

Worst Plot Contest

R Markdown

```
#Setting the working directory
```

```
setwd("/Users/myanamandravenkata@unomaha.edu/Downloads")
```

```
#Importing the dataset
```

```
hfs = read.csv("HFS Service Data.csv")
```

```
df <- data.frame(hfs)
```

```
df$is_client_involved <- as.numeric(df$is_client_involved)
```

```
# Converting the following fields to numeric because, these had Yes and No or  
True and False, therefore, I encoded them to numeric values with is.numeric()  
function.
```

```
df$is_noshow <- as.numeric(df$is_noshow)
```

```
df$is_locked <- as.numeric(df$is_locked)
```

```
df$is_billed <- as.numeric(df$is_billed)
```

```
df$is_paid <- as.numeric(df$is_paid)
```

```
df$do_not_bill <- as.numeric(df$do_not_bill)
```

```
df$do_not_pay <- as.numeric(df$do_not_pay)
```

```
df$is_billable <- as.numeric(df$is_billable)
```

```
attach(df)
```

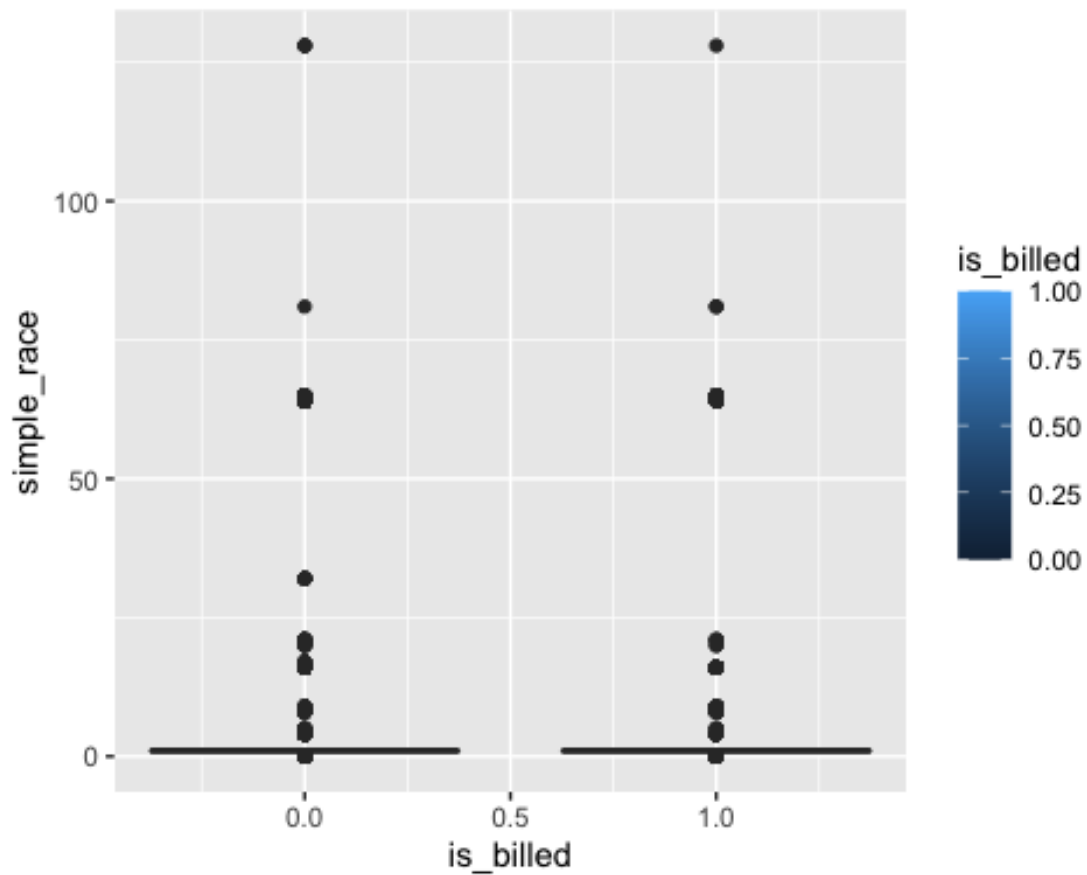
```
df$gender[df$gender == "Male"] <- "0"
```

```
df$gender[df$gender == "Female"] <- "1"
```

