Rainfall in Singapore

Delivery App

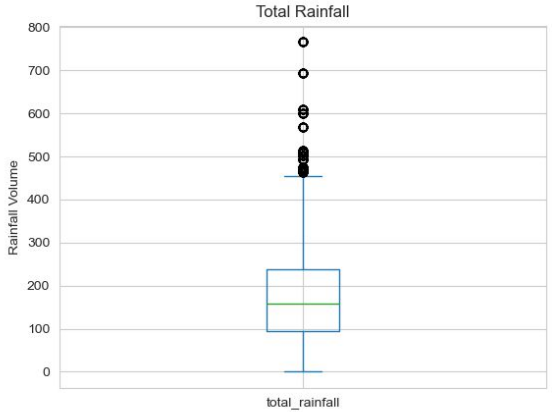
Problem Statement

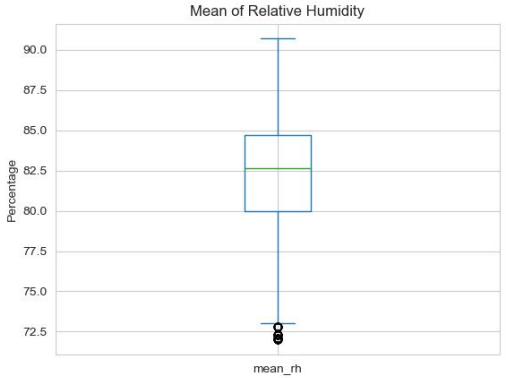
- Facing high demand of users when rainfall, lead to cancel from messengers (raiders)
- Rarely to find raiders to pick up food
- Food delivery app would like to increase food order amount and sales

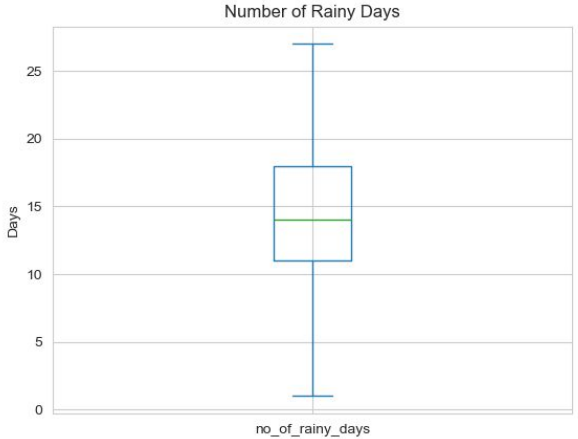
Key Findings

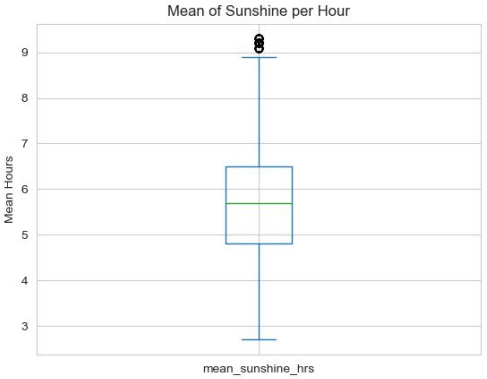
- Total Rainfall and Number of Rainy Days are correlation which can go in depth other metrics
- Outliers in boxplot in each metrics except number of rainy days
- Subplot need variable to show correlation
- Other Visualized
    - Line Chart
    - Bar Chart
    - Scatterplot

