$Regression Model_Week4_Assigned Project$

Ronda Hutchin

10/25/2020

EXECUTIVE SUMMARY

This report is for Motor Trend Magazine, and for the purpose the purpose is to (A) analyzing a data set of a collection of cars, (B) explore the relationship between a set of variables and miles per gallon (MPG) (outcome) and (C) answer the two questions listed below.

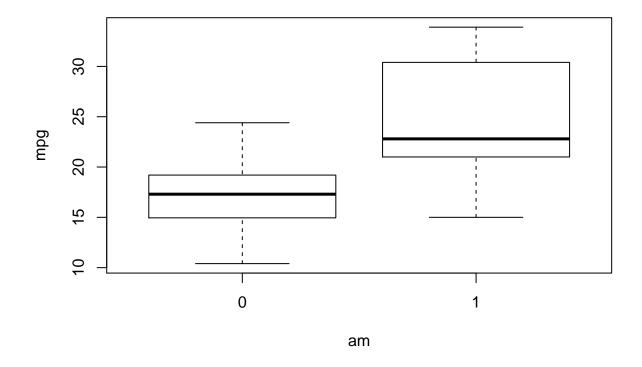
- (1) "Is an automatic or manual transmission better for MPG"?
- (2) "Quantify the MPG difference between automatic and manual transmissions"?

Examine the data and using STR, HEAD and SUMMARY. To save space the results are hidden.

```
library(ggplot2)
data(mtcars)
library(dplyr)
head(mtcars)
summary(mtcars)
str(mtcars)
```

EXPLORATORY ANALYSIS

```
with(mtcars, boxplot(mpg~am))
```



```
mtcars$am<-as.factor(mtcars$am)
levels(mtcars$am)<-c("Auto", "Manual")</pre>
```

You can also embed plots, for example:



Note that the \mbox{echo} = FALSE parameter was added to the code chunk to prevent printing of the R code that generated the plot.