All you can ride llc
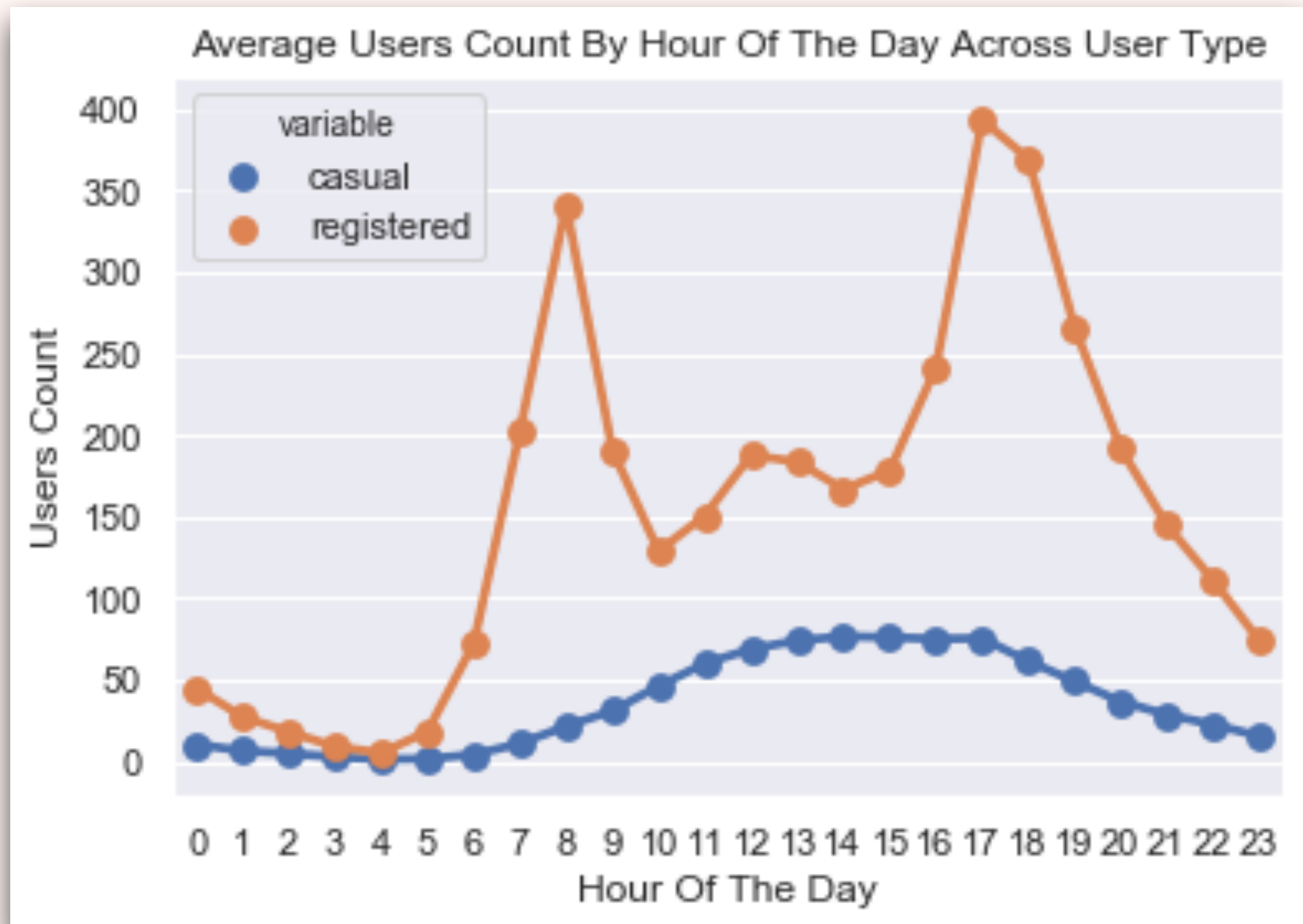
BIKE SHARE

Binyamin Zaetz - July 31 2020

LOOKING TO EXPAND

> How many bikes do we need?

> How does the weather affect ridership?

> Do registered members engage more often?

DO REGISTERED RIDERS ENGAGE MORE OFTEN?

