

Ford GoBike Trip data

Analyzing Share Bike

This data consisted of Ford GoBike System of year 2018. Ford GoBike is a bicycle sharing system in the San Francisco Bay Area. There are 111382 trips information in this dataset. The features in the dataset include trip duration (second), trip start and end time, trip start and end location, user type, user birth year and user gender, etc. The data can be found [here](#)

During the data wrangling process, some unneeded variables were removed and some new variables were created to help investigate the dataset effectively.

Data overview:

bike_id

duration_sec

end_station_id

end_station_latitude

end_station_longitude

end_station_name

end_time

start_station_id

start_station_latitude

start_station_longitude

start_station_name

start_time

bike_share_for_all_trip

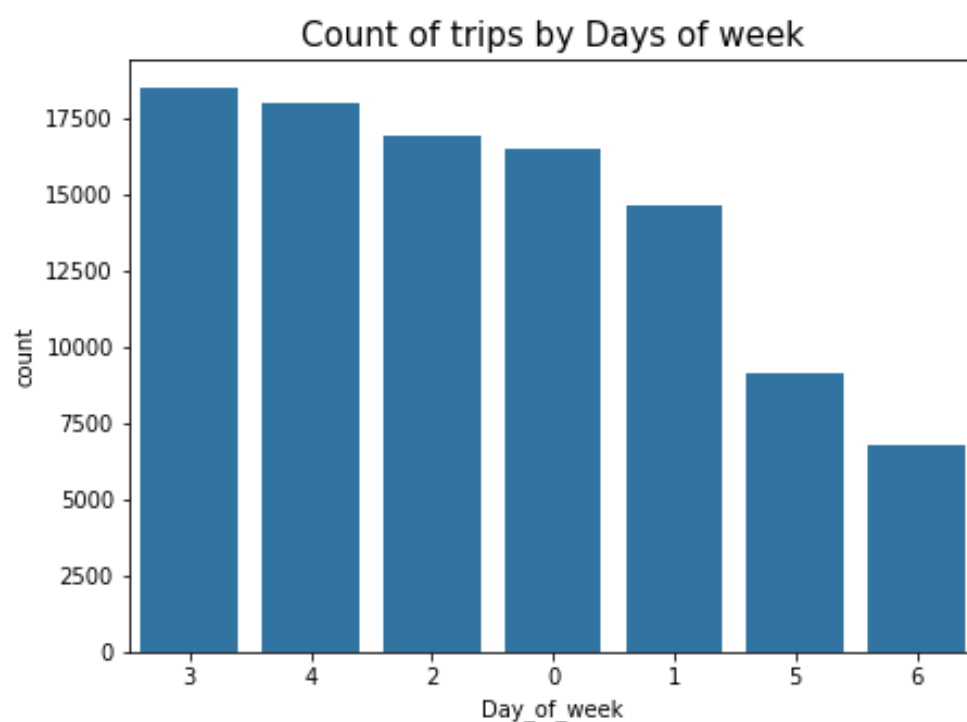
user_type

member_gender

member_birth yearPerforming Exploratory Data Analysis:

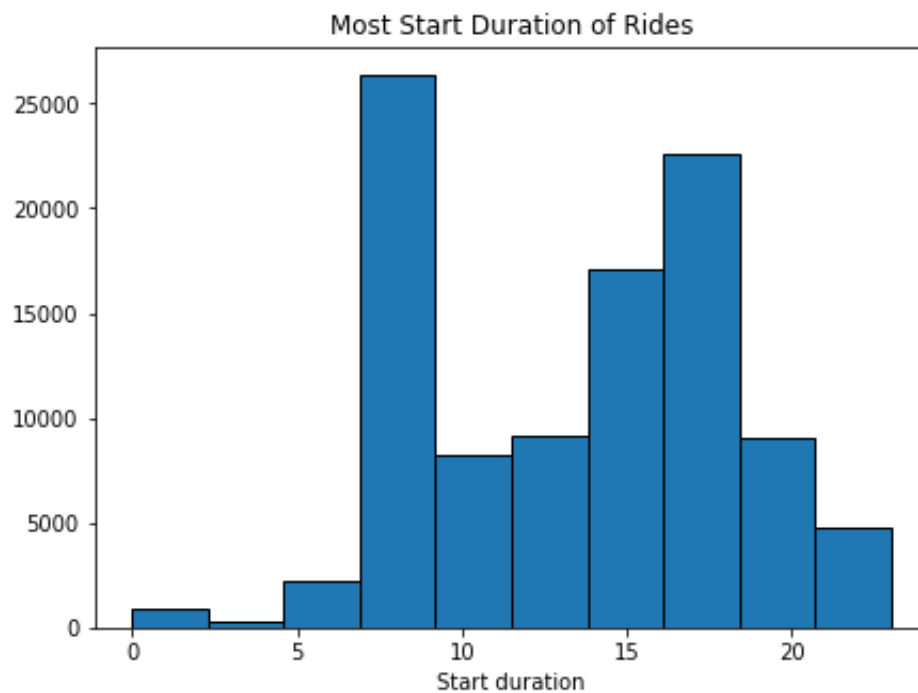
Data Visualisation:

