Package 'shinymaterial'

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Type Package

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Title Implement Material Design in Shiny Applications

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|--|
| Description Allows shiny developers to incorporate UI elements based on Google's Material design. See https://material.io/guidelines/ for more information. |
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material_button

Create a shinymaterial button

Description

Build a shinymaterial button. The initial value is zero, and increases by one on each press.

Usage

```
material_button(input_id, label, icon = NULL, depth = NULL, color = NULL)
```

Arguments

input_id String. The input identifier used to access the value.

String. The button text.

String. The name of the icon. Leave empty for no icon. Visit http://materializecss.com/icons.html for a list of available icons.

depth Integer. The amount of depth of the button. The value should be between 0 and 5. Leave empty for the default depth.

color String. The color of the button. Leave empty for the default color. Visit http://materializecss.com/color.html for a list of available colors.

```
material_button(
  input_id = "example_button",
  label = "Button",
  icon = "cloud",
  depth = 5,
  color = "blue lighten-2"
```

material_card 3

| material_card | material_card | Create a card that will contain UI content |
|---------------|---------------|--|
|---------------|---------------|--|

Description

UI content can be placed in cards to organize items on a page.

Usage

```
material_card(title, ..., depth = NULL)
```

Arguments

title String. The title of the card
... The UI elements to place in the card
depth Integer. The amount of depth of the card. The value should be between 0 and 5.
Leave empty for the default depth.

Examples

```
material_card(
  title = "Example Card",
  depth = 5,
  shiny::tags$h5("Card Content")
)
```

material_checkbox

Create a shinymaterial checkbox

Description

Build a shinymaterial checkbox. The value is a boolean (TRUE if checked, FALSE if not checked).

Usage

```
material_checkbox(input_id, label, initial_value = FALSE, color = NULL)
```

Arguments

input_id String. The input identifier used to access the value.

label String. The checkbox label.

initial_value Boolean. Is the checkbox initially checked?

color String. The color of the check. Leave empty for the default color. Visit http:

//materializecss.com/color.html for a list of available colors. This input requires using color hex codes, rather than the word form. E.g., "#ef5350",

rather than "red lighten-1".

material_date_picker

Examples

```
material_checkbox(
  input_id = "example_checkbox",
  label = "Checkbox",
  initial_value = TRUE,
  color = "#ef5350"
)
```

material_column

Create a column to organize UI content

Description

UI content can be placed in columns to organize items on a page.

Usage

```
material_column(..., width = 6, offset = 0)
```

Arguments

... The UI elements to place in the column.

width Integer. The width of the column. The value should be between 1 and 12.

offset Integer. The offset to the left of the column. The value should be between 0 and

11.

Examples

```
material_column(
  width = 4,
  shiny::tags$h1("Column Content")
)
```

 ${\tt material_date_picker} \quad \textit{Create a shinymaterial date picker}$

Description

Build a shinymaterial date picker.

Usage

```
material_date_picker(input_id, label, color = NULL)
```

Arguments

input_id String. The input identifier used to access the value.

label String. The date picker label.

color String. The date picker color. Leave empty for the default color. Visit http:

//materializecss.com/color.html for a list of available colors.

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Examples

```
material_date_picker(
  input_id = "example_date_picker",
  label = "Date Picker"
)
```

material_depth

Add depth to a UI element

Description

Give a UI element the perception of depth by creating a shadow.

Usage

```
material_depth(..., depth = 4)
```

Arguments

... The UI elements to apply the depth.

depth

Integer. The amount of depth. The value should be between 0 and 5. A value of 0 can be used to remove depth from objects that have depth by default.

Examples

```
material_depth(
  depth = 5,
  material_card(title = "Example Depth")
)
```

material_dropdown

Create a shinymaterial dropdown

Description

Build a shinymaterial dropdown.

```
material_dropdown(input_id, label, choices = NULL, selected = NULL,
    multiple = NULL, color = NULL)
```

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Arguments

input_id String. The input identifier used to access the value.

label String. The dropdown label.

choices Named vector. The option names and underlying values.

selected String. The initially selected underlling value.

multiple Boolean. Can multiple items be selected?

color String. The color of the dropdown choices. Leave empty for the default color.

Visit http://materializecss.com/color.html for a list of available colors. This input requires using color hex codes, rather than the word form. E.g.,

"#ef5350", rather than "red lighten-1".

Examples

```
material_dropdown(
  input_id = "example_dropdown",
  label = "Drop down",
  choices = c(
    "Chicken" = "c",
    "Steak" = "s",
    "Fish" = "f"
  ),
  selected = c("c"),
  multiple = FALSE,
  color = "#ef5350"
)
```

material_file_input

Create a shinymaterial file input

Description

Build a shinymaterial file input.

