

Sample Data Analysis Project

Data Analyst: K

Client/Sponsor:

Cyclistic Executive Team

Purpose:

The goal of this project is to support Cyclistic's marketing team in increasing the number of annual memberships.

To achieve this, we will analyze how annual members and casual riders use Cyclistic bikes differently.

The purpose of this analysis is to identify key patterns and behaviors—such as ride duration, time of day, day of the week, and most used stations—that distinguish these two user groups.

The insights gained will help guide future marketing strategies aimed at converting casual riders into annual members.

Scope / Major Project Activities:

What are the major parts of this project? List out the high-level steps, activities, or stages of the project, and give a brief description for each.

Activity	Description
Data Collection	Collect and upload 6 to 12 months of Cyclistic bike usage data (CSV files) to BigQuery.
Data Cleaning	Check and fix missing or incorrect data to prepare for analysis.
Usage Pattern Analysis	Analyze differences in ride duration, frequency, day of week, time of day, and distance between annual members and casual riders using SQL.
Visualization & Reporting	Create clear visualizations and summarize findings in a report for Moreno and the executive team.
Recommendation	Suggest marketing strategies to convert casual riders into annual members based on the analysis.

This project does not include:

Specify the things that this project isn't responsible for doing (out of scope). For instance, "this project does not involve a summation of 2019 data analysis"

- Analysis of data prior to 2023
- Marketing campaign execution
- Employee performance evaluation
- System or software development

Deliverables:

A specific list of things that your project will deliver.

Deliverable	Description/ Details
Cleaned Dataset	A cleaned and organized dataset of Cyclistic bike usage data uploaded in CSV format
Summary Report	PDF report including key insights, visualizations, and actionable recommendations
Interactive Dashboard	A live dashboard created in Google Sheets or Tableau showing trends and correlations
Final Presentation Slide Deck	A visual presentation summarizing the findings and suggestions for the client team

Schedule Overview / Major Milestones:

The expected schedule for the project. This can be defined by milestones (e.g. "all data is cleaned and processed"), periods of time ("Week 1 / Week 2"), or other ways based on the needs of the project.

Milestone	Expected Completion Date	Description/Details
Project Planning & Data Collection	July 5, 2025 (Fri)	Define project requirements, identify data sources, and collect necessary data.
Data Cleaning & Preparation	July 12, 2025 (Fri)	Clean and preprocess data

		<i>(handle missing values, normalize formats, etc.).</i>
<i>Data Analysis & Visualization</i>	<i>July 19, 2025 (Fri)</i>	<i>Analyze data, test hypotheses, and create visualizations (charts, graphs, etc.).</i>
<i>Dashboard & Report Development</i>	<i>July 26, 2025 (Sat)</i>	<i>Build interactive dashboards and draft project report or presentation.</i>
<i>Final Review & Presentation</i>	<i>August 2, 2025 (Sat)</i>	<i>Conduct final review and present findings/deliverables to the client or stakeholders.</i>

***Estimated date for completion:**

This is my "if all goes well and I have everything I need, this is when I'll be done" date.

August 2, 2025 (Sat)