Boxplot

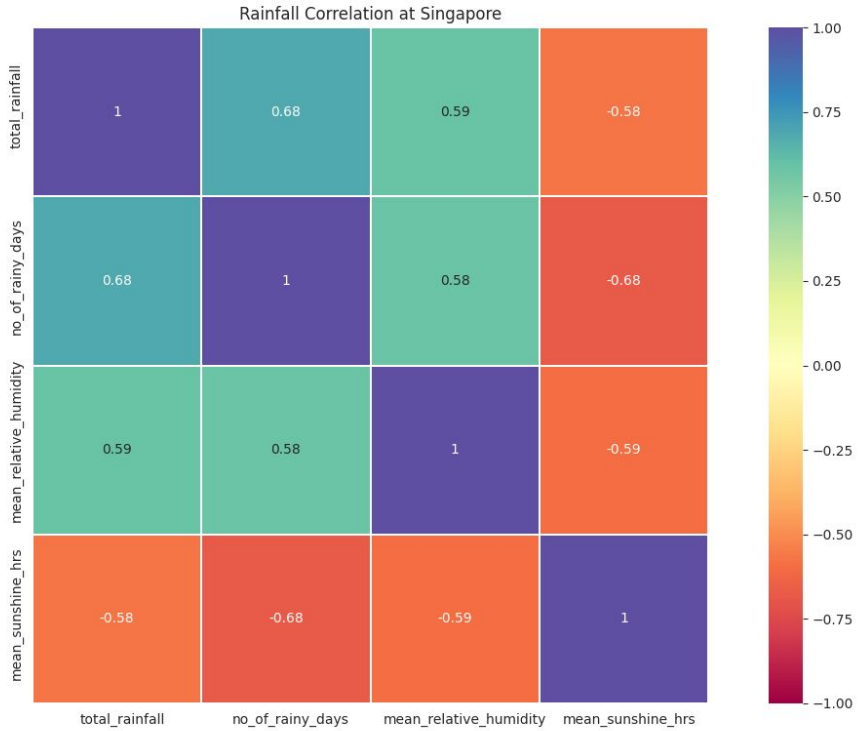

Total Rainfall
Rainfall Volume
800
700
600
500
400
300
200
100
0
total_rainfall


Mean of Relative Humidity
Percentage
90.0
87.5
85.0
82.5
80.0
77.5
75.0
72.5
mean_rh