Usage

```
material_file_input(input_id, label = "File", color = NULL)
```

Arguments

input_id String. The input identifier used to access the value.

label String. The file input button text.

color String. The color of the file input. Leave empty for the default color. Visit

http://materializecss.com/color.html for a list of available colors. *This input requires using color hex codes, rather than the word form. E.g., "#ef5350",*

rather than "red lighten-1".

Examples

```
if (interactive()) {
  ui <-
 material_page(
    material_row(
      material_column(
        width = 12,
        material_file_input(
          input_id = "file_1",
          label = "file"
      )
   ),
    material_row(
     material_column(
        width = 12,
        tableOutput("contents")
   )
  )
  server <- function(input, output) {</pre>
    output$contents <- renderTable({</pre>
      # input$file_1 will be NULL initially. After the user selects
      # and uploads a file, it will be a data frame with 'name',
      # 'size', 'type', and 'datapath' columns. The 'datapath'
      # column will contain the local filenames where the data can
      # be found.
      in_file <- input$file_1</pre>
      if (is.null(in_file))
        return(NULL)
      read.csv(in_file$datapath)
    })
  }
  shinyApp(ui, server)
}
```

material_floating_button

Create a shinymaterial floating button

Description

Build a shinymaterial floating button. The initial value is zero, and increases by one on each press.

```
material_floating_button(input_id, icon = NULL, depth = NULL,
    color = NULL)
```

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Arguments

input_id String. The input identifier used to access the value.

String. The name of the icon. Leave empty for no icon. Visit http://materializecss.com/icons.html for a list of available icons.

depth Integer. The amount of depth of the floating button. The value should be between 0 and 5. Leave empty for the default depth.

color String. The color of the floating button. Leave empty for the default color. Visit http://materializecss.com/color.html for a list of available colors.

Examples

```
material_floating_button(
  input_id = "example_floating_button",
  icon = "mode_edit",
  depth = 5,
  color = "red lighten-3"
)
```

material_input

Create a shinymaterial input

Description

Build a shinymaterial input.

Usage

```
material_input(type, ...)
```

Arguments

type String. The type of input to be created.... Additional arguments for the input.

```
##-- switch --##
material_input(
  type = "switch",
  input_id = "example_switch",
  label = "Switch",
  off_label = "Off",
  on_label = "On",
  initial_value = TRUE
)
```

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material_modal

Place UI content in a modal

Description

Put any UI object inside of a modal. The modal will open when the button is pressed.

Usage

```
material_modal(modal_id, button_text, title, ..., button_icon = NULL,
  floating_button = FALSE, button_depth = NULL, button_color = NULL)
```

Arguments

modal_id String. The ID for the modal. Must be unique per application. button_text String. The text displayed on the modal trigger button. title String. The title of the modal window. The UI elements to place in the modal String. The name of the icon. Visit http://materializecss.com/icons. button_icon html for a list of available icons. floating_button Boolean. Should the modal trigger button be a floating button? Integer. The amount of depth of the button. The value should be between 0 and button_depth 5. Leave empty for the default depth. button_color String. The color of the button. Leave empty for the default color. Visit http: //materializecss.com/color.html for a list of available colors.

Examples

```
material_modal(
  modal_id = "example_modal",
  button_text = "Modal",
  title = "Example Modal Title",
  button_color = "red lighten-3",
  shiny::tags$p("Modal Content")
)
```

material_number_box

Create a shinymaterial number box

Description

Build a shinymaterial number box.

```
material_number_box(input_id, label, min_value, max_value, initial_value,
  color = NULL)
```

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Arguments

input_id String. The input identifier used to access the value.

label String. The number box label.

min_value Number. The minimum allowable value.

max_value Number. The maximum allowable value.

initial_value Number. The initial value.

color String. The accent color of the number box. Leave empty for the default color.

Visit http://materializecss.com/color.html for a list of available colors. This input requires using color hex codes, rather than the word form. E.g.,

"#ef5350", rather than "red lighten-1".

Examples

```
material_number_box(
  input_id = "example_number_box",
  label = "number box",
  min_value = 5,
  max_value = 15,
  initial_value = 10,
  color = "#ef5350"
)
```

material_page

Create a shinymaterial page

Description

Build a shinymaterial page.

