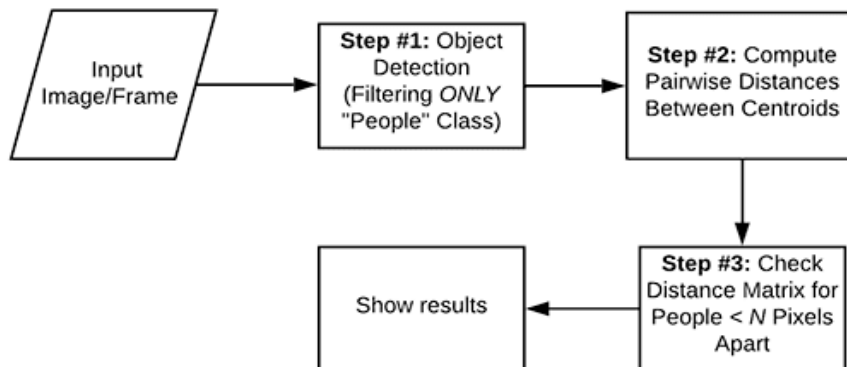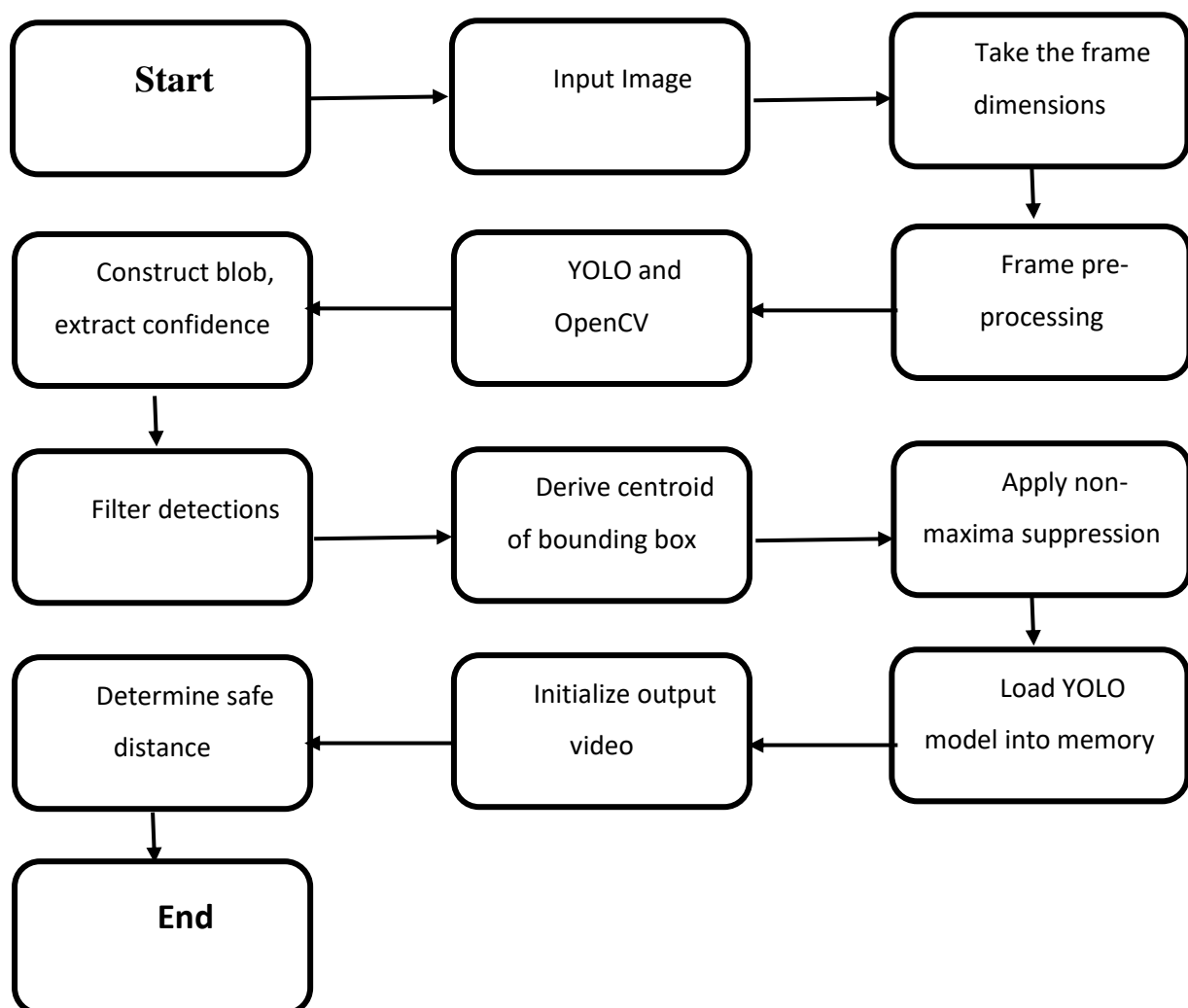Wireframe Documentation

