# User Churn Prediction Project

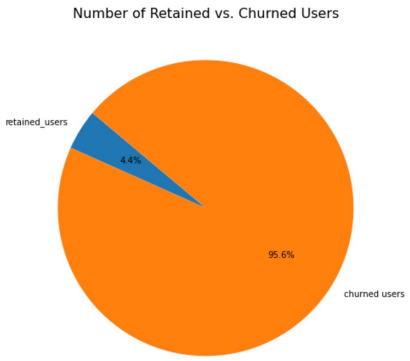
Data Discovery: Understanding trends in User Churn

## Overview

The data team is tasked with building a machine learning model to predict user churn with the overall goal of increasing growth. User churn quantifies the number of users that stop using or uninstall the app. This initial data discovery seeks to gain insights into the behaviors surrounding churn vs. retained users to better focus business efforts and resources in the future development of the project.

## Objective

Isolate the most informative variables contributing to user churn and retention and use this information as a guiding step into deeper exploratory analysis.




## Results

### Understanding the data:

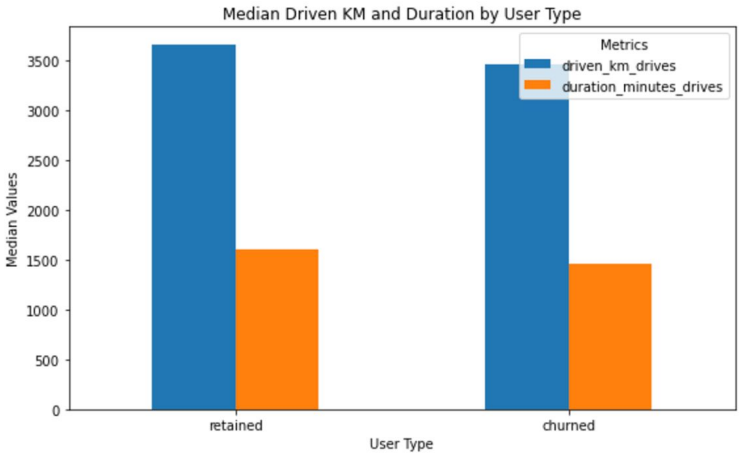
- Dataset is highly unbalanced with 82% retained users and 17% churned
- The data team identified missing labels in the collected data; however, an analysis comparing churned and retained users between labeled and unlabeled data points revealed consistent patterns, indicating no further investigation was needed.
- We have significantly more iPhone users than Android; however, the ratio of iPhone users and Android users is consistent between the churned group and the retained group.

### Key insights:

- It was found that churned user drive longer distances and drive more often per day compared to retained users.

### Trends:

- Retained users drive to their favorite places more often.




## Path Foward

### Recommendations:

- More exploratory data analysis is need to be done for our “super drivers” to understand if the app is meeting their specific needs.

### Next steps:

- More exploratory data analysis is need to be done for our “super drivers” to understand if the app is meeting their specific needs.