



Marketing

Data Analysis

Data Analytics Capstone Project
Cesar Aracena | <https://github.com/claracena/data-analytics>

Task:

Detect differences between the usage of the service
by members and casual users

Data Source

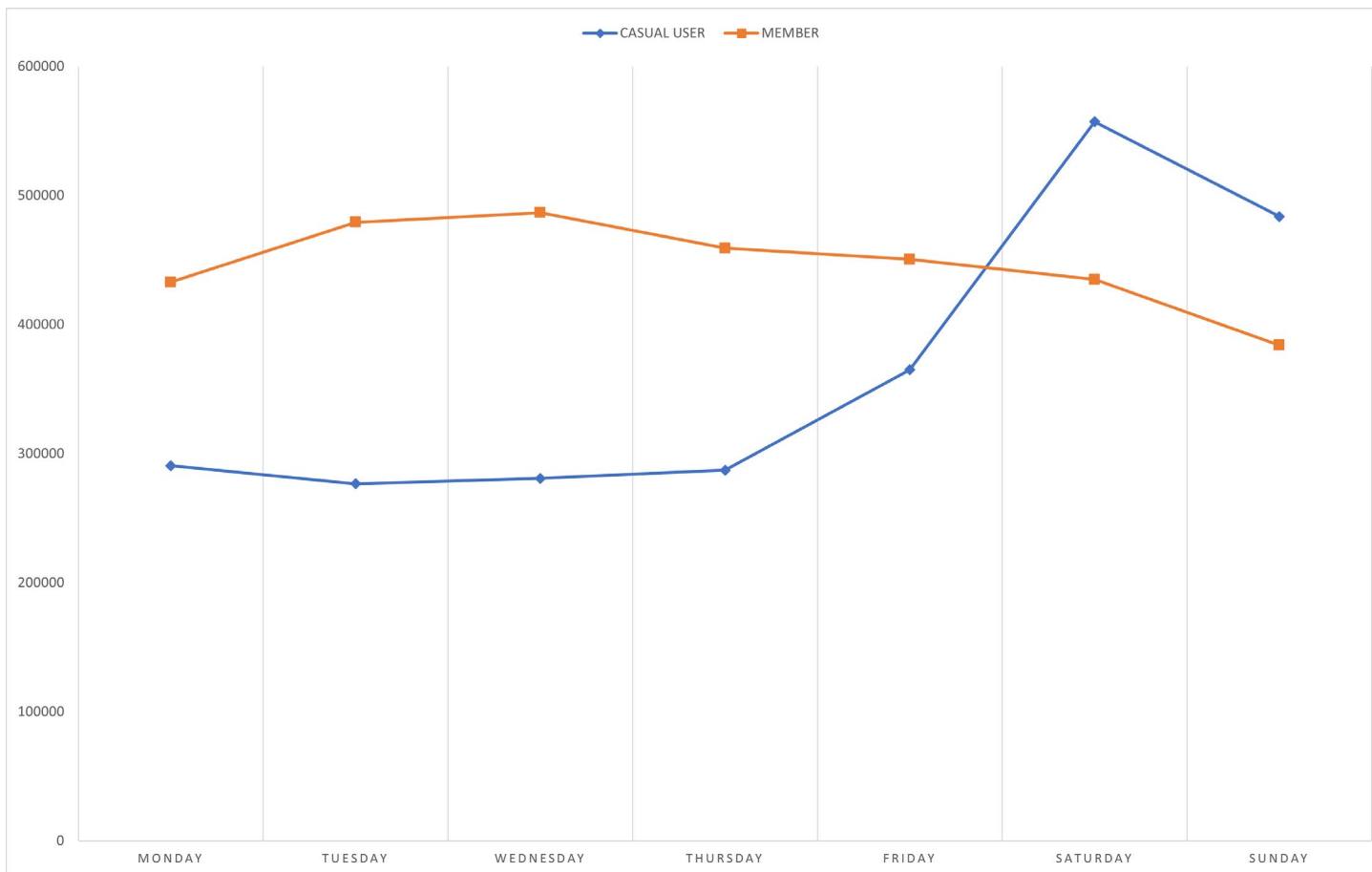
All the data was provided by the client separated in monthly, CSV files. For this analysis, only the past 12 months were selected (March 2021 to February 2022).