SDD (Social Distancing Detection)

This project does not have web App. And hence I will include input to the project, final results snapshot and actual working of entire code.
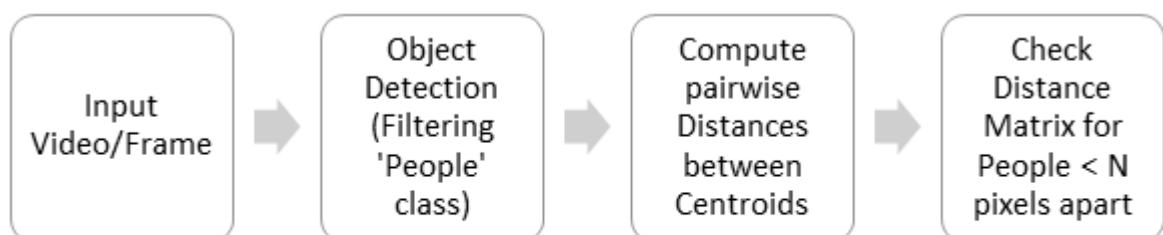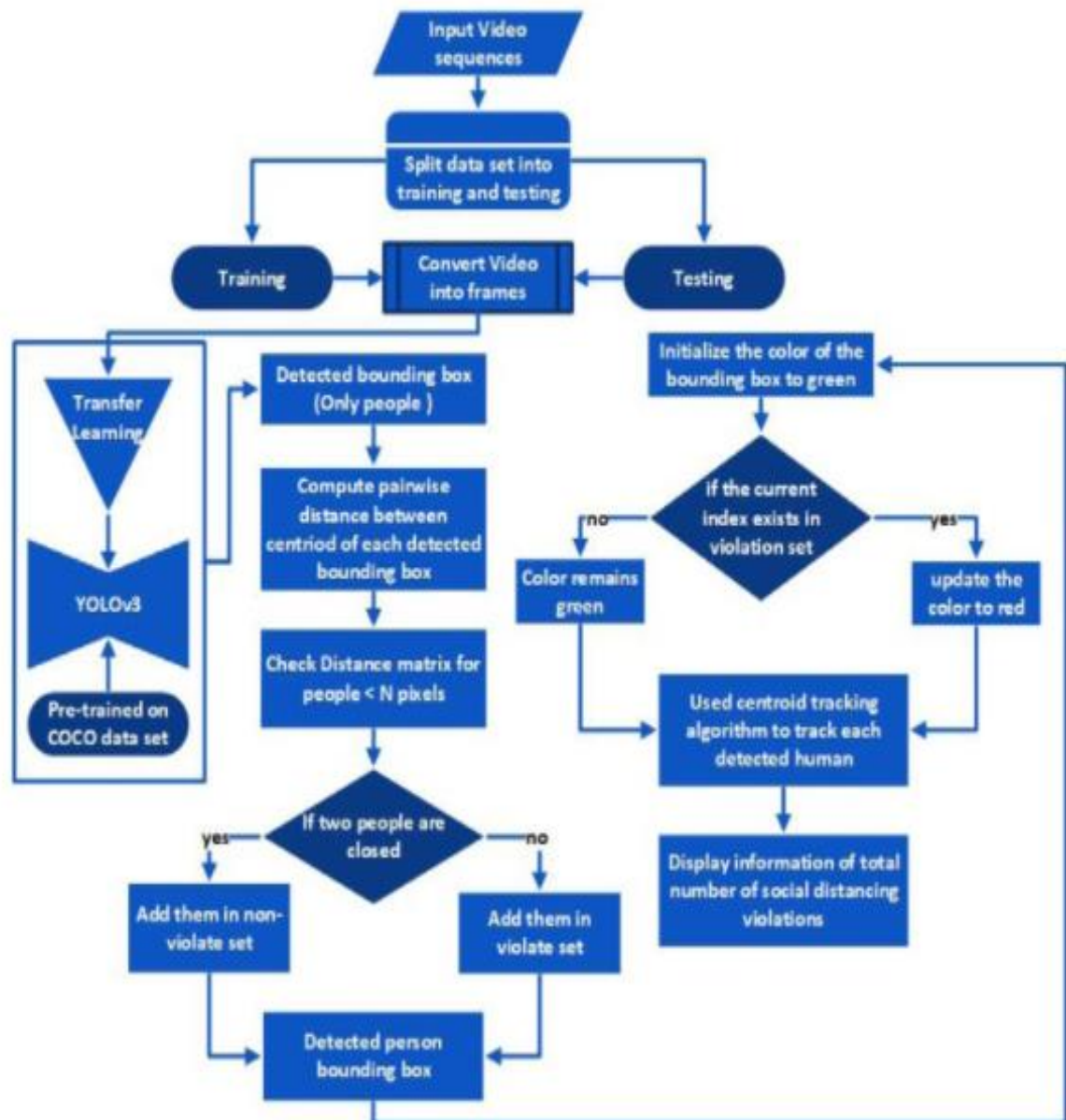
Process Flow:

