README

Chen Lianghe

08 February 2020

Overview

This is a Reproducible Pitch Presentation about my Shiny application.

It allows you to predict your car's expected Miles per Gallon (MPG) based on your car's specifications.

These specifications include:

1. The Type of Transmission (Automatic vs. Manual).
2. The Number of Cylinders.
3. The Car's Weight.
4. The Car's Gross Horsepower.

Purpose of Application

The purpose of this application is to allow users to predict their car's Miles per Gallon (MPG) with ease by entering their car's specifications.

These specifications include the type of transmission, the number of cylinders, the car's weight and gross horsepower.

This will allow users to have a better idea of the mileage they have achieved based on each gallon of fuel exhausted.

Resources

Shiny Application

- My Shiny Application is available at: https://chenlianghe.shinyapps.io/Prediction_of_Car_MPG/

Source Codes

- My Source Codes are available at: https://github.com/Lianghe-Chen/Shiny-Application-and-Reproducible-Pitch.git

Reproducible Pitch Presentation

- My Reproducible Pitch Presentation is available at: https://rpubs.com/chenlianghe/572687

Summary of Dataset

For this application, we utilised the mtcars dataset from the dataset library.

A summary of this dataset is shown below:

```
summary(mtcars)
```

```
##       mpg             cyl             disp             hp       
##  Min.   :10.40   Min.   :4.000   Min.   : 71.1   Min.   : 52.0  
##  1st Qu.:15.43   1st Qu.:4.000   1st Qu.:120.8   1st Qu.: 96.5  
##  Median :19.20   Median :6.000   Median :196.3   Median :123.0  
##  Mean   :20.09   Mean   :6.188   Mean   :230.7   Mean   :146.7  
##  3rd Qu.:22.80   3rd Qu.:8.000   3rd Qu.:326.0   3rd Qu.:180.0  
##  Max.   :33.90   Max.   :8.000   Max.   :472.0   Max.   :335.0  
##       drat             wt             qsec             vs        
##  Min.   :2.760   Min.   :1.513   Min.   :14.50   Min.   :0.0000  
##  1st Qu.:3.080   1st Qu.:2.581   1st Qu.:16.89   1st Qu.:0.0000  
##  Median :3.695   Median :3.325   Median :17.71   Median :0.0000  
##  Mean   :3.597   Mean   :3.217   Mean   :17.85   Mean   :0.4375  
##  3rd Qu.:3.920   3rd Qu.:3.610   3rd Qu.:18.90   3rd Qu.:1.0000  
##  Max.   :4.930   Max.   :5.424   Max.   :22.90   Max.   :1.0000  
##        am              gear            carb      
##  Min.   :0.0000   Min.   :3.000   Min.   :1.000  
##  1st Qu.:0.0000   1st Qu.:3.000   1st Qu.:2.000  
##  Median :0.0000   Median :4.000   Median :2.000  
##  Mean   :0.4062   Mean   :3.688   Mean   :2.812  
##  3rd Qu.:1.0000   3rd Qu.:4.000   3rd Qu.:4.000  
##  Max.   :1.0000   Max.   :5.000   Max.   :8.000
```