**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 22 October 2023 |
| Team ID | Team-592107 |
| Project Name | Project - **AI Enable Car Parking Using OpenCV** |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

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

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| **S.No.** | **Parameter** | **Description** |
| 1. | Problem Statement (Problem to be solved) | The primary objectives are to optimize parking space utilization, enhance the user experience, ensure security, and promote environmental sustainability in parking facilities. |
| 2. | Idea / Solution description | The project involves developing an intelligent system that can identify empty parking spaces and it gives the count of available parking spots.  The system uses a camera and OpenCV (Open Source Computer Vision) library to capture live video footage of the parking lot. |
| 3. | Novelty / Uniqueness | These novel and unique features and solutions combine to create an AI-enabled car parking system that goes beyond the basic functions of parking management. It prioritizes user experience, security, sustainability, and community engagement, setting it apart from conventional parking systems. |
| 4. | Social Impact / Customer Satisfaction | The "AI-Enabled Car Parking Using OpenCV" project not only improves the customer experience but also has broader social implications by reducing stress, promoting environmental sustainability, enhancing safety, and fostering community engagement. These social impacts, in turn, contribute to high levels of customer satisfaction, making the parking facility an attractive and user-friendly choice for urban mobility. |
| 5. | Business Model (Revenue Model) | The "AI-Enabled Car Parking Using OpenCV" project to create a diversified business model. It not only generates income from parking fees but also leverages technology, partnerships, and user engagement to enhance profitability and sustainability |
| 6. | Scalability of the Solution | The "AI-Enabled Car Parking Using OpenCV" solution is capable of growing with the demand, whether that means accommodating more users, expanding to additional locations, or incorporating new features and services. Scalability ensures that the system remains efficient, reliable, and cost-effective as it evolves. |