Usage

```
material_page(..., title = "", nav_bar_fixed = FALSE,
  nav_bar_color = NULL, background_color = "grey lighten-4",
  font_color = NULL, include_fonts = FALSE)
```

Arguments

. . . The UI elements to place in the page.

title String. The title of the page.

nav_bar_fixed Boolean. Should the nav bar remain fixed on the screen?

nav_bar_color Color of the nav bar. Leave blank for the default color. Visit http://materializecss.

com/color.html for a list of available colors.

background_color

Page background color. Leave blank for the default color. Visit http://materializecss.

com/color.html for a list of available colors.

font_color String. The title font color. Leave blank for the default color. Visit http:

//materializecss.com/color.html for a list of available colors. *Title color requires using word forms of colors (e.g. "deep-purple")*. Also, lighten or darken

effects do not work on title colors.

include_fonts Boolean. Should the material font files be included? (This will place the font

sources in a directory 'www', at the same location as the app code.)

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Examples

```
material_page(
  title = "Example Title",
  nav_bar_fixed = TRUE,
  nav_bar_color = "red lighten-2",
  background_color = "blue lighten-4",
  shiny::tags$h1("Page Content")
)
```

material_parallax

Create a parallax image

Description

Use this function to create a parallax effect in your application.

Usage

```
material_parallax(image_source)
```

Arguments

image_source

String. The image file name. Place the image in a folder labeled 'www' at the same level as the application (server.R & ui.R).

Examples

```
material_parallax(
  image_source = "example_image.jpg"
)
```

material_password_box Create a shinymaterial password box

Description

Build a shinymaterial password box.

Usage

```
material_password_box(input_id, label, color = NULL)
```

Arguments

input_id String. The input identifier used to access the value.

label String. The password box label.

color String. The accent color of the password box. Leave empty for the default

color. Visit http://materializecss.com/color.html for a list of available colors. This input requires using color hex codes, rather than the word form.

E.g., "#ef5350", rather than "red lighten-1".

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Examples

```
material_password_box(
  input_id = "example_password_box",
  label = "password box",
  color = "#ef5350"
)
```

Description

Build a shinymaterial radio button.

Usage

```
material_radio_button(input_id, label, choices, color = NULL)
```

Arguments

input_id String. The input identifier used to access the value.

label String. The radio button label.

choices Named vector. The option names and underlying values.

color String. The color of the radio buttons. Leave empty for the default color. Visit http://materializecss.com/color.html for a list of available colors. *This*

input requires using color hex codes, rather than the word form. E.g., "#ef5350",

rather than "red lighten-1".

```
material_radio_button(
  input_id = "example_radio_button",
  label = "Radio Button",
  choices = c(
    "Cake" = "c",
    "Pie" = "p",
    "Brownie" = "b"
  ),
  color = "#ef5350"
)
```

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material_row

Create a row to organize UI content

Description

UI content can be placed in a row to organize items on a page.

Usage

```
material_row(...)
```

Arguments

... The UI elements to place in the row.

Examples

```
material_row(
   shiny::tags$h1("Row Content")
)
```

material_side_nav

Create a side-nav that contains UI content

Description

UI content can be placed in side-nav.

Usage

```
material_side_nav(..., fixed = FALSE, image_source = NULL,
background_color = NULL)
```

Arguments

... The UI elements to place in the side-nav.

fixed Boolean. Set to TRUE to keep side-nav open on large screens.

image_source String. The background image file name. Place the image in a folder labeled

'www' at the same level as the application (server.R & ui.R).

background_color

Side-nav background color. Leave blank for the default color. Visit http://materializecss.com/color.html for a list of available colors.

```
material_side_nav(
   fixed = FALSE,
   image_source = "example_image.jpg",
   background_color = "blue lighten-4",
   shiny::tags$h1("Side-Nav Content")
)
```

```
material_side_nav_tabs
```

Place UI content within a side-nav tab

Description

Use this function to create side-nav tabs in your application.

Usage

```
material_side_nav_tabs(side_nav_tabs, icons = NULL, color = NULL,
font_color = NULL)
```

Arguments

 $side_nav_tabs$ Named vector. The side-nav tab display names and corresponding side-nav tab icons String vector. The names of the icons. Leave blank for no icons, or use "none". The length of the vector must match the length of side_nav_tabs. Visit http: //materializecss.com/icons.html for a list of available icons. color String. The accent color of the side-nav tab wave animation. Leave blank for the default color. Visit http://materializecss.com/waves.html for a list of available colors. Side-nav tab color requires using word forms of colors (e.g. "purple"). font_color String. The side-nav tabs font color. Leave blank for the default color. Visit http://materializecss.com/color.html for a list of available colors. Sidenav tab color requires using word forms of colors (e.g. "deep-purple"). Also, lighten or darken effects do not work on side-nav tab colors.

