL,
  heading_font = NULL,
  font_scale = NULL,
```

```
  bootswatch = NULL
)

is_bs_theme(x)
```

Arguments

version	The major version of Bootstrap to use (see versions() for possible values). Defaults to the currently recommended version for new projects (currently Bootstrap 5).
preset	The name of a theme preset, either a built-in theme provided by bslib or a Bootswatch theme (see builtin_themes() and bootswatch_themes() for possible values). This argument takes precedence over the bootswatch argument and only one theme or bootswatch can be provided. When provided to bs_theme_update(), any previous preset theme is first removed before the new theme preset is applied. You can use theme = "bootstrap" to remove any preset theme and to revert to a base Bootstrap theme.
...	arguments passed along to bs_add_variables().
bg	A color string for the background.
fg	A color string for the foreground.
primary	A color to be used for hyperlinks, to indicate primary/default actions, and to show active selection state in some Bootstrap components. Generally a bold, saturated color that contrasts with the theme's base colors.
secondary	A color for components and messages that don't need to stand out. (Not supported in Bootstrap 3.)
success	A color for messages that indicate an operation has succeeded. Typically green.
info	A color for messages that are informative but not critical. Typically a shade of blue-green.
warning	A color for warning messages. Typically yellow.
danger	A color for errors. Typically red.
base_font	The default typeface.
code_font	The typeface to be used for code. Be sure this is monospace!
heading_font	The typeface to be used for heading elements.
font_scale	A scalar multiplier to apply to the base font size. For example, a value of 1.5 scales font sizes to 150% and a value of 0.8 scales to 80%. Must be a positive number.
bootswatch	The name of a bootswatch theme (see bootswatch_themes() for possible values). When provided to bs_theme_update(), any previous Bootswatch theme is first removed before the new one is applied (use bootswatch = "bootstrap" to effectively remove the Bootswatch theme).
theme	a bs_theme() object.
x	an object.

Value

a sass::sass_bundle() (list-like) object.

Colors

Colors may be provided in any format that htmltools::parseCssColors() can understand. To control the vast majority of the ('grayscale') color defaults, specify both the fg (foreground) and bg (background) colors. The primary and secondary theme colors are also useful for accenting the main grayscale colors in things like hyperlinks, tabset panels, and buttons.

Fonts

Use base_font, code_font, and heading_font to control the main typefaces. These arguments set new defaults for the relevant font-family CSS properties, but don't necessarily import the relevant font files. To both set CSS properties *and* import font files, consider using the various font_face() helpers.

Each *_font argument may be collection of character vectors, font_google()s, font_link()s and/or font_face()s. Note that a character vector can have:

- A single unquoted name (e.g., "Source Sans Pro").
- A single quoted name (e.g., "'Source Sans Pro'").
- A comma-separated list of names w/ individual names quoted as necessary. (e.g. c("Open Sans", "'Source Sans Pro'", "'Helvetica Neue', Helvetica, sans-serif"))

Since font_google(..., local = TRUE) guarantees that the client has access to the font family, meaning it's relatively safe to specify just one font family, for instance:

```
bs_theme(base_font = font_google("Pacifico", local = TRUE))
```

However, specifying multiple "fallback" font families is recommended, especially when relying on remote and/or system fonts being available, for instance. Fallback fonts are useful not only for handling missing fonts, but also for handling a Flash of Invisible Text (FOIT) which can be quite noticeable with remote web fonts on a slow internet connection.

```
bs_theme(base_font = font_collection(font_google("Pacifico", local = FALSE), "Roboto", "sans-serif"))
```

References

https://rstudio.github.io/bslib/articles/theming.html

https://rstudio.github.io/sass/

See Also

bs_add_variables(), bs_theme_preview()

Examples

```
theme <- bs_theme(
  # Controls the default grayscale palette
  bg = "#202123", fg = "#B8BCC2",
  # Controls the accent (e.g., hyperlink, button, etc) colors
  primary = "#EA80FC", secondary = "#48DAC6",
  base_font = c("Grandstander", "sans-serif"),
  code_font = c("Courier", "monospace"),
  heading_font = "'Helvetica Neue', Helvetica, sans-serif",
  # Can also add lower-level customization
  "input-border-color" = "#EA80FC"
)
if (interactive()) {
  bs_theme_preview(theme)
}

# Lower-level bs_add_*() functions allow you to work more
# directly with the underlying Sass code
theme <- bs_add_variables(theme, "my-class-color" = "red")
theme <- bs_add_rules(theme, ".my-class { color: $my-class-color }")
```

---

bs_theme_dependencies *Compile Bootstrap Sass with (optional) theming*

Description

bs_theme_dependencies() compiles Bootstrap Sass into CSS and returns it, along with other HTML dependencies, as a list of htmltools::htmlDependency()s. Most users won't need to call this function directly as Shiny & R Markdown will perform this compilation automatically when handed a bs_theme(). If you're here looking to create a themeable component, see bs_dependency().

Usage

```
bs_theme_dependencies(
  theme,
  sass_options = sass::sass_options_get(output_style = "compressed"),
  cache = sass::sass_cache_get(),
  jquery = jquerylib::jquery_core(3),
  precompiled = get_precompiled_option("bslib.precompiled", default = TRUE)
)
```

Arguments

theme	a bs_theme() object.
sass_options	a sass::sass_options() object.

cache	This can be a directory to use for the cache, a FileCache object created by sass_file_cache(), or FALSE or NULL for no caching.
jquery	a jquerylib::jquery_core() object.
precompiled	Before compiling the theme object, first look for a precompiled CSS file for the theme_version(). If precompiled = TRUE and a precompiled CSS file exists for the theme object, it will be fetched immediately and not compiled. At the moment, we only provide precompiled CSS for "stock" builds of Bootstrap (i.e., no theming additions, bootswatch themes, or non-default sass_options).

Value

a list of HTML dependencies containing Bootstrap CSS, Bootstrap JavaScript, and jquery. This list may contain additional HTML dependencies if bundled with the theme.

Sass caching and precompilation

If Shiny Developer Mode is enabled (by setting options(shiny.devmode = TRUE) or calling shiny::devmode(TRUE)), both **sass** caching and **bslib** precompilation are disabled by default; that is, a call to bs_theme_dependencies(theme) expands to bs_theme_dependencies(theme, cache = F, precompiled = F)). This is useful for local development as enabling caching/precompilation may produce incorrect results if local changes are made to bslib's source files.

See Also

bs_theme(), bs_dependency()

Examples

```
# Function to preview the styling a (primary) Bootstrap button
library(htmltools)
button <- tags$a(class = "btn btn-primary", href = "#", role = "button", "Hello")
preview_button <- function(theme) {
  if (interactive()) {
    browsable(tags$body(bs_theme_dependencies(theme), button))
  }
}

# Latest Bootstrap
preview_button(bs_theme())
# Bootstrap 3
preview_button(bs_theme(3))
# Bootswatch 4 minty theme
preview_button(bs_theme(4, bootswatch = "minty"))
# Bootswatch 4 sketchy theme
preview_button(bs_theme(4, bootswatch = "sketchy"))
```

bs_theme_preview *Preview the currently set theme*

Description

Launches an example shiny app via `run_with_themer()` and `bs_theme_dependencies()`. Useful for getting a quick preview of the current theme setting as well as an interactive GUI for tweaking some of the main theme settings.

Usage

