**Project Requirements Document: Cyclistic Business Planning**

**BI Analyst:** Prawit Pongpipat

**Client/Sponsor:** Cyclistic

**Purpose:** Cyclistic wants to grow their customer base by understanding how bicycles are used across New York City. Cyclistic’s Customer Growth Team required insights into trip patterns across bike stations, demand, biker behaviour, and congestion at each bike station. These insights will support the data-driven business plan and potential expansion of bike stations in high-demand areas across New York City.

**Key dependencies:**

* **Data access approval from:**
  + Jamal Harris (Director of Customer Data)
  + Product teams (bike ID, trip duration, etc.)
* **Geospatial data:** U.S. Census boundaries for borough/zip code mapping.
* **Software availability:** Tableau for dashboard development.
* **Weather data:** For correlating with seasonal usage.
* **Data governance compliance:** Handled by Rick Andersson.

**Stakeholder requirements:**

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| **Requirement** | **Priority** |
| Accessible Dashboard | Required |
| Station Demand Visualization | Required |
| Trip Duration & Popular Destinations | Required |
| Seasonal Trend Analysis | Required |
| Congestion Insights | Required |
| User Behaviour Insights | Required |
| Weather Impact | Desirable |

**Success criteria:** Using SMART:

* **Specific:** Dashboard must show overall usage insights per location, time, and user type.
* **Measurable:** At least 5 or more key visualizations as defined in stakeholder requirement.
* **Achievable:** Feasible within 6-week timeline, using existing primary ([NYC Citi Bike Trips](https://console.cloud.google.com/marketplace/details/city-of-new-york/nyc-citi-bike)) and secondary ([Census Bureau US Boundaries](https://console.cloud.google.com/marketplace/product/united-states-census-bureau/us-geographic-boundaries)) datasets.
* **Relevant:** Supports strategic planning and bike station expansion.
* **Time-bound:** Final dashboard delivery within week 6.

**User journeys:**

* **VP, Marketing (Sara Romero)**  
  → Accesses dashboard → Filters by borough → Identifies peak station usage by subscribers → Screens insights using TTS
* **Data Analyst (Tessa Blackwell)**  
  → Uploads new trip data monthly → Reviews updated dashboard → Reports YoY and seasonal trends to stakeholders
* **VP, Product Development (Ernest Cox)**  
  → Uses destination trends and duration data → Informs next-gen bike models or station types

**Assumptions:**

* All stakeholders will approve data access within the first week.
* Tableau will be the primary tool for building visualizations.
* Trip data and station metadata are accurate and complete.
* Subscriber status is reliably tagged in the dataset.
* Weather data is available or can be approximated.

**Compliance and privacy:**

* PII anonymization is assumed and mandatory.
* Access control enforced by data governance team.
* Compliance with internal data-sharing policies.
* Customer behaviour analysis is aggregate level only.

**Accessibility:** Dashboard must include:

* Large, readable fonts.
* Color-blind friendly palettes.
* Text-to-speech compatibility.
* Simple navigation and filtering controls.

**Roll-out plan:**

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| **Week** | **Activities** |
| Week 1 | Secure data approvals, gather and clean datasets. |
| Week 2 | Design data model, define metrics. |
| Week 3 | Develop draft visualizations for the dashboard. |
| Week 4 | Add segmentation, congestion, and seasonal insights. |
| Week 5 | Finalize all visuals, test for accessibility. |
| Week 6 | Conduct stakeholder review, implement feedback, roll-out. |