



# cyclistic

BIKE SHARE

Google Data Analytics Capstone Project



# HELLO!

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- Project Purpose
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# PROJECT PURPOSE

This project includes a data-based decision-making scenario. Driving data was analyzed and analyzed in order to identify the Cyclistic company's upcoming marketing campaign and trends.

Insights were evaluated in order to enable people who use the service temporarily to switch to the annual membership plan.



**CASUAL**

**MEMBER**





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# THE QUESTIONS

- ▶ How do annual members and casual riders use Cyclistic bikes differently?
- ▶ Why would casual riders buy Cyclistic annual memberships?
- ▶ How can Cyclistic use digital media to influence casual riders to become members?



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## ANALYSIS SUMMARY

### ► Total Rides by User Type

**59.07%**

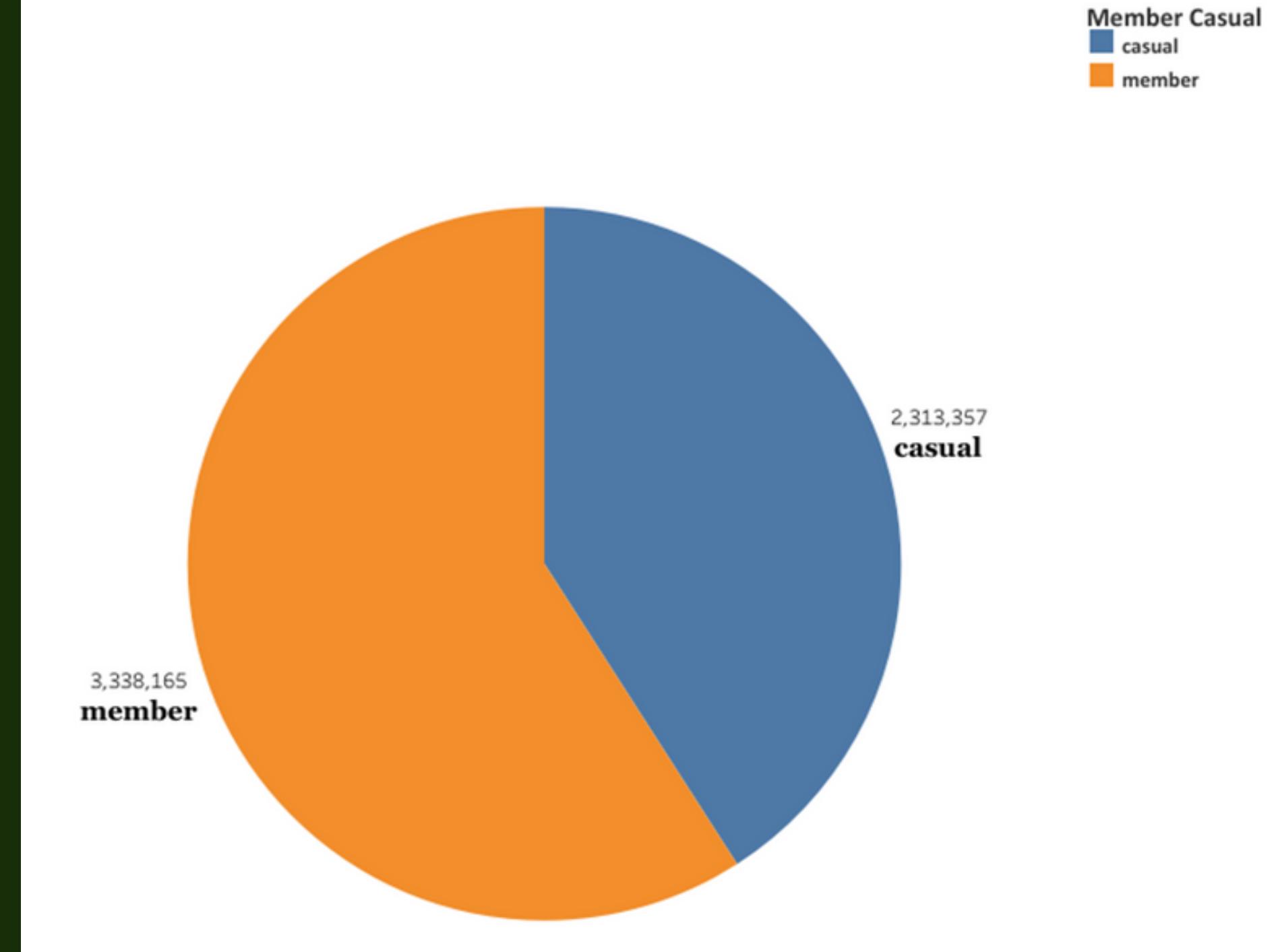
**Member**

**40.93%**

**Casual**

Of the total 5,651,522 rides, 2,313,357 were made by casual members and 3,338,165 by annual members.

Total Rides By User Type





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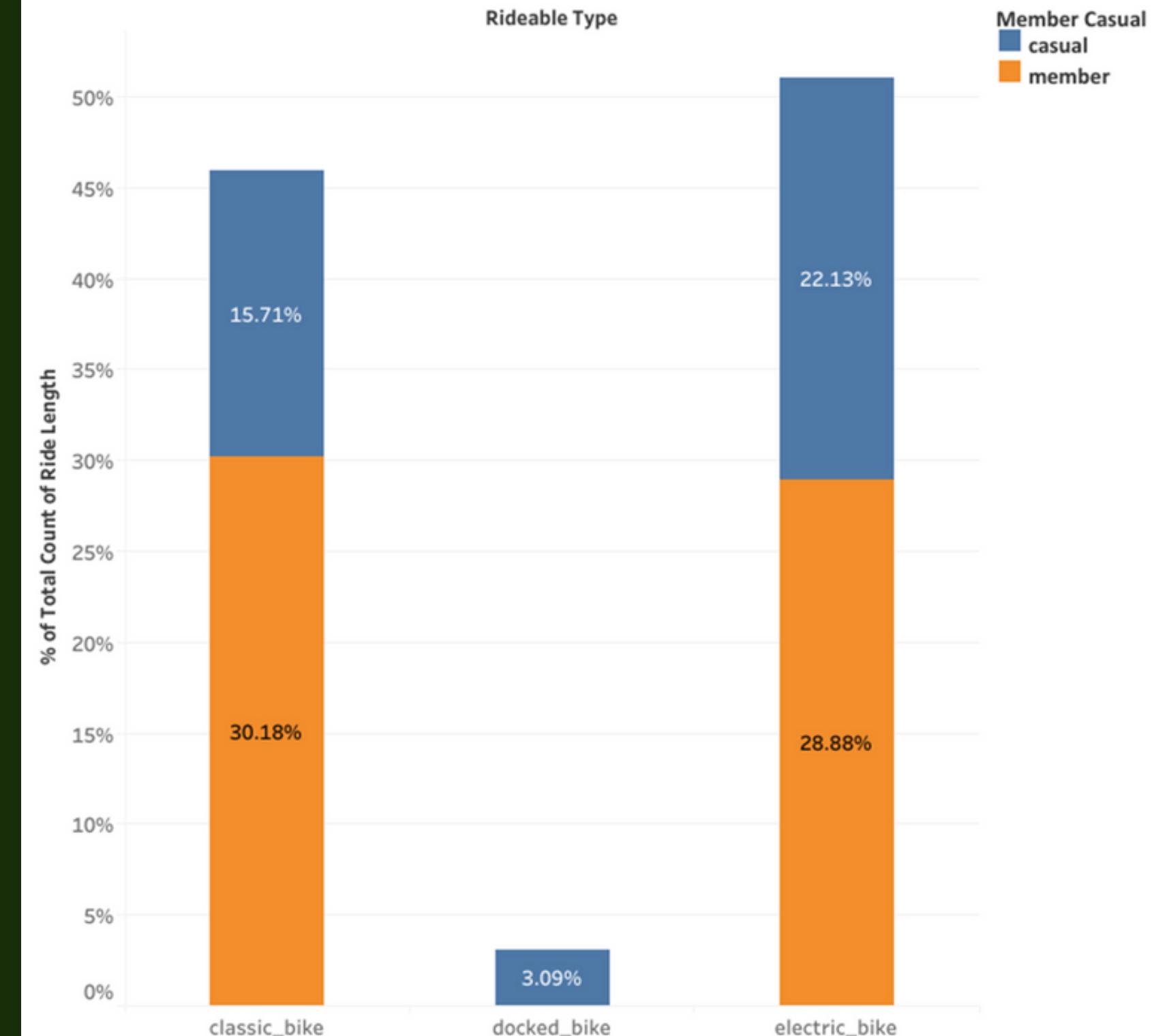
# ANALYSIS SUMMARY

## ► Total Rides by per Bike Type

While the electric bicycle covers a significant 51% of the total ride, the classical bicycle has a ratio of 45%.

