Project Design Phase-I
Proposed Solution Template

Date	24 September 2022
Team ID	PNT2022TMID49739
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)	The huge requirement of used cars and lack of experts who can determine the correct valuation, there is an atmost need of bridging this gap between sellers and buyers. This project focuses on building a system that can accurately predict the resale value of cars based on minimal features like kms driven, year of purchase, fuel type etc. without manual or human interference and hence it remains unbiased. In this project we have used machine learning techniques for developing Car resale value prediction systems considering different features of the car. Currently, only few features are used to predict resale value of the car. This can be extended to more features and including more input sets.
2.	Idea / Solution description	The accurate prediction can be achieved by providing the various details of the vehicles such as the specifications which includes the model, the year of making, fuel type and also the other details such as the number of kilometres the car has run, the average mileage of the vehicle, the timeline of the car usage etc. Along with the machine learning algorithm used by the application based on the historical data fed into the system, the application will be able to predict the average price to which the car can be sold in a more accurate manner by feeding more number of data sets and also we aim to include more uncommon features in the prediction such as the availability of documents to the functioning of AC's , airbags etc. which we expect to improve the efficiency of the prediction .Finally the selling price will be calculated and displayed to the user. This application can be useful for both kinds of people who wish to sell their vehicles and also those who are willing to buy the vehicle to

		predict the accurate price.
3.	Novelty / Uniqueness	The goal of this project is to explore new methods to evaluate used car prices and compare their accuracies. Usually common features are included to predict the value of the cars which reduces the efficiency of the prediction. In this project we attempt to include less common features such as the working of the car's AC, the deployment of airbags ,the availability of the other formal documents of the car(eg.. RC book) etc. as additional inputs along with a detailed dataset to train the application.
4.	Social Impact / Customer Satisfaction	This application can impact the society greatly because the users can know the resale value of the vehicles without much effort only to feed the system with the basic information about their cars. Hence a buyer can be prevented from fraudulent practices and a person who wishes to sell their car can know the full value of their vehicle based on the existing selling values of similar models of cars in the market.
5.	Business Model (Revenue Model)	The changing lifestyle is encouraging people to gradually move from two-wheeler to four-wheeler and from four-wheeler to latest car models. The overall lifecycle of this scenario is giving a huge push to the user car market and ensuring promising opportunities to the companies engaged in car selling and buying services. However, the advent of technology has changed the shopping trends and needs of the customers. The increasing usage of mobile applications has changed the way people look for small or big things to buy. And buying or selling a car is not left as an exception. Certified firms or companies that deal in the used car buy and sell services have already recognised the changing market trends and have taken the initiative to set up their own car buy and sell application that directly connects buyers to sellers.
6.	Scalability of the Solution	In the automotive industry, machine learning is most often associated with product innovations. More than 78% of automotive companies invest in Machine Learning to regularly improve their user experience. The application is scalable as further enhancements in technology can be incorporated within this

		application for all range of consumers.