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From: TOP GUN

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Summary

Team Top Gun finished building artificial intelligence models this week, and in the process of finding the best performance model by changing the hyperparameter. In addition, team Top Gun almost completed creating an Android application.

What TOP GUN completed this week:

- Created the loading, main, select, and result page for the application.
- Linked the pages to the XML file.
- Linked the application with the local camera then linked it to the XML file.
- Linked the application with a local gallery.
- Checked the storage path of the photo when it was taken on the application.
- Implemented the button of the select page.
- Ran 3 Classes of the classification model, 8 Classes of the classification model, and the Regression model by modifying hyperparameters to find the best performance model.
- Uploaded the YOLOv4 model to the server.
- Implemented the feature that sends the uploaded images to the server.
- Built the Android activity java code.

Things to do by next week

- Change the hyperparameters of the machine learning model and deep learning model to obtain the best accuracy.
- Revise the Abstract, Introduction, and Methodology of the IEEE paper.

Problems or challenges:

- It was difficult to implement the function of storing pictures in the local custom directory.
- It was difficult to implement the function of connecting the Android application to the flask server.
- Finding the best-performing model was tough since running the models to obtain accuracy and loss takes a lot of time.

References

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