1. On which day the trips are most?



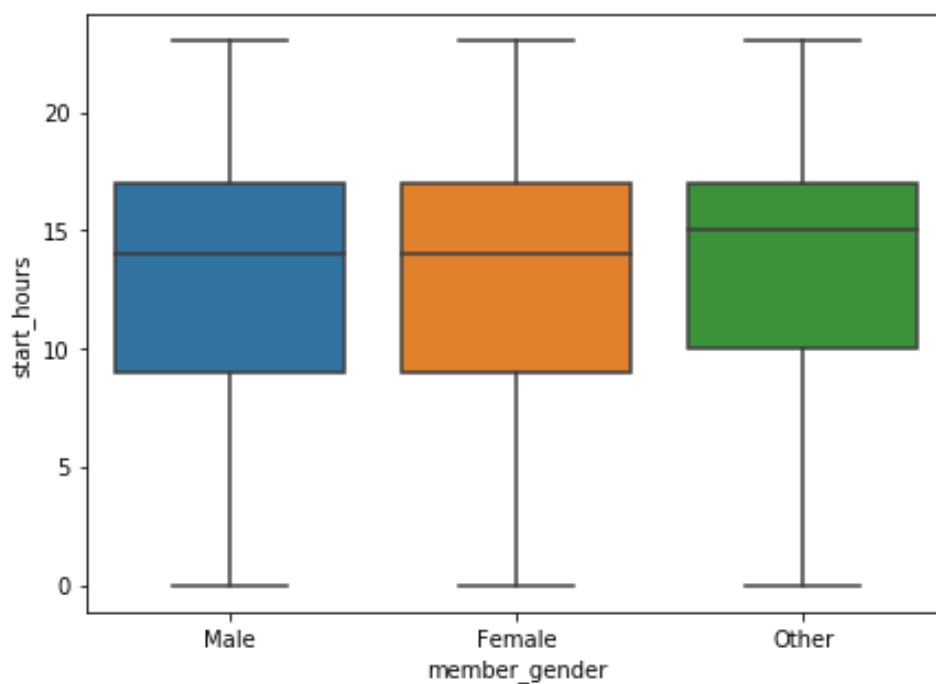
- Mostly maximum no of rides were taken on Thursday and Friday and very less no of trips taken from Saturday and Sunday
- Since the birth year of member is given we can calculate the age of the members. From birth year we can calculate every member age and then removing the member_birth_year.