**Annual members** prefer classic bikes more than **Casual riders**. The rate of use of electric bicycles is almost close.

Total Rides by per Bike Type





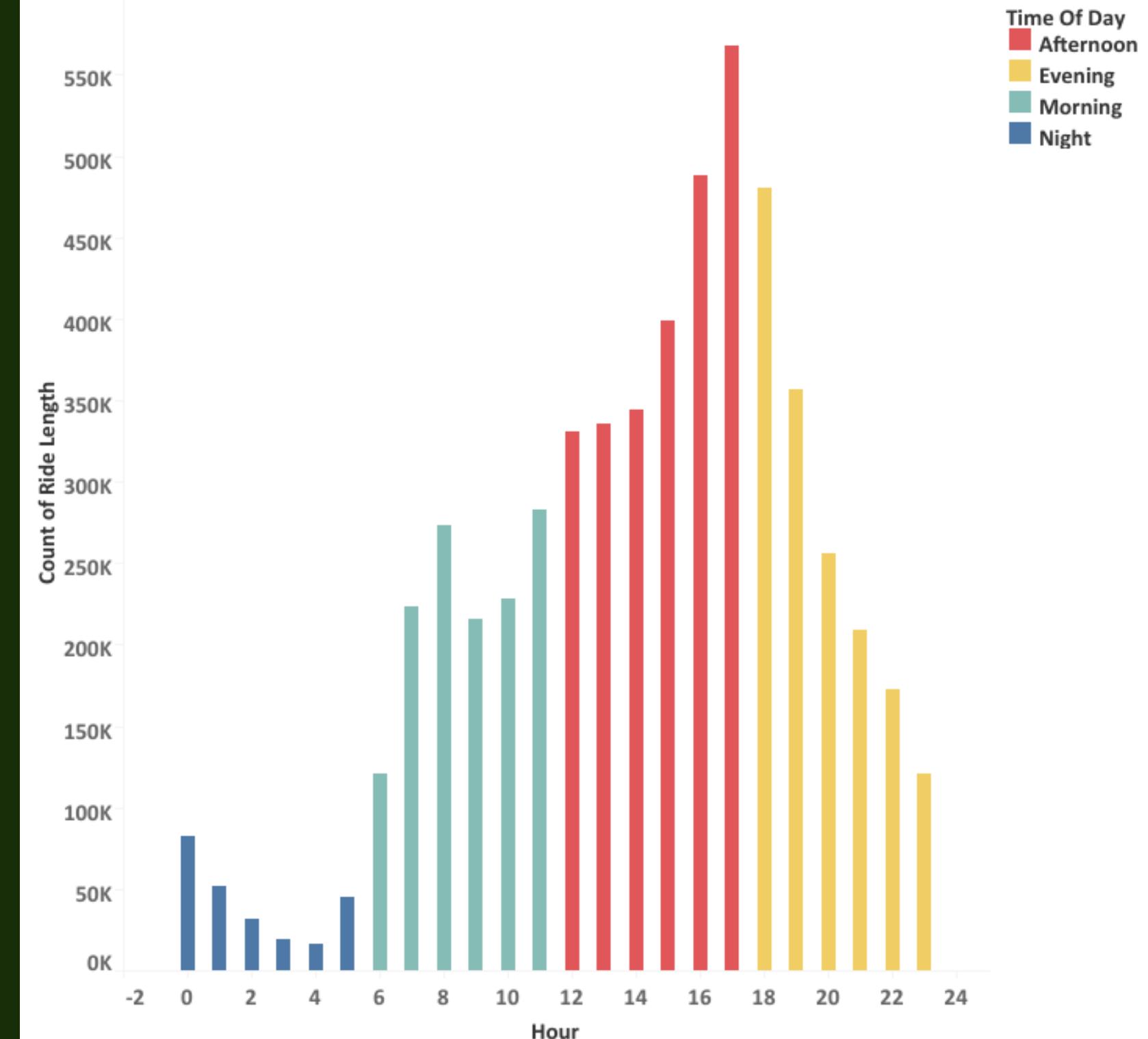
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# ANALYSIS SUMMARY

## ► Riding by the Hours

Users who are very active in the afternoon drive at least at night.

Riding by the Hours



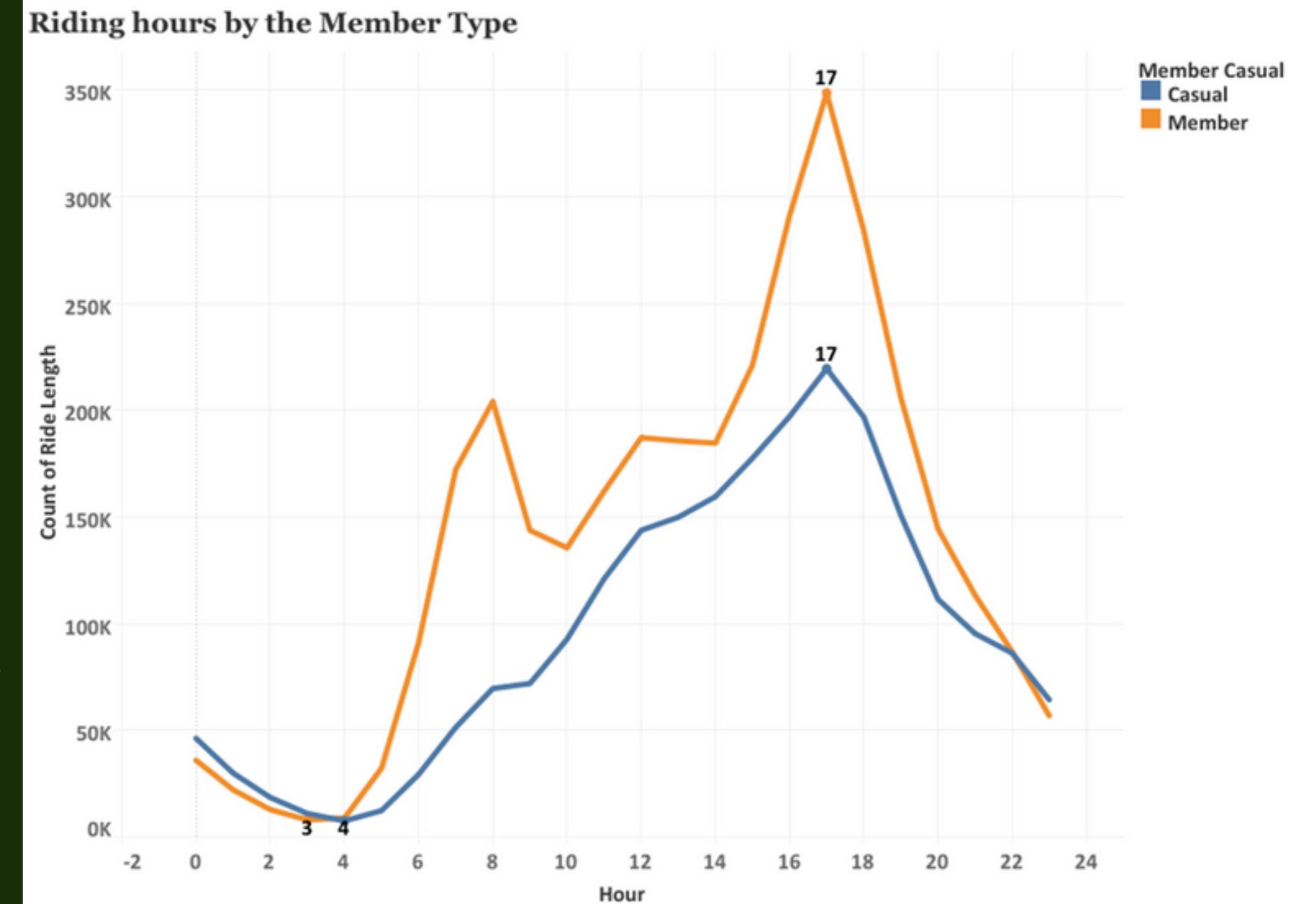


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# ANALYSIS SUMMARY

## Riding Hours by the Member Type

Our **annual members** and **Casual riders** drive the most around **5pm**. **Casual riders** ride at a minimum of **4am**, while **annual members** drive at **3am**.





