Project Design Phase-I
Proposed Solution

Date	22 October 2023
Team ID	593155
Project Name	Car purchase Prediction Using ML
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Develop a robust ML model to accurately predict the likelihood of an individual making a car purchase based on their demographic and historical data. This prediction will serve as a valuable tool for automakers and dealerships, enabling them to optimize marketing strategies, enhance customer experiences, and make data-driven decisions for increased sales and customer satisfaction.
2.	Idea / Solution description	We propose to create an innovative ML solution that leverages customer data, including age, income, and historical purchase patterns, to predict car purchases. This solution will offer a user-friendly interface where potential buyers can input their demographic information, and the system will provide precise purchase likelihood estimates.
3.	Novelty / Uniqueness	The uniqueness of our approach resides in its capacity to effectively combine sophisticated machine learning algorithms, careful data preprocessing, and an intuitive interface design in order to forecast car purchases. By enabling data-driven decision-making and customized marketing strategies, it maximizes productivity for the automobile industry.
4.	Social Impact / Customer Satisfaction	Because this project improves the total customer experience in the automotive business, it has a substantial social impact. Personalized purchase likelihood estimates will be provided to prospective car customers, empowering them to make well-informed choices. Automakers and dealers may boost sales and customer satisfaction by optimizing their marketing campaigns.
5.	Business Model (Revenue Model)	One possible revenue model for this approach is to license the prediction software to car dealerships and manufacturers. granting users of the prediction tool access through a subscription-based service.

		provide advice on how to best optimize marketing plans in light of the forecasts.
6.	Scalability of the Solution	The solution is highly scalable as it can be implemented across various automakers and dealerships. It can accommodate a large volume of user inputs and data, making it suitable for widespread use in the automotive industry. Additionally, the predictive model can be continuously updated and improved to adapt to changing market conditions and customer preferences.