Examples

```
material_side_nav_tabs(
    side_nav_tabs = c(
        "Example Side-Nav Tab 1" = "example_side_nav_tab_1",
        "Example Side-Nav Tab 2" = "example_side_nav_tab_2"
    ),
    icons = c("cloud", "none"),
    color = "teal"
)
```

```
material_side_nav_tab_content
```

Place UI content within a side-nav tab

Description

Use this function to place UI content within a specific side-nav tab.

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Usage

```
material_side_nav_tab_content(side_nav_tab_id, ...)
```

Arguments

```
String. The side-nav tab id in which to place the UI content.

The UI elements to place in the side-nav tab.
```

Examples

```
material_side_nav_tab_content(
    side_nav_tab_id = "example_side_nav_tab_1",
    shiny::tags$h1("Side-Nav Tab Content")
)
```

material_slider

Create a shinymaterial slider

Description

Build a shinymaterial slider.

Usage

```
material_slider(input_id, label, min_value, max_value, initial_value,
  color = NULL)
```

Arguments

input_id String. The input identifier used to access the value.

label String. The slider label.

min_value Number. The minimum value on the slider.

max_value Number. The maximum value on the slider.

initial_value Number. The initial value of the slider.

String. The slider color. Leave empty for the default color. Visit http://materializecss.com/color.html for a list of available colors. This input requires using color hex codes, rather than the word form. E.g., "#ef5350", rather

than "red lighten-1".

Examples

color

```
material_slider(
  input_id = "example_slider",
  label = "slider",
  min_value = 5,
  max_value = 15,
  initial_value = 10,
  color = "#ef5350"
)
```

material_spinner_show Create a material preloader (spinner)

Description

Display a preloader (spinner) while server is busy.

Usage

```
material_spinner_show(session, output_id)
```

Arguments

session The session object passed to function given to shinyServer.

output_id The output id for which the spinner will be a placeholder for.

```
if(interactive()){
  library(shiny)
  library(shinymaterial)
  ui <- material_page(</pre>
    title = "Spinner Example",
    numericInput(inputId = "n", label = "", value = 10),
    plotOutput("n_plot")
 )
  server <- function(input, output, session) {</pre>
    output$n_plot <- renderPlot({</pre>
      #--- Show the spinner ---#
      material_spinner_show(session, "n_plot")
      #--- Simulate calculation step ---#
      Sys.sleep(time = 5)
      #--- Hide the spinner ---#
      material_spinner_hide(session, "n_plot")
      plot(1:input$n)
    })
  shinyApp(ui = ui, server = server)
```

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material_switch

Create a shinymaterial switch

Description

Build a shinymaterial switch. The value is a boolean (TRUE if 'on', FALSE if 'off').

Usage

```
material_switch(input_id, label, off_label = "", on_label = "",
  initial_value = FALSE, color = NULL)
```

Arguments

input_id String. The input identifier used to access the value.

label String. The switch label.

off_label String. The label for the 'off' position of the switch.
on_label String. The label for the 'on' position of the switch.

initial_value Boolean. Is the switch initially on?

color String. The color of the switch. Leave empty for the default color. Visit http:

//materializecss.com/color.html for a list of available colors. This input requires using color hex codes, rather than the word form. E.g., "#ef5350",

rather than "red lighten-1".

Examples

```
material_switch(
  input_id = "example_switch",
  label = "Switch",
  off_label = "Off",
  on_label = "On",
  initial_value = TRUE,
  color = "#ef5350"
)
```

material_tabs

Place UI content within a tab

Description

Use this function to create tabs in your application.

```
material_tabs(tabs, color = NULL)
```

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Arguments

tabs Named vector. The tab display names and corresponding tab ids.

color String. The accent color of the tabs. Leave blank for the default color. Visit http://materializecss.com/color.html for a list of available colors. *Tab*

color requires using word forms of colors (e.g. "deep-purple"). Also, lighten or

darken effects do not work on tab colors.

Examples

```
material_tabs(
  tabs = c(
    "Example Tab 1" = "example_tab_1",
    "Example Tab 2" = "example_tab_2"
  ),
  color = "deep-purple"
)
```

Description

Use this function to place UI content within a specific tab.

Usage

```
material_tab_content(tab_id, ...)
```

Arguments

tab_id String. The tab id in which to place the UI content.

... The UI elements to place in the tab.

```
material_tab_content(
  tab_id = "example_tab_1",
  shiny::tags$h1("Tab Content")
)
```

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material_text_box

Create a shinymaterial text box

Description

Build a shinymaterial text box.