```
bs_theme_preview(theme = bs_theme(), ..., with_themer = TRUE)
```

Arguments

`theme`	a `bs_theme()` object.
`...`	passed along to `shiny::runApp()`.
`with_themer`	whether or not to run the app with `run_with_themer()`.

Details

The app that this launches is subject to change.

Value

nothing, this function is called for its side-effects (launching an application).

See Also

`run_with_themer()`

Examples

```
theme <- bs_theme(bg = "#6c757d", fg = "white", primary = "orange")
if (interactive()) bs_theme_preview(theme)
```

builtin_themes *Obtain a list of all available built-in* **bslib** *themes.*

Description

Obtain a list of all available built-in **bslib** themes.

Usage

```
builtin_themes(version = version_default(), full_path = FALSE)
```

Arguments

version	the major version of Bootstrap.
full_path	whether to return a path to the installed theme.

Value

a character vector of built-in themes provided by **bslib**.

card *A Bootstrap card component*

Description

A general purpose container for grouping related UI elements together with a border and optional padding. To learn more about `card()`s, see this article.

Usage

```
card(
  ...,
  full_screen = FALSE,
  height = NULL,
  max_height = NULL,
  min_height = NULL,
  fill = TRUE,
  class = NULL,
  wrapper = card_body
)
```

Arguments

`...`	Unnamed arguments can be any valid child of an htmltools tag (which includes card items such as `card_body()`. Named arguments become HTML attributes on returned UI element.
`full_screen`	If `TRUE`, an icon will appear when hovering over the card body. Clicking the icon expands the card to fit viewport size.
`height`	Any valid CSS unit (e.g., `height="200px"`). Doesn't apply when a card is made `full_screen` (in this case, consider setting a `height` in `card_body()`).
`max_height, min_height`	Any valid CSS unit (e.g., `max_height="200px"`). Doesn't apply when a card is made `full_screen` (in this case, consider setting a `max_height` in `card_body()`).
`fill`	Whether or not to allow the card to grow/shrink to fit a fillable container with an opinionated height (e.g., `page_fillable()`).
`class`	Additional CSS classes for the returned UI element.
`wrapper`	A function (which returns a UI element) to call on unnamed arguments in `...` which are not already card item(s) (like `card_header()`, `card_body()`, etc.). Note that non-card items are grouped together into one `wrapper` call (e.g. given `card("a", "b", card_body("c"), "d")`, `wrapper` would be called twice, once with `"a"` and `"b"` and once with `"d"`).

Value

A `htmltools::div()` tag.

See Also

`card_body()` for putting stuff inside the card.

`navset_card_tab()` for cards with multiple tabs.

`layout_column_wrap()` for laying out multiple cards (or multiple columns inside a card).

Examples

```
library(htmltools)

if (interactive()) {
  card(
    full_screen = TRUE,
    card_header(
      "This is the header"
    ),
    card_body(
      p("This is the body."),
      p("This is still the body.")
    ),
    card_footer(
      "This is the footer"
    )
```

```
  )
}
```

---

card_body *Card items*

Description

Components designed to be provided as direct children of a `card()`. For a general overview of the `card()` API, see this article.

Usage

```
card_body(
  ...,
  fillable = TRUE,
  min_height = NULL,
  max_height = NULL,
  max_height_full_screen = max_height,
  height = NULL,
  padding = NULL,
  gap = NULL,
  fill = TRUE,
  class = NULL
)

card_title(..., container = htmltools::h5)

card_header(..., class = NULL, container = htmltools::div)

card_footer(..., class = NULL)

card_image(
  file,
  ...,
  href = NULL,
  border_radius = c("top", "bottom", "all", "none"),
  mime_type = NULL,
  class = NULL,
  height = NULL,
  fill = TRUE,
  width = NULL,
  container = card_body
)

as.card_item(x)
```

```
is.card_item(x)
```

Arguments

`...`	Unnamed arguments can be any valid child of an htmltools tag. Named arguments become HTML attributes on returned UI element.
`fillable`	Whether or not the card item should be a fillable (i.e. flexbox) container.
`min_height, max_height, max_height_full_screen`	Any valid CSS length unit.
`height`	Any valid CSS unit (e.g., `height="200px"`). Doesn't apply when a card is made `full_screen` (in this case, consider setting a `height` in `card_body()`).
`padding`	Padding to use for the body. This can be a numeric vector (which will be interpreted as pixels) or a character vector with valid CSS lengths. The length can be between one and four. If one, then that value will be used for all four sides. If two, then the first value will be used for the top and bottom, while the second value will be used for left and right. If three, then the first will be used for top, the second will be left and right, and the third will be bottom. If four, then the values will be interpreted as top, right, bottom, and left respectively.
`gap`	A CSS length unit defining the gap (i.e., spacing) between elements provided to `...`. This argument is only applicable when `fillable = TRUE`
`fill`	Whether to allow this element to grow/shrink to fit its `card()` container.
`class`	Additional CSS classes for the returned UI element.
`container`	a function to generate an HTML element to contain the image.
`file`	a file path pointing an image. The image will be base64 encoded and provided to the `src` attribute of the `<img>`. Alternatively, you may set this value to `NULL` and provide the `src` yourself.
`href`	an optional URL to link to.
`border_radius`	where to apply `border-radius` on the image.
`mime_type`	the mime type of the `file`.
`width`	Any valid CSS unit (e.g., `width="100%"`).
`x`	an object to test (or coerce to) a card item.

Value

An `htmltools::div()` tag.

Functions

- `card_body()`: A general container for the "main content" of a `card()`.
- `card_title()`: Similar to `card_header()` but without the border and background color.
- `card_header()`: A header (with border and background color) for the `card()`. Typically appears before a `card_body()`.

- `card_footer()`: A header (with border and background color) for the `card()`. Typically appears after a `card_body()`.
- `card_image()`: Include static (i.e., pre-generated) images.
- `as.card_item()`: Mark an object as a card item. This will prevent the `card()` from putting the object inside a `wrapper` (i.e., a `card_body()`).

See Also

`card()` for creating a card component.

`navset_card_tab()` for cards with multiple tabs.

`layout_column_wrap()` for laying out multiple cards (or multiple columns inside a card).

---

font_face *Helpers for importing web fonts*

Description

`font_google()`, `font_link()`, and `font_face()` are all re-exported from the **sass** package (see `sass::font_face()` for details). For a quick example of how to use these functions with `bs_theme()`, see the examples section below.

Examples

```
# If you have an internet connection, running the following code
# will download, cache, and import the relevant Google Font files
# for local use
theme <- bs_theme(
  base_font = font_google("Fira Sans"),
  code_font = font_google("Fira Code"),
  heading_font = font_google("Fredoka One")
)
if (interactive()) {
  bs_theme_preview(theme)
}

