DS210 Final Project Part II

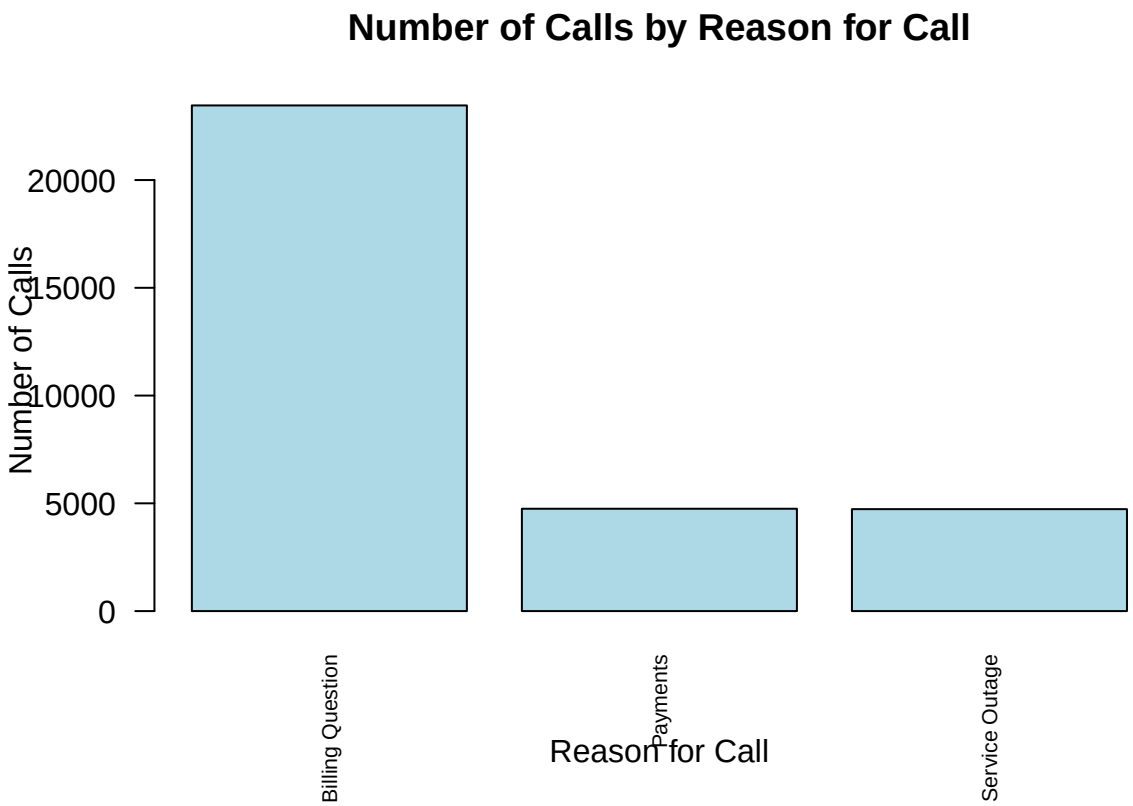
Bracha Stein

2024-12-22

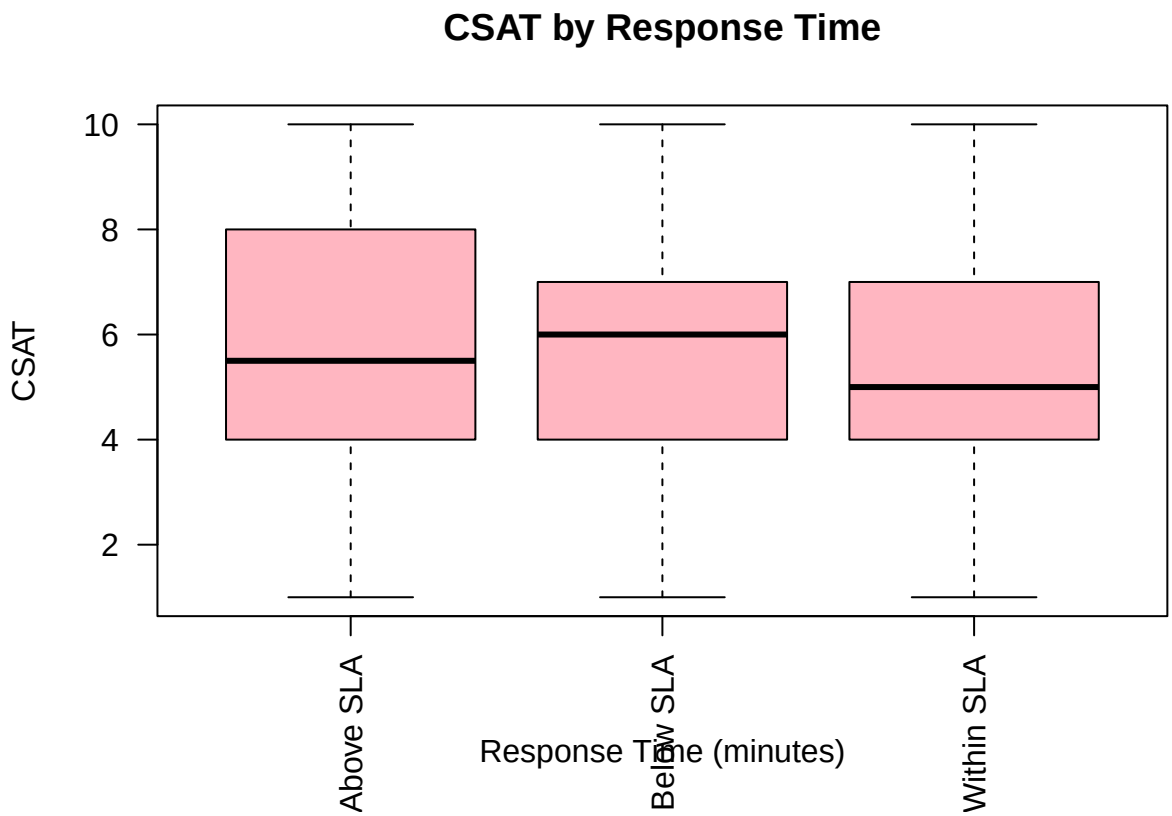
R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see http://rmarkdown.rstudio.com.