❯ **Registered members engage significantly more often then nonmembers**

Average Users Count By Hour Of The Day Across User Type

Introduce dataset

THANK YOU KAGGLE FOR PROVIDING THIS DATASET

DATASET

Over 17000 observations

> Rental count per hour

> Hourly weather
> (temperature, humidity, precipitation...)

> Workday or holiday
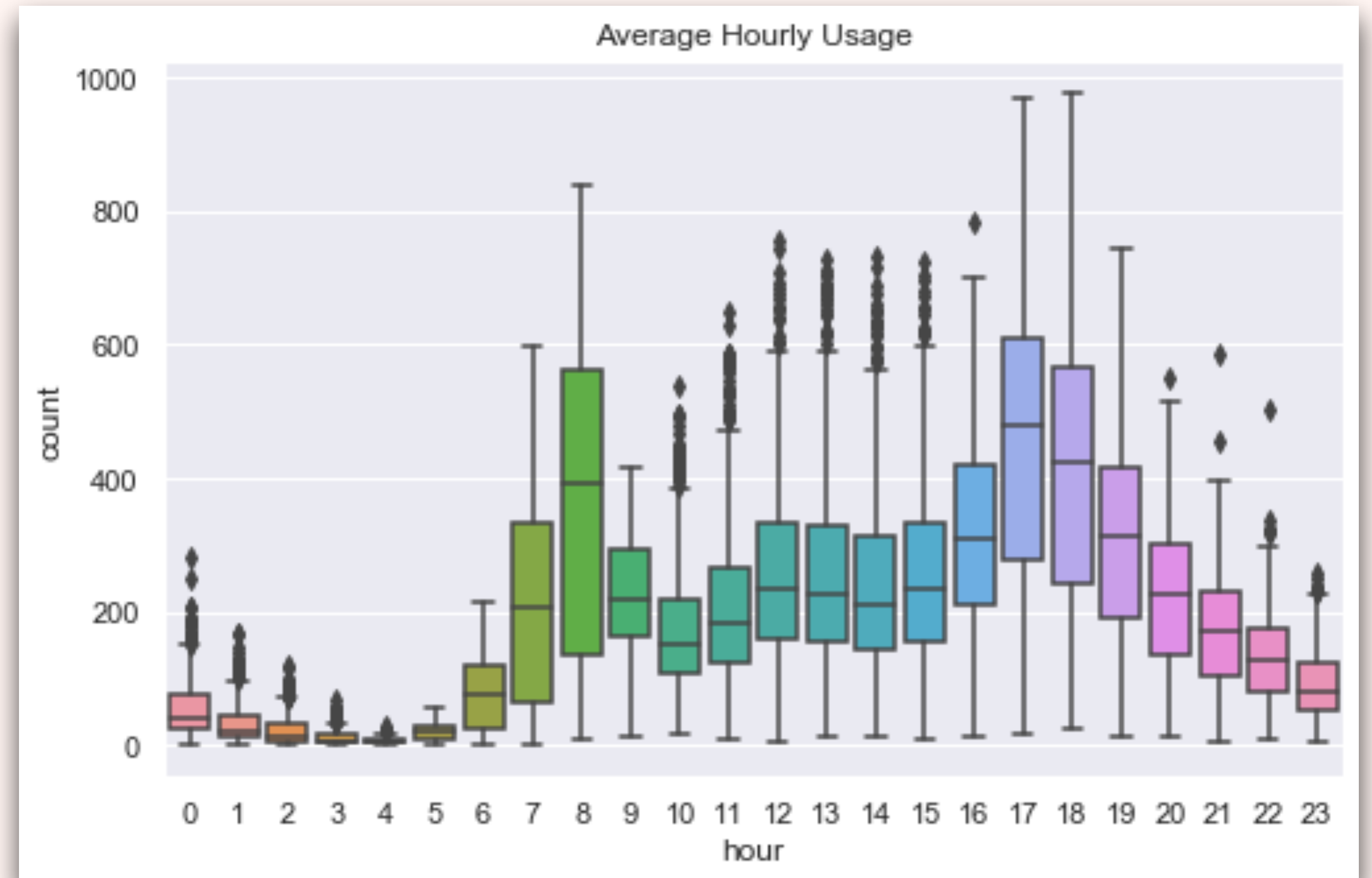
> Registered member or casual rider

