# Project Title: Cyclist Bike Share Analysis.

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Date: May 1,2025.

# 1. Executive Summary:

This project aims to analyze the Cyclist Bike Share data to uncover usage patterns, to understand how casual members and annual members uses bikes. The insights will help the company to take steps, make strategies so that they can upgrade casual members into annual members and increase the company's future success.

# 2. Buisness objective:

Design marketing strategies aimed at converting casual riders into annual members.

## 3.Buisness task:

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

#### 4. Stakeholders.

Name	Role	Responsibility
1.Lily Moreno	Director	Final decision maker
2.Aryan Farswan	Junior	Data cleaning, analysis,
	Data Analyst	reporting.

#### 5. Data Sources:

• **File name:** Divvy\_Trips\_2019\_Q1, Divvy\_Trips\_2020\_Q1

• Format: csv

## 6. Project Scope

#### In Scope:

- Data cleaning and preprocessing.
- Exploratory data analysis using SQL and Excel.
- Development of interactive dashboards.
- Generation of insights and recommendations.

## **Out of Scope:**

- Real-time data processing.
- Integration with mobile applications.

## 7. Business Requirements

- The system shall process and analyze Cyclist data.
- The analysis shall identify trends based on time, user type, and weather conditions.
- The dashboard shall allow stakeholders to filter data by date range, user type, and weather conditions.
- The system shall generate reports highlighting key performance indicators (KPIs).

# 8. Functional Requirements

- **Data Cleaning:** Handle missing values, remove duplicates, and standardize data formats.
- **Data Analysis:** Perform statistical analysis to identify trends and patterns.
- **Dashboard Development:** Create interactive visualizations using Excel or Power BI.
- **Reporting:** Generate summary reports with actionable insights

# 9. Non-Functional Requirements

- **Performance:** The system should process data efficiently to provide quick insights.
- **Usability:** Dashboards and reports should be user-friendly and intuitive.

- **Scalability:** The system should accommodate additional data sources in the future.
- **Security:** Ensure data confidentiality and integrity.

## **10.Assumptions and Constraints**

- The provided dataset is accurate and complete.
- Stakeholders will provide timely feedback during the project lifecycle.
- The project will utilize existing tools like Excel and SQL without additional software procurement.

# 11. Glossary

KPI: Key Performance Indicator

CSV: Comma-Separated Values

• SQL: Structured Query Language

# 12. Approval

Prepared By:

Name: Aryan Farswan

Date: May 1, 2025

Approved By:

Name: Lily Moreno

Date: May1,2025