



Bike Share Subscriber or Casual Rider?

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Two Types of Users

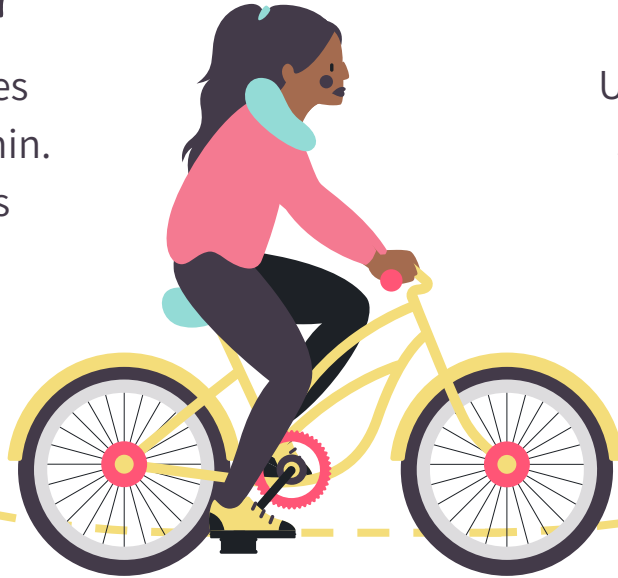
Casual Rider

\$2 for first 30 minutes
\$3 for additional 15 min.
Extra fee for e-bikes

Subscriber

Unlimited 45-minute rides
\$2 for additional 15 min.
Discounted e-bikes
Can link transit card

01



02

Main Goal

Identify casual riders and turn them into subscribers.

Say hello to
your new ride,
Bay Wheels.



Become a member

Members get
unlimited 45-minute
rides all year long

Bike on, Bay Area. Sign up for a Bay Wheels membership to get exclusive perks — unlimited 45-minute Classic rides, discounted ebikes, and much more — for less than \$13 per month.*

Join and save



Data Sources



Lyft Bay Wheels

Ridership data



GBFS

Station data



U.S. DOT

Transit connection data

Process

Exploratory
Data Analysis

01

02

Optimize and
evaluate models

Model
selection

03

04

Feature
importance



Classification Algorithms

KNN

Logistic
Regression

Decision Tree

Random Forest

Naive Bayes

XGBoost

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Classification Metrics



Precision



Recall

Casual

0.90

0.77

Subscriber

0.32

0.56

Classification Metrics



Precision



Recall

Casual

0.90

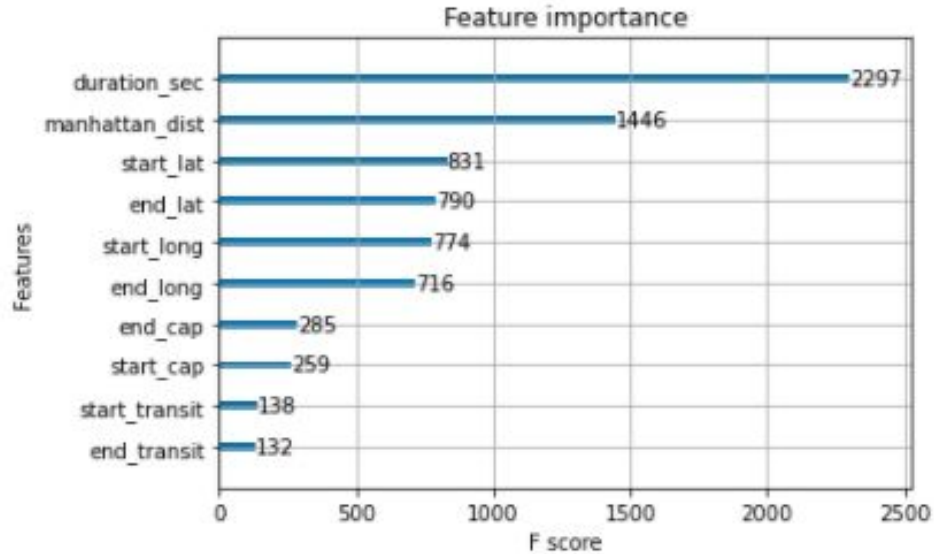
0.77

Subscriber

0.32

0.56

Classification Metrics



App Demo

Bay Area Bike Share Data

This combined data frame includes information from Lyft, owner of Bay Wheels, as well as the General Bikeshare Feed Specification and the U.S. Bureau of Transportation.

Mapping the Stations by Distance Traveled



Make predictions from user input

Duration (seconds)

2000

- +

Start Latitude

37.36

- +

End Latitude

37.77

- +

Start Longitude

-122.42

- +

End Longitude

-122.51

- +

Start Transit

2

- +

End Transit

0

- +

Start Station Bike Capacity

15

- +

End Station Bike Capacity

15

- +

Predicted Type: Customer

Improvements



Time Data

Consistent start and
stop data



Web App

More useful for less
technical users

Thank you!

Contact me:

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