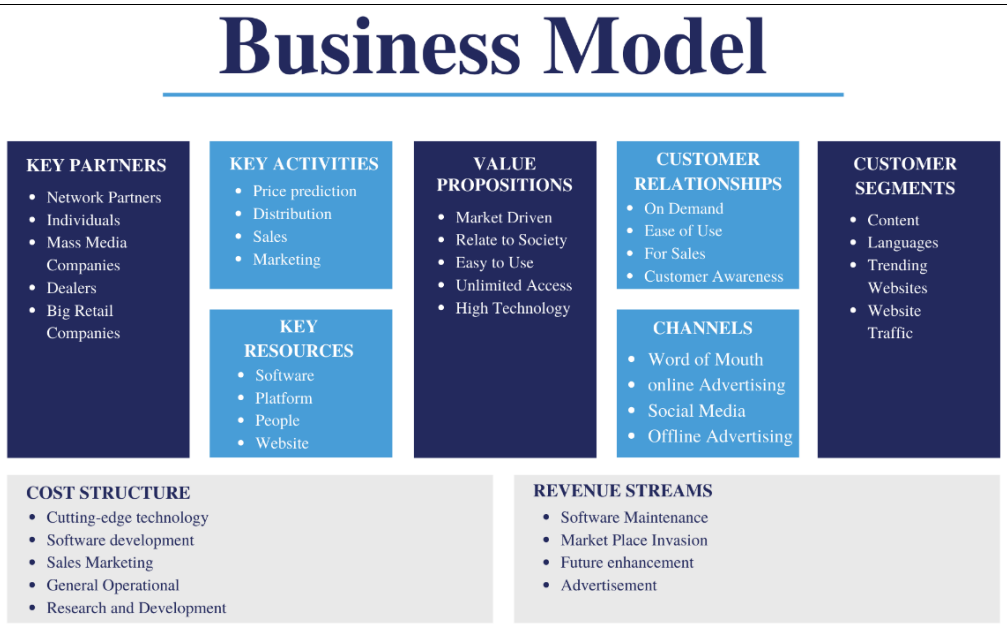
Project Design Phase-I
Proposed Solution

Date	19 September 2022
Team ID	PNT2022TMID05680
Project Name	Project - Car Resale Value Prediction
Maximum Marks	2 Marks

Proposed Solution:

S.No	Parameter	Description
1.	Problem Statement (Problem to be solved)	**Car Resale Value Prediction** With difficult economic conditions, it is likely that sales of second-hand imported (reconditioned) cars and used cars will increase. In many developed countries, it is common to lease a car rather than buying it outright. After the lease period is over, the buyer has the possibility to buy the car at its residual value, i.e., its expected resale value. Thus, it is of commercial interest to sellers or financers to be able to predict the salvage value (residual value) of cars with accuracy. Therefore, the problem statement is to predict the resale value of Cars.
2.	Idea / Solution description	• In order to predict the resale value of the car, we have proposed an intelligent, flexible, and effective solution which works based on a machine learning algorithm. • Considering the main factors which would affect the resale value of a car, the machine learning model has been trained to give the nearest resale value of the car. • We have tried various machine learning algorithms and the algorithm with the best accuracy has been taken as a solution, then it has been integrated to the website developed by us, where the user is displayed with the resale price of the car. • The machine learning model that we have used is Random Forest Regression.
3.	Novelty / Uniqueness	• Most of the car resale prediction websites or applications take into account only some basic features of the car like kilometers driven, fuel type, the year when the car was bought and the showroom price of the car. • But we have used some more specific parameters like number of owners who previously had the car, the car transmission type (i.e., Manual car or Automatic car) and whether the person who is willing to sell the car is an individual or dealer. • The car resale price which is predicted by our model is acceptable as it gives the nearest price as output.
4.	Social Impact / Customer Satisfaction	• Customers become aware of the car value before they buy the used cars so that fraudulent activities can be prevented. • Gives an idea for the sellers regarding the car resale price. • Our Car resale prediction website sets a price at a level that prediction attracts customers and also maximizes sales. • Knowing the resale price beforehand helps the customer as well as the

		seller in many ways by minimizing the losses.
5.	Business Model (Revenue Model)	
6.	Scalability of the Solution	• This prediction saves the time of both the customer and the seller. • Does not require any installation process to use the website. • The website is user friendly. • Boosts the sale of used cars. • Increases competitiveness of market players, by making this resale business more attractive.