

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

Date	Feb 2026
Team ID	LTVIP2026TMIDS47701
Project Name	Virtualization 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	User Registration	Registration through Form Registration through Gmail
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Login	Login using email & password Login using Gmail
FR-4	Dashboard Access	View EV range analysis View battery status & charging data
FR-5	Charging Station Information	View nearby charging stations Filter stations by availability
FR-6	Data Visualization	View charts and graphs for EV performance

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The system should be easy to use with a simple and intuitive user interface.
NFR-2	Security	User data should be protected using authentication and secure access.
NFR-3	Reliability	The system should provide accurate EV range and charging analysis without data loss.
NFR-4	Performance	The application should load dashboards and analytics within a few seconds.
NFR-5	Availability	The system should be accessible 24/7 with minimal downtime.
NFR-6	Scalability	The system should support an increasing number of users and EV datasets.

