Week-8: Code-along

NM2207: Computational Media Literacy- Tang Ching Xian

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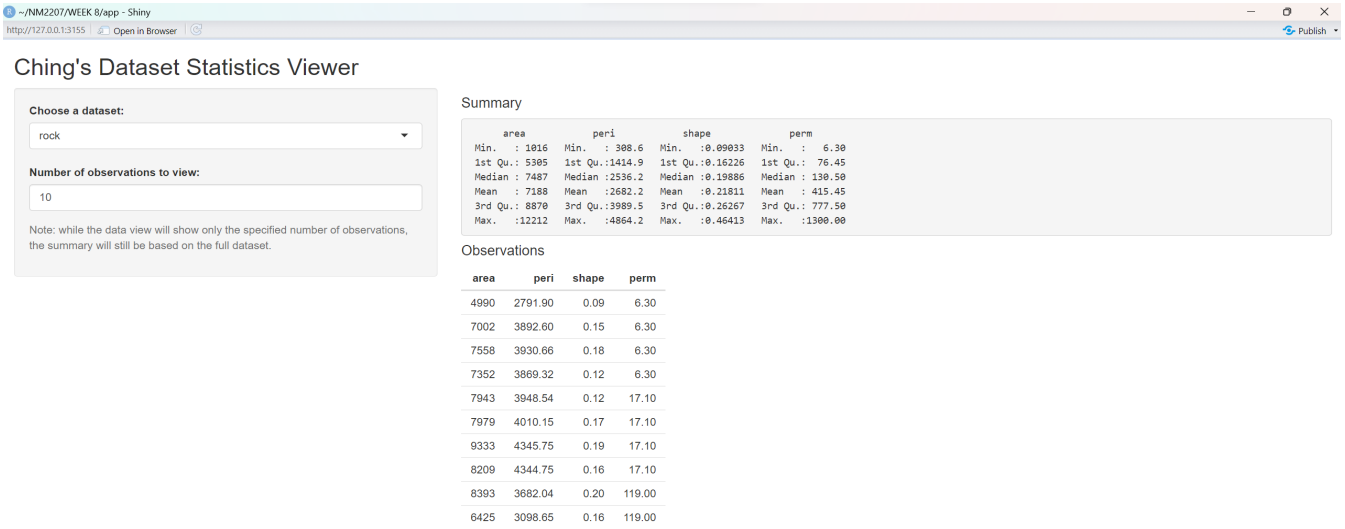
```
knitr::include_graphics("1.png")
```



WEEK8 CODE

```r
##
# This is a Shiny web application. You can run the application by clicking
# the 'Run App' button above.
#
# Find out more about building applications with Shiny here:
#
#    http://shiny.rstudio.com/
#

library(shiny)

# Assuming you have a dataset named 'your_dataset' (replace with your actual dataset)
your_dataset <- mtcars

# Define UI for dataset viewer app ----
ui <- fluidPage(

  # App title ----
  titlePanel("Ching's Dataset Statistics Viewer"),

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

    # Sidebar panel for inputs ----
    sidebarPanel(

      # Input: Select a dataset ----
      selectInput("dataset", "Choose a dataset:",
                  choices = c("rock", "pressure", "cars")),

      # Input: Specify the number of observations to view ----
      numericInput("obs", "Number of observations to view:", 10),

      # Include clarifying text ----
      helpText("Note: while the data view will show only the specified",
               "number of observations, the summary will still be based",
               "on the full dataset.")
    ),

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

      # Output: Header + summary of distribution ----
      h4("Summary"),
      verbatimTextOutput("summary"),

      # Output: Header + table of distribution ----
      h4("Observations"),
      tableOutput("view")
    )
  )
)

# Define server logic to summarize and view selected dataset ----
```

```
server <- function(input, output) {

  # Reactive function to get the selected dataset
  datasetInput <- reactive({
    switch(input$dataset,
           "rock" = rock,
           "pressure" = pressure,
           "cars" = cars)
  })

  # Generate a summary of the dataset ----
  output$summary <- renderPrint({
    dataset <- datasetInput()
    summary(dataset)
  })

  # Show the first "n" observations ----
  output$view <- renderTable({
    head(datasetInput(), n = input$obs)
  })
}

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

Ching's Dataset Statistics Viewer

Choose a dataset:

rock

Number of observations to view:

10

Note: while the data view will show only the specified number of observations, the summary will still be based on the full dataset.

Summary

```
      area            peri            shape              perm
 Min.   : 1016   Min.   : 308.6   Min.   :0.09033   Min.   :   6.30
```