

pAIRed T TEST using r

DATA SCIENCE MODELING IN R PROJECT



October 21, 2021

GANPAT UNIVERSITY

SEMESTER 5 PROJECT

This project under our Professor Dhaval Sathvara in Institute of computer technology – Ganpat University in Semester 5 and Subject Name :- Data Science Modeling in R.

URL :- https://smitrpatel.shinyapps.io/Project/

The project done by

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CODE :-

library(shiny)

library(datasets)

ui <- shinyUI(fluidPage(

titlePanel("Paired T Test"),

tabsetPanel(

tabPanel("Upload File",

titlePanel("Uploading Files"),

sidebarLayout(

sidebarPanel(

fileInput('file1', 'Choose CSV File',

accept=c('text/csv',

'text/comma-separated-values,text/plain',

'.csv')),

# added interface for uploading data from

# http://shiny.rstudio.com/gallery/file-upload.html

tags$br(),

checkboxInput('header', 'Header', TRUE),

radioButtons('sep', 'Separator',

c(Comma=',',

Semicolon=';',

Tab='\t'),

','),

radioButtons('quote', 'Quote',

c(None='',

'Double Quote'='"',

'Single Quote'="'"),

'"')

),

mainPanel(

tableOutput('contents')

)

)

),

tabPanel("Plot",

pageWithSidebar(

headerPanel('Scatter Plot'),

sidebarPanel(

# "Empty inputs" - they will be updated after the data is uploaded

selectInput('xcol', 'X Variable', ""),

selectInput('ycol', 'Y Variable', "", selected = "")

),

mainPanel(

plotOutput('MyPlot')

)

)

)

)

)

)

server <- shinyServer(function(input, output, session) {

# added "session" because updateSelectInput requires it

data <- reactive({

req(input$file1) ## ?req # require that the input is available

inFile <- input$file1

# tested with a following dataset: write.csv(mtcars, "mtcars.csv")

# and write.csv(iris, "iris.csv")

df <- read.csv(inFile$datapath, header = input$header, sep = input$sep,

quote = input$quote)

# Update inputs (you could create an observer with both updateSel...)

# You can also constraint your choices. If you wanted select only numeric

# variables you could set "choices = sapply(df, is.numeric)"

# It depends on what do you want to do later on.

updateSelectInput(session, inputId = 'xcol', label = 'X Variable',

choices = names(df), selected = names(df))

updateSelectInput(session, inputId = 'ycol', label = 'Y Variable',

choices = names(df), selected = names(df)[2])

return(df)

})

output$contents <- renderTable({

data()

})

output$MyPlot <- renderPlot({

# for a histogram: remove the second variable (it has to be numeric as well):

# x <- data()[, c(input$xcol, input$ycol)]

# bins <- nrow(data())

# hist(x, breaks = bins, col = 'darkgray', border = 'white')

# Correct way:

# x <- data()[, input$xcol]

# bins <- nrow(data())

# hist(x, breaks = bins, col = 'darkgray', border = 'white')

# I Since you have two inputs I decided to make a scatterplot

x <- data()[, c(input$xcol, input$ycol)]

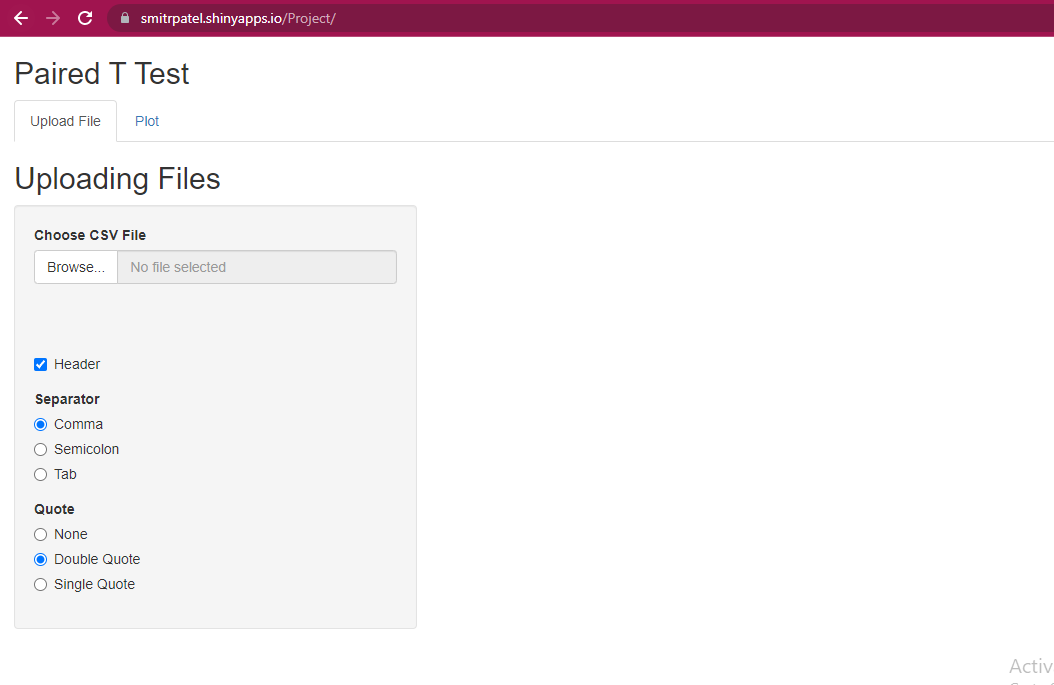
plot(x)

