Project Design Phase-I
Proposed Solution Template

Date	22 October 2023
Team ID	PNT2022TMID593136
Project Name	Project - **Car Purchase Prediction Using ML**
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The problem at hand is predicting car purchase probability based on client data such as gender, age and annual salary
2.	Idea / Solution description	We intend to use machine learning techniques to forecast automobile purchases. We suggest using the Random Forest algorithm, an ensemble learning technique that is better at prediction than solo decision trees, to improve our results.

3.	Novelty / Uniqueness	Our solution's use of machine learning to forecast automobile purchases instead of a conventional Decision Tree model is one of its most unique features. We suggest using the Random Forest algorithm, an ensemble learning technique known for its remarkable prediction accuracy and resistance to overfitting, in place of using a single Decision Tree.
4.	Social Impact / Customer Satisfaction	Our solution has a significant social impact as it empowers potential car buyers to make informed choices. We improve their entire car-buying experience by giving them precise estimates of their propensity to acquire a vehicle.
5.	Business Model (Revenue Model)	Our business model revolves around providing predictive analytics services to automotive businesses. The prediction model can be licensed to other automotive businesses, or we can offer subscription plans and consulting services to make money off of it.
6.	Scalability of the Solution	We have a highly scalable solution. The predictive model is suitable to all types of organizations since it can handle a larger dataset with more customer information. Furthermore, we can effectively scale up the prediction process by utilizing random forests