Project Design Phase-I
Proposed Solution Template

Date	22 October 2022
Team ID	Team - 593081
Project Name	Project – Car Purchase Prediction
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No	Parameter	Description
1.	Problem Statement (Problem to be solved)	In the automotive industry, companies often spend large amounts of money to advertise to a large audience with sub-par levels of success. They try to increase the number of people watching their ads and in trying to do so, have to invest a lot of money into advertising. This money used in advertising is not spent optimally as the success rate of these ads are far less than the effort they require.
2.	Idea / Solution description	Develop a car purchase prediction system leveraging Convolutional Neural Networks (CNNs). This system will be used to predict if a person will purchase a car or not using variables such as gender, age and annual salary. Using our model, the companies can target their ads more efficiently, thereby increasing the success rate for their ads but at the same time reducing the cost of producing the ads as well. This will cut the cost of advertising in half but at the same time, the companies reach and number of customers will remain intact.
3.	Novelty / Uniqueness	Use of Convolutional Neural Networks (CNNs) for car purchase prediction ensures precision and efficiency, and reduces the cost of advertising by a lot. It enables the company to scout out their target audience and strategically advertise their cars to that targeted audience. This provides a unique and cost effective approach towards marketing and finding potential customers
4.	Social Impact / Customer Satisfaction	By accurately predicting whether a person will buy a car or not, we can easily find our target audience and target our ads. This in turns establishes a system where in data of the people if being processed and rendered useful in various fields. This model will shift focus from the amount of ads to the quality of ads thereby reducing costs for the company as well as helping people reach their required products.
5.	Business Model (Revenue Model)	The core business revolves around the development, licensing and sale of the car purchase prediction software. The revenue streams encompass mainly the sale and

		maintenance of the car purchase prediction software. The model can be sold to car companies in order to help them with their advertising campaigns, making them more effective.
6.	Scalability of the Solution	Car purchase prediction is easily scalable as it has no hardware parts to it. We can simply change the size of the dataset to accommodate a varied crowd in a different part of the world. We can easily alter the training parameters as well making the model more accurate by having more independent variables in it.