Project Design Phase-I

Proposed Solution Template

Date	18-05-2023
Team ID	NM2023TMID14621
Project Name	**AI enabled car parking using openCV**
Maximum Marks	2 Marks

Proposed Solution Template:

S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Inefficient car parking management leading to congestion, difficulty finding parking spaces, and reduced overall parking efficiency
2.	Idea / Solution description	Develop an AI-enabled car parking system using OpenCV to automate parking space detection, monitoring, and guidance, improving the overall parking experience and efficiency
3.	Novelty / Uniqueness	Utilize OpenCV and computer vision algorithms to detect and track vehicles, analyze parking occupancy in real-time, and provide accurate guidance to drivers for available parking spaces
4.	Social Impact / Customer Satisfaction	Enhance customer satisfaction by reducing the time spent searching for parking spaces, minimizing congestion, and optimizing the utilization of parking resources. This improves the overall traffic flow and reduces environmental impact.
5.	Business Model (Revenue Model)	Revenue can be generated through various models such as charging parking fees, providing value-added services like reservations, offering premium parking

		options, or partnering with parking lot operators and municipalities
6.	Scalability of the Solution	The AI-enabled car parking solution can be scaled by integrating with multiple cameras and parking lots, expanding the system's coverage and accommodating larger parking facilities. Additionally, the solution can be customized to meet the specific needs of different parking environments