

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	2 Feb 2026
Team ID	LTVIP2026TMIDS24926
Project Name	Visualization Tool For Electric Vehicle Charge And Range Analysis
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Filter EV Data	Users can filter EVs by brand, price, or charge level.
FR-2	Display Charge Distribution	Shows donut chart of EV charge level distribution.
FR-3	Compare Range by Brand	Displays range comparison across EV brands using bar chart.
FR-4	Sort by Battery/Range	Allows sorting EVs by battery capacity or driving range
FR-5	Show Price vs Range	Scatter plot comparing EV price and range.
FR-6	Show Summary Cards	Displays average charge, range, and battery capacity in summary boxes.

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Easy-to-use dashboard with clear charts and filters for users to explore EV charge and range data.
NFR-2	Security	Data is securely managed with access control (if private), ensuring no unauthorized edits or leaks.
NFR-3	Reliability	Delivers consistent, error-free visual insights with stable performance during use.
NFR-4	Performance	Fast dashboard loading and smooth filter interactions ensure an efficient user experience.
NFR-5	Availability	Hosted on Tableau Public or other platforms to ensure it's accessible anytime with high uptime.
NFR-6	Scalability	Supports future expansion with more EV data, filters, and visualizations without affecting performance.

