

# CYCLIST CASE STUDY

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# OBJECTIVE

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- How do annual **members** and **casual** riders use cyclist bikes differently?
- Why would casual riders buy **cyclist annual membership**?
- How can cyclist use digital media to influence casual riders to become members?

# DATA SOURCE

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- Data was obtained directly from company records available at <https://divvy-tripdata.s3.amazonaws.com/index.html>
- License to use data is available at <https://ride.divvybikes.com/data-license-agreement>
- Data is from **July 2020** to **June 2021**

# DATA CLEANING

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- Data was cleaned and organized using `python`.
- Data was cleaned in accordance with rules found at <https://ride.divvybikes.com/system-data>
- Rides less than 60s in length taken by staff, and bikes that were simply docked for multiple days were removed.
- Missing value was 3% of the total rows , so I dropped the rows with missing values.

# DATA MANIPULATION

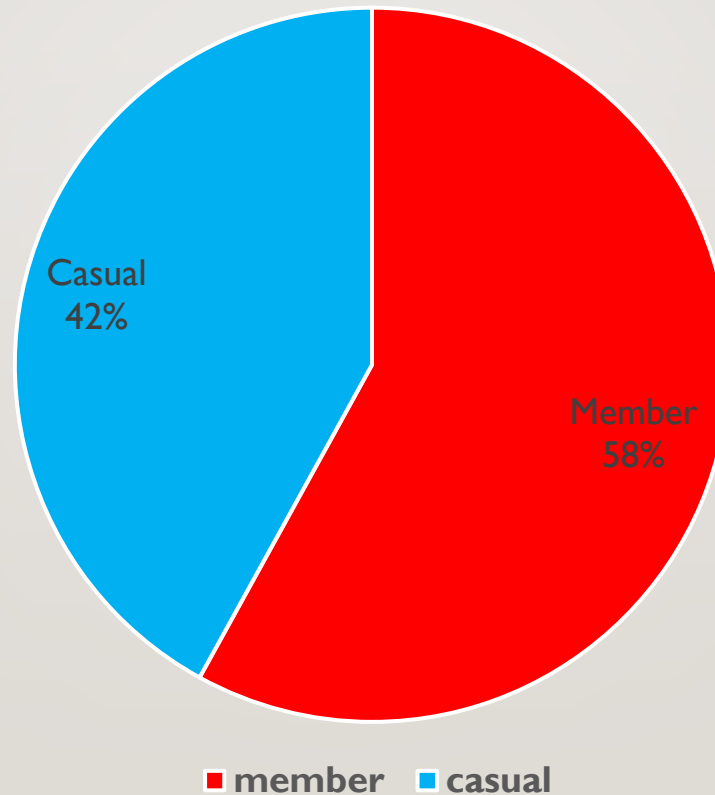
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- Remaining data was organized **by rider type**, **member** or **casual** day of the **week**, **month** and **year**.
- **Ride length** was calculated in seconds by taking difference between start and end time.
- Overall usage of bike was evaluated by using the average riding distance and time across **week**, **month** and **year** .
- **Manhattan distance** was calculated by taking square root of sum of square of difference between latitudinal and longitudinal coordinates of the start and end point .



