Project Requirements Document: [Project Name]

## **BI Analyst:** Ryan Mansfield

## **Client/Sponsor:** Jamal Harris, Director, Customer Data

## **Purpose:** (Briefly describe why the project is happening and why the company should invest resources in it.)

We want to create a dashboard that summarizes millions of rides into actionable insights to inform our plans for the coming fiscal year. This includes analyzing the popularity of different stations as well as looking into how time of year, time of day, and weather impact use of our bikes. The application/dashboard should also look into weak spots like congestion, In short, we want to get a holistic view of our customers to give the leadership at Cyclistic the tools they need to make decisions regarding them

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

We are using customer data which contains PII so Jamal needs to approve it’s uisage. Additional teams owning data including, but possibly not limited to, bike trip duration and bike identification numbers may also need to approve it’s usage. Contacts are

* Megan Pirato, Data Warehousing Specialist
* Rick Andersson, Manager, Data Governance
* Tessa Blackwell, Data Analyst

## **Stakeholder requirements:** (List the established stakeholder requirements, based on the Stakeholder Requirements Document. Prioritize the requirements as: R - required, D - desired, or N - nice to have.)

The dashboard most enable the user to understand customer behavior and usage at different station and at different times, taking into account events like weather, and most enable them to take actions on those. The application dashboard most include

* Table or map exploring the start and end of trips using any geographical data to judge usage of different stations by showing trips from each starting location R
* A visual showing which end destinations are most used based on total trip minutes with an emphasis on peak months R
* A visual showing off trends from summer 2015 D
* Visual showing percent increases in trips from year to year R
* Gather data on congestion (a table calculation to calculate the net of start and ending trips per station) N
* Data on all starting and ending locations R
* Insight into peak month, time of day, and impact of weather R

## **Success criteria:** (Clarify what success looks like for this project. Include explicit statements about how to measure success. Use SMART criteria.)

S- Look into what impacts demand on different station and how customers use our bikes

M-Evaluate using starting location, duration, ending location, time of data, season, weather, etc.

A- prove (or disprove) the theory that location time of day, season, weather, and other factors impact usage of bikes in order to enable Cyclistic to make better decision about product development

R- All data and analyses should focus on building a better customer experience

T- We want to focus on 2015 but also capture data over 1+ year to see how seasons as well as weather and time of day impact usage

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

The application dashboard should enable a deeper dive into customer usage of our bikes to enable use to understand overall usage and understand trends in usage in order to improve customer experiences

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

* Geographic data is provide only in longitude and latitude, a separate data set provided internally can be used to convert this to more specific borough/ zip code. Neighborhood
* Weather data does not include time of precipitation but we should assume the amount on any given data impact all rides that day
* Starting a bike trip at certain places will be impossible if they have no bikes, we need more factors to understand demand
* We can not include any PII

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

Users did not consent to have PII, such as name and address, used in this way so we can not use it and most ensure it is removed

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

Large font and text to speech options most be available for those with limited eye sight or other disabilities making reading difficult

**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