

## CHAPTER 6

### CONCLUSION

We can improve the performance of the “System for detection and recapitulation of health protocol violations based on computer vision technology that is integrated with websites and smartphone applications“ by changing the object detection model. From the experiment, we know that SSD ResNet50 V1 FPN is the most effective model. Although the researcher did two times experiment, the results were approximately the same. In the first experiment, mean average precision, mean average precision of medium images, mean average precision of small images, average recall, average recall for large images, average recall of medium images, and an average recall of small images SSD ResNet50 V1 FPN has the better results than others. Also in the second experiment, mean average precision, mean average precision of large images, mean average precision of medium images, mean average precision of small images, average recall, average recall of medium images, and an average recall of small images SSD ResNet50 V1 FPN has the better results.

Compared to the SSD MobileNet V2 architecture, even though both use SSD architecture, it is evident that the addition of the ResNet50 V1 FPN architecture makes for better performance than the addition of MobileNet V2 architecture. Compared to the Faster R-CNN ResNet50 V1, it is evident that the addition of the ResNet50 V1 FPN architecture can make SSD architecture more accurate than Faster R-CNN architecture that basically on many research more accurate.

For the next research, the researcher has suggestions about the dataset. It's better if in the next research the dataset is more varied. Also better if in the next research the researcher uses more steps for the training.