

Project Design Phase-II

Data Flow Diagram & User Stories

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Team ID: LVTIP2026TMIDS81919

Project Name: Visualization Tool for Electric Vehicle Charge and Range Analysis

Maximum Marks: 4 Marks

Data Flow Diagram (DFD)

A Data Flow Diagram (DFD) visually represents how data moves through the system. It shows how data enters the system, how it is processed, and where it is stored.

DFD for EV Charge & Range Visualization Tool:

- User inputs vehicle data and battery level.
- System processes data to estimate travel range.
- Charging station database provides nearby stations.
- Visualization module displays charts and battery status.
- Historical data stored for performance analysis.

User Stories

1. As an EV user, I want to see my battery percentage so that I know when to charge.
2. As a driver, I want to estimate travel range so that I can plan my trips.
3. As a user, I want to locate nearby charging stations to avoid running out of power.
4. As a user, I want to view energy consumption charts to understand my vehicle usage.
5. As a user, I want alerts for low battery to ensure timely charging.