Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMIDxxxxxx
Project Name	Project - Machine Learning based Vehicle Performance analyzer
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Analysing the performance of the vehicle is a challenging task due to the issues like engine sputter, low fuel mileage and exhaustive smoke. This may even lead to the damage for the passenger who travels on that vehicle. So, here the need of predicting the performance of the vehicle is important to avoid the above mentioned consequences.
2.	Idea / Solution description	The performance of the car can be analysed based on the engine type, no of engine cylinders, fuel type and horsepower etc. Here performance is considered in terms of mileage. To solve this problem, various models are developed using the different machine algorithms and then choose the algorithm which predicts car performance(in terms of Mileage) with higher accuracy.
3.	Novelty / Uniqueness	Since the model prediction is focused on various parameter which has an impact on performance instead of taking single parameter into account, it ensures better quality, high accuracy which improves the efficiency.
4.	Social Impact / Customer Satisfaction	The main goal is to satisfy the customer needs by providing better performance(milage).Customers get benefited by high milage as it reduces the fuel consumption rate. Thus the rate of vehicle emission also decreases which results in somewhat less pollution.
5.	Business Model (Revenue Model)	Due to high milage and low maintenance cost, many customers get attracted which increases the profit of the business. Since all the parameters of the vehicle are analyzed, it results in minimum service requirement
6.	Scalability of the Solution	As a result of our model's thorough analysis of all the data and more precise solution, our

| | | solution is more scalable. We could optimise performance by making fewer changes to the prameters of the vehicle. |