Usage

```
material_text_box(input_id, label, color = NULL)
```

Arguments

input_id String. The input identifier used to access the value.

label String. The text box label.

color String. The accent color of the text box. Leave empty for the default color. Visit

http://materializecss.com/color.html for a list of available colors. *This input requires using color hex codes, rather than the word form. E.g., "#ef5350",*

rather than "red lighten-1".

Examples

```
material_text_box(
  input_id = "example_text_box",
  label = "text box",
  color = "#ef5350"
)
```

update_material_checkbox

Change the value of a material_checkbox on the client

Description

Change the value of a material_checkbox on the client.

Usage

```
update_material_checkbox(session, input_id, value = NULL)
```

Arguments

session The session object passed to function given to shinyServer.

input_id The input_id of the material_checkbox.

value Boolean. The value to set for the material_checkbox.

Examples

```
## Not run:
update_material_checkbox(
   session,
   input_id = "example_checkbox",
   value = TRUE
)
## End(Not run)
```

update_material_date_picker

Change the value of a material_date_picker on the client

Description

Change the value of a material_date_picker on the client.

Usage

```
update_material_date_picker(session, input_id, value = NULL)
```

Arguments

session The session object passed to function given to shinyServer.

input_id The input_id of the material_date_picker.

value The value to set for the material_date_picker.

Examples

```
## Not run:
update_material_date_picker(
    session,
    input_id = "example_date_picker",
    value = "10 April, 2012"
)
## End(Not run)
```

update_material_dropdown

Change the value of a material_dropdown on the client

Description

Change the value of a material_dropdown on the client.

```
update_material_dropdown(session, input_id, value = NULL, choices = NULL)
```

Arguments

session The session object passed to function given to shinyServer.
input_id The input_id of the material_dropdown.

value The value to set for the material_dropdown.

choices The choices to set for the material_dropdown.

Examples

```
## Not run:
update_material_dropdown(
    session,
    input_id = "example_dropdown",
    value = "New Text"
)
## End(Not run)
```

update_material_number_box

Change the value of a material_number_box on the client

Description

Change the value of a material_number_box on the client.

Usage

```
update_material_number_box(session, input_id, value = NULL)
```

Arguments

session The session object passed to function given to shinyServer.

input_id The input_id of the material_number_box.value The value to set for the material_number_box.

```
## Not run:
update_material_number_box(
    session,
    input_id = "example_number_box",
    value = 3
)
## End(Not run)
```

```
update_material_password_box
```

Change the value of a material_password_box on the client

Description

Change the value of a material_password_box on the client.

Usage

```
update_material_password_box(session, input_id, value = NULL)
```

Arguments

session The session object passed to function given to shinyServer.

input_id The input_id of the material_password_box.value The value to set for the material_password_box.

Examples

```
## Not run:
update_material_password_box(
    session,
    input_id = "example_password_box",
    value = "New Password"
)
## End(Not run)
```

```
update_material_radio_button
```

Change the value of a material_radio_button on the client

Description

Change the value of a material_radio_button on the client.

Usage

```
update_material_radio_button(session, input_id, value = NULL)
```

Arguments

session The session object passed to function given to shinyServer.

input_id The input_id of the material_radio_button.

value The value to set for the material_radio_button.

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Examples

```
## Not run:
update_material_radio_button(
    session,
    input_id = "example_radio_button",
    value = "new_value"
)
## End(Not run)
```

update_material_slider

Change the value of a material_slider on the client

Description

Change the value of a material_slider on the client.

Usage

```
update_material_slider(session, input_id, value = NULL)
```

Arguments

session The session object passed to function given to shinyServer.

input_id The input_id of the material_slider.

value The value to set for the material_slider.

Examples

```
## Not run:
update_material_slider(
   session,
   input_id = "example_slider",
   value = "new_value"
)
## End(Not run)
```

update_material_switch

Change the value of a material_switch on the client

Description

Change the value of a material_switch on the client.

```
update_material_switch(session, input_id, value = NULL)
```

Arguments

session The session object passed to function given to shinyServer.

input_id The input_id of the material_switch.

value Boolean. The value to set for the material_switch.

Examples

```
## Not run:
update_material_switch(
   session,
   input_id = "example_switch",
   value = TRUE
)
## End(Not run)
```

update_material_text_box

Change the value of a material_text_box on the client

Description

Change the value of a material_text_box on the client.

Usage

```
update_material_text_box(session, input_id, value = NULL)
```

Arguments

session The session object passed to function given to shinyServer.

input_id The input_id of the material_text_box.

value The value to set for the material_text_box.

```
## Not run:
update_material_text_box(
    session,
    input_id = "example_text_box",
    value = "New Text"
)
## End(Not run)
```

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