Architecture

Sample Inputs:

Model WorkFlow

The steps involved in an OpenCV-based social distancing application.

Snapshot of result (video)

Logfile Sample

```
2022-03-08 17:18:54,051 - log_f - 13 - INFO - !!!Logging Started!!!
2022-03-08 17:18:54,051 - <module> - 5 - INFO - Inside Driver code
2022-03-08 17:18:54,052 - argument_parsing - 17 - INFO - Arguments are: {'input': 'input_files/walk1.mp4', 'output': 'my_output.avi', 'display': 1}
2022-03-08 17:18:54,053 - model - 27 - INFO - LabelsPath = yolo-coco/coco.names
2022-03-08 17:18:54,053 - model - 29 - INFO - LABELS = ['person', 'bicycle', 'car', 'motorbike', 'aeroplane', 'bus', 'train', 'truck', 'boat', 'traffic light'
2022-03-08 17:18:54,053 - model - 30 - INFO - Loaded the COCO class labels on which YOLO model was trained on
2022-03-08 17:18:54,053 - model - 34 - INFO - weightsPath==>yolo-coco/yolov3.weights
2022-03-08 17:18:54,053 - model - 35 - INFO - configPath==>yolo-coco/yolov3.cfg
2022-03-08 17:18:54,053 - model - 37 - INFO - Loading YOLO from disk...
2022-03-08 17:18:54,388 - model - 45 - INFO - We are not using GPU here..
2022-03-08 17:18:54,388 - <module> - 78 - INFO - calling function :  access_frame()
2022-03-08 17:18:54,415 - access_frame - 63 - INFO - initialize the video stream and pointer to output video file
2022-03-08 17:18:54,415 - access_frame - 67 - INFO - Total frames in video==>341
2022-03-08 17:18:54,415 - <module> - 80 - INFO - calling function : distance_checker()
2022-03-08 17:18:54,415 - distance_checker - 83 - INFO - Displaying social distance detection result..!!!
```