Project Design Phase-I
Proposed Solu7on Template

Date	19 September 2022
Team ID	PNT2022TMID25152
Project Name	Project – Car Resale Value Prediction
Maximum Marks	2 Marks

Proposed Solu7on Template:

S.No.	Parameter	Descrip7on
1.	Problem Statement (Problem to besolved)	I am a customer. I'm trying to buy a second hand car. But I cannot es?mate the price of the car. Because I need a trustworthy plaOorm to predict the price of the car. Which makes me feel Frustrated and Confused.
2.	Idea / Solu?on descrip?on	Deciding whether a used car is worth the posted price when you see lis?ngs online can be difficult. Several factors, including mileage, make, model, year, etc. can influence the actual worth of a car. From the perspec?ve of a seller,it is also a dilemma to price a used car appropriately. Based on exis?ng data, the aim is to use machine learning algorithms to develop models for predic?ng used car prices.
3.	Novelty / Uniqueness	As there are so many ongoing experiments that use sta?s?cal approaches and some tradi?onalmethods to focus on predic?ng the price of a used car. Machine Learning algorithms such as Simple Linear Regression, Support Vector Regression, Gradient Boos4ng algorithm, and Random Forest Regression are considered to predict the most effec?ve metrics such as accuracy, mean absolute error, and max error are considered for measuring algorithm efficiency. We will be using different models which adapt best to the task at hand and result in high accuracy.
4.	Social Impact / Customer Sa?sfac?on	Predic?ng prices of a used car is a challenging task because of a high number of features and parameters that should be considered to generate accurate results. Be we can use these features and parameters to provide a even higher accuracy which can predict the value of the car correctly and hence sa?sfy the customer.
5.	Business Model (Revenue Model)	Deciding whether a used car is worth the posted price when you see lis?ngs online can be difficult. Several factors, including mileage,

		make, model, year, etc. can influence the actualworth of a car. From the perspec?ve of a seller, it is also a dilemma to price a used car. Based on exis?ng data, the aim is to use machine learning algorithms to develop models for predic?ng used car prices and in return make profits.
6.	Scalability of the Solu?on	We started with understanding the use case of machine learning in the Automo?ve industry. Moving on, we looked at the various factors that affect the resale value of a used car and performed exploratory data analysis (EDA). Based on the EDA we can determine which algorithm to use either Regression or Classifica?on. There are a lot of algorithms like Simple Linear Regression, Mul? Linear Regression, Decision Tree, Random Forest, SVM etc. Based on the result we can fine tune are model and make any changes if necessary.