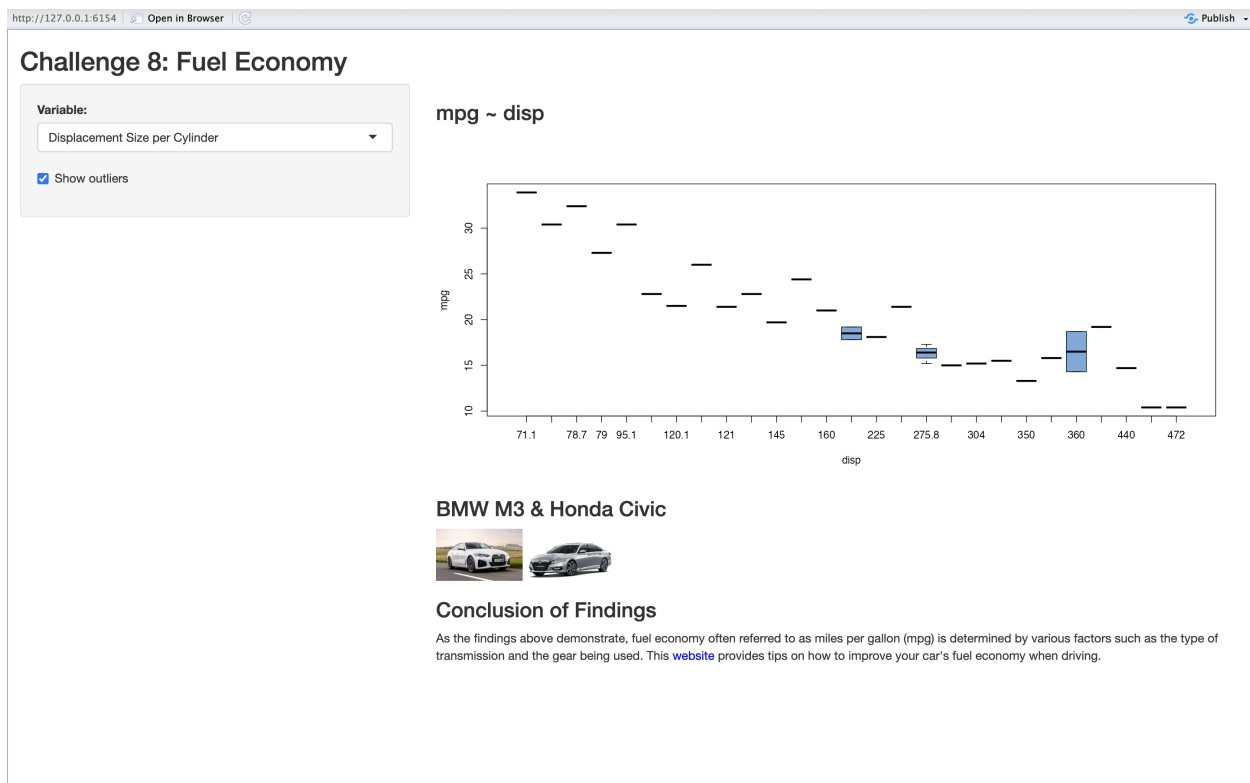


# Week-8: Code-along

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## Image



## Code

```
library(shiny)
library(datasets)

# Data pre-processing ----
# Tweak the "am" variable to have nicer factor labels -- since this
# doesn't rely on any user inputs, we can do this once at startup
# and then use the value throughout the lifetime of the app
mpgData <- mtcars
mpgData$am <- factor(mpgData$am, labels = c("Automatic", "Manual"))
```

```

# Define UI for miles per gallon app ----
ui <- fluidPage(

  # App title ----
  titlePanel("Challenge 8: Fuel Economy"),

  # Sidebar layout with input and output definitions ----
  sidebarLayout(

    # Sidebar panel for inputs ----
    sidebarPanel(

      # Input: Selector for variable to plot against mpg ----
      selectInput("variable", "Variable:",
        c("Cylinders" = "cyl",
          "Transmission" = "am",
          "Gears" = "gear",
          "Horsepower" = "hp",
          "Displacement Size per Cylinder" = "disp")),

      # Input: Checkbox for whether outliers should be included ----
      checkboxInput("outliers", "Show outliers", TRUE)

    ),

    # Main panel for displaying outputs ----
    mainPanel(

      # Output: Formatted text for caption ----
      h3(textOutput("caption")),

      # Output: Plot of the requested variable against mpg ----
      plotOutput("mpgPlot"),

      h3("BMW M3 & Honda Civic"),
      img(src = "car.jpeg", height = 60, width = 100),
      img(src = "car2.jpeg", height = 60, width = 100),

      h3("Conclusion of Findings"),
      p("As the findings above demonstrate, fuel economy often referred to as miles per gallon (mpg) are
        a(

```

```

formulaText <- reactive({
  paste("mpg ~", input$variable)
})

# Return the formula text for printing as a caption ----
output$caption <- renderText({
  formulaText()
})

# Generate a plot of the requested variable against mpg ----
# and only exclude outliers if requested
output$mpgPlot <- renderPlot({
  boxplot(as.formula(formulaText()),
    data = mpgData,
    outline = input$outliers,
    col = "#75AADB", pch = 19)
})
}

# Create Shiny app ----
shinyApp(ui, server)

```