**Interactive single linaer models for the Mtcars Dataset**

**December 16, 2017**

**By Sabine**

**This shinyapps application lets you choose a parameter of the mtcars dataset and plots mpg~the chosen parameter along with a regression line. It also plots a linear model. The intercept and coefficient are given as well.**

The app is based on the mtcars dataset with the following parameters: MilesPerGallon, Cylinders, Transmission, Gears, Displacement, HorsePower, RearAxleRatio, Weight, V/S.

Ths app consists of 2 parts:

**Input**:

On the left hand side there is a selectInput widget where you can choose the parameter you are interested in ( all the mentioned abouve exept for MilesPerGallon (mpg)). Once you have chosen a parameter on the input-side the output will be displayed on the right side.

**Output:**

This part contains 4 outputs:

* A plot with mpg as y-axis and the chosen parameter as x-axis with a regression line.
* The Intercept of this regression line
* The coefficient of this regression line
* A plot of the residuals vs. leverage