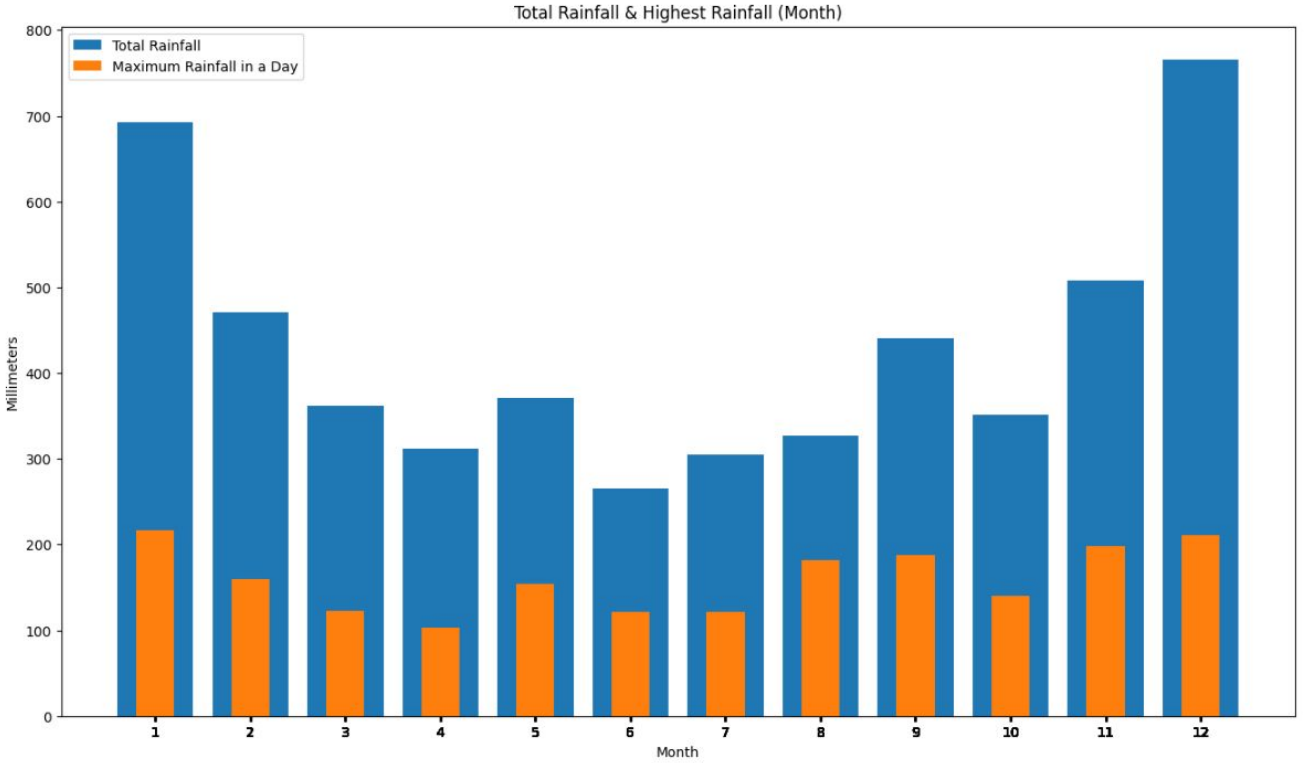

Number of Rainy Days
Days
25
20
15
10
5
0
no_of_rainy_days


Mean of Sunshine per Hour
Mean Hours
9
8
7
6
5
4
3
mean_sunshine_hrs

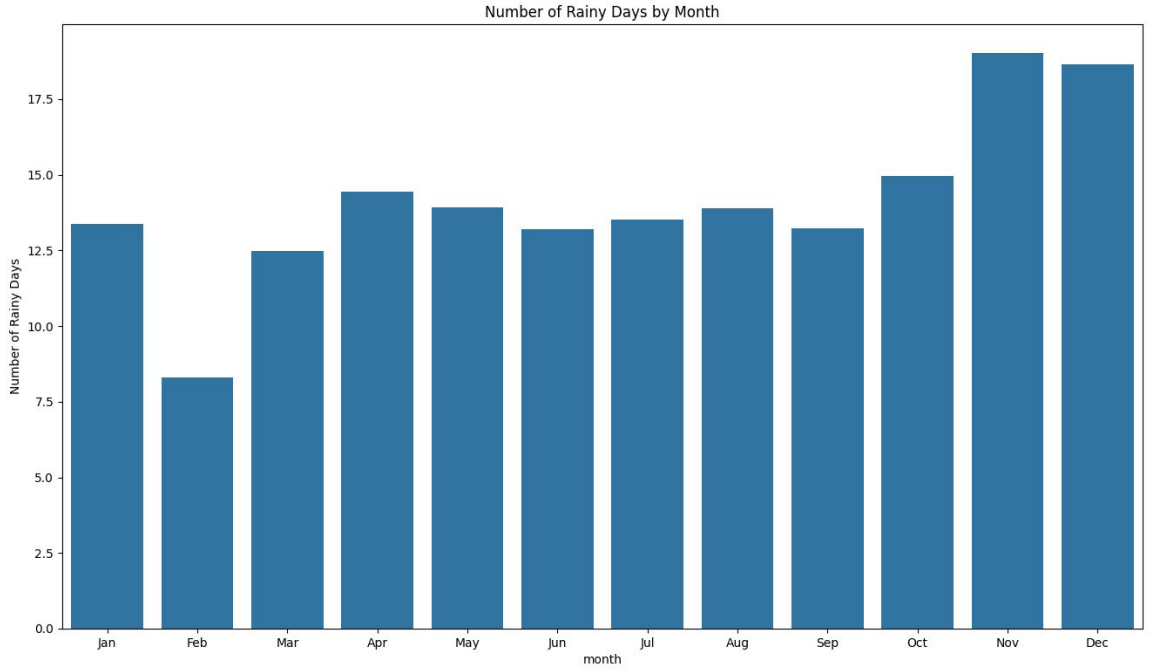
Correlation



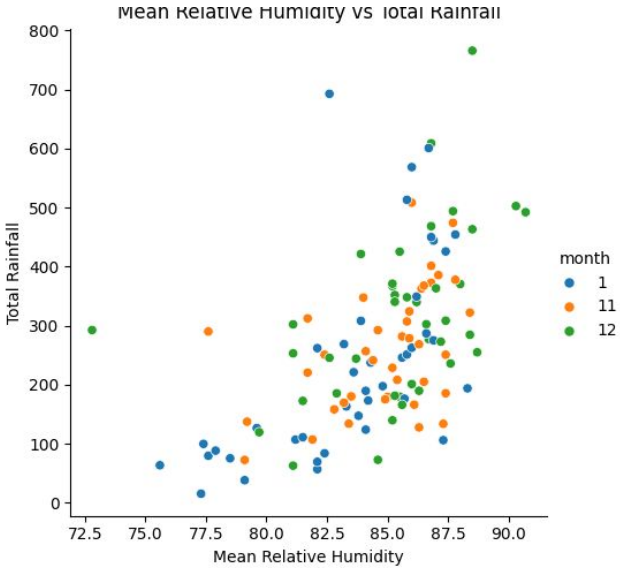
Total Rainfall and number of rainy days by month

