Project Design Phase-I
Proposed Solution

Date	22 October 2022
Team ID	PNT2022TMID54269
Project Name	Car Resale Value Prediction
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	**Car Resale Value Prediction** With difficult economic conditions, it is likely that sales of second-hand imported (reconditioned) cars and used cars will increase. In many developed countries, it is common to lease a car rather than buying it outright. After the lease period is over, the buyer has the possibility to buy the car at its residual value, i.e. its expected resale value. Thus, it is of commercial interest to sellers/financers to be able to predict the salvage value (residual value) of cars with accuracy.
2.	Idea / Solution description	Using regression algorithms, we proposed an intelligent, flexible, and effective system to predict the value of the car. By regression algorithms and other algorithms is used to predict the accuracy value of the cars. Depend on major parts and damages on the car will affect the price of the car.
3.	Novelty / Uniqueness	To predict the value, the most essential elements for forecast are brand and model, period use of vehicle, mileage of vehicle, gear type and fuel type utilized in the vehicle just as fuel utilization per mile profoundly influence cost of a vehicle because of continuous changes in the cost of a fuel. By forecasting the above details, AI can predict the value accurately.

4.	Social Impact / Customer Satisfaction	Customer Satisfaction plays a vital role in this, i.e for customer, he/she need to get profit from his car so customer expect that the predict value need to be good which gives him/her profit, but it is depend on the car condition. Depend on the customer satisfaction our application will create a social impact and may customer will increase.
5.	Business Model (Revenue Model)	A Revenue model is a framework for generating financial income. It identifies which revenue source to pursue ,what value to offer ,how to price the value ,and who pays for the value.
6.	Scalability of the Solution	The value of the car is predicting by using different regression algorithms like linear regression , random forest regression , decision tree regression and so on. Thus the car will got accurate price. Those algorithms gives the results with the user given details about the car, but the best and approximate result is got by random forest algorithm. As random forest regression algorithm gives more as 15% then other algorithms.