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

Date	07 October 2022
Team ID	PNT2022TMID27752
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 data	Get data through a form
FR-2	User Essential	Attributes of the vehicle
FR-3	Data Pre-processing	Form-based user input sending the data to the server
FR-4	User Input Evaluation	The ML model to forecast the vehicle behaviour. Search for more recent vehicles that resemble the current model.
FR-5	Report Generation	Display the problems of the vehicle and fix the requirements. 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 need new, specialised sensor. Through data that the user can manually gather, it attempts to estimate the vehicle behaviour.
NFR-2	Security	Ensured Confidentiality, Integrity, and Availability while being protected from all types of obstacles 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 sensor 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 the attributes of the vehicle can easily predicted.