Plotted a boxplot between is_billed and simple_race columns and the graph is not clearly explaining how the billing is divided among the simple_race.

```
library(ggplot2)

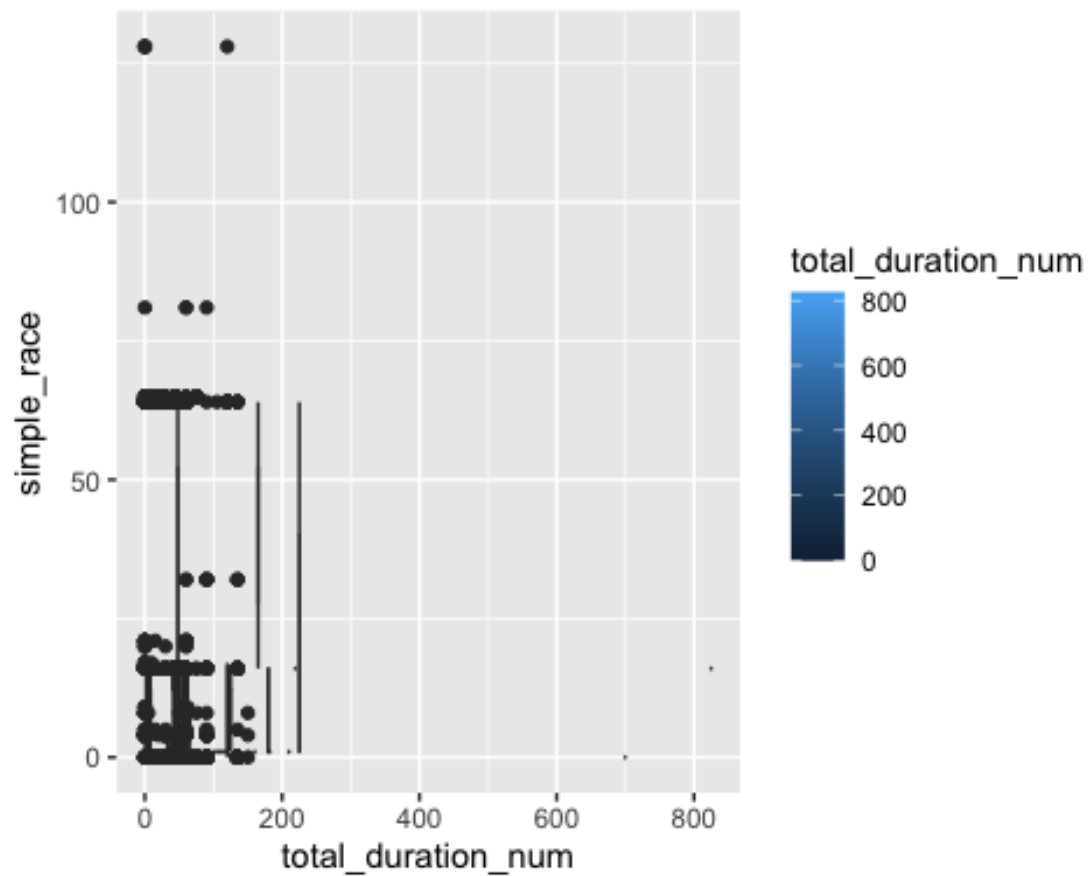
bp1 <- ggplot(df, aes(x = is_billed, y = simple_race, group = is_billed))+
  geom_boxplot(aes(fill = is_billed))
bp1
```



Plotted

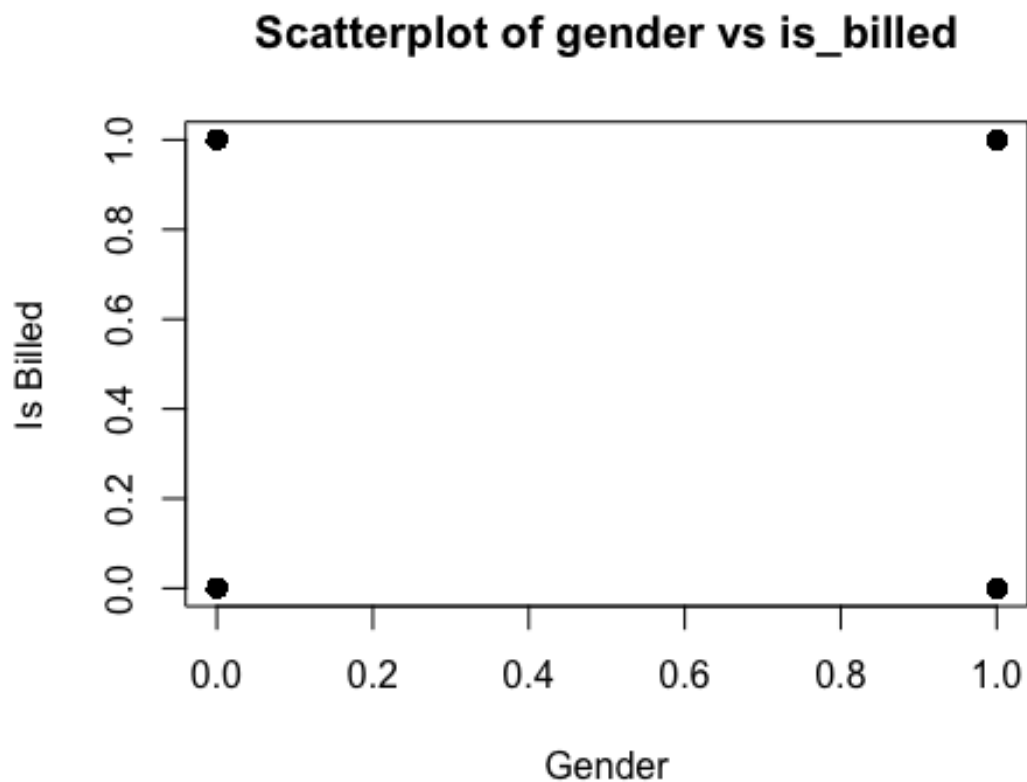
A boxplot between total_duration_num and simple_race columns and the graph is not clearly explaining how the total duration is divided among the simple_race.

```
bp2 <- ggplot(df, aes(x = total_duration_num, y = simple_race, group = total_
duration_num))+
  geom_boxplot(aes(fill = total_duration_num))
bp2
```



