

Iris Plotter Shiny Application

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Coursera Reproducible Pitch

This is a task as part of the Developing Data Products Coursera Data Science course. As part of this I have developed an interactive shiny application and deployed it to a website. The code can be found on Github and the shiny web application can be found here

The Dataset

The application takes the Iris Dataset below and plots either the Sepal or Petal Length per species depending on the user's preference from the dropdown box.

##	Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
## 1	5.1	3.5	1.4	0.2	setosa
## 2	4.9	3.0	1.4	0.2	setosa
## 3	4.7	3.2	1.3	0.2	setosa
## 4	4.6	3.1	1.5	0.2	setosa
## 5	5.0	3.6	1.4	0.2	setosa
## 6	5.4	3.9	1.7	0.4	setosa

UI.r code

```
library(shiny) shinyUI(fluidPage(  
  
  titlePanel("Cars Dataset - Miles per Gallon"),  
  
  sidebarPanel(  
  
    selectInput("variable", "Variable:",  
               c("Sepal" = "Sepal.Length",  
                 "Petal" = "Petal.Length"  
               ))  
  ),  
  
  mainPanel(  
  
    h3(textOutput("caption")),  
  
    plotOutput("mpgPlot")  
  )  
)
```

Server.r code

```
library(shiny) library(plotly)

mpgData <- iris

shinyServer(function(input, output) {

  formulaText <- reactive({
    paste("Sepcies vs ", input$variable)
  })

  output$caption <- renderText({
    formulaText()
  })

  output$mpgPlot <- renderPlot({
    ggplot(mpgData, aes_string(y=input$variable, x="Species"))
  })

})
```