

Project Design Phase-I
Proposed Solution Template

Date	05 MAY 2023
Team ID	NM2023TMID00131
Project Name	AI enabled car parking using open CV
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The problem of finding an appropriate parking space is a challenging one, particularly in large cities. With the increase in car ownership, parking spaces have become scarce. The growing demand for these spots coupled with limited availability has led to imbalances between supply and demand. A lack of adequate parking management systems has resulted in many streets being littered with illegally parked cars. A scalable, reliable, and efficient parking management system is needed to combat this problem
2.	Idea / Solution description	At first, there were no parking lanes in the parking lot. The user must manually enter the location of the intended parking spot and the car. The system automatically creates virtual parking spaces while taking the size of the vehicle into consideration. Our system will check to see if there are any cars in each block after the parking area has been partitioned into virtual blocks.
3.	Novelty / Uniqueness	The unique features of AI enabled car parking is its ability to integrate with mobile payments technologies, parking meters. In addition to making, it simple for users to pay this integration offers helpful information and insights for parking management. Overall AI enabled automobile parking's novelty and distinctiveness reside in its capacity to automate the parking process utilising cutting edge technology adapt to shifting conditions in real time and offer users a flawless parking experience.
4.	Social Impact / Customer Satisfaction	Overall, Ai-enabled auto parking utilising open CV can have a beneficial social impact by reducing traffic congestion, enhancing safety and security, enhancing accessibility, saving money, and managing parking lots based on data.

5.	Business Model (Revenue Model)	A variety of revenue source, such as parking fees, subscription, advertising, data-driven insights, and consulting services, may be included in the business model for AI-enabled car parking utilising open cv. The market's specific needs and wants, as well as the capacity to offer customer a dependable and parking experience, will determine the viability of company model.
6.	Scalability of the Solution	An AI-enabled auto parking system can grow to meet the needs of larger and more complex parking lots with the correct technology, resources, and business model