# Three different yet equivalent ways of importing a remotely-hosted Google Font
a <- font_google("Crimson Pro", wght = "200..900", local = FALSE)
b <- font_link(
  "Crimson Pro",
  href = "https://fonts.googleapis.com/css2?family=Crimson+Pro:wght@200..900"
)
url <- "https://fonts.gstatic.com/s/crimsonpro/v13/q5uDsoa5M_tv7IihmnkabARboYF6CsKj.woff2"
c <- font_face(
  family = "Crimson Pro",
  style = "normal",
  weight = "200 900",
  src = paste0("url(", url, ") format('woff2')")
```

```
)
theme <- bs_theme(base_font = c)
if (interactive()) {
  bs_theme_preview(theme)
}
```

`input_switch` *Switch input control*

Description

Create an on-off style switch control for specifying logical values.

Usage

```
input_switch(id, label, value = FALSE, width = NULL)

update_switch(id, label = NULL, value = NULL, session = get_current_session())

toggle_switch(id, value = NULL, session = get_current_session())
```

Arguments

`id`	An input id.
`label`	A label for the switch.
`value`	Whether or not the switch should be checked by default.
`width`	Any valid CSS unit (e.g., `width="200px"`).
`session`	a shiny session object (the default should almost always be used).

Value

Returns a UI element for a switch input control. The server value received for the input corresponding to `id` will be a logical (`TRUE`/`FALSE`) value.

Examples

```
library(shiny)
library(bslib)

ui <- page_fixed(
  title = "Keyboard Settings",
  h2("Keyboard Settings"),
  input_switch("auto_capitalization", "Auto-Capitalization", TRUE),
  input_switch("auto_correction", "Auto-Correction", TRUE),
  input_switch("check_spelling", "Check Spelling", TRUE),
  input_switch("smart_punctuation", "Smart Punctuation"),
  h2("Preview"),
```

```
  verbatimTextOutput("preview")
)

server <- function(input, output, session) {
  output$preview <- renderPrint({
    list(
      auto_capitalization = input$auto_capitalization,
      auto_correction = input$auto_correction,
      check_spelling = input$check_spelling,
      smart_punctuation = input$smart_punctuation
    )
  })
}

shinyApp(ui, server)
```

`layout_columns` *Responsive column-based grid layouts*

Description

Create responsive, column-based grid layouts, based on a 12-column grid.

Usage

```
layout_columns(
  ...,
  col_widths = NA,
  row_heights = NULL,
  fill = TRUE,
  fillable = TRUE,
  gap = NULL,
  class = NULL,
  height = NULL
)
```

Arguments

`...`	Unnamed arguments should be UI elements (e.g., `card()`) Named arguments become attributes on the containing htmltools::tag element.
`col_widths`	One of the following: • `NA` (the default): Automatically determines a sensible number of columns based on the number of children. • A numeric vector of integers between 1 and 12, where each element represents the number of columns for the relevant UI element. Elements that happen to go beyond 12 columns wrap onto the next row. For example, `col_widths = c(4, 8, 12)` allocates 4 columns to the first element, 8

columns to the second element, and 12 columns to the third element (which wraps to the next row). Negative values are also allowed, and are treated as empty columns. For example, `col_widths = c(-2, 8, -2)` would allocate 8 columns to an element (with 2 empty columns on either side).

- A `breakpoints()` object, where each breakpoint may be either of the above.

`row_heights` One of the following:

- A numeric vector, where each value represents the fractional unit (`fr`) height of the relevant row. If there are more rows than values provided, the pattern will repeat. For example, `row_heights = c(1, 2)` allows even rows to take up twice as much space as odd rows.
- A list of numeric and CSS length units, where each value represents the height of the relevant row. If more rows are needed than values provided, the pattern will repeat. For example, `row_heights = list("auto", 1)` allows the height of odd rows to be driven my it's contents and even rows to be `1fr`.
- A character vector/string of CSS length units. In this case, the value is supplied directly to `grid-auto-rows`.
- A `breakpoints()` object, where each breakpoint may be either of the above.

`fill` Whether or not to allow the layout to grow/shrink to fit a fillable container with an opinionated height (e.g., `page_fillable()`).

`fillable` Whether or not each element is wrapped in a fillable container.

`gap` A CSS length unit defining the gap (i.e., spacing) between elements provided to `...`. This argument is only applicable when `fillable = TRUE`

`class` Additional CSS classes for the returned UI element.

`height` Any valid CSS unit (e.g., `height="200px"`). Doesn't apply when a card is made `full_screen` (in this case, consider setting a `height` in `card_body()`).

See Also

`breakpoints()` for more information on breakpoints.

Examples

```
x <- card("A simple card")

page_fillable(
  layout_columns(x, x, x, x)
)

page_fillable(
  layout_columns(
    col_widths = c(6, 6, 12),
    x, x, x
  )
```

```
)

page_fillable(
  layout_columns(
    col_widths = c(6, 6, -2, 8),
    row_heights = c(1, 3),
    x, x, x
  )
)

page_fillable(
  fillable_mobile = TRUE,
  layout_columns(
    col_widths = breakpoints(
      sm = c(12, 12, 12),
      md = c(6, 6, 12),
      lg = c(4, 4, 4)
    ),
    x, x, x
  )
)
```

`layout_column_wrap` *A grid-like, column-first, layout*

Description

Wraps a 1d sequence of UI elements into a 2d grid. The number of columns (and rows) in the grid dependent on the column `width` as well as the size of the display. For more explanation and illustrative examples, see here

Usage

```
layout_column_wrap(
  width,
  ...,
  fixed_width = FALSE,
  heights_equal = c("all", "row"),
  fill = TRUE,
  fillable = TRUE,
  height = NULL,
  height_mobile = NULL,
  gap = NULL,
  class = NULL
)
```

Arguments

width	The desired width of each card, which can be any of the following: • A (unit-less) number between 0 and 1. – This should be specified as 1/num, where num represents the number of desired columns. • A CSS length unit – Either the minimum (when fixed_width=FALSE) or fixed width (fixed_width=TRUE). • NULL – Allows power users to set the grid-template-columns CSS property manually, either via a style attribute or a CSS stylesheet.
...	Unnamed arguments should be UI elements (e.g., card()) Named arguments become attributes on the containing htmltools::tag element.
fixed_width	Whether or not to interpret the width as a minimum (fixed_width=FALSE) or fixed (fixed_width=TRUE) width when it is a CSS length unit.
heights_equal	If "all" (the default), every card in every row of the grid will have the same height. If "row", then every card in *each* row of the grid will have the same height, but heights may vary between rows.
fill	Whether or not to allow the layout to grow/shrink to fit a fillable container with an opinionated height (e.g., page_fillable()).
fillable	Whether or not each element is wrapped in a fillable container.
height	Any valid CSS unit (e.g., height="200px"). Doesn't apply when a card is made full_screen (in this case, consider setting a height in card_body()).
height_mobile	Any valid CSS unit to use for the height when on mobile devices (or narrow windows).
gap	A CSS length unit defining the gap (i.e., spacing) between elements provided to .... This argument is only applicable when fillable = TRUE
class	Additional CSS classes for the returned UI element.

Examples

```
x <- card("A simple card")
# Always has 2 columns (on non-mobile)
layout_column_wrap(1/2, x, x, x)
# Has three columns when viewport is wider than 750px
layout_column_wrap("250px", x, x, x)
```

nav-items *Navigation items*

Description

Create nav item(s) for use inside nav containers (e.g., navset_tab(), navset_bar(), etc).

Usage

```
nav_panel(title, ..., value = title, icon = NULL)

nav_panel_hidden(value, ..., icon = NULL)

nav_menu(title, ..., value = title, icon = NULL, align = c("left", "right"))

nav_item(...)

nav_spacer()
```

Arguments

title	A title to display. Can be a character string or UI elements (i.e., tags).
...	Depends on the function: • For nav_panel() and nav_panel_hidden(): UI elements (i.e., tags) to display when the item is active. • For nav_menu(): a collection of nav items (e.g., nav_panel(), nav_item()). • For nav_item(): UI elements (i.e., tags) to place directly in the navigation panel (e.g., search forms, links to external content, etc).
value	A character string to assign to the nav item. This value may be supplied to the relevant container's selected argument in order to show particular nav item's content immediately on page load. This value is also useful for programmatically updating the selected content via nav_select(), nav_hide(), etc (updating selected tabs this way is often useful for showing/hiding panels of content via other UI controls like shiny::radioButtons() – in this scenario, consider using nav_panel_hidden() with navset_hidden()).
icon	Optional icon to appear next to the nav item's title.
align	horizontal alignment of the dropdown menu relative to dropdown toggle.

Value

A nav item that may be passed to a nav container (e.g. navset_tab()).

Functions

- `nav_panel()`: Content to display when the given item is selected.
- `nav_panel_hidden()`: Create nav content for use inside `navset_hidden()` (for creating custom navigation controls via `navs_select()`),
- `nav_menu()`: Create a menu of nav items.
- `nav_item()`: Place arbitrary content in the navigation panel (e.g., search forms, links to external content, etc.)
- `nav_spacer()`: Adding spacing between nav items.

See Also

`navset_tab()`, `nav_select()`.

---

navset *Navigation containers*

Description

Render a collection of `nav_panel()` items into a container.

Usage

```
navset_tab(..., id = NULL, selected = NULL, header = NULL, footer = NULL)

navset_pill(..., id = NULL, selected = NULL, header = NULL, footer = NULL)

navset_pill_list(
  ...,
  id = NULL,
  selected = NULL,
  header = NULL,
  footer = NULL,
  well = TRUE,
  fluid = TRUE,
  widths = c(4, 8)
)

navset_hidden(..., id = NULL, selected = NULL, header = NULL, footer = NULL)

navset_bar(
  ...,
  title = NULL,
  id = NULL,
  selected = NULL,
  sidebar = NULL,
```

```
  fillable = TRUE,
  gap = NULL,
  padding = NULL,
  position = c("static-top", "fixed-top", "fixed-bottom"),
  header = NULL,
  footer = NULL,
  bg = NULL,
  inverse = "auto",
  collapsible = TRUE,
  fluid = TRUE
)

navset_card_tab(
  ...,
  id = NULL,
  selected = NULL,
  title = NULL,
  sidebar = NULL,
  header = NULL,
  footer = NULL,
  height = NULL,
  full_screen = FALSE,
  wrapper = card_body
)

navset_card_pill(
  ...,
  id = NULL,
  selected = NULL,
  title = NULL,
  sidebar = NULL,
  header = NULL,
  footer = NULL,
  height = NULL,
  placement = c("above", "below"),
  full_screen = FALSE,
  wrapper = card_body
)
```

Arguments

`...`	a collection of `nav_panel()` items.
`id`	a character string used for dynamically updating the container (see `nav_select()`).
`selected`	a character string matching the `value` of a particular `nav_panel()` item to selected by default.
`header`	UI element(s) (tags) to display *above* the nav content.
`footer`	UI element(s) (tags) to display *below* the nav content.

well	TRUE to place a well (gray rounded rectangle) around the navigation list.
fluid	TRUE to use fluid layout; FALSE to use fixed layout.
widths	Column widths of the navigation list and tabset content areas respectively.
title	A (left-aligned) title to place in the card header/footer. If provided, other nav items are automatically right aligned.
sidebar	A sidebar() component to display on every nav_panel() page.
fillable	Whether or not to allow fill items to grow/shrink to fit the browser window. If TRUE, all nav_panel() pages are fillable. A character vector, matching the value of nav_panel()s to be filled, may also be provided. Note that, if a sidebar is provided, fillable makes the main content portion fillable.
gap	A CSS length unit defining the gap (i.e., spacing) between elements provided to ....
padding	Padding to use for the body. This can be a numeric vector (which will be interpreted as pixels) or a character vector with valid CSS lengths. The length can be between one and four. If one, then that value will be used for all four sides. If two, then the first value will be used for the top and bottom, while the second value will be used for left and right. If three, then the first will be used for top, the second will be left and right, and the third will be bottom. If four, then the values will be interpreted as top, right, bottom, and left respectively.
position	Determines whether the navbar should be displayed at the top of the page with normal scrolling behavior ("static-top"), pinned at the top ("fixed-top"), or pinned at the bottom ("fixed-bottom"). Note that using "fixed-top" or "fixed-bottom" will cause the navbar to overlay your body content, unless you add padding, e.g.: tags$style(type="text/css", "body {padding-top: 70px;}")
bg	a CSS color to use for the navbar's background color.
inverse	Either TRUE for a light text color or FALSE for a dark text color. If "auto" (the default), the best contrast to bg is chosen.
collapsible	TRUE to automatically collapse the navigation elements into a menu when the width of the browser is less than 940 pixels (useful for viewing on smaller touch-screen device)
height	Any valid CSS unit (e.g., height="200px"). Doesn't apply when a card is made full_screen (in this case, consider setting a height in card_body()).
full_screen	If TRUE, an icon will appear when hovering over the card body. Clicking the icon expands the card to fit viewport size.
wrapper	A function (which returns a UI element) to call on unnamed arguments in ... which are not already card item(s) (like card_header(), card_body(), etc.). Note that non-card items are grouped together into one wrapper call (e.g. given card("a", "b", card_body("c"), "d"), wrapper would be called twice, once with "a" and "b" and once with "d").
placement	placement of the nav items relative to the content.

Details

A basic example:

This first example creates a simple tabbed navigation container with two tabs. The tab name and the content of each tab are specified in the `nav_panel()` calls and `navset_tab()` creates the tabbed navigation around these two tabs.

```
library(htmltools)

navset_tab(
  nav_panel(title = "One", p("First tab content.")),
  nav_panel(title = "Two", p("Second tab content."))
)
```

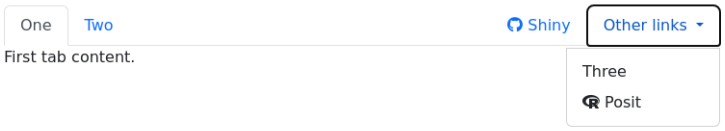
In the rest of the examples, we'll include links among the tabs (or pills) in the navigation controls.