Data Treatment

The files containing the data were first imported into a secure SQL server.

Once the 12 tables were created, the totality of the data was combined, and the following steps were taken:

- Check for duplicates
- Check for null/empty values
- Check for data format inside each column



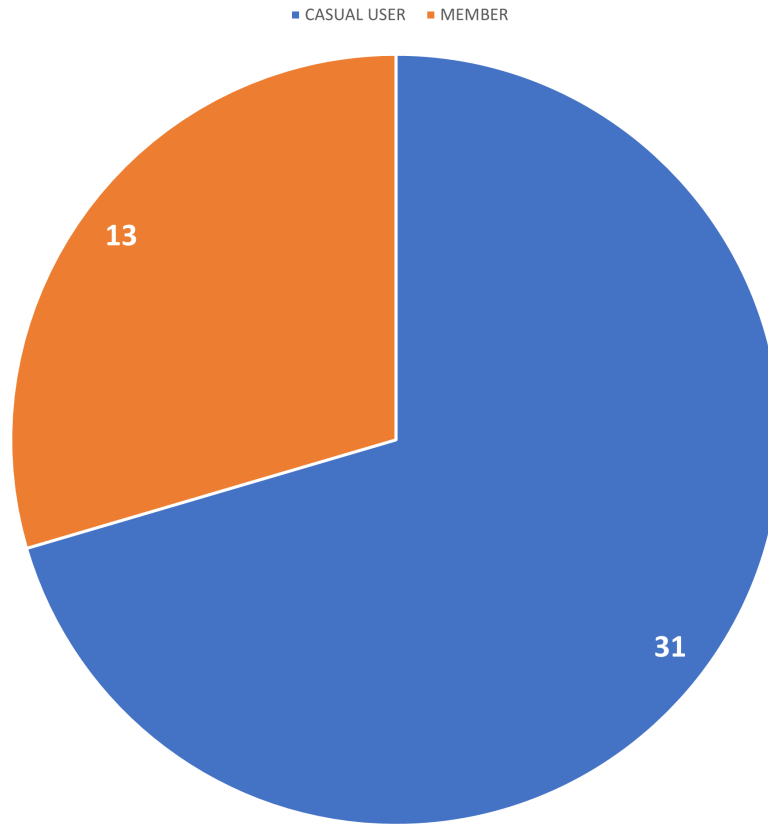
Daily Usage By User Type

Daily Average for 12 months

Members are notoriously more active during weekdays and casual users are more active during weekends.