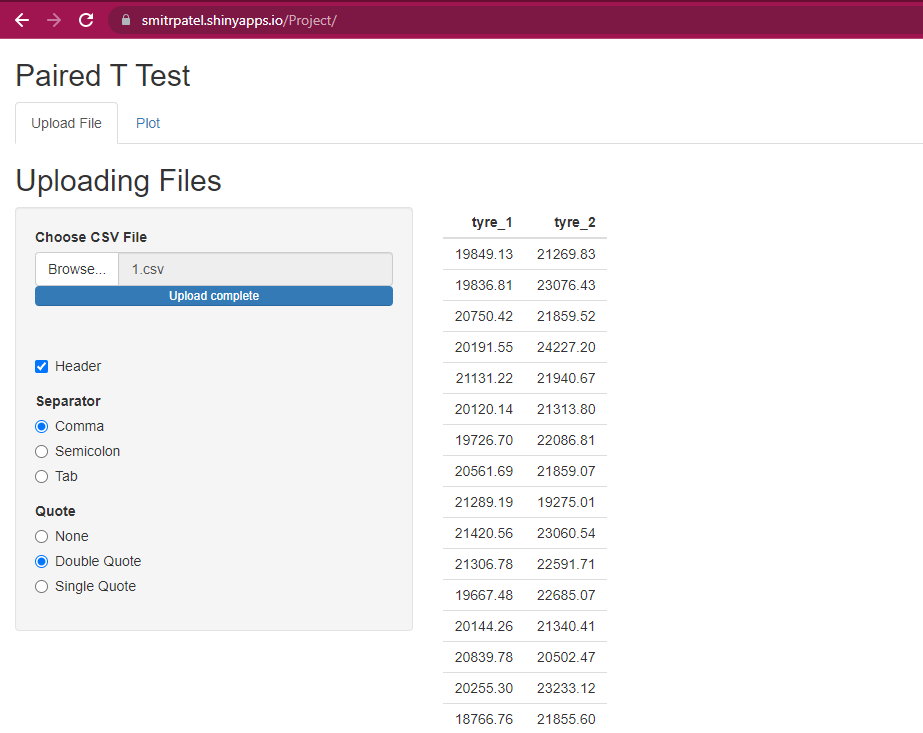
})