```
link_shiny <- tags$a(shiny::icon("github"), "Shiny", href = "https://github.com/rstudio/shiny", targ
link_posit <- tags$a(shiny::icon("r-project"), "Posit", href = "https://posit.co", target = "_blank")
```

`navset_tab()`:

You can fully customize the controls in the navigation component. In this example, we've added a direct link to the Shiny repository using `nav_item()`. We've also included a dropdown menu using `nav_menu()` containing an option to select a third tab panel and another direct link to Posit's website. Finally, we've separated the primary tabs on the left from the direct link and dropdown menu on the right using `nav_spacer()`.

```
navset_tab(
  nav_panel(title = "One", p("First tab content.")),
  nav_panel(title = "Two", p("Second tab content.")),
  nav_spacer(),
  nav_item(link_shiny),
  nav_menu(
    title = "Other links",
    align = "right",
    nav_panel("Three", p("Third tab content")),
    nav_item(link_posit)
  )
)
```



`navset_pill()`:

`navset_pill()` creates a navigation container that behaves exactly like `navset_tab()`, but the tab toggles are *pills* or button-shaped.

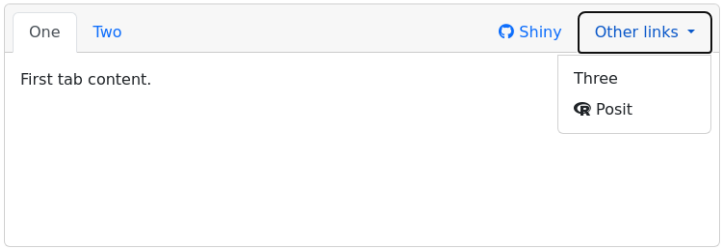
```
navset_pill(
  nav_panel(title = "One", p("First tab content.")),
  nav_panel(title = "Two", p("Second tab content.")),
  nav_spacer(),
  nav_item(link_shiny),
  nav_menu(
    title = "Other links",
    align = "right",
    nav_panel("Three", p("Third tab content")),
    nav_item(link_posit)
  )
)
```

`navset_card_tab()`:

The tabbed navigation container can also be used in a `card()` component thanks to `navset_card_tab()`. Learn more about this approach in the article about Cards, including how to add a shared sidebar to all tabs in the card using the `sidebar` argument of `navset_card_tab()`.

```
navset_card_tab(
  nav_panel(title = "One", p("First tab content.")),
  nav_panel(title = "Two", p("Second tab content.")),
  nav_spacer(),
  nav_item(link_shiny),
  nav_menu(
    title = "Other links",
```

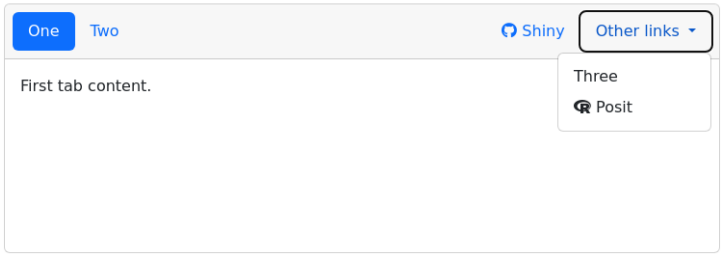
```
    align = "right",
    nav_panel("Three", p("Third tab content")),
    nav_item(link_posit)
  )
)
```



`navset_card_pill()`:

Similar to `navset_pill()`, `navset_card_pill()` provides a pill-shaped variant to `navset_card_tab()`. You can use the `placement` argument to position the navbar `"above"` or `"below"` the card body.

```
navset_card_pill(
  placement = "above",
  nav_panel(title = "One", p("First tab content.")),
  nav_panel(title = "Two", p("Second tab content.")),
  nav_spacer(),
  nav_item(link_shiny),
  nav_menu(
    title = "Other links",
    align = "right",
    nav_panel("Three", p("Third tab content")),
    nav_item(link_posit)
  )
)
```



`navset_pill_list()`:

Furthermore, `navset_pill_list()` creates a vertical list of navigation controls adjacent to, rather than on top of, the tab content panels.

```
navset_pill_list(
```

```
  nav_panel(title = "One", p("First tab content.")),
  nav_panel(title = "Two", p("Second tab content.")),
  nav_spacer(),
  nav_item(link_shiny),
  nav_menu(
    title = "Other links",
    align = "right",
    nav_panel("Three", p("Third tab content")),
    nav_item(link_posit)
  )
)
```

`page_navbar()`:

Finally, `page_navbar()` provides full-page navigation container similar to `navset_tab()` but where each `nav_panel()` is treated as a full page of content and the navigation controls appear in a top-level navigation bar.

```
page_navbar(
  title = "My App",
  bg = "#0062cc",
  nav_panel(title = "One", p("First page content.")),
  nav_panel(title = "Two", p("Second page content.")),
  nav_spacer(),
  nav_item(link_shiny),
  nav_menu(
    title = "Other links",
    align = "right",
    nav_panel("Three", p("Third page content.")),
    nav_item(link_posit)
  )
)
```

See Also

nav_panel(), nav_select().

---

nav_select *Dynamically update nav containers*

Description

Functions for dynamically updating nav containers (e.g., select, insert, and remove nav items). These functions require an id on the nav container to be specified and must be called within an active Shiny session.

Usage

```
nav_select(id, selected = NULL, session = get_current_session())

nav_insert(
  id,
  nav,
  target = NULL,
  position = c("after", "before"),
  select = FALSE,
  session = get_current_session()
)

nav_remove(id, target, session = get_current_session())

nav_show(id, target, select = FALSE, session = get_current_session())

nav_hide(id, target, session = get_current_session())
```

Arguments

id	a character string used to identify the nav container.
selected	a character string used to identify a particular nav_panel() item.
session	a shiny session object (the default should almost always be used).

nav	a nav_panel() item.
target	The value of an existing nav_panel() item, next to which tab will be added. If removing: the value of the nav_panel() item that you want to remove.
position	Should nav be added before or after the target?
select	Should nav be selected upon being inserted?

See Also

nav_panel(), navset_tab().

Examples

```
can_browse <- function() interactive() && require("shiny")

# Selecting a tab
if (can_browse()) {
  shinyApp(
    page_fluid(
      radioButtons("item", "Choose", c("A", "B")),
      navset_hidden(
        id = "container",
        nav_panel_hidden("A", "a"),
        nav_panel_hidden("B", "b")
      )
    ),
    function(input, output) {
      observe(nav_select("container", input$item))
    }
  )
}

# Inserting and removing
if (can_browse()) {
  ui <- page_fluid(
    actionButton("add", "Add 'Dynamic' tab"),
    actionButton("remove", "Remove 'Foo' tab"),
    navset_tab(
      id = "tabs",
      nav_panel("Hello", "hello"),
      nav_panel("Foo", "foo"),
      nav_panel("Bar", "bar tab")
    )
  )
  server <- function(input, output) {
    observeEvent(input$add, {
      nav_insert(
        "tabs", target = "Bar", select = TRUE,
        nav_panel("Dynamic", "Dynamically added content")
      )
    })
```

