

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

Date	26 June 2025
Team ID	LTVIP2025TMID51636
Project Name	Visualizing Electric Vehicle Trends: An Analysis of Range, Brands, and Powertrain Features Using Tableau
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	User Registration	<ul style="list-style-type: none">• Registration through Form• Registration through Gmail• Registration through LinkedIn
FR-2	User Confirmation	<ul style="list-style-type: none">• Confirmation via Email• Confirmation via OTP
FR-3	Login	<ul style="list-style-type: none">• Login via email & password• Login via Gmail or LinkedIn
FR-4	Dashboard Access	<ul style="list-style-type: none">• User views dashboard after login• Visualizations of car types, charger types, etc.
FR-5	EV Data Visualization	<ul style="list-style-type: none">• Display charts for range, top speed, efficiency, brand comparisons
FR-6	Charging Station Map	<ul style="list-style-type: none">• Show charging station locations using interactive map
FR-7	Filtering and Searching	<ul style="list-style-type: none">• Filter EVs by price, brand, charger type, body style, and more
FR-8	Export and Reporting	<ul style="list-style-type: none">• Export dashboards as PDF or image• Download summary reports
FR-9	Admin Data Management	<ul style="list-style-type: none">• Upload or refresh datasets (CSV, Excel)• Approve new data uploads
FR-10	Customer Support Access (Optional)	<ul style="list-style-type: none">• Submit feedback or report data inaccuracies• View responses

Non-functional Requirements:

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

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	The interface should be intuitive for both mobile and desktop users.
NFR-2	Security	User login data and uploaded files must be encrypted and securely stored.
NFR-3	Reliability	The system should work consistently without crashing during dashboard use.
NFR-4	Performance	Dashboards and filters should load within 3 seconds even with large datasets.
NFR-5	Availability	The service should be available 99% of the time with minimal downtime.
NFR-6	Scalability	The system must support increased users and data uploads without performance drop.