

**Project Design Phase-I**  
**Proposed Solution**

Date	19 September 2022
Team ID	PNT2022TMID14677
Project Name	Project - Car Resale value Prediction
Maximum Marks	2 Marks

**Proposed Solution:**

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none"><li>• The main aim of this project is to predict the resale value of a used car using regression algorithms.</li><li>• This could help the customers to find the best price of the used car that is going to be sold.</li></ul>
2.	Idea / Solution description	<ul style="list-style-type: none"><li>• The resale value of a car depends on factors such as price, vehicle type, gearbox, model, kilometres run, fuel type, etc.</li><li>• The data is then pre-processed to handle missing values and outliers, to normalize the data and split it into dependent and independent variables.</li><li>• After that the model is developed using regression algorithms to predict the resale price of the car.</li></ul>
3.	Novelty / Uniqueness	<ul style="list-style-type: none"><li>• This is a real-time problem which can benefit both customer and seller.</li><li>• The novelty of this proposal is to predict the resale value as near as possible to the actual value.</li></ul>
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"><li>• Provided the current economic times, it is more likely that the usage of second-hand cars will increase.</li><li>• This is a mutual commercial interest to both the customers and the sellers.</li><li>• It predicts the resale values of the car based on all its features and prevents over-pricing or under-pricing.</li><li>• This sets an understanding or trust between the seller and the customer.</li></ul>

5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> <li>The proposed model could be sold to resellers so that they could use it to find the perfect price for bidding.</li> <li>It could be developed into an application and get revenue from it if more no of users started to using it to find the best value of a second-hand car.</li> </ul>
6.	Scalability of the Solution	<ul style="list-style-type: none"> <li>The primary model is targeted only for a lower number of audiences.</li> <li>However, as the customer base increases for the model it can be extended to the cloud for effective services.</li> </ul>

#### Solution flow:

##### Pre-processing:



##### Training Phase:



##### Testing Phase:

