Proposed Solution

Date	1st November,2023
Team ID	Team-593183
Project Name	Car Purchase Prediction using ML
Maximum Marks	2 Marks

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	A User Interface is to be developed, which will help the customers to buy a car by predicting whether they should buy a car or not based on their income, age and previous history of having a car. The website will also help the marketing department to target a particular portion of the audience to market their product and in turn increase the sales. The whole prediction will be based on Machine Learning algorithms.
2.	Idea / Solution description	The problem Has to be solved following these steps: ● Dataset collection- A proper dataset is to be collected or created based on the problem. ● Getting started with the thorough analysis of the dataset along with its visualization. ● Data Pre-Processing, checking for null values, detecting outliers, label encoding, splitting the dataset into training and testing dataset. ● Model building, testing the model and finding its accuracy and saving the model. ● Building the application with help of HTML code and python file.
3.	Novelty / Uniqueness	Our project Can be made unique by: ● We'll not only predict whether a customer can buy a car or not, we'll also predict what type of car they can buy. ● We'll include a feedback form at the end of the application to record customer satisfaction. ● We'll ensure the safety of the data shared to us by the customer by ensuring data privacy and

		inculcating user consent.
		- We can even enter a portion explaining the customers why they should buy that certain car. - We can also add a section where users can add reviews of their cars.
4.	Social Impact / Customer Satisfaction	To emphasize social impact and Customer satisfaction: - Community engagement can be promoted, that is a group of people can unite over a single platform sharing feedback about the car they are currently using, even reading feedback about the car they want to buy. - We will initiate a user feedback form to take suggestions from the user so that we can make our website better. - We will try educating users about the social environmental impact that the car-buying decision will bring. - In the later part, if possible, we will try to include voice typing and other assistance like that, so that everyone can access the application with ease.
5.	Business Model (Revenue Model)	To add a business model, specifically revenue model to the project, we can: - One has to subscribe for a minimum of $10 to get premium services, like premium recommendations, priority customer support, etc. - We can allow companies to give ads on our website and in turn we can earn some amount of revenue from them. - A basic version of the prediction system will be available free online, but the exclusive features and advanced analysis will only be available for premium users. - Partner with companies such as car magazines,automotive events, to promote or co-promote their products, in return of sponsorship fees.
6.	Scalability of the Solution	In order to reach a broader portion of the audience, scalability is necessary: - A Machine Learning algorithm has to be designed that will be able to handle a large amount of user data and adapt to changing user behaviors. - Load management of the user requests on the website is a very important factor that has to be taken care of. - Large amounts of data should be handled well and stored well, as any fallacy may cause a huge loss for the project.

		- The application must be adaptable and accessible across various devices and various screen sizes. - To increase global scalability, the application has to deployed across various geographic regions to reduce latency and improve user experience.