

## CF 2.2 Project Planning & Sourcing Data with an API

### Section 1

**CONTEXT:** *The project's objective is to conduct a descriptive analysis of existing data and discover actionable insights for the business strategy team to help make informed decisions that will circumvent availability issues and ensure the company's position as a leader in eco-friendly transportation solutions in the city.*

#### Planning a Dashboard

- Data Sources:
  - o NYC Bike Share Usage Data 2022
  - o NOAA, NYC Weather Data

The Dashboard should be a 'strategic' style dashboard, containing long-term KPI reporting which showcases the breadth of the available data which has been collected (Spanning 1 year). The Dashboard will provide a high-level overview of important KPIs such as;

- Overall Usage (Monthly – Temporal, Line Chart) *Measured either in length of trip OR qty of trips*
- Most Frequently Used Start Points / End Points (Categorical - Bar Chart)
- Least Used Start Points / End Points (Categorical - Bar Chart) **OR both expressed in a Map view to provide geographical context.**
- Average Weather Temp vs Usage (Monthly / Weekly - Bi-Variate Line chart OR Scatterplot *if we to review correlation instead – but that would be more research based, rather than general strategic KPIs*)
- Bike Availability – *Do some stations contain a surplus of inventory? Are some stations ill-equipped to meet demand?* (Explore possible options for showcasing data – Express as a ratio? – Bar Chart Showing top 5 Under serviced / Over serviced)