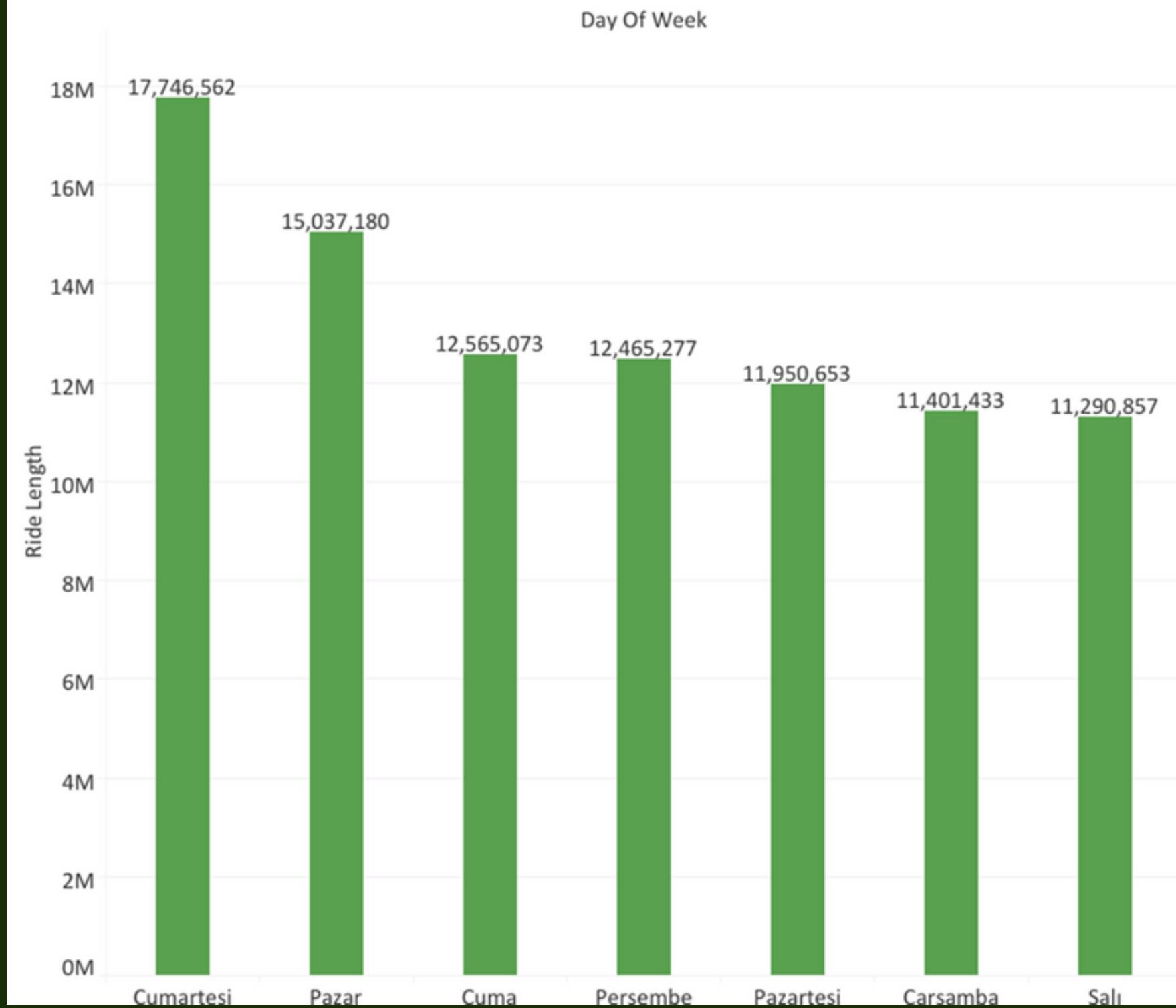
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# ANALYSIS SUMMARY

## ► Riding by the Weekday

Saturday and Sunday are the days with the most driving.

Total Rides by Weekday





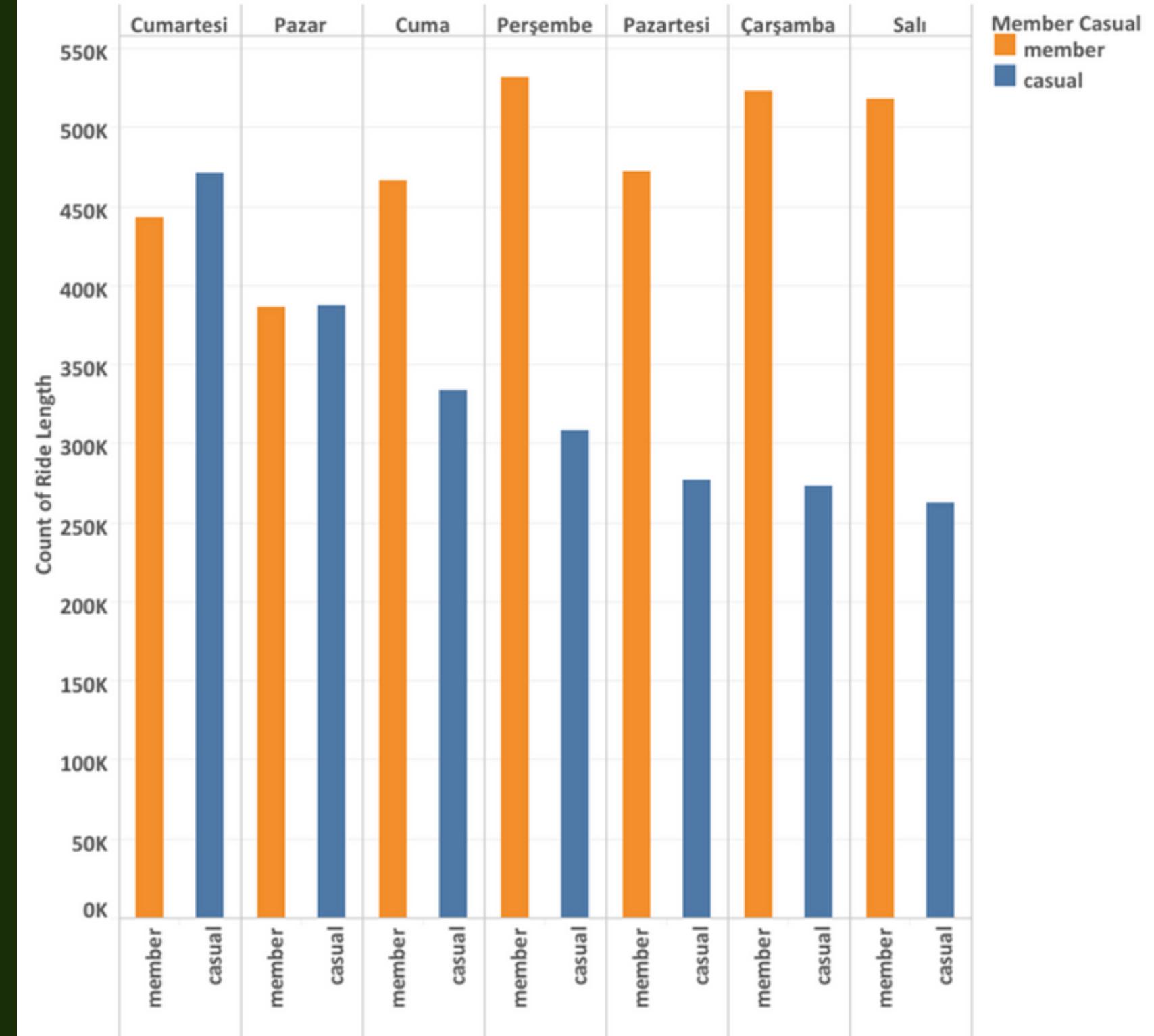
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# ANALYSIS SUMMARY

