

Project Design Phase-I
Proposed Solution Template

Date	23 September 2022
Team ID	PNT2022TMID00170
Project Name	Project - Car Resale value Prediction
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To develop an efficient and effective model which predicts the price of a used car according to the user's inputs. To achieve good accuracy. To develop a User Interface(UI) which is user-friendly and takes input from the user and predicts the resale value of a car.
2.	Idea / Solution description	We will be trying various regression algorithms and choose the most efficient algorithm that gives the result with the best accuracy. Then it will be integrated to the web-based application where the user is able to upload his data and obtain the estimated car resale value. The process for testing each algorithm is as follows: 1. Training phase: The system is trained by using the data in the data set and fits a model (line/curve) based on the algorithm chosen accordingly. 2. Testing phase: the system is provided with the inputs and is tested for its working. The accuracy is checked. Therefore, the data that is used to train the model or test it, has to be appropriate.
3.	Novelty / Uniqueness	Multiple factors are considered while deciding the resale value of the car, and this data is used to improve the accuracy of the algorithm. The focus of the website design puts emphasis on the ease of usage and ensures that the users have a smooth experience without any hassles or complications.
4.	Social Impact / Customer Satisfaction	With the rise in automobile ownership, the used automobile market is ripe for growth. The healthy development of the used car market requires an accurate used car pricing evaluation. Since the proposed system can be real-time and user friendly in terms of its handling, it is an overall unique proposal idea that gives overall customer satisfaction.

5.	Business Model (Revenue Model)	Advertisement columns on both sides of the website. People are required to log in to use the price estimator. Using the estimator more than 3 times a month requires additional charges.
6.	Scalability of the Solution	Even with a large volume of site traffic, we can still respond to queries of all the customers, as the process is automated and requires no human interaction. The datasets used will also increase over the years, as we gain additional data, improving the overall accuracy of the system.