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|  | **Title:SDP Project Registration & Progress Review** | | **FF No. 180** |  |
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| **Department: SY Common** | | **Academic Year: 2021-2022** | | | |
| **Semester: 3** | | **Group Number.:** | | | |
| **Project Title:** Social Distance Detector Using Deep Learning | | | | | |
| **Project Area:** deep learning, Convolutional neural network, Covid-19 | | | | | |
| **Group Members Details:** | | | | | |

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| Project approved / Not approved  Guide Coordinator Head of Department |

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**PROJECT SYNOPSIS: -**

* **ABSTRACT:** COVID19 is a disease caused by the coronavirus, severe respiratory syndrome. The coronavirus is transmitted from person to person primarily through close contact. The document proposes a social distance detection method that uses deep learning to assess the distance between people to mitigate the impact of the coronavirus pandemic. The detection tool is designed to remind people to keep a safe distance from each other by evaluating video sources. Taking the video frame of the camera as input, the open source object detection pre-training model based on the YOLOv3 algorithm is used for pedestrian detection. Later, the video frame is converted into a top-down view to measure the distance from the 2D plane. The distance between people can be estimated. Anyone who does not meet the standard on the screen will be indicated by a red frame and a red line. The proposed method is verified in a pre-recorded video of pedestrians walking on the street.
* **PROBLEM STATEMENT:** It is difficult to know particularly who is affected by the novel coronavirus. Social Distancing is one of the best ways to stop spread of the virus by slowing down social interaction and maintaining physical distance. So a algorithm is required that will detect whether people are following social distancing or not.
* **PROPOSED SOLUTION:** By using computer vision, a model detecting the social distance between people in the crowded place will be developed. It will basically detect the people who are following social distance and who are not, after detecting it will indicate them with the green box for the person who follows the social distancing and with the red box for the persons who violates the social distancing.

**FF No180**

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| Batch No. | 2 | | |
| Activity | Review Schedule | Progress Review Report submitted | Signature of Guide |
| Review 1 | Mid Sem. Semester |  | **Varsha Dange** |
| Review 2 | End of Semester |  | **Varsha Dange** |

Format of Progress Review Report:

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| **Review No.: 1 Group No.: Date:** |
| **Progress Review Report** |
| **Signature of Guide: Varsha Dange** |

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| **Review No.: 2 Group No.: Date:** |
| **Progress Review Report** |
| **Signature of Guide: Varsha Dange** |