```
    observeEvent(input$remove, {
      nav_remove("tabs", target = "Foo")
    })
  }
  shinyApp(ui, server)
}
```

---

page *Create a Bootstrap page*

Description

These functions are small wrappers around shiny's page constructors (i.e., `shiny::fluidPage()`, `shiny::navbarPage()`, etc) that differ in two ways:

- The `theme` parameter defaults bslib's recommended version of Bootstrap (for new projects).
- The return value is rendered as an static HTML page when printed interactively at the console.

Usage

```
page(..., title = NULL, theme = bs_theme(), lang = NULL)

page_fluid(..., title = NULL, theme = bs_theme(), lang = NULL)

page_fixed(..., title = NULL, theme = bs_theme(), lang = NULL)

page_fillable(
  ...,
  padding = NULL,
  gap = NULL,
  fillable_mobile = FALSE,
  title = NULL,
  theme = bs_theme(),
  lang = NULL
)

page_navbar(
  ...,
  title = NULL,
  id = NULL,
  selected = NULL,
  sidebar = NULL,
  fillable = TRUE,
  fillable_mobile = FALSE,
  gap = NULL,
  padding = NULL,
```

```
  position = c("static-top", "fixed-top", "fixed-bottom"),
  header = NULL,
  footer = NULL,
  bg = NULL,
  inverse = "auto",
  collapsible = TRUE,
  fluid = TRUE,
  theme = bs_theme(),
  window_title = NA,
  lang = NULL
)
```

Arguments

...	The contents of the document body.
title	The browser window title (defaults to the host URL of the page)
theme	A bs_theme() object.
lang	ISO 639-1 language code for the HTML page, such as "en" or "ko". This will be used as the lang in the <html> tag, as in <html lang="en">. The default (NULL) results in an empty string.
padding	Padding to use for the body. This can be a numeric vector (which will be interpreted as pixels) or a character vector with valid CSS lengths. The length can be between one and four. If one, then that value will be used for all four sides. If two, then the first value will be used for the top and bottom, while the second value will be used for left and right. If three, then the first will be used for top, the second will be left and right, and the third will be bottom. If four, then the values will be interpreted as top, right, bottom, and left respectively.
gap	A CSS length unit defining the gap (i.e., spacing) between elements provided to ... .
fillable_mobile	Whether or not fillable pages should fill the viewport's height on mobile devices (i.e., narrow windows).
id	a character string used for dynamically updating the container (see nav_select()).
selected	a character string matching the value of a particular nav_panel() item to selected by default.
sidebar	A sidebar() component to display on every nav_panel() page.
fillable	Whether or not to allow fill items to grow/shrink to fit the browser window. If TRUE, all nav_panel() pages are fillable. A character vector, matching the value of nav_panel()s to be filled, may also be provided. Note that, if a sidebar is provided, fillable makes the main content portion fillable.
position	Determines whether the navbar should be displayed at the top of the page with normal scrolling behavior ("static-top"), pinned at the top ("fixed-top"), or pinned at the bottom ("fixed-bottom"). Note that using "fixed-top" or "fixed-bottom" will cause the navbar to overlay your body content, unless you add padding, e.g.: tags$style(type="text/css", "body {padding-top: 70px;}")

header	UI element(s) (tags) to display *above* the nav content.
footer	UI element(s) (tags) to display *below* the nav content.
bg	a CSS color to use for the navbar's background color.
inverse	Either TRUE for a light text color or FALSE for a dark text color. If "auto" (the default), the best contrast to bg is chosen.
collapsible	TRUE to automatically collapse the navigation elements into a menu when the width of the browser is less than 940 pixels (useful for viewing on smaller touch-screen device)
fluid	TRUE to use fluid layout; FALSE to use fixed layout.
window_title	the browser window title. The default value, NA, means to use any character strings that appear in title (if none are found, the host URL of the page is displayed by default).

See Also

page_sidebar()

shiny::navbarPage()

---

page_sidebar *A sidebar page (i.e., dashboard)*

Description

Create a dashboard layout with a full-bleed header (title) and sidebar().

Usage

```
page_sidebar(
  ...,
  sidebar = NULL,
  title = NULL,
  fillable = TRUE,
  fillable_mobile = FALSE,
  theme = bs_theme(),
  window_title = NA,
  lang = NULL
)
```

Arguments

...	UI elements to display in the 'main' content area (i.e., next to the sidebar). These arguments are passed to layout_sidebar(), which has more details.
sidebar	A sidebar() object.
title	A string, number, or htmltools::tag() child to display as the title (just above the sidebar).

fillable	Whether or not the main content area should be considered a fillable (i.e., flexbox) container.
fillable_mobile	Whether or not fillable pages should fill the viewport's height on mobile devices (i.e., narrow windows).
theme	A bs_theme() object.
window_title	the browser window title. The default value, NA, means to use any character strings that appear in title (if none are found, the host URL of the page is displayed by default).
lang	ISO 639-1 language code for the HTML page, such as "en" or "ko". This will be used as the lang in the <html> tag, as in <html lang="en">. The default (NULL) results in an empty string.

See Also

layout_sidebar() for 'floating' sidebar layouts.

accordion() for grouping related input controls in the sidebar.

card() for wrapping outputs in the 'main' content area.

value_box() for highlighting values.

Examples

```
library(shiny)
library(ggplot2)

ui <- page_sidebar(
  title = "Example dashboard",
  sidebar = sidebar(
    varSelectInput("var", "Select variable", mtcars)
  ),
  card(
    full_screen = TRUE,
    card_header("My plot"),
    plotOutput("p")
  )
)

server <- function(input, output) {
  output$p <- renderPlot({
    ggplot(mtcars) + geom_histogram(aes(!!input$var))
  })
}

shinyApp(ui, server)
```

popover *Add a popover to a UI element*

Description

Display additional information when clicking on a UI element (typically a button).

Usage

```
popover(
  trigger,
  ...,
  title = NULL,
  id = NULL,
  placement = c("auto", "top", "right", "bottom", "left"),
  options = list()
)

toggle_popover(id, show = NULL, session = get_current_session())

update_popover(id, ..., title = NULL, session = get_current_session())
```

Arguments

trigger	The UI element to serve as the popover trigger (typically a shiny::actionButton() or similar). If trigger renders as multiple HTML elements (e.g., it's a tagList()), the last HTML element is used for the trigger. If the trigger should contain all of those elements, wrap the object in a div() or span().
...	UI elements for the popover's body. Character strings are automatically escaped unless marked as HTML().
title	A title (header) for the popover.
id	A character string. Required to re-actively respond to the visibility of the popover (via the input[[id]] value) and/or update the visibility/contents of the popover.
placement	The placement of the popover relative to its trigger.
options	A list of additional options.
show	Whether to show (TRUE) or hide (FALSE) the popover. The default (NULL) will show if currently hidden and hide if currently shown. Note that a popover will not be shown if the trigger is not visible (e.g., it's hidden behind a tab).
session	A Shiny session object (the default should almost always be used).

Functions

- popover(): Add a popover to a UI element
- toggle_popover(): Programmatically show/hide a popover.
- update_popover(): Update the contents of a popover.

Closing popovers

In addition to clicking the `close_button`, popovers can be closed by pressing the Esc/Space key when the popover (and/or its trigger) is focused.

Theming/Styling

Like other bslib components, popovers can be themed by supplying relevant theming variables to `bs_theme()`, which effects styling of every popover on the page. To style a *specific* popover differently from other popovers, utilize the `customClass` option:

```
popover(
  "Trigger", "Popover message",
  options = list(customClass = "my-pop")
)
```

And then add relevant rules to `bs_theme()` via `bs_add_rules()`:

```
bs_theme() |> bs_add_rules(".my-pop { max-width: none; }")
```

References

https://getbootstrap.com/docs/5.3/components/popovers/

See Also

`tooltip()`

Examples

```
popover(
  shiny::actionButton("btn", "A button"),
  "Popover body content...",
  title = "Popover title"
)

library(shiny)

ui <- page_fixed(
  card(class = "mt-5",
    card_header(
      popover(
        uiOutput("card_title", inline = TRUE),
        title = "Provide a new title",
        textInput("card_title", NULL, "An editable title")
      )
    ),
    "The card body..."
  )
```

```
)

server <- function(input, output) {
  output$card_title <- renderUI({
    list(input$card_title, bsicons::bs_icon("pencil-square"))
  })
}

shinyApp(ui, server)
```

`run_with_themer` *Theme customization UI*

Description

A 'real-time' theme customization UI that you can use to easily make common tweaks to Bootstrap variables and immediately see how they would affect your app's appearance. There are two ways you can launch the theming UI. For most Shiny apps, just use `run_with_themer()` in place of `shiny::runApp()`; they should take the same arguments and work the same way. Alternatively, you can call the `bs_themer()` function from inside your server function (or in an R Markdown app that is using `runtime: shiny`, you can call this from any code chunk). Note that this function is only intended to be used for development!

Usage

```
run_with_themer(appDir = getwd(), ..., gfonts = TRUE, gfonts_update = FALSE)

bs_themer(gfonts = TRUE, gfonts_update = FALSE)
```

Arguments

`appDir`	The application to run. This can be a file or directory path, or a `shiny::shinyApp()` object. See `shiny::runApp()` for details.
`...`	Additional parameters to pass through to `shiny::runApp()`.
`gfonts`	whether or not to detect Google Fonts and wrap them in `font_google()` (so that their font files are automatically imported).
`gfonts_update`	whether or not to update the internal database of Google Fonts.

Details

To help you utilize the changes you see in the preview, this utility prints `bs_theme()` code to the R console.

Value

nothing. These functions are called for their side-effects.

Limitations

- Doesn't work with Bootstrap 3.
- Doesn't work with IE11.
- Only works inside Shiny apps and `runtime: shiny` R Markdown documents.
  - Can't be used with static R Markdown documents.
  - Can be used to some extent with `runtime: shiny_prerendered`, but only UI rendered through a `context="server"` may update in real-time.
- Doesn't work with '3rd party' custom widgets that don't make use of `bs_dependency_defer()` or `bs_current_theme()`.

Examples

```
library(shiny)

ui <- fluidPage(
  theme = bs_theme(bg = "black", fg = "white"),
  h1("Heading 1"),
  h2("Heading 2"),
  p(
    "Paragraph text;",
    tags$a(href = "https://www.rstudio.com", "a link")
  ),
  p(
    actionButton("cancel", "Cancel"),
    actionButton("continue", "Continue", class = "btn-primary")
  ),
  tabsetPanel(
    tabPanel("First tab",
      "The contents of the first tab"
    ),
    tabPanel("Second tab",
      "The contents of the second tab"
    )
  )
)

if (interactive()) {
  run_with_themer(shinyApp(ui, function(input, output) {}))
}
```

---

sidebar *Sidebar layouts*

Description

Create a collapsing sidebar layout by providing a `sidebar()` object to the `sidebar` argument of:

- `page_sidebar()`
  - Creates a "page-level" sidebar.
- `page_navbar()`
  - Creates a multi-page app with a "page-level" sidebar.
  - Creates a multi page/tab UI with a singular `sidebar()` (which is shown on every page/tab).
- `layout_sidebar()`
  - Creates a "floating" sidebar layout component which can be dropped inside any `page()` and/or `card()` context.
- `navset_card_tab()` and `navset_card_pill()`
  - Creates a multi-tab card with a sidebar inside of it.

See this article to learn more.

Usage

```
sidebar(
  ...,
  width = 250,
  position = c("left", "right"),
  open = c("desktop", "open", "closed", "always"),
  id = NULL,
  title = NULL,
  bg = NULL,
  fg = NULL,
  class = NULL,
  max_height_mobile = NULL,
  gap = NULL,
  padding = NULL
)

layout_sidebar(
  ...,
  sidebar = NULL,
  fillable = TRUE,
  fill = TRUE,
  bg = NULL,
  fg = NULL,
  border = NULL,
  border_radius = NULL,
  border_color = NULL,
  padding = NULL,
  gap = NULL,
  height = NULL
)
```

```
toggle_sidebar(id, open = NULL, session = get_current_session())

sidebar_toggle(id, open = NULL, session = get_current_session())
```

Arguments

`...`	Unnamed arguments can be any valid child of an htmltools tag and named arguments become HTML attributes on returned UI element. In the case of `layout_sidebar()`, these arguments are passed to the main content tag (not the sidebar+main content container).
`width`	A valid CSS unit used for the width of the sidebar.
`position`	Where the sidebar should appear relative to the main content.
`open`	The initial state of the sidebar, choosing from the following options: • `"desktop"`: The sidebar starts open on desktop screen, closed on mobile. This is default sidebar behavior. • `"open"` or `TRUE`: The sidebar starts open. • `"closed"` or `FALSE`: The sidebar starts closed. • `"always"` or `NA`: The sidebar is always open and cannot be closed. In `sidebar_toggle()`, `open` indicates the desired state of the sidebar, where the default of `open = NULL` will cause the sidebar to be toggled open if closed or vice versa. Note that `sidebar_toggle()` can only open or close the sidebar, so it does not support the `"desktop"` and `"always"` options.
`id`	A character string. Required if wanting to re-actively read (or update) the `collapsible` state in a Shiny app.
`title`	A character title to be used as the sidebar title, which will be wrapped in a `<div>` element with class `sidebar-title`. You can also provide a custom `htmltools::tag()` for the title element, in which case you'll likely want to give this element `class = "sidebar-title"`.
`bg, fg`	A background or foreground color. If only one of either is provided, an accessible contrasting color is provided for the opposite color, e.g. setting `bg` chooses an appropriate `fg` color.
`class`	CSS classes for the sidebar container element, in addition to the fixed `.sidebar` class.
`max_height_mobile`	The maximum height of the horizontal sidebar when viewed on mobile devices. The default is `250px` unless the sidebar is included in a `layout_sidebar()` with a specified height, in which case the default is to take up no more than 50% of the layout container.
`gap`	A CSS length unit defining the vertical `gap` (i.e., spacing) between adjacent elements provided to `...`.
`padding`	Padding within the sidebar itself. This can be a numeric vector (which will be interpreted as pixels) or a character vector with valid CSS lengths. `padding` may be one to four values. If one, then that value will be used for all four sides. If two, then the first value will be used for the top and bottom, while the second

	value will be used for left and right. If three, then the first will be used for top, the second will be left and right, and the third will be bottom. If four, then the values will be interpreted as top, right, bottom, and left respectively.
sidebar	A sidebar() object.
fillable	Whether or not the main content area should be considered a fillable (i.e., flexbox) container.
fill	Whether or not to allow the layout container to grow/shrink to fit a fillable container with an opinionated height (e.g., page_fillable()).
border	Whether or not to add a border.
border_radius	Whether or not to add a border radius.
border_color	The border color that is applied to the entire layout (if border = TRUE) and the color of the border between the sidebar and the main content area.
height	Any valid CSS unit (e.g., height="200px"). Doesn't apply when a card is made full_screen (in this case, consider setting a height in card_body()).
session	A Shiny session object (the default should almost always be used).

Functions

- toggle_sidebar(): Toggle a sidebar() state during an active Shiny user session.
- sidebar_toggle(): An alias for toggle_sidebar().

---

theme_bootswatch *Obtain a theme's Bootswatch theme name*

Description

Obtain a theme's Bootswatch theme name

Usage

