Project Requirements Document: [Project Name]

## **BI Analyst:** Preeti Dhaliwal

## **Client/Sponsor:** Cyclistic

## **Purpose:** Cyclistic’s Customer Growth Team is creating a business plan for next year. The team wants to understand how their customers are using their bikes; their top priority is identifying customer demand at different station locations. The dataset includes millions of rides, so the team wants a dashboard that summarizes key insights. Business plans that are driven by customer insights are more successful than plans driven by just internal staff observations. The executive summary must include key data points that are summarized and aggregated in order for the leadership team to get a clear vision of how customers are using Cyclistic.

## **Key dependencies:** (Detail the major elements of this project. Include the team, primary contacts, and expected deliverables.)

For this project the datasets requied will include customer(user) data, which requires Jamal’s approval. Also, might need approval by the teams that own specific data, including bike trip duration and bike identification numbers.

**Primary contacts**:

* Adhira Patel
* Megan Pirato
* Rick Andersson
* Tessa Blackwell

**Stakeholder requirements:**

* **R:** Must show number of trips at starting locations using a table or map visualization of starting and ending point of trips, categorized by location identifiers such as station, zip code, neighborhood, etc.
* **R:** Must include a visualization showing popular destinations, especially during peak-months, based on the total trip minutes.
* **R:** Should include insights about the peak usage by time of day, season, and impact of weather.
* **R:** Should gather insights about congestion at stations by calculating whether more bikes were coming in or out of the station.
* **R:** Should include insights about the number of trips across all starting and ending points.
* **D:** Includes a visualization that focuses on trends from the summer of 2015.
* **N:** Must include a visualization showing the yearly percentage growth in the number of trips.

## **Success criteria:** (Clarify what success looks like for this project. Include explicit statements about how to measure success. Use SMART criteria.) **Specific**: BI insights must clearly demonstrate how the customers are using their bikes, and the factors affecting customer demand at different locations. **Measurable:** Evaluate each trip based on the number of rides between starting and ending locations. Also, consider variables like time fo day, impact of weather and season. For example, do customers use Cyclistic less when it rains? Or does bikeshare demand stay consistent? Does this vary by location and user types (subscribers vs. nonsubscribers)? **Action-oriented:** The team will use these customer usage insights to inform new station growth. **Relevant:** All metrics must support the primary question: How can we build a better Cyclistic experience? **Time Bound:** Analyze data that spans at least one year to see how seasonality affects usage. Exploring data that spans multiple months will capture peaks and valleys in usage.

## **User journeys:** (Document the current user experience and the ideal future experience.)

Cyclistic’s Customer Growth Team wants to improve cutomers’ bike-sharing experience. Gaining customer usage insights and analyzing trip trends will help decision-makers understand how customers are currently using the bike share service and how the experience can be improved.

## **Assumptions:** (Explicitly and clearly state any assumptions you are making.)

The dataset includes latitude and longitude of stations but does not identify more geographic aggregation details, such as zip code, neighborhood name, or borough. The team will provide a separate database with this data.

The weather data provided does not include what time precipitation occurred; it’s possible that on some days, it precipitated during off-peak hours. However, for the purpose of this dashboard, I should assume any amount of precipitation that occurred on the day of the trip could have an impact.

Starting bike trips at a location will be impossible if there are no bikes available at a station, so we might need to consider other factors for demand.

## **Compliance and privacy:** (Include compliance, privacy, or legal dimensions to consider.)

The data must not include any personal data such as Name, email, phone, physical address. It is important to anonymize users to protect their privacy.

## **Accessibility:** (List key considerations for creating accessible reports for all users.)

The dashboard should include large print and text-to-speech alternatives.

**Roll-out plan:** (Detail the expected scope, priorities and timeline.)

* Week 1: Dataset assigned. Initial design for fields and BikeIDs validated to fit the requirements.
* Weeks 2–3: SQL and ETL development
* Weeks 3–4: Finalize SQL. Dashboard design. 1st draft review with peers.
* Weeks 5–6: Dashboard development and testing