

Project Design Phase-I
Proposed Solution Template

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| Date | 19 September 2022 |
| Team ID | PNT2022TMID02019 |
| Project Name | PROJECT-CAR RESALES VALUE PREDICTION |
| Maximum Marks | 2 Marks |

| S.No. | Parameter | Description |
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| 1. | Problem Statement (Problem to be solved) | <ul style="list-style-type: none">• Due to the overwhelming demand for used vehicles and the lack of experts who can establish the appropriate valuation, there is an almost need to bridge the gap between sellers and buyers.• This project's primary goal is to forecast used automobile prices using multiple Machine Learning (ML) models.• The project helps lighten the client's load.• The project should allow users to make judgments independently by using inputs related to used cars. |
| 2. | Idea / Solution description | <ul style="list-style-type: none">• The model that would be constructed would provide the closest estimate of the used car's resale value.• This concept will assist clients in finding a car at a fair price and prevent loss.• The web-based application where users can enter used car details and estimate current prices will be merged with the best accuracy values, which will be considered an accurate solution. |
| 3. | Novelty / Uniqueness | <ul style="list-style-type: none">• With the help of the created application, used car price prediction may be used to quickly assess a vehicle's value on its own.• Users can enter the car model, miles traveled, views on the car on a certain website, kind of car, and the quantity of uploaded car photographs. The price of a car will be predicted using the data.• Consider additional characteristics like pricing, innovation, and seasonality that are similar. |

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| 4. | Social Impact / Customer Satisfaction | <ul style="list-style-type: none"> ● If a user wishes to purchase an automobile, they only need to enter their criteria and they will automatically receive the results. ● Predictions for used automobiles can be made by a weak learner, and a loss function needs to be tuned. ● By providing knowledge of the probable behavior of your most valued clients, sales forecasting aids in achieving this revenue efficiency. ● You can optimize pricing, advertising, and sales by predicting what will happen in the future. |
| 5. | Business Model (Revenue Model) | <ul style="list-style-type: none"> ● It helps users to predict the price of the car easily without any manpower like car dealers with perfect valuation and thus helps users by preventing them from unreasonable prices quoted by dealers. |
| 6. | Scalability of the Solution | <ul style="list-style-type: none"> ● Here we are using time series analysis so, When historical data for a product or product line is available and patterns are obvious, organizations typically employ the time series analysis technique to demand forecasting. ● A time series analysis can help you detect seasonal variations in demand, cyclical patterns, and major sales trends. ● The time series analysis approach works best for well-established organizations with several years of data to work with and very steady trend patterns. |