Dataset

TRUST THE PROCESS

› **Sourced dataset from Kaggle**

› **Cleaned data with pandas**

› **Data visualizations with seaborn**

› **Created polynomial features and interactions with sklearn**

› **Used multiple models to return most accurate prediction**
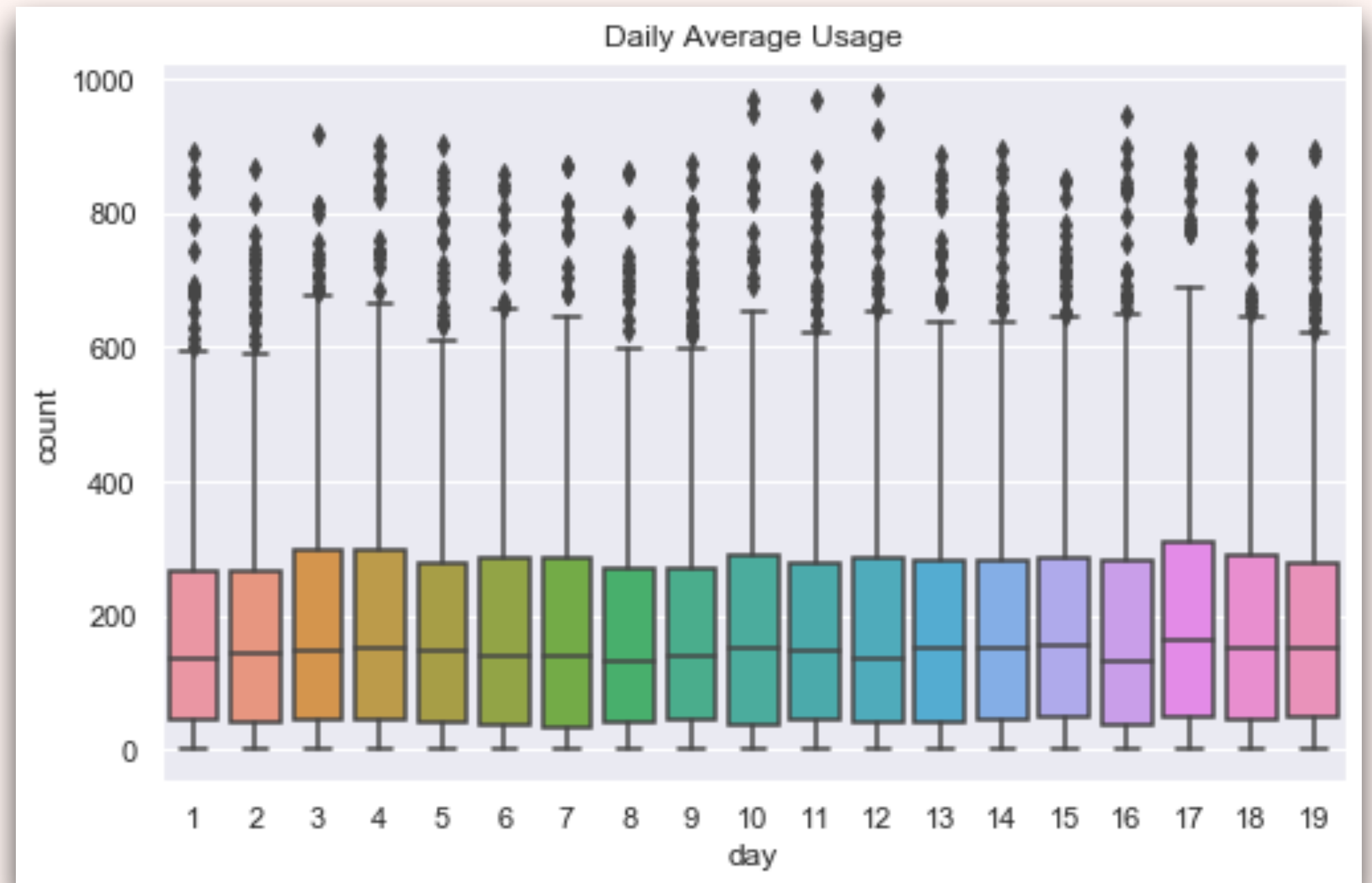
DAILY USAGE TRENDS