Plotted a Scatterplot between Gender and Is_billed columns and the graph clearly is unclear about the gender and their billing rate.

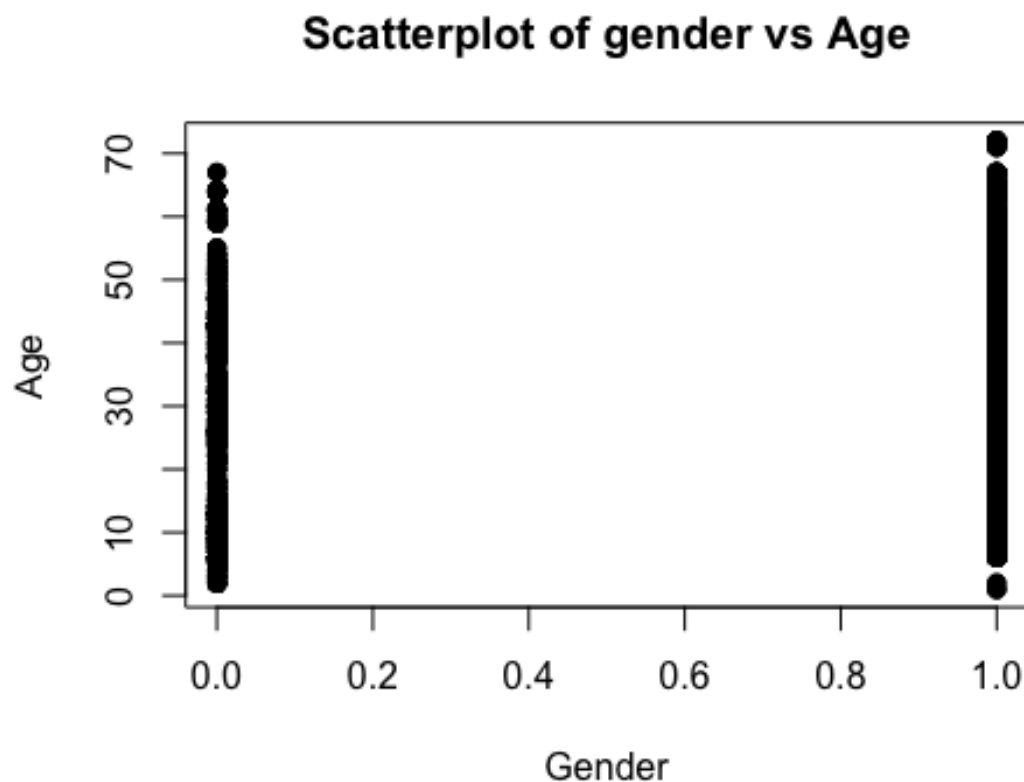
```
sp1 <- plot(df$gender, df$is_billed , xlab = "Gender", ylab = "Is Billed",  
            main = "Scatterplot of gender vs is_billed", col = "black", pch=19)  
## Warning in xy.coords(x, y, xlabel, ylabel, log): NAs introduced by coercion
```



```
sp1  
## NULL
```

Plotted a Scatterplot between Gender and Age columns and the graph clearly is unclear about the gender and their Age if we want to know the age group of a particular gender who are utilising the services.

```
sp2 <- plot(df$gender, df$age , xlab = "Gender", ylab = "Age",  
            main = "Scatterplot of gender vs Age", col = "black", pch=19)  
## Warning in xy.coords(x, y, xlabel, ylabel, log): NAs introduced by coercion
```



```
sp2
```

```
## NULL
```