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 each 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 crawled standard images 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.

This team is able to replicate the RAPiD model in project 1. What new in project 2 is that several technique has been employed to improve the performance, for example performing holdout cross-validation, hyperparameters tuning and some complex image augmentation.

Strength:

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

Evaluation:

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