

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

Date	31 January 2025
Team ID	LTVIP2026TMIDS47424
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	Charging Infrastructure Analysis	Display charging stations by region and type (AC/DC).
		Provide interactive charging station map visualization.
FR-2	Brand & Model Analysis	Show number of EV models by each brand.
		Display EV distribution based on body style.
FR-3	Performance & Efficiency Analysis	Compare top speed across EV brands.
		Display top 10 most efficient EV brands.
FR-4	Price Analysis	Display price range of EV cars in India.
		Provide price comparison across brands.
FR-5	Powertrain Filtering	Allow filtering of brands by powertrain type.
		Update dashboard dynamically based on selected filters.
FR-6	Data Processing	Clean and aggregate EV datasets using SQL.
		Integrate processed data with Tableau dashboards.

Non-functional Requirements:

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

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	Dashboard should be simple, intuitive, and easy to navigate.
NFR-2	Performance	Dashboard should load visualizations within acceptable response time.

NFR-3	Reliability	System should display accurate and consistent data insights.
NFR-4	Security	Access to datasets and dashboard should be secure and controlled.
NFR-5	Availability	Dashboard should be accessible whenever required without downtime.
NFR-6	Scalability	System should handle addition of new EV datasets in future.