



A Case Study

Google Data Analytics  
Coursera

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# introduction

In this case study, we will analyze data for Cyclistic, a fictional bike-share company, in order to help them attract more riders.

The director of marketing and our manager, has set a clear goal: Design marketing strategies aimed at converting casual riders into annual members. Analyze Cyclistic historical bike trip data to identify trends that would help achieve this goal.

Our business task is to develop recommendations on how to convert casual riders to annual members by identifying how annual members and casual riders use Cyclistic bikes differently. We will gather, clean, analyze, and visualize Cyclistic historical bike trip data to support our conclusions.

Note: Cyclistic's marketing strategy relied on building general awareness and appealing to the broad consumer segment. One approach that helped make these things possible was the flexibility of its pricing plans: single-ride passes, full-day passes, and annual memberships. Customers who purchase a single-ride or full-day passes are referred to as casual riders. Customers who purchase annual memberships are Cyclistic members.



## approach

We will use the 2021 Cyclistic trip data to answer these 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?

Understanding the differences in usage will help support a marketing strategy aimed at converting casual riders into annual members.



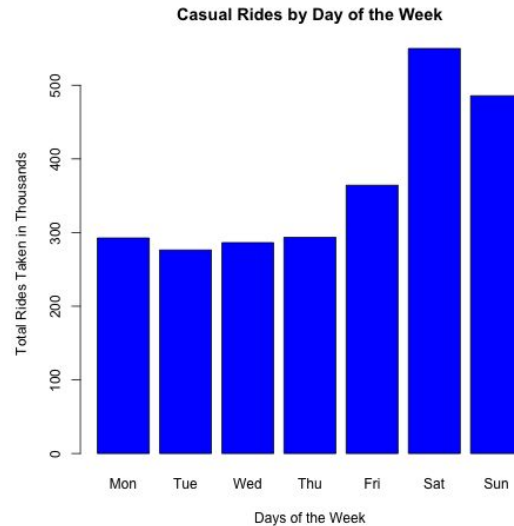
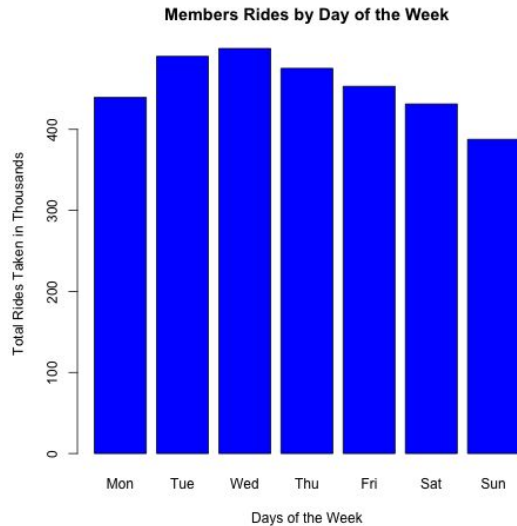
## how long is each trip?

	Mean	Median	Mode	Max
All Rides	21.5	11.7	6	55944.2
Casual	13.4	9.4	6	1499.9
Member	31.7	15.8	8	55944.2