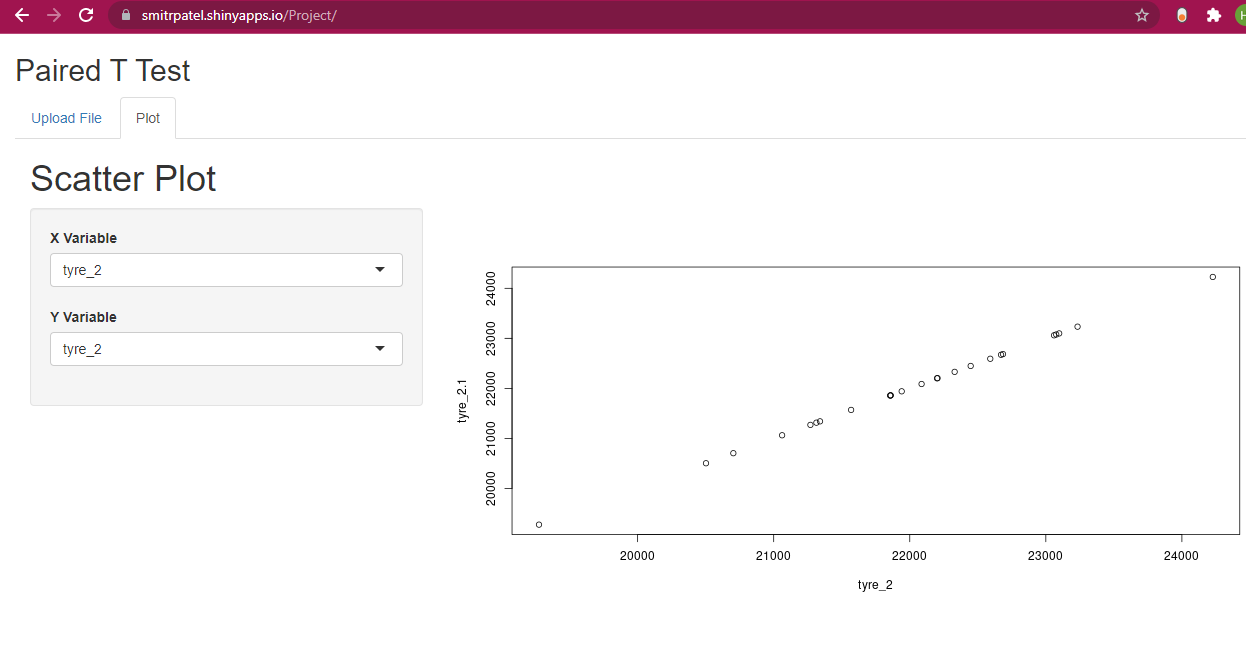
})

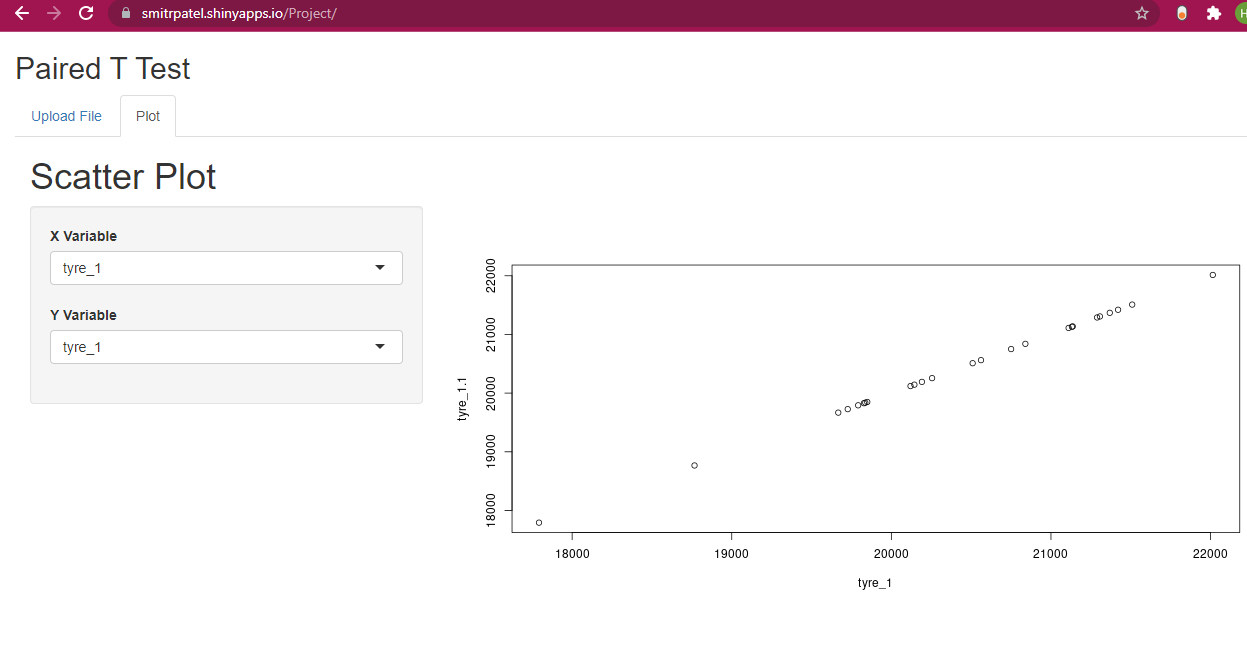
shinyApp(ui, server)

OUTPUT :-









Conclusion :- In this project we learn paired t test , and hence this line show linear line and our output show in same line. So we upload on internet and learn many things using this project in data science subject.

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