**Project Design Phase-I**

**Proposed Solution**

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| Date | 06 May 2023 |
| Team ID | NM2023TMID18956 |
| Project Name | AI ENBLED CAR PARKING USING OPENCV |

**Proposed Solution :**

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | Normal parking not only consumes your precious time but fule as well. Statistics state that vehicles spend up to 1,00,000 barrels of oil supply daily looking for a parking spot. Furthermore, irregularly parked cars are more prone to road accidents. |
|  | Idea / Solution description | AI-based parking is an innovative combination of modern technology and creative human intelligence.   * By analysis of traffic direction and flow * By recording the free space * By studying filled spaces to predict free parking spaces * Utilizing devices such as cameras and sensors to gather the information as mentioned above. |
|  | Novelty / Uniqueness | It optimizes parkonog space and make processes efficient. It gives real time car parking information such as vechile and slot counts , available slot display , reserved parking. |
|  | Social Impact / Customer Satisfaction | Reducing wait time is crucial for customer satisfaction. A AI enabled car parking helps achieve this by providing the free spaces Instead of waiting in queues for parking. |
|  | Business Model (Revenue Model) | The paring of a car in parking space in a particular parking area, the parking owner charges a certain amount from the user. A part of this amount is returned to the parking owner as a commission fee for using the parking space. |
|  | Scalability of the Solution | There is a huge wastage of fuel and time in the manual parking system. During any kind of emergency, it is highly impossible for anyone to wait all the way to the parking lot, which may lead to any kind of danger. Manual parking systems must be fast enough and the person should be attentive all day, which is also not so effective. To avoid such circumstances, it is essential to develop an intelligent parking system that utilizes the benefits of artificial intelligence. |