**Project Design Phase-I**

**Proposed Solution**

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| Date | 19 September 2022 |
| Team ID | PNT2022TMID34943 |
| Project Name | Car Resale Value Prediction |

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | The problem is, for the car seller find difficult to identify the specification of the car and also estimate the car price based on the specification. So, they generally approach a car broker or car mechanic for analysing the car condition and details and estimating the car price correctly. In this process they may have chance to loss their money if the people are not trusted or not experienced. |
|  | Idea / Solution description | As a solution, obtain the details of the car from the seller and provide approximate price according to the details that given by car seller. The car seller provides the registration number image or text. For the given registration car, the detail get from the dataset include Registration Date, Car Variant, Car Model, Car Number of Ownership, car Registration State, Registration Certificate details and providing the additional details like internal or external damages, driven kilometres by the car seller. Based on this detail, The car exact price is obtained. In order to predict a car's price various Machine Learning algorithms such as Linear Regression algorithm, Random Forest Regression algorithm are used and frameworks like TensorFlow using Python Flask. |
|  | Novelty / Uniqueness | The unique solution in which the car maximum details are obtained from Registration number of the car. Additionally details like any internal or external damages, driven kilometres. Based on these details, the price value is predicted. It shows the price more accurate. |
|  | Social Impact / Customer Satisfaction | By using this model the car seller know the price of their car model. These make trust among the car seller the car. It leads to increase the sale of used car market. People wishes to buy used car instead of buying new car with high cost. |
|  | Business Model (Revenue Model) | Revenue made by promoting car models and advertising car. But the project is absolutely free for users. If they interested to advertise their car model then they can approach any third party serving. Also car seller sell their car through our platform. It should be paid for the car seller to verify their car. Based on their provided details should be correct. For this the separate service charge should be made. |
|  | Scalability of the Solution | For any registered vehicle, the price should be displayed. Additionally, if the car is not in the registration list. It is possible to provide it manually. |