> **What we can expect on an average day**
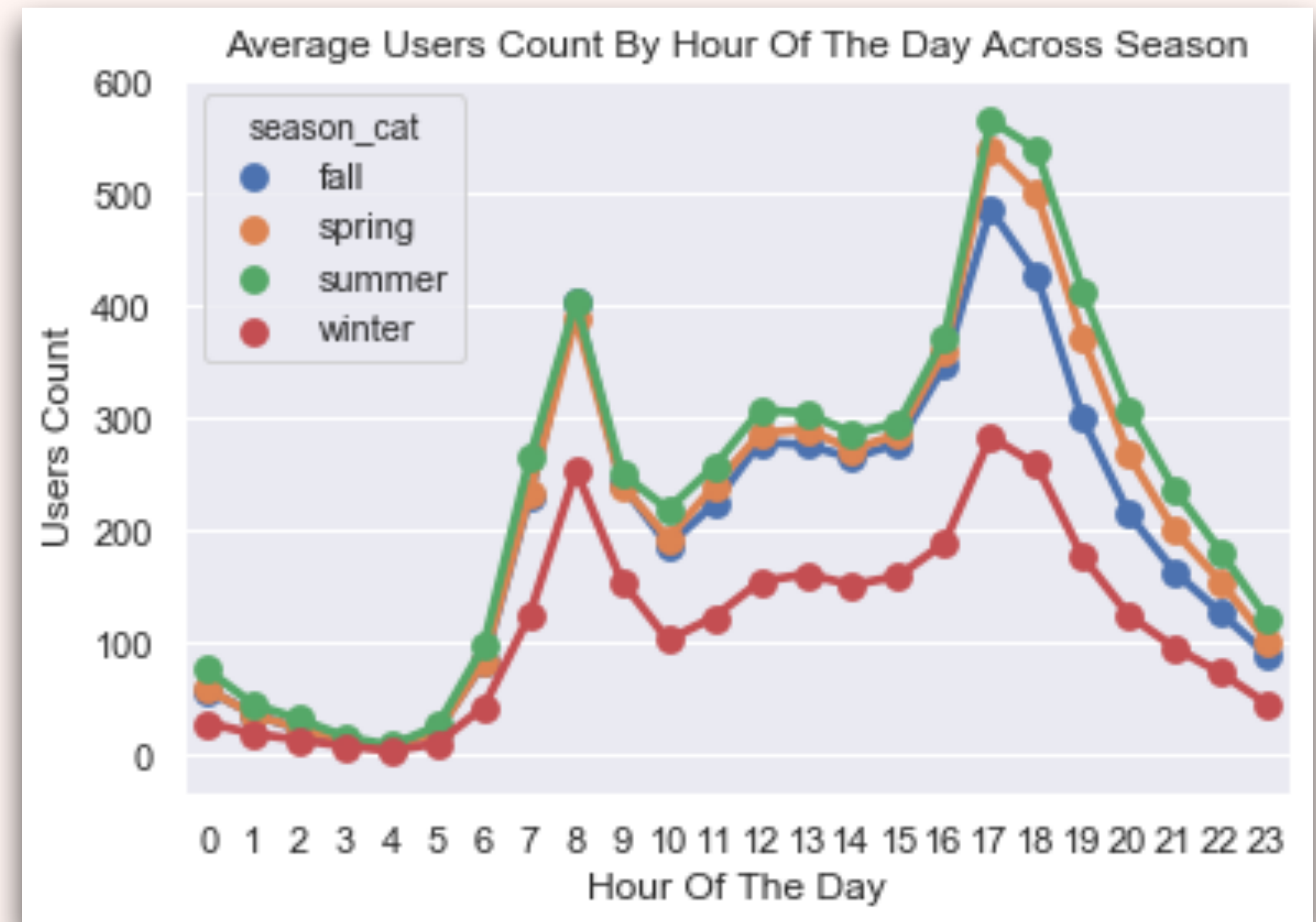

Average Hourly Usage

HOW MANY BIKES DO WE NEED?

How many bikes are used per day?

