

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

Date	31 January 2026
Team ID	LTVIP2026TMIDS90945
Project Name	Visualizations tools of ev 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 Registration through LinkedIN
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Login	Login using email and password Secure session management
FR-4	EV Data Management	Upload EV sales datasets Upload battery performance data Upload charging infrastructure data
FR-5	Data Analysis	EV sales trend analysis Battery performance analysis Charging station availability analysis
FR-6	Dashboard & Reports	Interactive dashboards Downloadable analytics reports (PDF/CSV)
FR-7	User Management	View and manage user roles Activate or deactivate users

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 for analysts.
NFR-2	Security	User data and EV datasets must be protected using authentication and authorization mechanisms.
NFR-3	Reliability	The system should consistently produce accurate analytics results without data loss.
NFR-4	Performance	The system should process large EV datasets efficiently and generate dashboards quickly.
NFR-5	Availability	The system should be available to users with minimal downtime.
NFR-6	Scalability	The system should handle increasing EV data volume and number of users without performance degradation.