Homework # 5 – MATPLOTLIB

COMMENTS

PLOT #1 – Bubble Plot

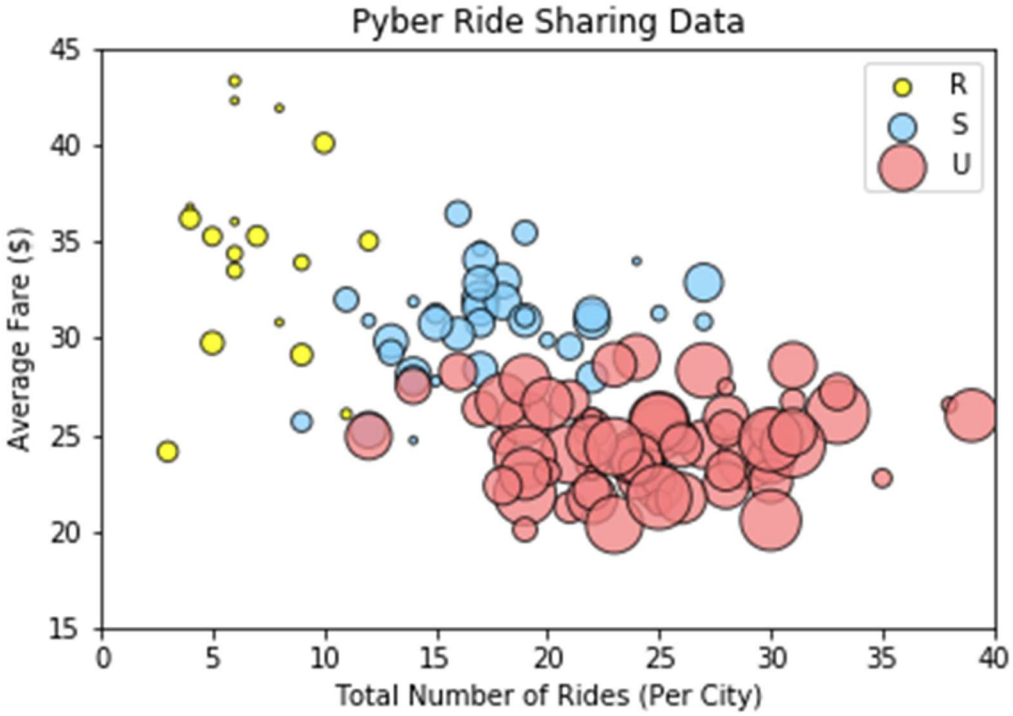
Plot Explanation

This bubble plot shows the distribution of Rides per City (X Axis) vs Average Fare (Y Axis). Each bubble represents an individual city, the size of the bubble reflects number of Pyber drivers employed in that city. The three bubble colors indicate the location of the city being Rural (gold), Suburban (light blue) or Urban (light coral).

Plot Significance

This plot displays several significant points

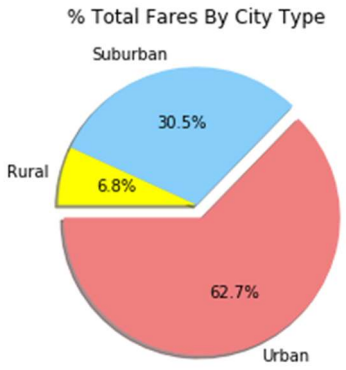
1. There are fewer rides and drivers in the rural area, consistent with lower demand for service. Also, the average fare is higher. This would be expected in that rural ride mileage between pickup and destination would naturally tend to be farther apart.
2. Conversely, the Urban areas have overall more rides and more drivers consistent with the greater demands of higher population density. Smaller average fares compared to Rural stats reflect generally shorter distances between pickup and destinations.
3. Suburban stats reflect consistent middle ground between Rural and Urban stats.



PLOT # 2 – Pie Plot - Total Fares By City Type

Plot Significance

This indicates that over 90% of revenues derive from Urban and Suburban service.

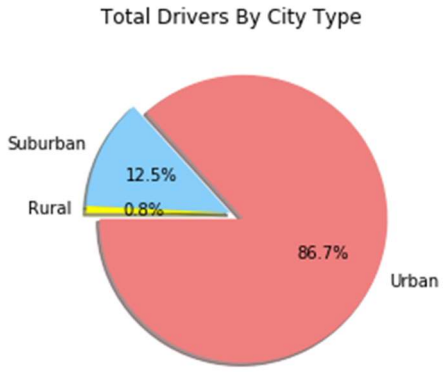


PLOT # 3 – Pie Plot – Drivers By City Type

Plot Significance

The vast majority of drivers serve the Urban areas.

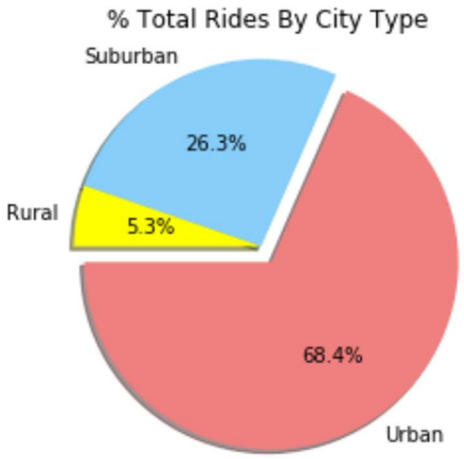
There are fewer rides and drivers in the rural area, consistent with lower demand for service.



PLOT # 4 – Pie Plot - Percent of Total Rides by City Type

Plot Significance

There are more drivers and more demand in the urban areas, again consistent with higher population density.



CONCLUSIONS

The data above is consistent with intuitive expectations concerning the relationships between Urban, Suburban and Rural markets. The bubble chart representation seems to be the most concise presentation of general trends of the. The value of the pie charts are that they provide specific numbers describing the actual market numbers.