

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

Date	03 October 2022
Team ID	PNT2022TMID10674
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 Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Add Vehicles to Account	Register vehicles through registration number and identify the model.
FR-4	Get attributes of vehicles as inputs.	Use a form to obtain input.
FR-5	Pre-process the data	Use techniques such as dimensionality reduction and feature selection to pre process data and handle missing values.
FR-6	Predict the performance of the vehicle	Use a machine learning model to predict the performance of the vehicle
FR-7	Tracking the vehicle performance	Use storage techniques to store predicted performance from time to time and track them
FR-8	Interact with the user	Use a web application interface developed using HTML to interact with user.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The project is made easy to use by any one using traditional method of web designing.
NFR-2	Security	Security is enabled by providing proper authentication strategies and incorporating some form of encryption.
NFR-3	Reliability	The machine learning model is chosen in such a way that it is most suitable for the field of application and makes accurate prediction almost all the time.
NFR-4	Performance	The performance will be improved by choosing efficient algorithms making predictions in less time.
NFR-5	Availability	The user can access the application from anywhere anytime.
NFR-6	Scalability	The application is highly scalable as vehicle performance is measured in every country.