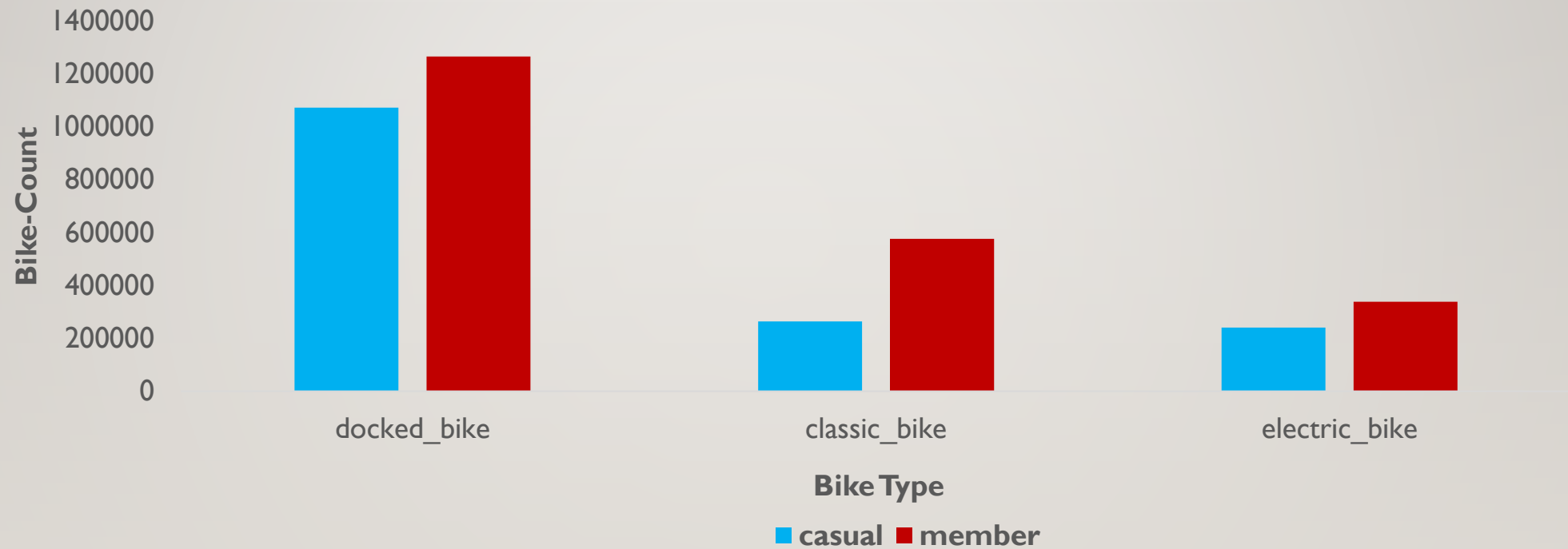
# TOTAL COUNT BY MEMBER AND CASUAL

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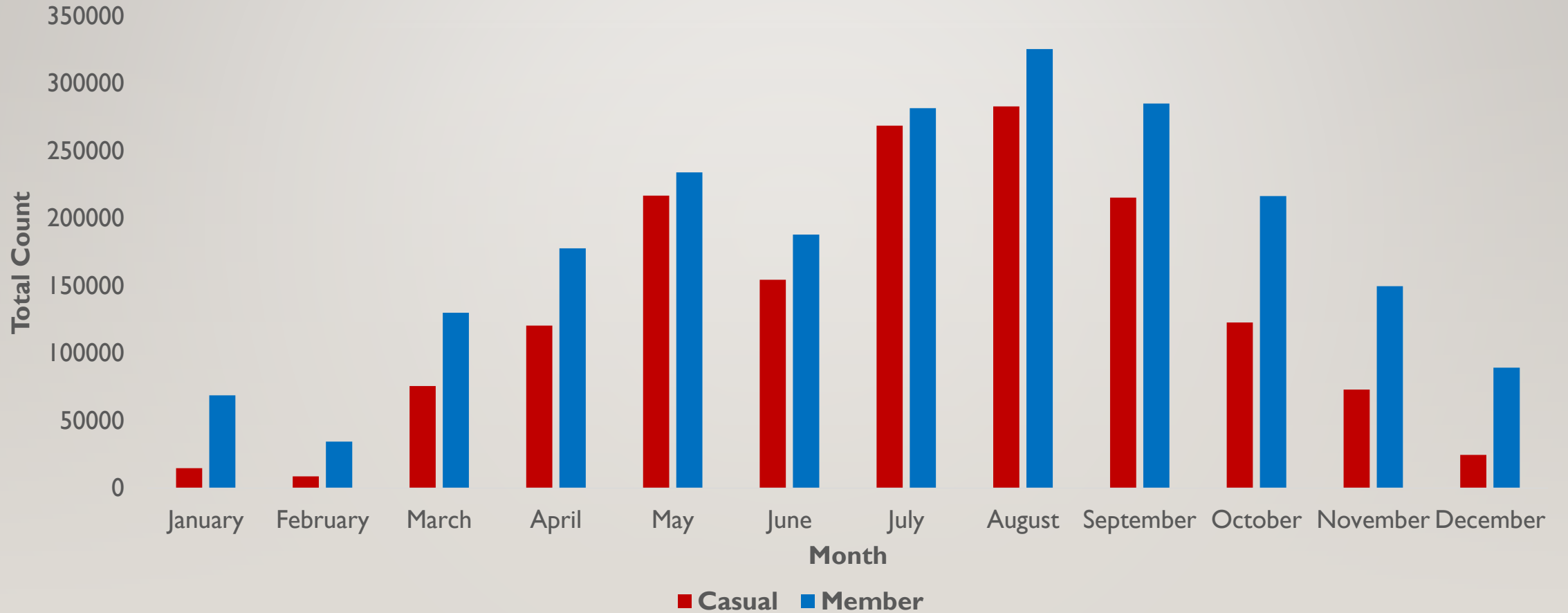