```
theme_bootswatch(theme)
```

Arguments

theme	a bs_theme() object.

Value

the Bootswatch theme named used (if any) in the theme.

theme_version *Obtain a theme's Bootstrap version*

Description

Obtain a theme's Bootstrap version

Usage

```
theme_version(theme)
```

Arguments

theme	a bs_theme() object.

Value

the major version of Bootstrap used in the theme.

tooltip *Add a tooltip to a UI element*

Description

Display additional information when focusing (or hovering over) a UI element.

Usage

```
tooltip(
  trigger,
  ...,
  id = NULL,
  placement = c("auto", "top", "right", "bottom", "left"),
  options = list()
)

toggle_tooltip(id, show = NULL, session = get_current_session())

update_tooltip(id, ..., session = get_current_session())
```

Arguments

trigger	A UI element (i.e., htmltools tag) to serve as the tooltip trigger. If trigger renders as multiple HTML elements (e.g., it's a tagList()), the last HTML element is used for the trigger. If the trigger should contain all of those elements, wrap the object in a div() or span().
...	UI elements for the tooltip. Character strings are automatically escaped unless marked as HTML().
id	a character string that matches an existing tooltip id.
placement	The placement of the tooltip relative to its trigger.
options	A list of additional options.
show	Whether to show (TRUE) or hide (FALSE) the tooltip. The default (NULL) will show if currently hidden and hide if currently shown. Note that a tooltip will not be shown if the trigger is not visible (e.g., it's hidden behind a tab).
session	A Shiny session object (the default should almost always be used).

Functions

- tooltip(): Add a tooltip to a UI element
- toggle_tooltip(): Programmatically show/hide a tooltip.
- update_tooltip(): Update the contents of a tooltip.

Theming/Styling

Like other bslib components, tooltips can be themed by supplying relevant theming variables to bs_theme(), which effects styling of every popover on the page. To style a *specific* popover differently from other popovers, utilize the customClass option:

```
tooltip(
  "Trigger", "Tooltip message",
  options = list(customClass = "my-tip")
)
```

And then add relevant rules to bs_theme() via bs_add_rules():

```
bs_theme() |> bs_add_rules(".my-tip { max-width: none; }")
```

References

https://getbootstrap.com/docs/5.3/components/tooltips/

See Also

popover()

Examples

```
tooltip(
  shiny::actionButton("btn", "A button"),
  "A message"
)

card(
  card_header(
    tooltip(
      span("Card title ", bsicons::bs_icon("question-circle-fill")),
      "Additional info",
      placement = "right"
    )
  ),
  "Card body content..."
)
```

---

value_box *Value box*

Description

An opinionated (card()-powered) box, designed for displaying a value and title. Optionally, a showcase can provide for context for what the value represents (for example, it could hold a bsicons::bs_icon(), or even a shiny::plotOutput()).

Usage

```
value_box(
  title,
  value,
  ...,
  showcase = NULL,
  showcase_layout = showcase_left_center(),
  full_screen = FALSE,
  theme_color = "primary",
  height = NULL,
  max_height = NULL,
  fill = TRUE,
  class = NULL
)

showcase_left_center(
  width = 0.3,
  max_height = "100px",
```

```
  max_height_full_screen = 0.67
)

showcase_top_right(
  width = 0.3,
  max_height = "75px",
  max_height_full_screen = 0.67
)
```

Arguments

`title, value`	A string, number, or `htmltools::tag()` child to display as the title or value of the value box. The `title` appears above the `value`.
`...`	Unnamed arguments may be any `htmltools::tag()` children to display below `value`. Named arguments become attributes on the containing element.
`showcase`	A `htmltools::tag()` child to showcase (e.g., a `bsicons::bs_icon()`, a `plotly::plotlyOutput()`, etc).
`showcase_layout`	either `showcase_left_center()` or `showcase_top_right()`.
`full_screen`	If `TRUE`, an icon will appear when hovering over the card body. Clicking the icon expands the card to fit viewport size.
`theme_color`	A theme color to use for the background color. Should match a name in the Bootstrap Sass variable `$theme-colors` (e.g., `"secondary"`, `"success"`, `"danger"`, etc).
`height`	Any valid CSS unit (e.g., `height="200px"`). Doesn't apply when a card is made `full_screen` (in this case, consider setting a `height` in `card_body()`).
`max_height, max_height_full_screen`	A proportion (i.e., a number between 0 and 1) or any valid CSS unit defining the showcase max_height.
`fill`	Whether to allow the value box to grow/shrink to fit a fillable container with an opinionated height (e.g., `page_fillable()`).
`class`	Utility classes for customizing the appearance of the summary card. Use `bg-*` and `text-*` classes (e.g, `"bg-danger"` and `"text-light"`) to customize the background/foreground colors.
`width`	one of the following: • A proportion (i.e., a number between 0 and 1) of available width to allocate to the showcase. • A vector of length 2 valid CSS unit defining the width of each column (for `showcase_left_center()` the 1st unit defines the showcase width and for `showcase_top_right` the 2nd unit defines the showcase width). Note that any units supported by the CSS grid `grid-template-columns` property may be used (e.g., `fr` units).

See Also

`card()`

Examples

```
library(htmltools)

if (interactive()) {
  value_box(
    "KPI Title",
    h1(HTML("$1 <i>Billion</i> Dollars")),
    span(
      bsicons::bs_icon("arrow-up"),
      " 30% VS PREVIOUS 30 DAYS"
    ),
    showcase = bsicons::bs_icon("piggy-bank"),
    class = "bg-success"
  )
}
```

`versions` *Available Bootstrap versions*

Description

Available Bootstrap versions

Usage

```
versions()

version_default()
```

Value

A list of the Bootstrap versions available.

Index