

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

Date	07 October 2022
Team ID	PNT2022TMID02351
Project Name	Project - Machine Learning Based Vehicle Performance Analyzer
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 Gmail
FR-2	User Confirmation	Confirmation via Email
FR-3	Data Collection	Form-based user input sending the data to the server
FR-4	Query Processing Predict	The ML model to forecast the anticipated mileage. Search for more recent vehicles that resemble the current model.
FR-5	Report Generation	Display the anticipated distance and plot the anticipated mileage over time. suggest related auto models based on the database.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	To collect data, this programme doesn't need any new, specialised hardware. Through data that the user can manually gather, it attempts to estimate mileage.
NFR-2	Security	Ensured Confidentiality, Integrity, and Availability while being protected from all types of web-based threats.
NFR-3	Reliability	In terms of the efficiency and remaining life of the car, the programme will provide nearly perfect predictions, and it will be designed in such a way that false positives won't negatively impact users in any way.
NFR-4	Performance	The performance of this application can handle a sizable number of concurrent users accessing the services with little to no apparent impact.
NFR-5	Availability	Minimising service downtime by ensuring that the programme is always accessible to all users.
NFR-6	Scalability	All types of vehicles, not just cars, could use this application.