> An average of 200 rentals per day

> Can reach up to 1000 rentals per day

> What is causing the variance?
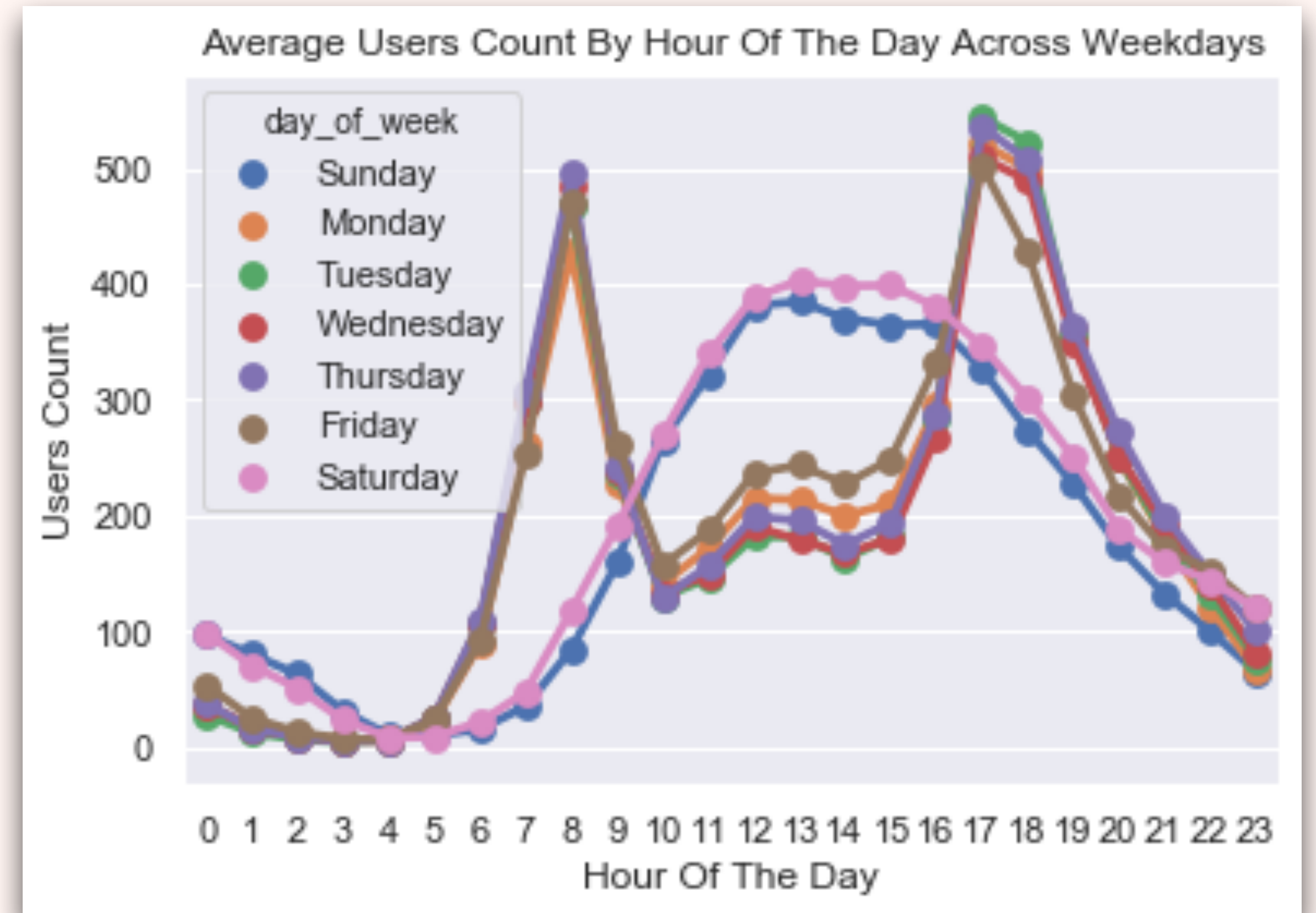

Daily Average Usage

WHAT LEVEL OF SEASONALITY SHOULD WE EXPECT?

> **Seasons explain a lot of the variance**

> **There are fewer riders in the winter compared to the other seasons**

PRIMARY USE FOR RENTALS

> **Commuting to and form work on weekdays**

> **Leisure on the weekends**

Average Users Count By Hour Of The Day Across Weekdays

APPLICATIONS

> **Incentivize membership as it increases engagement**

> **Model recommends a cushion of 200 bikes**

> **Target working professionals**

> **Promote riding in the summer**

IF ONLY I HAD MORE TIME

> **Average distance traveled per trip**

> **Average time per trip**

> **Identify hot zones**

> **Strategize bicycle placement**

THE END