Average Ride Duration By User Type

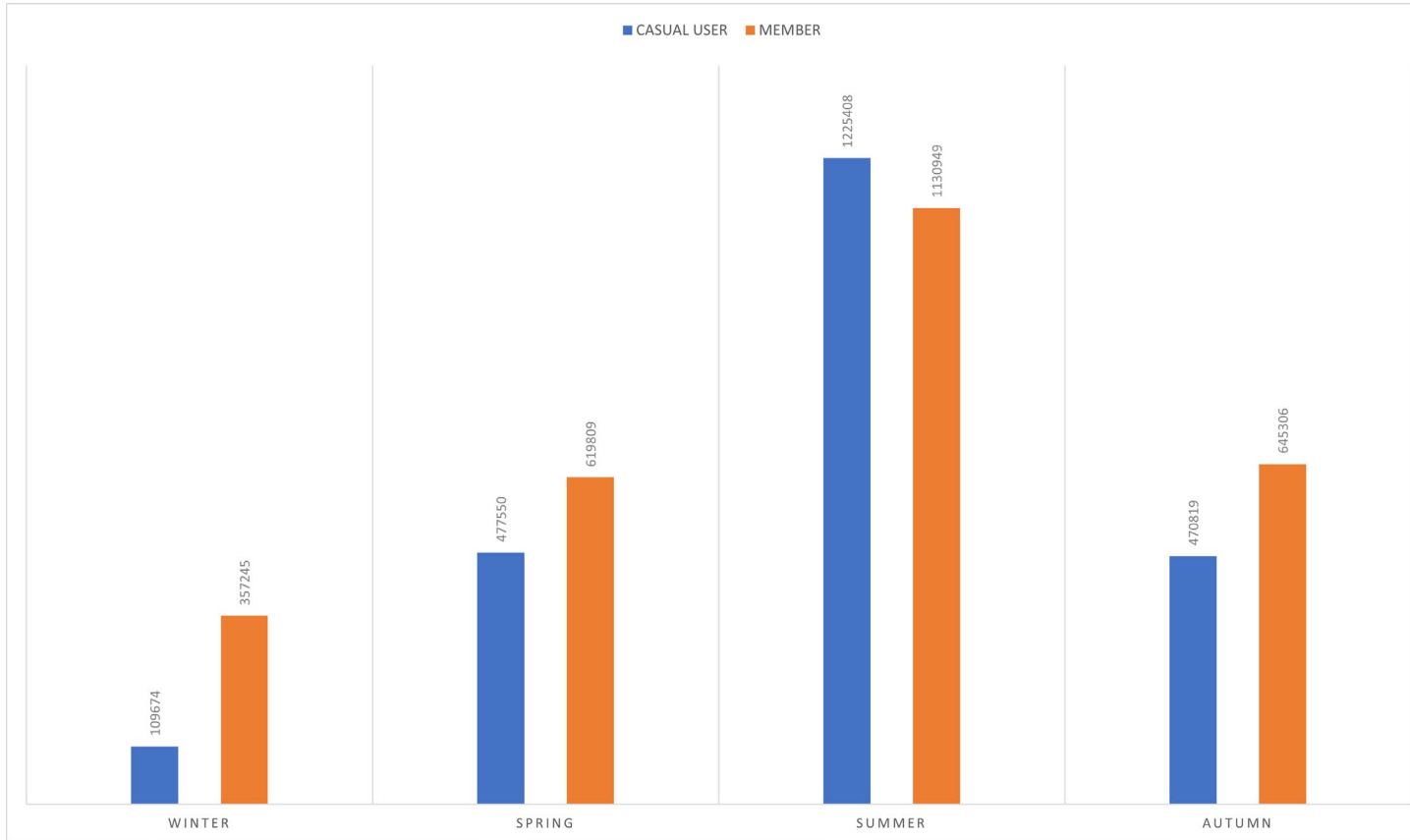
Average for 12 months, in minutes



Casual users use the bicycles more time
each time they rent one.

Seasonal Use By User Type

Total rides per season



Casual users increase the use of the service when the conditions are best suited for outdoor activities.

Key Insights & Recommendations

The analysis of the data shows that while annual members use the service for commuting to and from work, casual users tend to only use the service when outside conditions are optimal.

Because the data does not include the quantity of times single casual riders use the service or how they use it, it is not possible to determine the average recurrency of users.

Key Insights & Recommendations (continued)

Without more data to analyze, the only recommendation we can propose is:

- Create a marketing campaign to offer a better price for weekend/casual users

Unfortunately, any other recommendation would be based on hypothesis as the data is incomplete or not broad enough.

Next Steps

To be able to create a better recommendation, we suggest the following:

- Continue gathering data, including some sort of id that identifies each casual user for the next 12 months
- Create a campaign to survey both casual users and members to have a better understanding on their habits and interests on the service.