Project Design Phase-I

Date	24 September 2022
Team ID	PNT2022TMIDO1748
Project Name	PROJECT-CAR RESALES VALUE PREDICTION
Maximum Marks	2 Marks

Proposed Solution :

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	➢ Due to the huge requirement for used cars and the lack of experts who can determine the correct valuation, there is an almost need of bridging the gap between sellers and buyers. Without any definite details of the cars that are already used it leads to less reliability. ➢ If anyone wants to sell their car either they have to take their car to a respective workshop or hard to make an appointment for the company to get an estimate of the price. ➢ Buying a reused car without any warranty and without proper details it could be waste of time and money then the maintenance of reused car must be mentioned so that it can be known whether it is in good condition to buy. But the problem here is the details features of the reused cars are minimal.
2.	Idea / Solution description	➢ The idea starts with login page where the user initially directed to the login page with some authenticated credentials. ➢ Then the user is been taken to the dataset uploading page where the data is read with the integrated flask. ➢ Flask is used as middleware for integrating frontend and backend. ➢ This application had the features of extracting the data , cleaning the data and perform some EDA for accurate predictions. ➢ Then the processed data is split into train and test the dataset is trained based on any of the machine learning algorithm.The model that we are using is time series forecasting.

		➢ Then the trained dataset is predicted based on the user needs like model, price, design, kilometres covered, Interior look, colour, mileage, number of owners and many features. ➢ Then the predicted result is shown in the interactive dashboard.
3.	Novelty / Uniqueness	➢ Look at similarities in other features such as pricing, innovation, and seasonality for example. ➢ Consumer behavior changes, it's a fact. So for better accuracy select a more recently added product when possible. ➢ You can use multiple reference products to get the best average and the novelty sales estimates will be based on features from all of them using the average.
4.	Social Impact / Customer Satisfaction	➢ Sales forecasting helps you attain this revenue efficiency by offering insight into the likely behavior of your most valuable customers. ➢ You can predict future sales, as well as improve pricing, advertising, and product development.
5.	Scalability of the Solution	➢ Here we are using time series analysis so, When historical data for a product or product line is available and patterns are obvious, organisations 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 organisations with several years of data to work with and very steady trend patterns.