## ► Riding weekday by the Member Type

**Annual members** drove the most on weekdays, while **casual riders** drove more on the weekend.

Riding weekday by the Member Type





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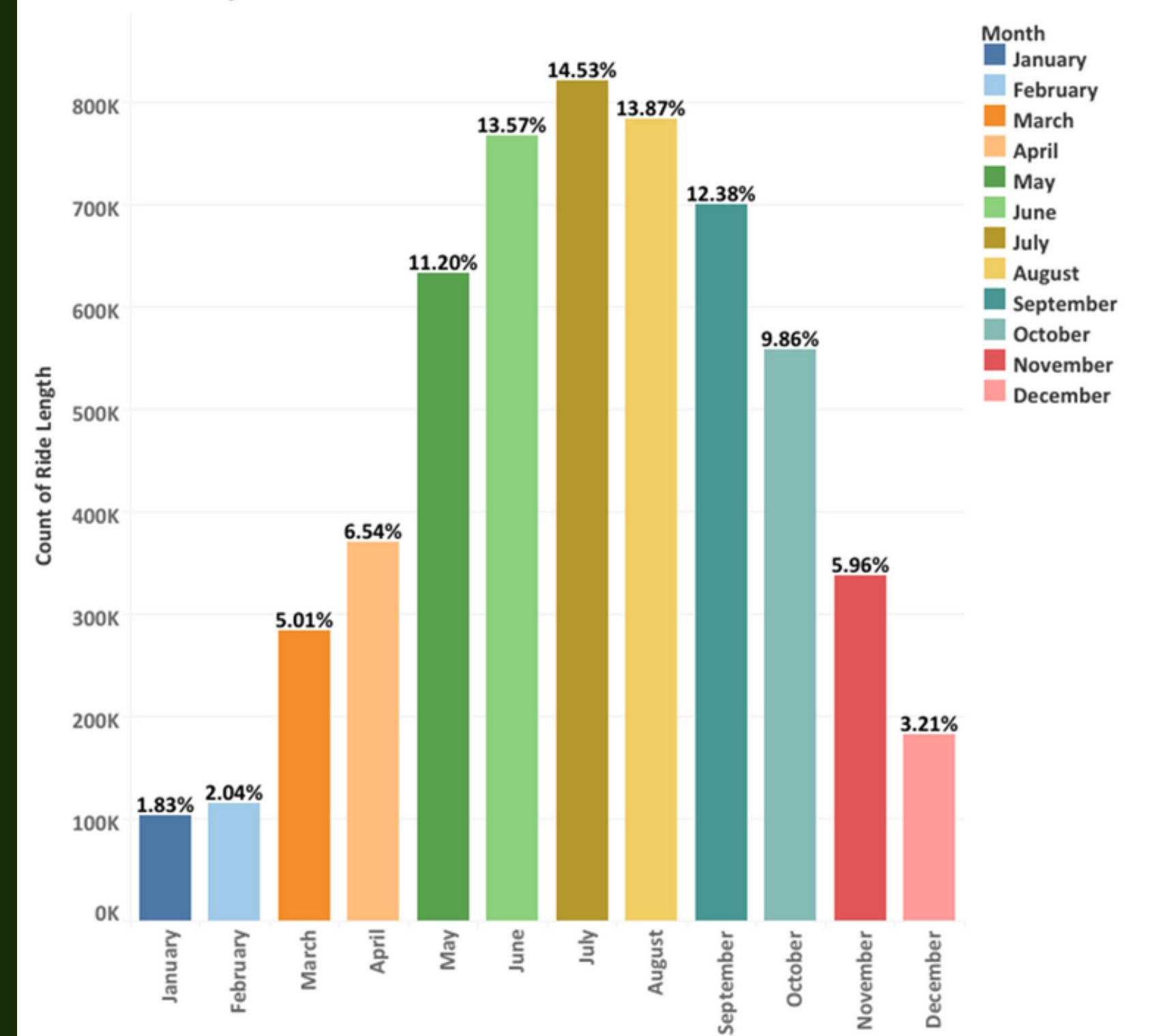
# ANALYSIS SUMMARY



## Rides by the Month

In the summer months, especially in June, July and August, the number of rides was at the highest point, while the lowest number of rides was in the winter months.

Total Rides by the Month





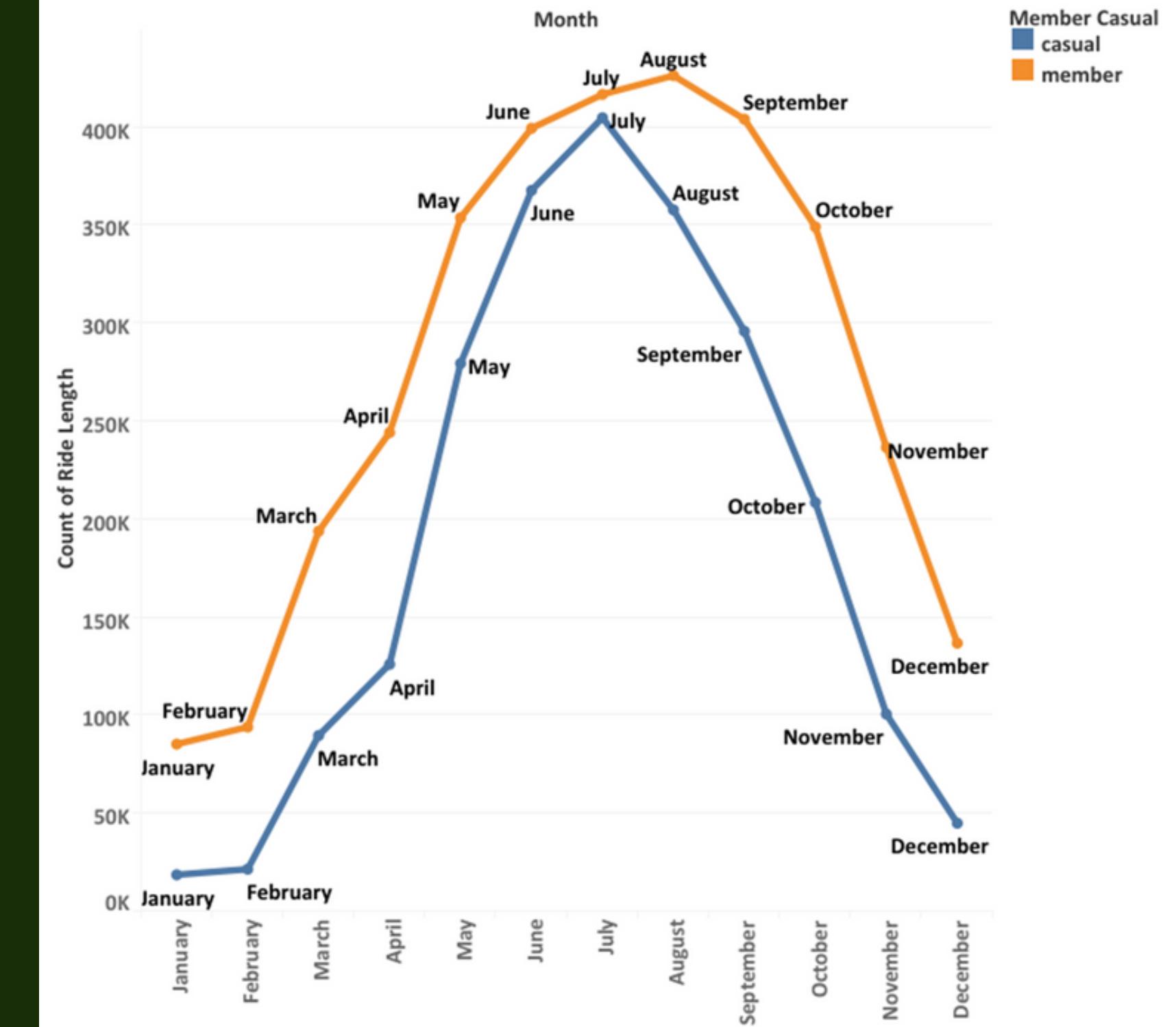
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# ANALYSIS SUMMARY

## Total Rides Month by the Member Type

**Annual members** drove the most in August, while **casual riders** drove the most in July. The lowest driving for both user types was in January.

Total Rides Month by the Member Type





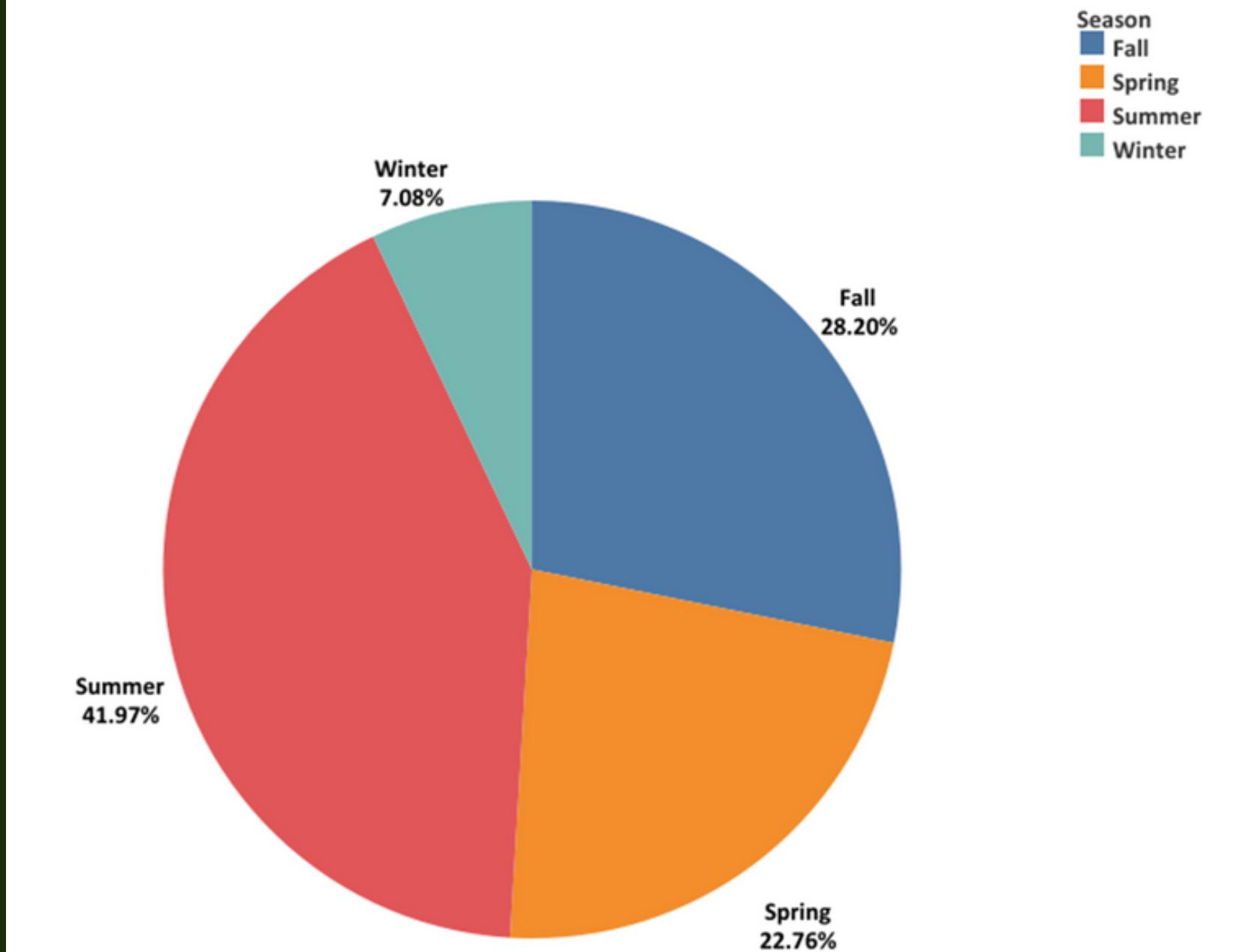
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# ANALYSIS SUMMARY

