Solution Architecture

Date	29 June 2025
Team ID	LTVIP2025TMID48669
Project Name	Visualization Tool for Electric Vehicle Charge and Range Analysis.
Maximum Marks	4 Marks

TITLE :

Visualization Tool for Electric Vehicle Charge and Range Analysis.

Team ID : LTVIP2025TMID48669

Team Members :

Team Leader : Likitha Dadi
Team member : Ella Likhitha
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The solution architecture consists of several interconnected layers:

1. **Data Sources:** EV datasets collected from public and global repositories.

2. **Data Ingestion & Storage:** Imported and cleaned using SQL, then stored in a structured **MySQL database**.

3. **Processing Layer:** Business logic and queries process the data to support various visual requirements.

4. **Visualization Layer:** Tableau connects directly to the MySQL database to build dashboards and storyboards.

5. **Web Integration:** Dashboards are published to **Tableau Public** and embedded in a custom web application using **HTML/CSS/Bootstrap**.

6. **User Interface:** End-users access visual insights via browser or mobile through the web app.

This architecture ensures flexibility, scalability, and real-time usability of EV data.

Solution Architecture for EV Charge & Range Analysis Dashboard