

shinyscript

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# Shiny App
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# JSC

# shinyApp is r package that builds interactive web apps( not page).
# uses R coding and interactiveness of web to create a reactive experience.
# ui : user interface: this is the controls and layout/appearance of the app. This is what the user wil
# server: the coding instructions for the shiny app
# control widgets: web elements that users will interact with.

# library(shiny)
# #Define UI ----
# ui <- fluidPage(
#   titlePanel(""),
#   sidebarLayout(
#     sidebarPanel(
#     ),
#     mainPanel(
#     )
#   )
# )
#
# #Define server ----
# server <- function(input,output){
# }
#
# #Run the app ----
# shinyApp(ui=ui,server = server)

library(shiny)

ui <- fluidPage(

  # add a title to shiny App
  titlePanel("This is a Test shiny"),

  # create sidebar for interactive elements
  sidebarLayout(position ="left",

    # add sidebar panel
    sidebarPanel(

      # add a header in side panel
      h1("This is my first Header"),
      h2("second"),
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h3("third"),
# add in widgets. widgets allow user to change elements
# selectInput requires: name, label, choices)
selectInput("X",label = "X", names(trees)),
selectInput("Y", label = "Y", names(trees))),
mainPanel(

# add a header in main panel as well
h1("header"),

# bold text
h2(strong("Header 2")),

# add a paragraph
p("This is a paragraph about my graph. It's a plot of how many x are in a square. Use

# add line breaks
br(),

# add an image
img(src = "ant.jpg",height = 75, width = 75),

# insert the "output", the main reactive element
plotOutput("TreePlot")
)
)

#
server <- function(input,output){

# combine the selected variables into new data frame
selectedData <- reactive({
  trees[,c(input$X,input$Y)]
})

# use render plot to add to reactive element
output$TreePlot <- renderPlot({

# basic plot function thats built into r
plot(selectedData(),

# type refers how the data is shown: p - points, l - lines, b - both
type = "p",

# change point:using pch values stored in 'plot' function. 21.25 - color and fill points, 19 - solid ci
pch = 21.25,
col = "black",
bg = "blue",

# add a main title to graph
main = "This is the main title of the Graph",

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# add a subtitle as a caption
  sub = "this is the subtitle for the plot. A good way to add a caption below the graph")
}
)
}

# call to shiny app
shinyApp(ui=ui,server=server)
```

Shiny applications not supported in static R Markdown documents