## ► Total riding percentages by Season

With **41.97%**, the most driving was in the **summer** season, while the least with **7.08%** was in the **winter** season.

Display of total driving percentages by season





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# ANALYSIS SUMMARY

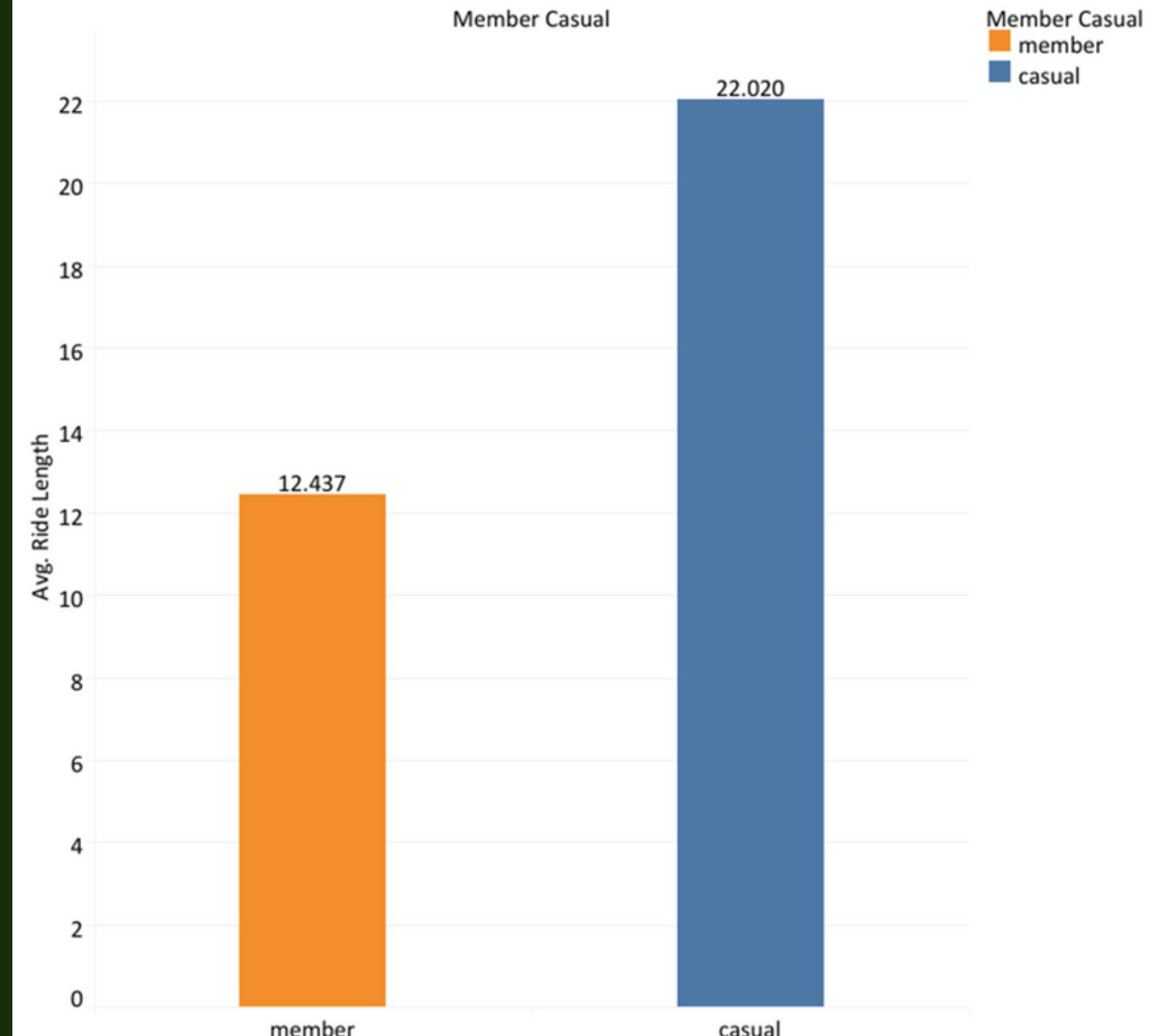
## ► Average Ride Length by user Type

When we look at the average herd times, there is a significant difference. **Casual riders** rank first in terms of average driving time, with more minutes than **annual members**.

**12.437 Min**  
**Member**

**22.020 Min**  
**Casual**

Average Ride Length by User Type





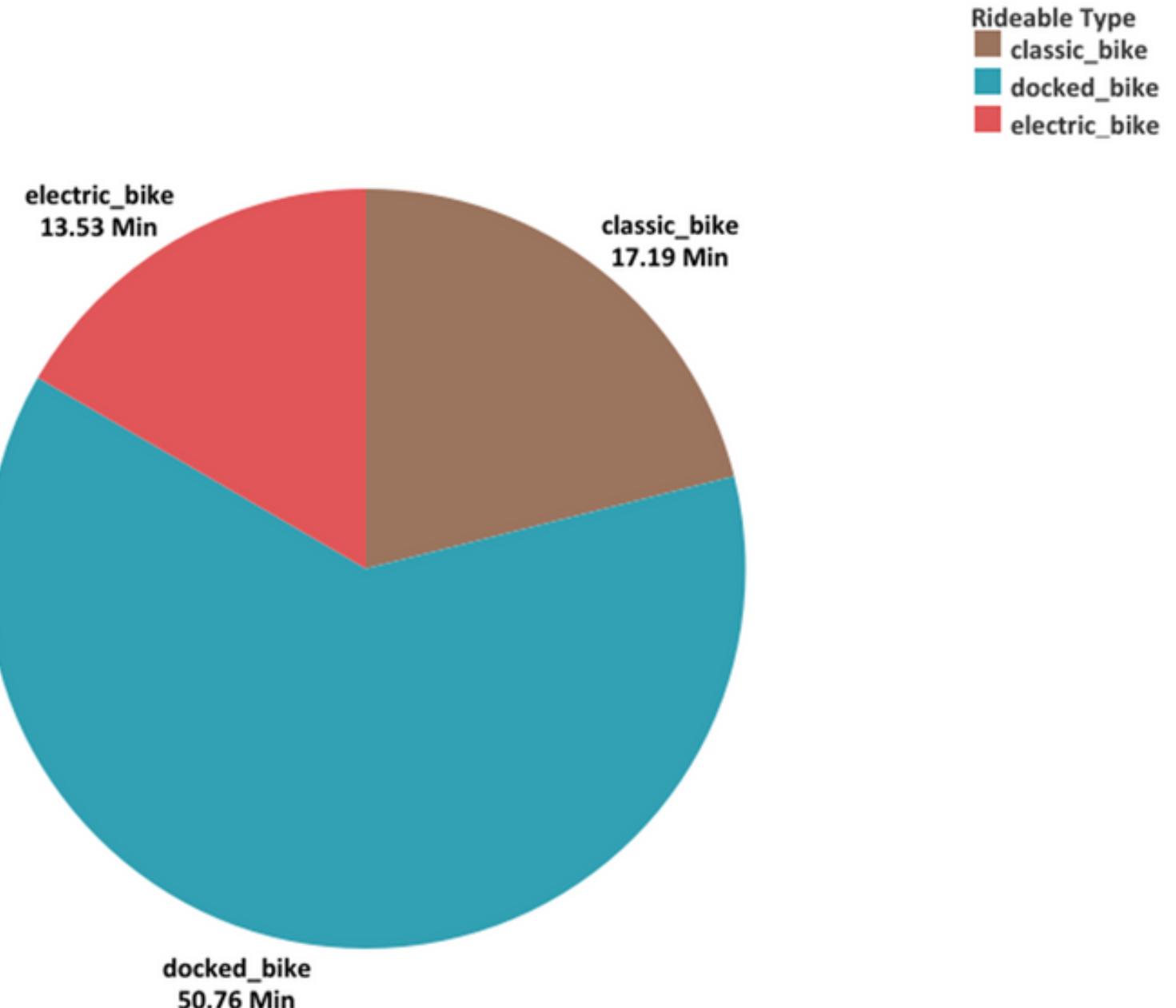
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## ANALYSIS SUMMARY

### ► Average ride length by the Bike Type

While the **docked bike** is the type of bike with the longest ride with an average of **50.76** minutes, the **classic bike** is the second with **17.19** minutes, and the **electric bike** has the shortest riding time with **13.56** minutes.

