Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID12028
Project Name	Project - Car Resale Value Prediction
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)	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	In order to predict the resale value of the car, we proposed an intelligent, flexible, and effective system that is based on using regression algorithms. Considering the main factors which would affect the resale value of a vehicle a regression model is to be built that would give the nearest resale value of the vehicle. We will be using various regression algorithms and algorithm with the best accuracy will be taken as a solution, then it will be integrated to the web-based application where the user is notified with the status of his product.
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	1) Enhanced resale value accuracy. 2) Improved relationships with customers. 3) Leads to increased quality of products and it's related after sales service.
5.	Business Model (Revenue Model)	This business plan addresses all relevant concerns by presenting a comprehensive account of a month-by-month marketing strategy coupled with an extensive report on all aspects of the needs of a successful used car center.

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.