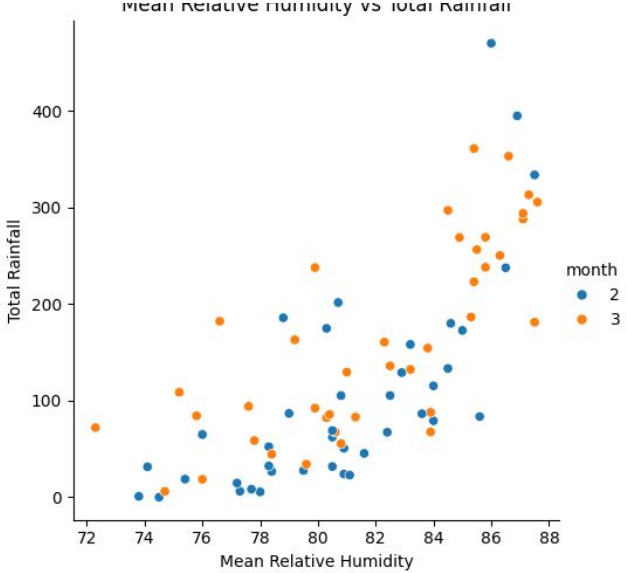


Number of rainy days by month

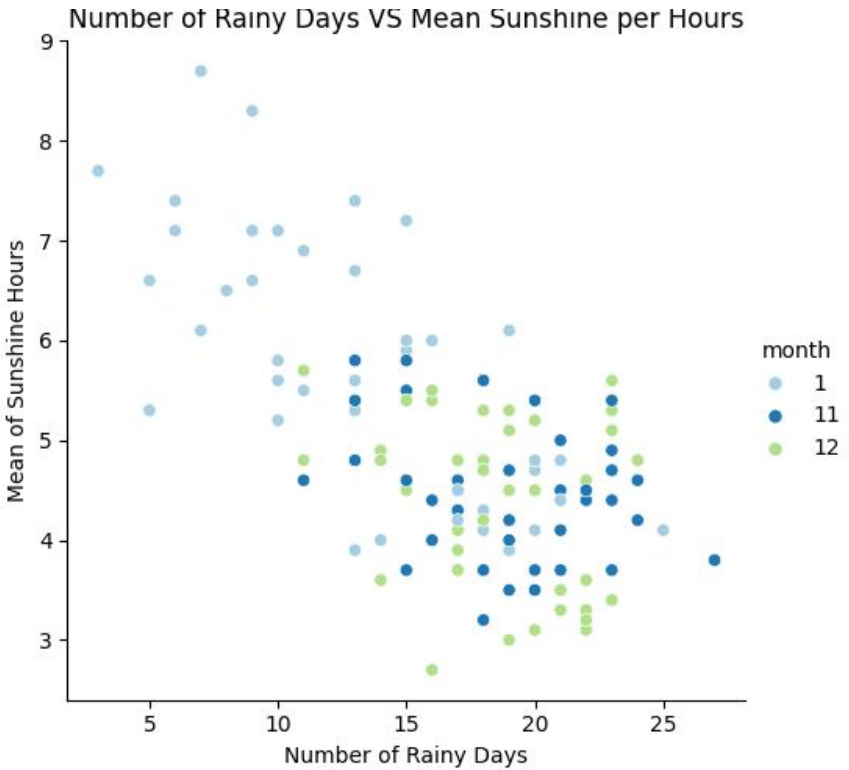


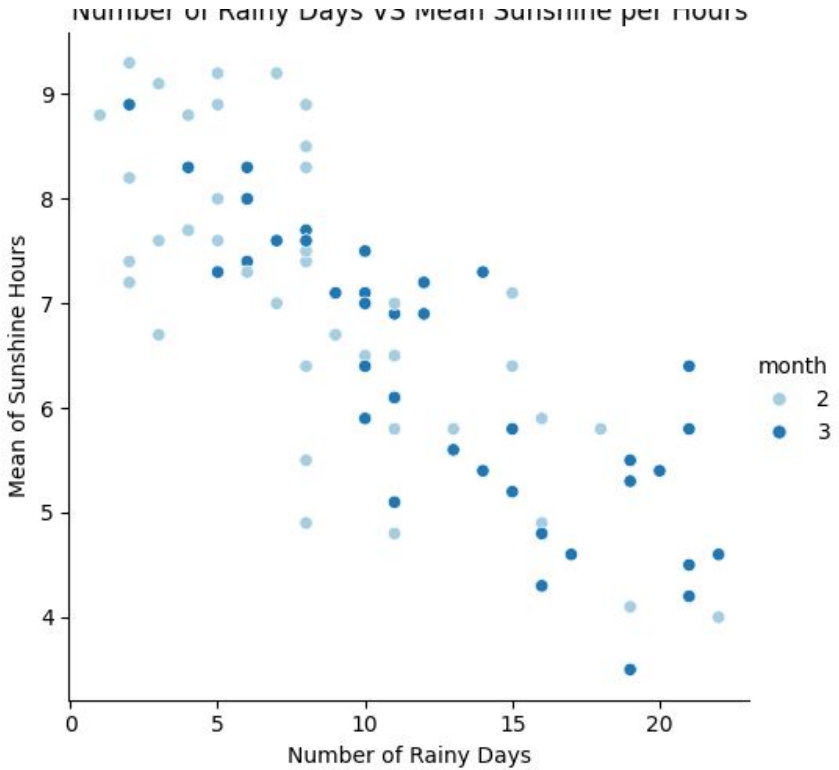
Mean Relative Humidity with total rainfall (Highest, Lowest)



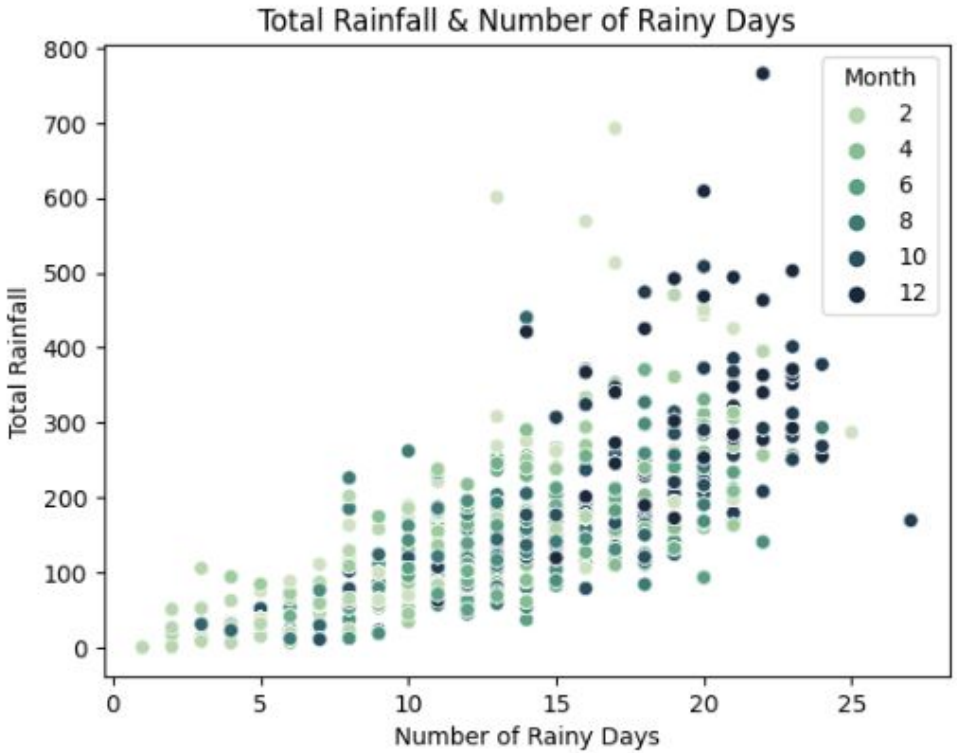


Number of Rainy Days VS Mean Sunshine per Hours (Highest, Lowest)





Total Rainfall and Number of Rainy Days



Conclusion & Recommendations

Conclusion

1. How to control high demand of users during rainfall

2. How to increase attention to work during rainfall for riders

3. Cancellation by riders and customers when they see their food is wet

Recommendations

1. Provide rainy gears to raiders

2. Set up weather notification onward 2 hours which applied with the data given

3. Pay extra wage / any welfare as reward for riders who attend rainy period which can motivate them to work

4. Allocate resources, for example, contact EV mini cars and EV bikes merchandise to deal partners and make contract to raiders who are willing to drive