Average ride length by the Bike Type





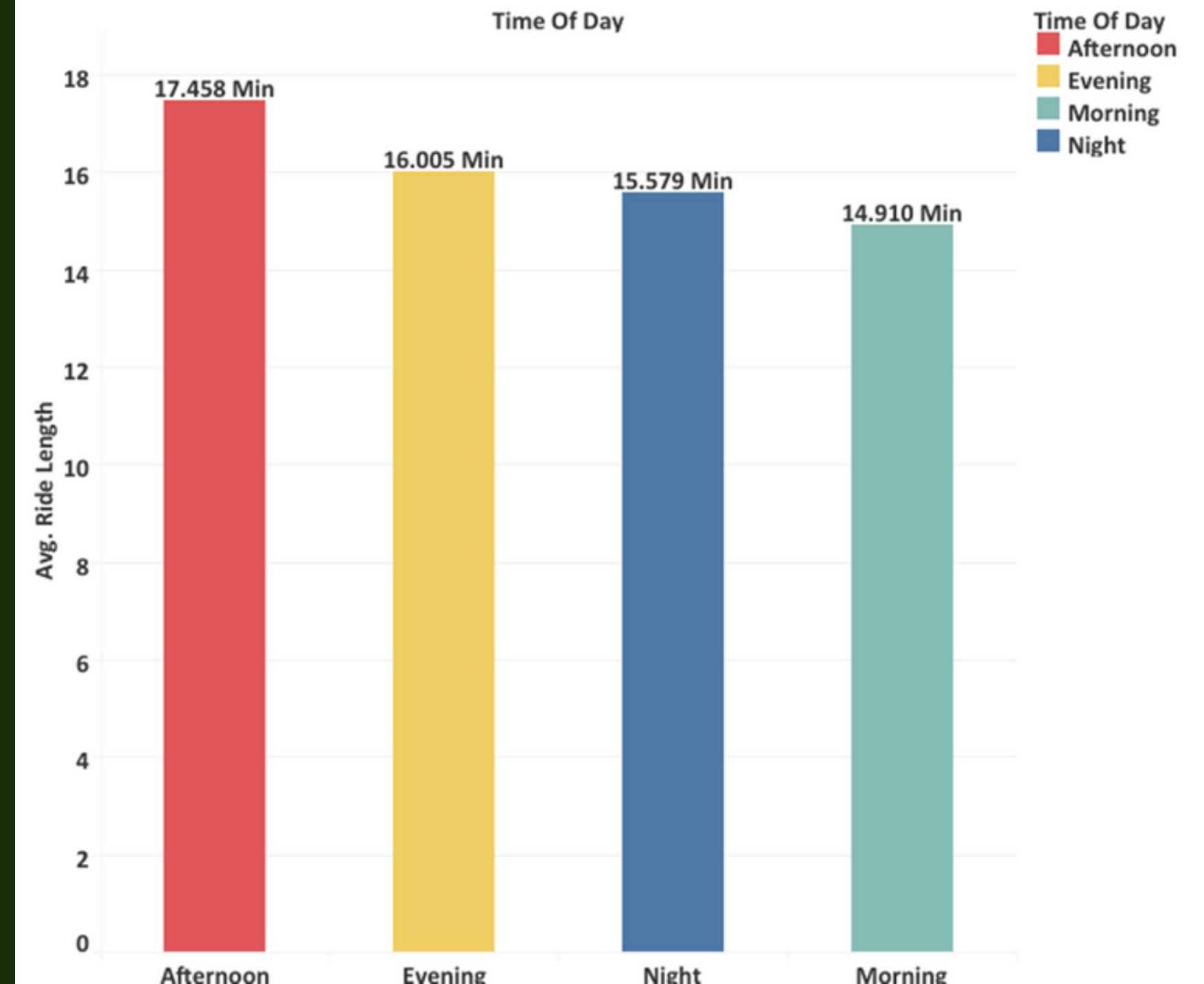
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## ANALYSIS SUMMARY

### ► Average riding times according to time zones of the day

With an average driving time of **17,458** minutes in the **afternoon**, it is the time period for the longest rides. The minimum driving time is in the **morning** hours, while the average driving time is **14,910** minutes.

Average driving times according to time zones of the day





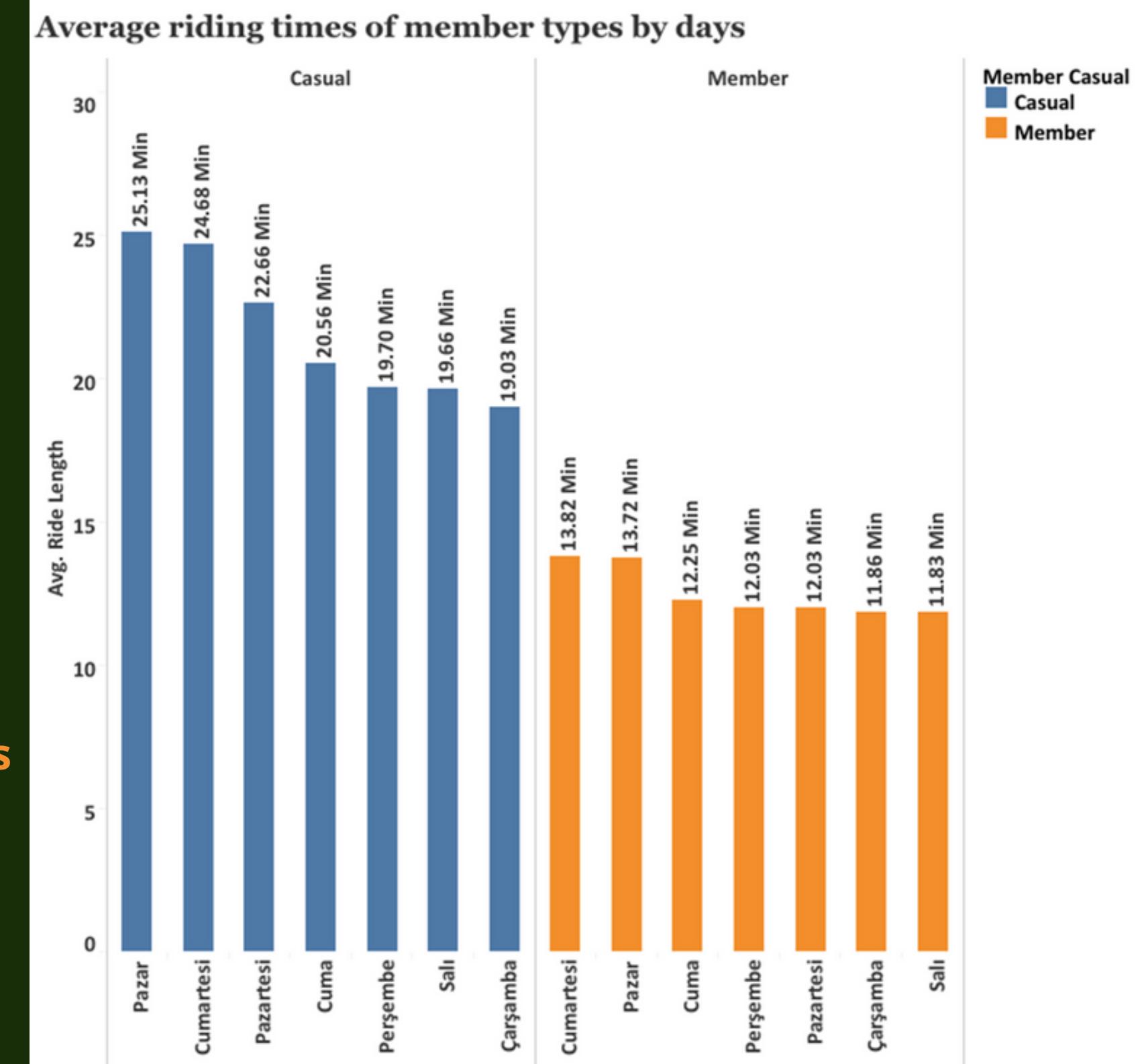
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## ANALYSIS SUMMARY

### Average riding times of member types by days

Average driving time is higher on weekends for both types of users. It can be said that **casual riders** use the service for longer periods on weekends as a sign that they see this activity as a means of entertainment and relaxation.

