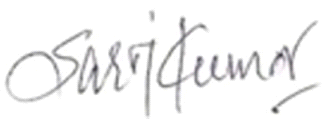
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **University Institute of Engineering, Chandigarh University**  **Department of Computer Science & Engineering**  **Phase I(Project Scope, Planning and Task Definition)**  **Date: 04-03-2022** | | | | | | | | | | | | | | | | | |
| **Project Title**: Parking Space Counter using OpenCV Python | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | |
| **Project Team** | | | | | | | | | | | | | | | | | |
| **Team Designation** | | **Name** | | | | | | | | | **UID** | | | **Section** | | | |
| **Lead** | | **Mehakpreet Kaur** | | | | | | | | | **20BCS1320** | | | **PH20BCS602-B** | | | |
| **Member1** | | **Rishit Gupta** | | | | | | | | | **20BCS1270** | | | **PH20BCS602-A** | | | |
| **Member2** | | **Abhijeet Kaur** | | | | | | | | | **20BCS1326** | | | **PH20BCS602-B** | | | |
| **Project Scope** | | | | | | | | | | | | | | | | | |
| We are going to create a Parking Space Counter. We will find how many total cars are present and how many spaces are vacant to park. The best thing about the project is that we will be using basic Image Processing techniques to solve this problem. | | | | | | | | | | | | | | | | | |
| **Project Planning and Task Definition** | | | | | | | | | | | | | | | | | |
| We planned to design a project of parking monitoring and control system to count the number of cars entering and leaving a parking and provide information about free parking spaces. We will use image processing techniques to find the total number of cars can be parked in the area and how many vacant slots left to be parked.  Steps to be taken in project:   * Install packages(OpenCV, pickle,numpy) * Write code to import image, video or to connect webcam with the file. * Write code to create a rectangle around the slots. * Use the image processing technique to check the slots are filled or vacant. * Store the total counts of spaces and counts of spaces filled in the specific variables. * Output the current count on the screen. | | | | | | | | | | | | | | | | | |
| **Project ID (If selected from project basket)** | | | | | | | |  | | | | | | | | | |
| **Project Outcome (Tick the Column)** | | | **Patent** | |  | **Journal Paper** | |  | **S/W Project** | | | √ | **H/W + S/W Project** | |  | **Other** |  |
| **Remark of Supervisor** | | | | | | | | | | | | | | | | | |
| The project will help in detecting number of slots vacant in parking. It helps in management of parking area by reducing traffic in parking area. | | | | | | | | | | | | | | | | | |
| **Name of Supervisor** | | **Ms. Neha** | | | | | **Signature** | | |  | | | | | | | |
| **S.No.** | **Signature of the Students** | | | **Contact No.** | | | | | | | | **Signature** | | | | | |
| **1.** | **Mehakpreet Kaur** | | | **6239993018** | | | | | | | |  | | | | | |
| **2.** | **Rishit Gupta** | | | **97565 51911** | | | | | | | |  | | | | | |
| **3.** | **Abhijeet Kaur** | | | **9588163806** | | | | | | | |  | | | | | |



**(Dr. Saroj Kumar)**

**Signature**

**(Project Teacher)**