# NO OF USER BASED ON RIDER AND BIKE TYPE

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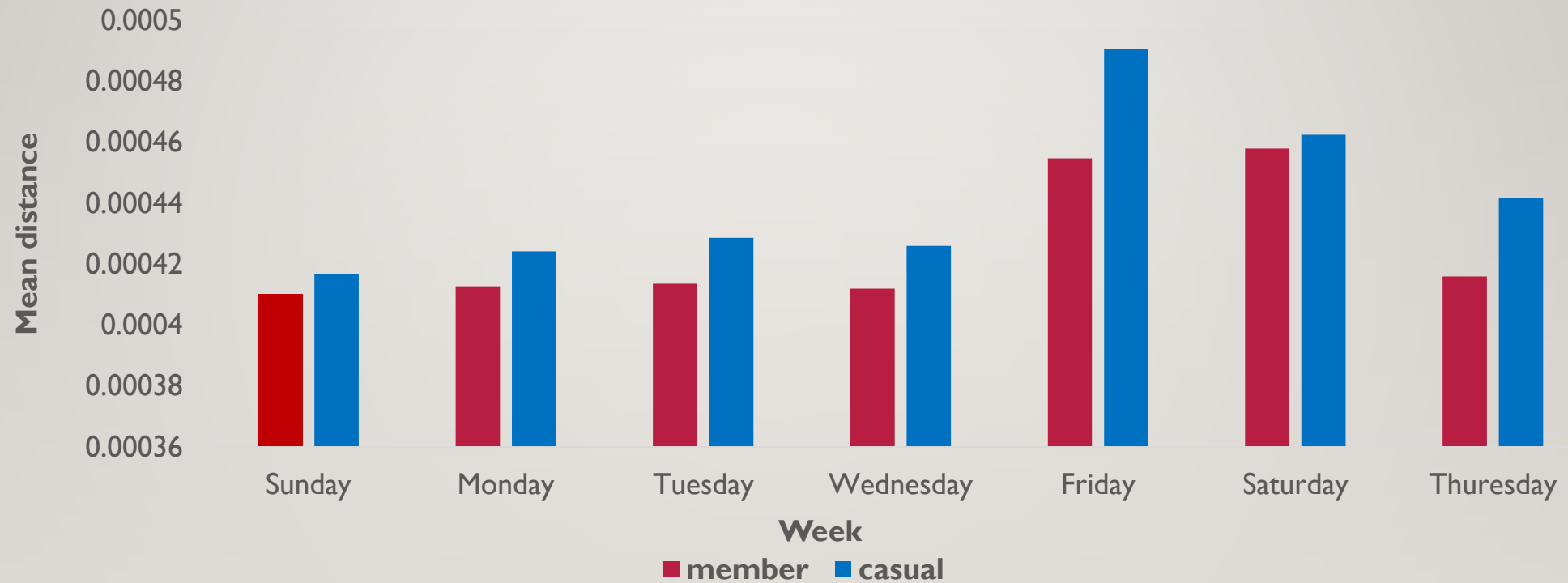
# TOTAL RIDER COUNT IN EACH MONTH