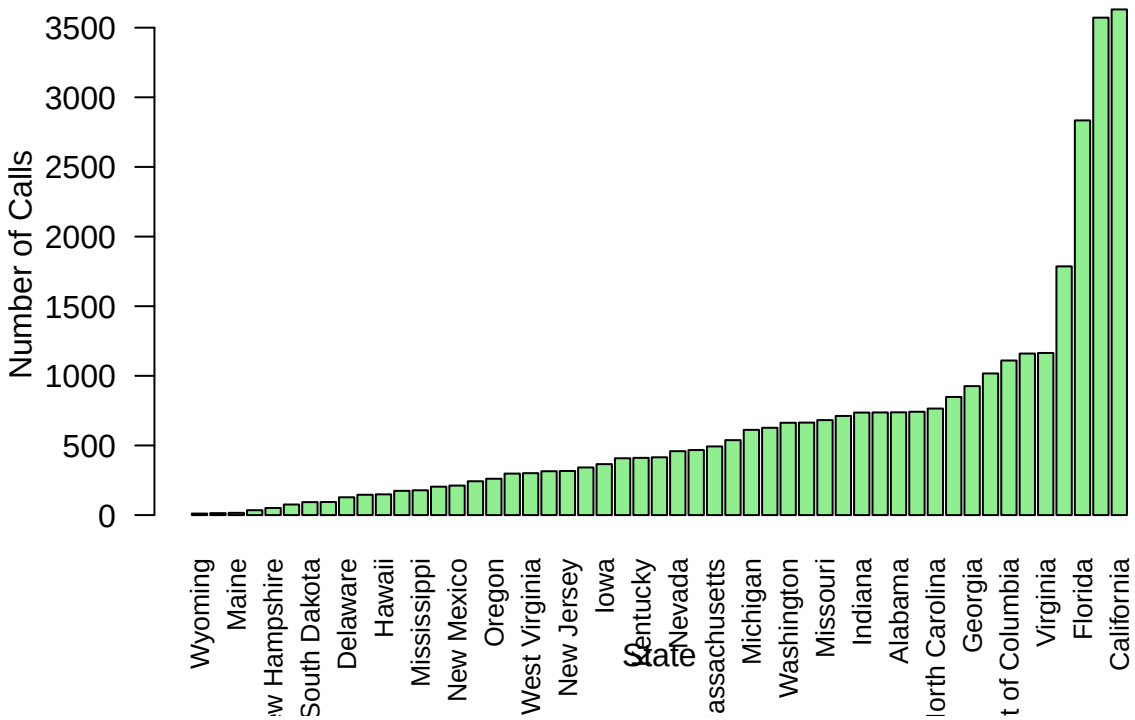
```
# Load in the data set
 path_to_file <- "C:\\Users\\brach\\Downloads\\Call_Center (1).csv"
 call_data = read.csv(path_to_file)


# Bar plot for the number of calls by Reason

# Calculate the number of calls for each Reason
calls_by_reason <- table(call_data$Reason)

# Bar plot
bar_heights <- barplot(calls_by_reason,
        names.arg = names(calls_by_reason),
        main = "Number of Calls by Reason for Call",
        xlab = "Reason for Call",
        ylab = "Number of Calls",
        col = "lightblue",
        las = 2,  # Rotate x-axis labels
        cex.names = 0.7)  # Adjust size of the x-axis labels
```




```
# Boxplot for CSAT by Response Time

# Create a box plot
boxplot(Csat.Score ~ Response.Time, data = call_data,
        main = "CSAT by Response Time",
        xlab = "Response Time (minutes)",
        ylab = "CSAT",
        col = "lightpink",
        las = 2)
```




```r
# Bar Plot of Number of Calls per State

# Count the number of calls per state
calls_by_state <- table(call_data$State)

# Sort by ascending order
sorted_calls <- sort(calls_by_state, increasing = TRUE)

# Create a bar plot
barplot(sorted_calls,
        main = "Number of Calls by State",
        xlab = "State",
        ylab = "Number of Calls",
        col = "lightgreen",
        las = 2,
        cex.names = 0.8)
```


Number of Calls by State
Number of Calls
3500
3000
2500
2000
1500
1000
500
0
Wyoming
Maine
w Hampshire
South Dakota
Delaware
Hawaii
Mississippi
New Mexico
Oregon
West Virginia
New Jersey
Iowa
Kentucky
Nevada
assachusetts
Michigan
Washington
Missouri
Indiana
Alabama
lorth Carolina
Georgia
t of Columbia
Virginia
Florida
California
State