

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

Date	31 January 2025
Team ID	LTVIP2025TMID47712
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	Data Import and Preparation	Load four EV-related datasets (CSV format) into Tableau. Clean and prepare data for visualizations. Combine relevant fields for a unified view.
FR-2	Dashboard and Visualizations	Provide comparative charts (range, price, efficiency, etc.) of different EV models. Map EV charging stations by region and type. Enable filters (brand, powertrain, body style, segment).
FR-3	KPI Summary Cards	Display key insights such as average prices, top speeds, number of brands, etc. Include summary cards for India and global EV data.
FR-4	Storyboarding	Construct a user-friendly story path highlighting dashboard findings. Present data in logical, decision-guiding order.
FR-5	User Interaction	Filters and parameters to explore different segments of EV data. Hover/tooltip features to display additional info.
FR-6	Publishing and Access:	Publish final dashboard and story to Tableau Public. Generate public share link.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Dashboard must be user-friendly and intuitive for a non-technical audience.
NFR-2	Security	Published dashboard should not expose any sensitive or personal data.
NFR-3	Reliability	Dashboard should perform consistently without crashes or data loss.
NFR-4	Performance	Load time should be under 5 seconds for average datasets.
NFR-5	Availability	Dashboard should be accessible anytime via Tableau Public.
NFR-6	Scalability	Solution should handle increased data volume without major redesign.