Project schedule

Week 1: Understanding OpenCV and adding support module to use the device camera.

Week 2: Implementing the logic for object detection.

Week 3: Understanding Realtime object tracking and adding it to the project.

Week 4: Adding the support for measurement of the distance between the detected objects.

Week 5: Understanding YOLO object detection algorithm.

Week 6: Implementing YOLO for real-time object tracking from live feeds.

Week 7: Implementing the logic to measure distance between detected objects using Euclidean distance.

Week 8: Understanding the IP Webcam app for android and adding to project.

Week 9: Adding support for mobile camera to use in the desktop application.

Week 10: Adding functionality to raise an alarm when Social Distance Violation is detected.

Week 11: Displaying both Social Distance Violation and Human Count on the OpenCV frame.

Week 12: Understanding NVIDIA GPU ACCELERATION (CUDA, CuDNN)

Week 13: Adding GPU computing support using CUDA for NVIDIA Graphic Cards.

Week 14: Creating a GUI for the App using python Tkinter.

Week 15: Adding individual support for Social Distance Detection, Human count and Both in GUI.

Week 16: Understanding regex module in python to add limitations and parameters to the input given by the user and implementing it.

Week 17: Adding Support to Record Data directly from the OpenCV frame.

Week 18: Understanding the OS module in python to store data into text file, word file, excel file, etc. and perform creation and deletion process.

Week 19: Adding support to convert the stored data into different file format like pdf, etc.

Week 20: Finalizing the project app and start testing in Real World to check for bugs.