Data Collection and Preprocessing Phase

Date	18 March 2025
Team ID	LTVIP2025TMID26729
Project Title	Visualization Tool For Electric Vehicle Charge And Range Analysis In Tableau
Maximum Marks	3 Marks

Data Quality Report Template

The Data Quality Report Template will summarize data quality issues from the selected source, including severity levels and resolution plans. It will aid in systematically identifying and rectifying data discrepancies.

Data Source	Data Quality Issue	Severity	Resolution Plan
Cheapest Electric Cars-EV Database	The data is not properly organised, and the quality of the data depends on the reliability of the sources used. Databases that aggregate information from various sources may inherit inaccuracies.	High	Generate reports to monitor data quality trends and identify areas for improvement. Implement data validation rules at the database level to prevent invalid data from being entered
Electric Vehicle Charging Station	Incorrect or incomplete information about charger type (AC, DC), charging speed, and connector type can cause compatibility issues.	High	Promote and enforce the use of open communication protocols like OCPP (Open Charge Point Protocol) to ensure seamless data exchange between different charging networks and platforms.
Electric Car Data Clean	Data from charging stations may come from diverse networks with inconsistent reporting standards. • This can lead to discrepancies in location, availability, and pricing information.	High	Establish clear data schemas and formats for all data sources, including sensor data, charging station data, and user-generated data. • This ensures consistency across different data sources.
EV India	A lack of standardized charging protocols and data formats across different charging network providers can hinder interoperability and data sharing • This makes it difficult to create comprehensive and reliable charging station maps and apps.	High	Create a national platform to aggregate and standardize EV data from various sources, including vehicle manufacturers, charging network operators, and government agencies. • Define clear data standards for charging infrastructure, vehicle performance, and battery health.