The fact that the average driving time of the **annual members** is close to each other clearly reveals that this user type uses the service according to routine habits.





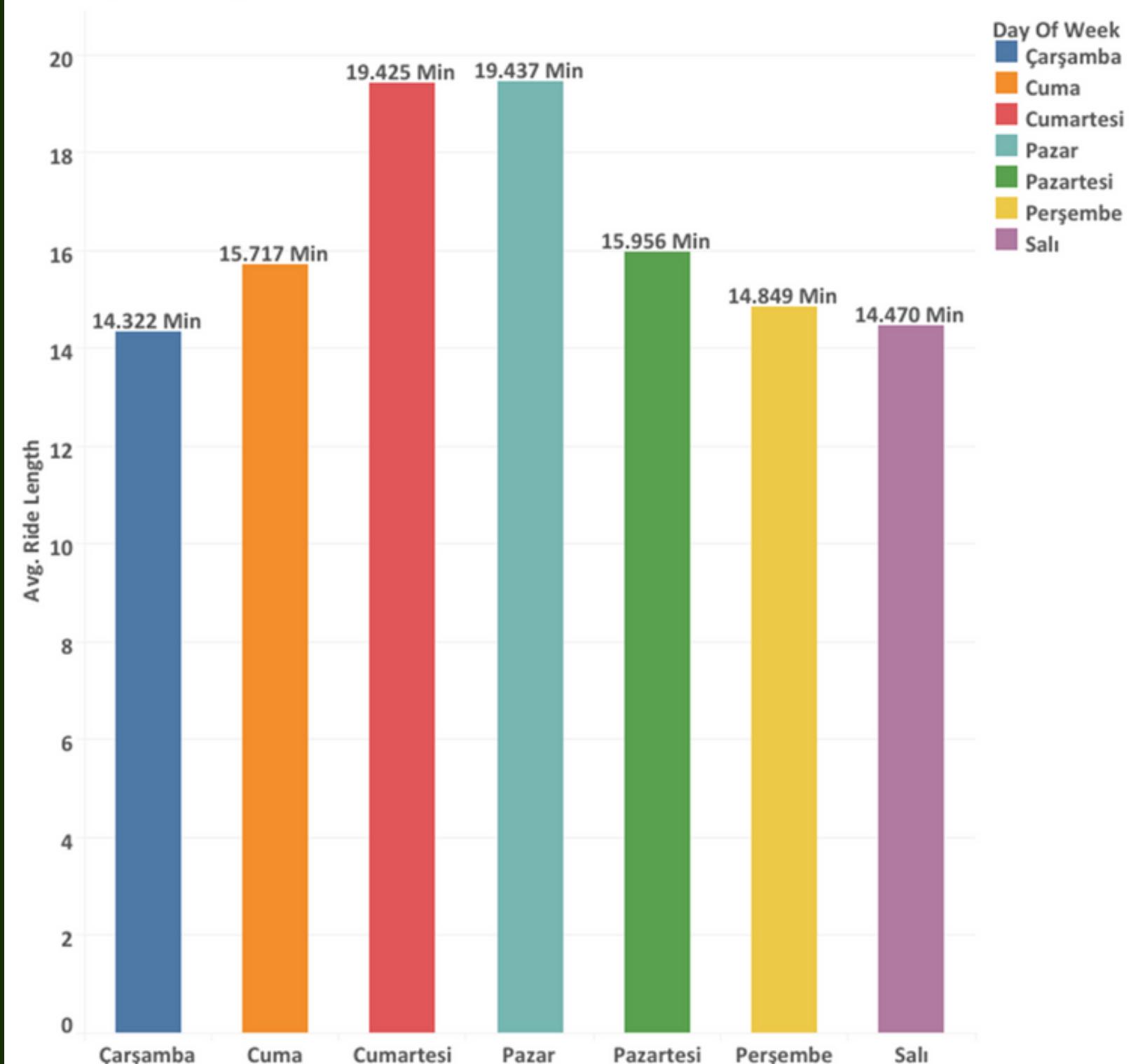
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# ANALYSIS SUMMARY

## ► Average riding times by Day

In terms of average driving time, the longest rides were made at the **weekend**. In the **middle of the week**, the average time decreased to the lowest level.

Average riding times by day



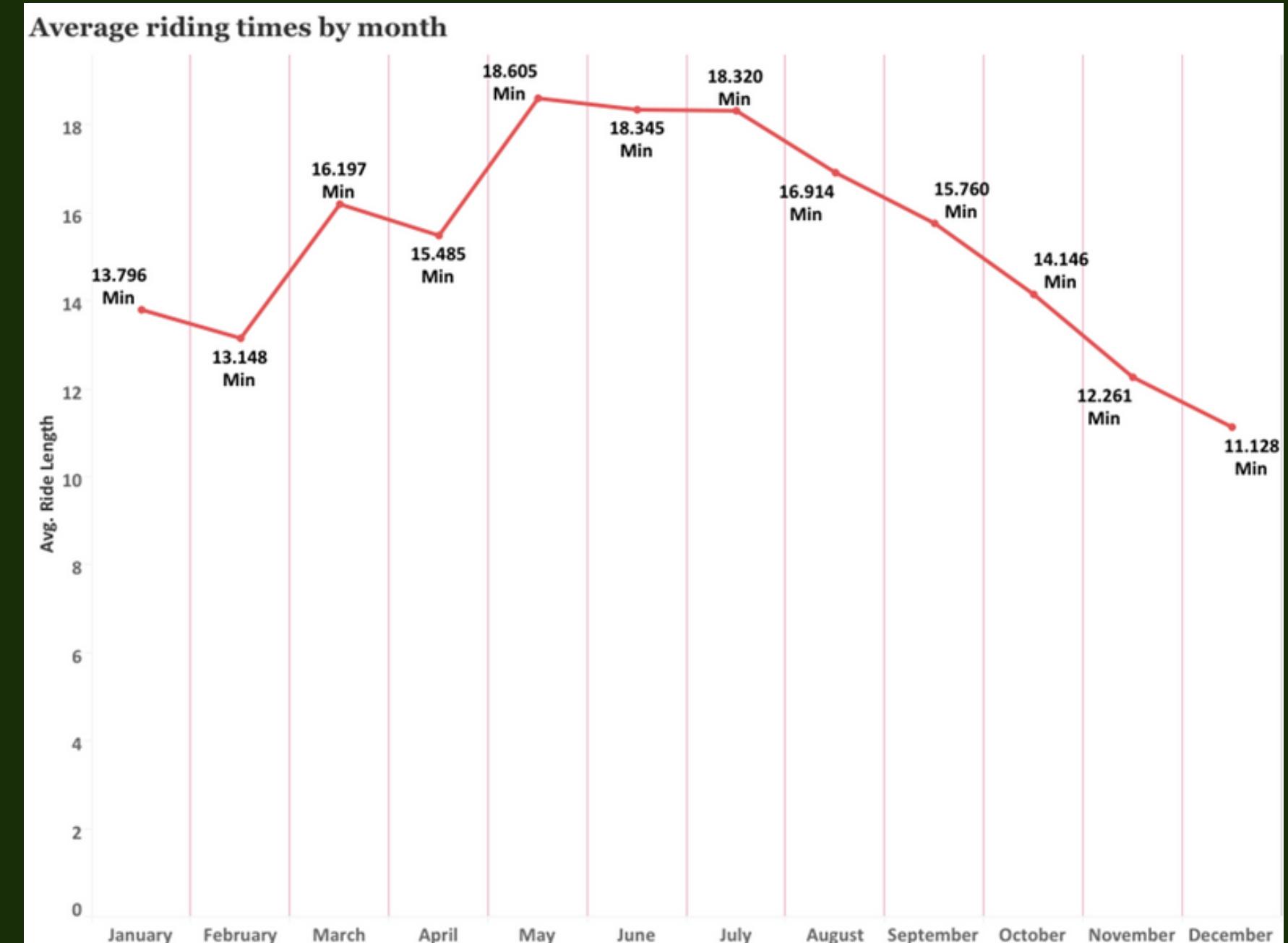


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# ANALYSIS SUMMARY

## ► Average riding times by Month

In terms of average driving time, the longest rides were generally in the **summer** months of **May, June and July**. This is due to the fact that cycling activity is thought to be an enjoyable activity with the warming of the weather.