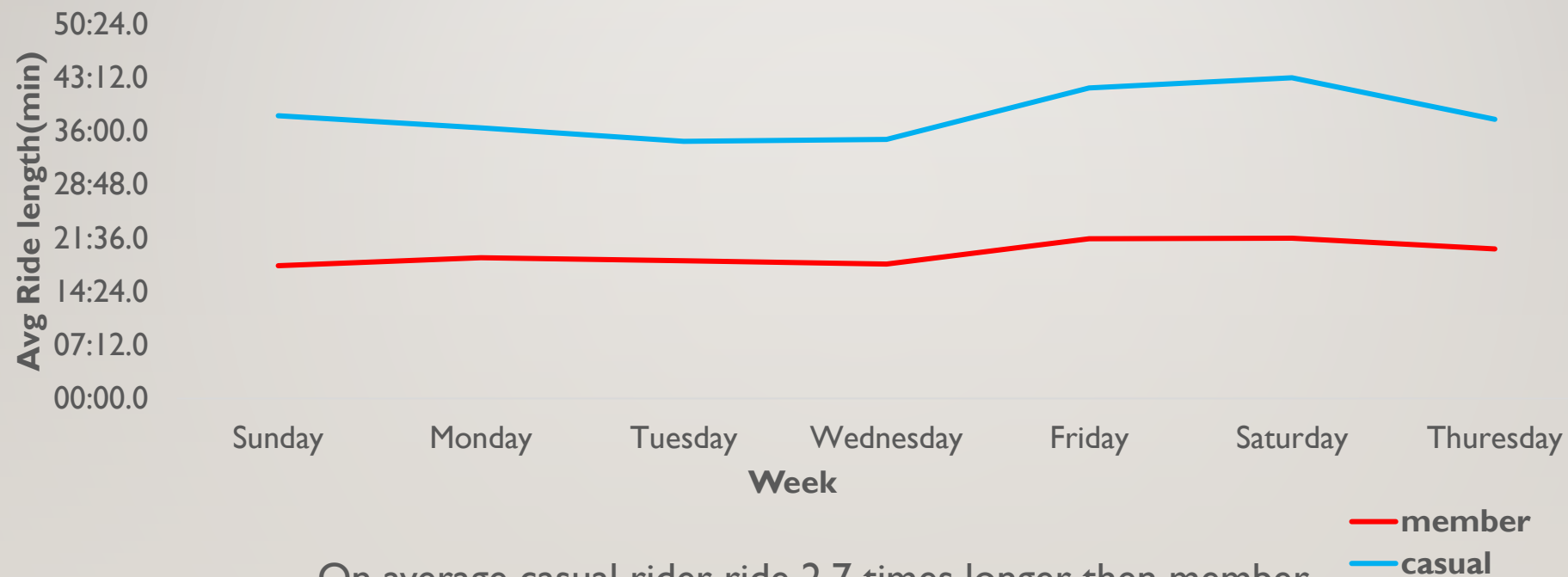
# AVERAGE DISTANCE IN WEEK

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# AVERAGE RIDING TIME

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On average casual rider ride 2.7 times longer then member

# RECOMMENDATION

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- We can increase the price of ticket for **casual rider** for 45 minutes ride and give **5%** discount those who are willing to take the membership .
- We can give 2 ride free to member those who take the membership .
- Demand of cycle increases in **morning** and **evening** ,so we can reserve 50% of cycle for members and rest 50% can be used by both **casual** and **members** (preference will be given to members)

# CONTINUE

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- Introduce the weekend pass , priced below the annual pass that allows unlimited 45 minutes rides on **Saturday** and **Sunday** only.
- In the months of **December , January and February** we can reduce the price of ticket .

# THANK YOU

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