

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

Date	15 October 2022
Team ID	PNT2022TMID12635
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	Enter the input	Get input through the form
FR-2	User Essential	Predict the performance of the vehicle
FR-3	Data preprocessing	Sample dataset for training purpose
FR-4	User input Evaluation	Evaluating the given user values
FR-5	Prediction	Fuel consumption and efficiency of the vehicle

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	The analyzer allows the user to improve performance based on the results provided. It is easy to use with just the data required.
NFR-2	<b>Security</b>	The security is improved by using vehicle alarm, wheel lock, vehicle lock and also GPS tracker.
NFR-3	<b>Reliability</b>	The reliability rating is good due to best performance, less frequency of problem occurrence and cost for repairing is low.
NFR-4	<b>Performance</b>	The vehicle is upgraded in quality and infrastructure to provide better performance like good mileage, smooth travel.
NFR-5	<b>Availability</b>	The data required is collected by research persons and this data can be used to provide better results.

NFR-6	<b>Scalability</b>	Better scalability since our model analyzes all information and provides better refined solutions. With less change to the vehicle, we could achieve maximum performance.
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