Group 5 Summary:

This group's project is about replicating the RAPiD model from "*Rotation-aware people detection in overhead fisheye images*". In addition to that, they would like to train a binary image classifier to determine whether workers wear all necessary safety equipment using the EfficientNetV2 model.

The datasets they use to train the detector are HABBOF and CEPDOF, which each of them has some advantage and disadvantage. The dataset for training the classifier is self-made scraping from the internet.

What special about RAPid when compare to other YOLO based image classifier is that RAPid uses arbitarily-rotated bounding boxes rather than radial-aligned bounding boxes or rotated anchor boxes. Therefore, RAPiD has less computational complexity.

The advantage of EfficientNetV2 is that it apply progressive learning and has smaller parameter size compare with ImageNet.

Their preliminary result includes successfully implement and train the RAPid model and achieve a similar result with the original paper.

Strength:

The report described everything in great detail. It explained various technical term clearly, for example, RAPiD and EfficientNetV2. All figures and tables are helpful in explaining thing.

Weakness:

It would be nice if they could show the table 3 in [4] in the report.

Evaluation:

Criteria	**Points**
Quality of writing	5
Presentation	5
Creativity	5
Confidence on my assessment	2