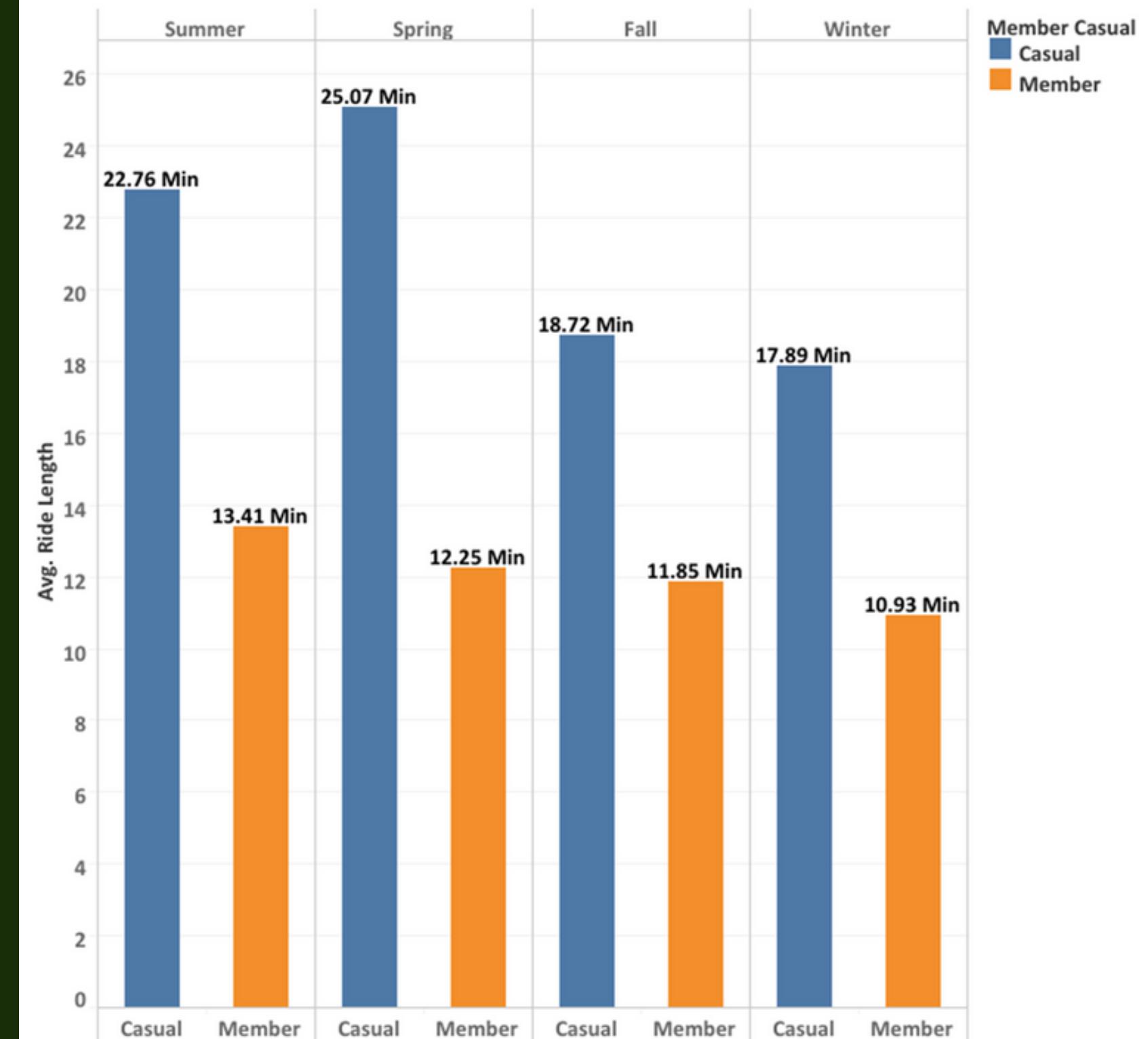
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# ANALYSIS SUMMARY

## ► Average Riding Times Per Season by Member Type

**Casual** riders have their longest rides usually during the **summer**, while **annual members** have taken the longest rides in the **spring**. The shortest rides of both types of users took place in the winter season.

Average riding times per season by member type





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# FINAL CONCLUSION AND RECOMMENDATION

My answers to the three questions that will guide the future marketing program are as follows, based on my analysis and visualizations:



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# QUESTION 1

**How do annual members and casual riders use Cyclistic bikes differently?**

- Our **annual members** use the **Cyclistic** bike sharing service frequently and consistently in terms of total ride and ride time. It has shown that users prefer bicycles to other types of vehicles on issues such as cost, environmental pollution and traffic to use for certain jobs.

On the other hand, **casual riders** do not use the bike frequently and consistently. Therefore, it is understandable that they do not prefer to switch to the annual membership plan. Despite this, casual riders like to cycle inconsistently compared to **annual members**, with long rides on weekends that we think are for fun and relaxation.





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# QUESTION 1

**How do annual members and casual riders use Cyclistic bikes differently?**

- ▶ **Annual members** are very likely to opt for the annual membership plan, as their daily and weekly routines are set. The fact that users have school, work and other activities at certain time intervals seems to push them to use a certain means of transportation in a planned way. Due to this planned use, annual membership seems quite reasonable to meet the needs of such members.

As a result, usage differences give us information about drivers' tendencies and behaviors. These differences vary according to the drivers' behaviors and perceptions of use. ◀



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## QUESTION 2



**Why would casual riders buy Cyclistic annual memberships?**

- The advertising and marketing strategy to get **casual riders** to get their **annual membership** plan should be around very specific issues. These issues are the **cost** of cycling, **health**, **environmental health**, **traffic**, etc. It should be noted that the benefits in these subjects are more than other tools.

In the light of the analyzes I have made; it has been observed that the reason for the **annual members** to use the service stems from their instincts to stick to their planned and routines in their lives. For this reason, mobile applications can be developed to encourage **casual riders** to move on to a planned life, and advertisements can be made for users to create routines at certain times of the day and use **Cyclistic bicycles** as a means of travel to these routines.





50%  
Lavoro

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## QUESTION 2

Why would casual riders buy Cyclistic annual memberships?

- It is a known fact that **time** and **money** are very important in today's societies. For this reason, the transition to the **annual plan** can be encouraged by reducing the costs of the **annual membership** plans and by making special campaigns, sweepstakes, coupons and discounts for people who switch to the **annual membership** plan. Thanks to the agreements to be made with different establishments (**food restaurants, cafes, book stores, entertainment centers, etc.**), a system can be developed in which users can use the points they earn according to the number and frequency of driving in these establishments.

SUPER  
SALE



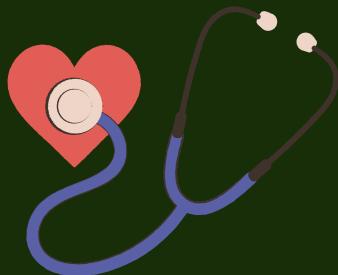
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## QUESTION 2



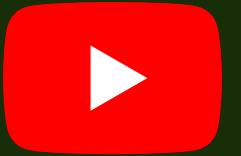
**Why would casual riders buy Cyclistic annual memberships?**

- ▶ A system where driving time and number can be tracked would be very useful. Thanks to the application to be integrated into smart devices, it can be connected to other mobile applications such as **Google fit** and **Apple Health**, and the data can be created in the minds of users to create the perception that they are doing an activity to protect their health with their daily driving goals.





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## QUESTION 3

How can Cyclistic use digital media to influence casual riders to become members?

- ▶ The impact of social media on marketing and campaign processes in recent times is an undeniable fact. For this reason, encouraging campaigns can be organized using social media platforms. **YouTube, Facebook, Twitter, TikTok** etc. With the community and activity groups to be created on social media platforms, it can be ensured that members can share in these groups. In these community and group events where existing members will register, activities such as cycling and collective trips to certain points can be organized and shared on social media accounts. Especially with the planned activities to be held on social media, effective communication can be ensured between our current users and this communication can be met on social media and attract new users to our structure.





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## QUESTION 3



How can Cyclistic use digital media to influence casual riders to become members?

- ▶ Various agreements are made with the faces known to the public from social media phenomena, and the sharing of these people about the **Cyclistic company** in their accounts can cause a significant increase in the number of members.



Especially in media sharing tools such as **YouTube** and **TikTok**, agreements with influencers who have a channel on travel will be very effective, and the owners of these channels will use their **Cyclistic bikes** on their trips and make special coupons and discount draws for people watching their videos. Historical, cultural, touristic, etc. Collective trips to places can be organized through these channels and shared on social media, thus attracting the attention of more users.





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# PROJECT RESOURCES



[Github.com/Cyclistic\\_Bike\\_Share\\_Data\\_Analysis](https://github.com/Cyclistic_Bike_Share_Data_Analysis)

kaggle

[Kaggle/Cyclistic Bike-Share Capstone Project](https://www.kaggle.com/c/cyclistic-bike-share-capstone-project)



[Tableau/Cyclistic Bike-Share Capstone Project](#)



# THANK YOU

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