2. What are the most start durations?



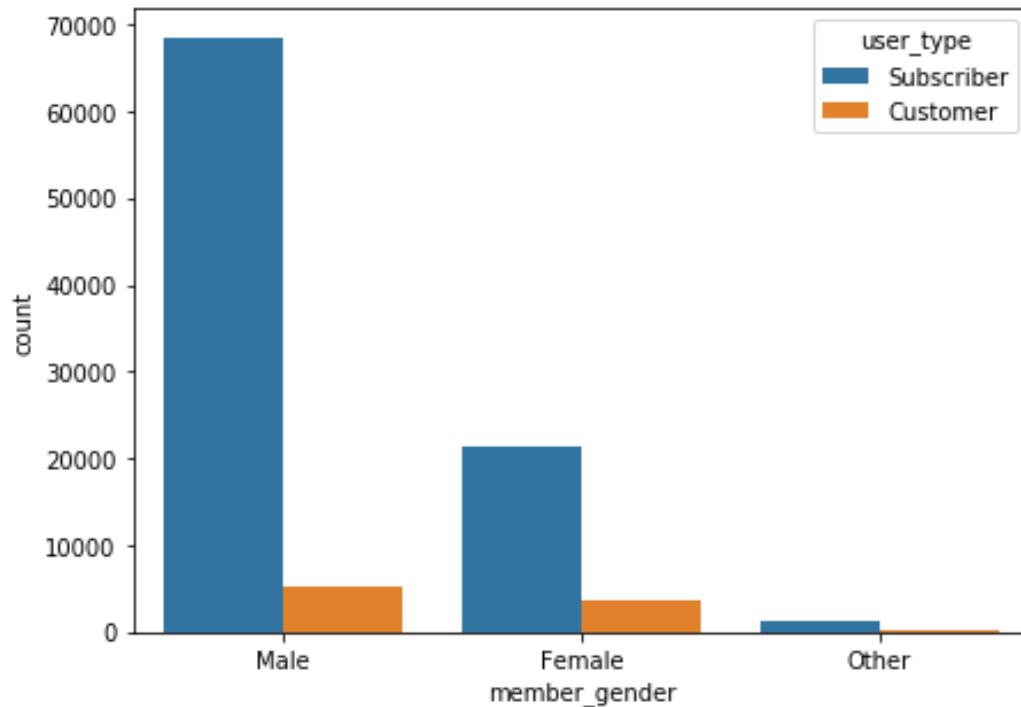
➤ Most start duration is between 7 to 9 and then 16 to 18

3. Which gender start trip earliest?



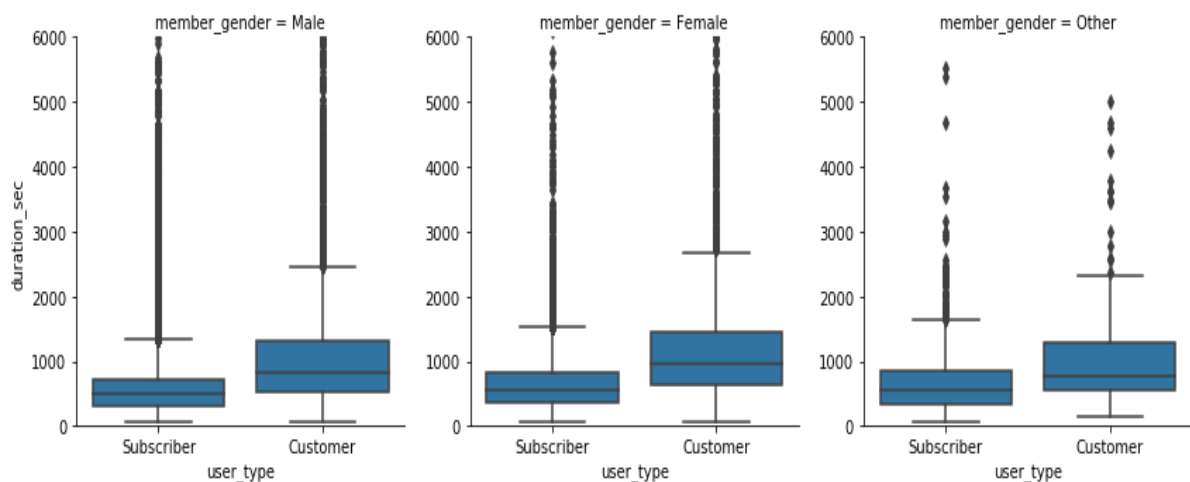
➤ It is noted that both the genders starts from the same time i.e gender makes no difference in start time.

4. Which of the gender has more Subscriber and Customers?



➤ It is observed that in Males subscribers are more than female. And there are more male customers than female