numbers shown are in minutes

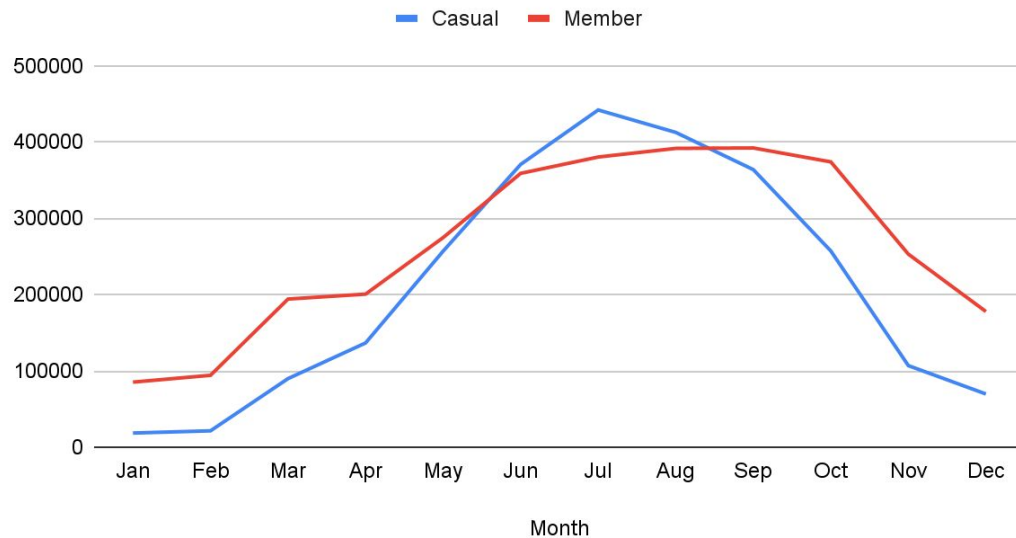


# is it a good day for a ride?



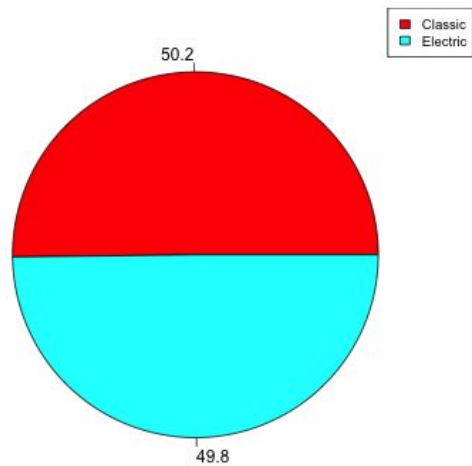
# is it seasonal?

Total Rides per Month

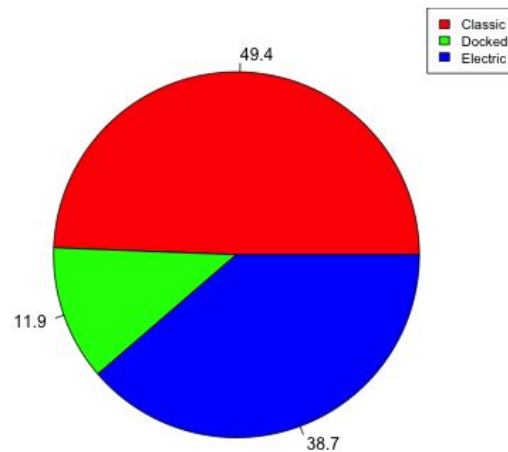


# which bikes do they like?

Rides by Rideable Type for Members



Rides by Rideable Type for Casual





## top 10 member routes

ROUTE	CASUAL	MEMBER
Ellis Ave & 60th St TO Ellis Ave & 55th St	989	4589
Ellis Ave & 60th St TO University Ave & 57th St	655	4074
Ellis Ave & 55th St TO Ellis Ave & 60th St	938	4016
University Ave & 57th St TO Ellis Ave & 60th St	523	3961
Calumet Ave & 33rd St TO State St & 33rd St	142	2192
State St & 33rd St TO Calumet Ave & 33rd St	102	2083
Loomis St & Lexington St TO Morgan St & Polk St	174	2031
Morgan St & Polk St TO Loomis St & Lexington St	181	1862
Loomis St & Lexington St TO Halsted St & Polk St	99	1475

[Complete List of Casual and Member Routes](#)





## summary

- Casual riders use Cyclistic for almost twice as long as Member riders per ride
- Member rider peak usage is on Wednesday, followed by Tuesday and Thursday while casual riders peak usage is on Saturday, followed by Sunday and Friday
- 50% of all Member rides occurred in July, August, September, and October while 50% of all Casual rides occurred in June, June, August
- Both Member and Casual riders prefer classic bikes more than electric bikes. Members do not use docked bikes but Casual riders do.

Due to higher weekday usage for Members than Casual riders, we suspect more members use Cyclistic for commuting compared to casual riders. Members are also more likely to use Cyclistic in specific areas or certain routes.



# recommendations

- If we have Ride IDs linked to user emails & mobile phone/device; Users download an app; Unlimited marketing budget; Unlimited rides usage model
  - Offer 2 months free with first annual member plan purchase
  - Retarget casual riders who visited the website or downloaded the app with display, video, and in-app ads
  - Create a keyword and key terms CPC search campaign with geo-targeting
  - Craft an email marketing campaign for casual riders starting in March, after winter season
  - Send an SMS text or push notification offer to casual riders after 3rd casual ride completed in the year
  - Create QR code print ads on docked bike stations from March to September
  - Create QR code print ads at top 25 start and end stations for casual riders
  - Sponsor/Promote at top 25 high foot traffic start and end stations for casual riders (ie museums, theaters, marketplaces)
- For more targeted campaigns and higher ROI:
  - Focus on the casual riders who use the top 25 most popular member routes (by start & end stations)
  - Start an email marketing campaign to these casual riders with a location specific theme
  - Send an SMS text or push notification offers when a casual rider starts a ride on a weekday, Monday - Friday from one of these popular member start stations