

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

Date	03 October 2022
Team ID	PNT2022TMID19412
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	Data Collection	Download the dataset
FR-2	Data Pre-processing	Import libraries and read the dataset Handle the missing value and label the encoding variables Split the dataset into Dependent and independent variables Split the dataset into train and test data
FR-3	Model Building	Train the datasets to run smoothly and see an incremental improvement in the prediction rate for the available Machine Learning algorithms. Build The Model With The Decision Tree Algorithm Predict The Values Model Evaluation
FR-4	Application Building	Building An Index. Html File Build Python Code Run the app using flask Output

**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 open-source frameworks are used
NFR-2	<b>Security</b>	All the security / access controls are implemented, such as firewalls etc.
NFR-3	<b>Reliability</b>	The application is made reliable
NFR-4	<b>Performance</b>	The performance of the application is analysed
NFR-5	<b>Availability</b>	The application is made available to all users
NFR-6	<b>Scalability</b>	The application can be extended