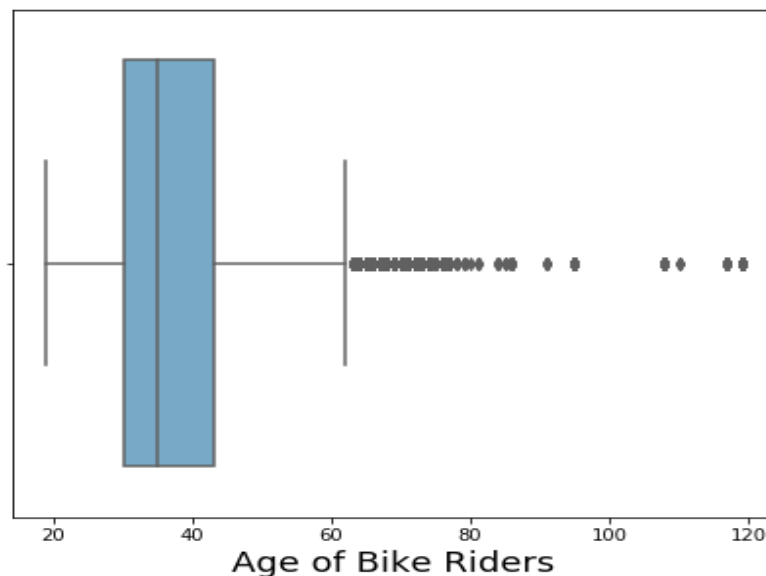
5. Which gender has most long rides and whether they are customers or subscribers?



- It is observed that female customers has more long rides.Both male and female customers has long duration ride as compared to subscriber.

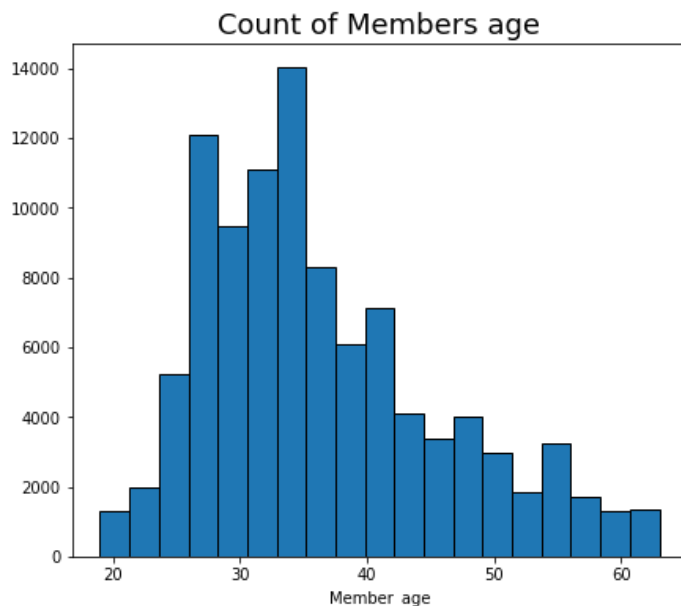
6. What are the most age groups of most Ford goBike Riders user?

Age distribution of Ford goBike Riders



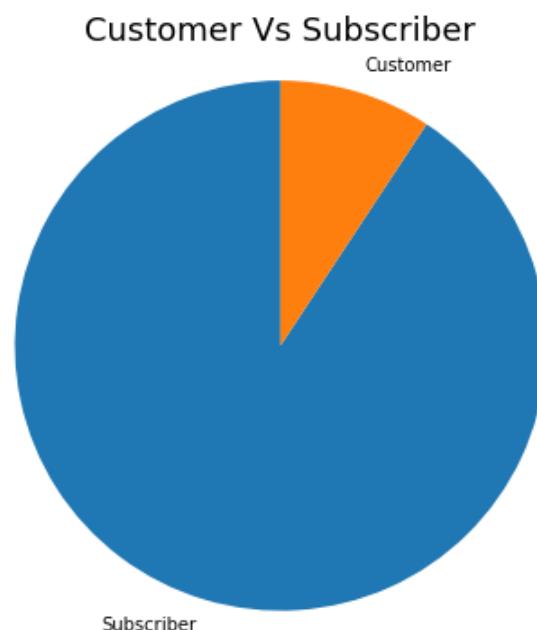
- Age from 19 to 63 takes almost 95 percent of the data. There are outliers present in the database. There are users more than 100 years old. From Ford website they do allow users to put an unusual age such as 1918.

Removing users more then 60 years old will give us more accuracy thus removing the outliers gives:



The above Histograms shows the count of the member age. It is observed that approx 26 to 37 years members are more and the histogram is right skewed which shows as the age increases the count decreases i.e old ones take less bike share.

7. Most no of user weather customer or subscriber:



Subscribers are more in comparison to customer