

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

Date	19 October 2022
Team ID	PNT2022TMID43198
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	User segment	Geographic segmentation. Demographic segmentation.
FR-4	User constraints	problems where learned models have to both be accurate and respect constraints

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The general usability data processing in recent research works still relies on conventional analytical tools and very little research has been carried out in post evaluation analysis using machine learning.
NFR-2	Security	necessity to evaluate the Meta features of vehicles which could be helpful in improving the vehicle driver's skill to prevent accidents and also evaluate the change in the quality of cars over passing time

NFR-3	Reliability	We developed the failures and reliability prediction model for automobile parts using the field claim of the initial 6 months.
NFR-4	Performance	Predicting the performance level of cars is an important and interesting problem. The main goal of the current study is to predict the performance of the car to improve certain behavior of the vehicle
NFR-5	Availability	The need for deeper analysis and monitoring of in-vehicle embedded systems data is driven by the growth of autonomous vehicles, cloud connectivity, and other advanced vehicle functionality.
NFR-6	Scalability	we can collect the vision data, sensor data which we can further use in our model to derive the result which will help the driver in regards to car maintenance, driving skills in a way to improve driving skills, and also to government by reporting road anomalies.