Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	19 feb 2026
Team ID	LTVIP2026TMIDS80003
Project Name	Visualization Tool for Electric Vehicle Charge and Range Analysis
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2
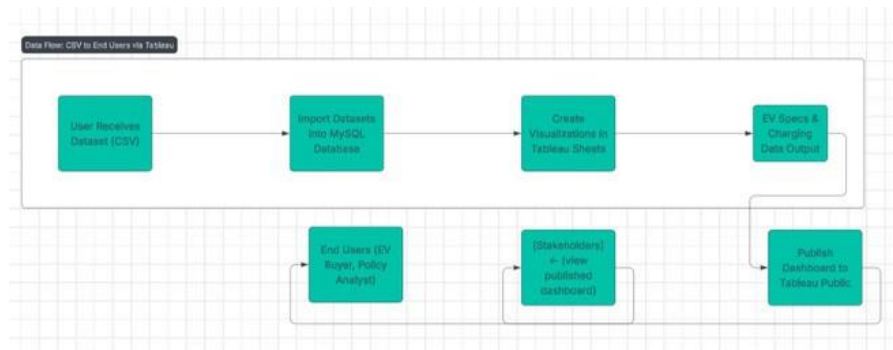
Table-1 : Components & Technologies:

S.No	Component	Description	Technology Used
1	User Interface	Tableau Dashboard accessed via web	Tableau Public (Web UI)
2	Application Logic-1	Data filtering, sorting, and KPI logic	Tableau Calculations
3	Application Logic-2	Dashboard interactions (filters, stories)	Tableau Sheets/Story Functions
4	Database	Stores EV specs, charging station data	MySQL
5	Cloud Database	Not applicable	—
6	File Storage	Raw data files (.csv)	Local Filesystem
7	External API-1	Not used	—
8	External API-2	Not used	—
9	Machine Learning Model	Not used	—
10	Infrastructure	Tableau Desktop on Local + Tableau Public	Local PC, Tableau Cloud

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology Used
1	Open-Source Frameworks	Data cleaned using open-source spreadsheet tools	LibreOffice / Python (optional)
2	Security Implementations	Public view only (read-only), no login required	Tableau Public default

3	Scalable Architecture	Easily expandable by adding more datasets/visuals	Tableau architecture
4	Availability	Always available via Tableau Public (hosted dashboard)	Tableau Cloud
5	Performance	Light-weight dashboard, optimized for fast loading	Tableau engine, MySQL backend