

Spring Break Check-in (April 1st, 2024)

Completed Steps:

- Researched architecture (YOLOv8, OpenCV)
- Gathered various datasets to test and train the model with (Roboflow, Kaggle)
- Analyzed various datasets to determine the best dataset(s) for our product
- Designed project code structure
- Delegated tasks to members of the team
- Assigned due dates to minor benchmarks for the

Steps to work on:

- Compile and build custom datasets from multiple sources
- Implement project architecture, including but not limited to:
 - Implementation for templates / training data
 - Scalable image detection
 - Basic image / template identification
- Compile code and convert from Google Colaboratory into an executable file (optional)
 - For this, we would include a command line tool to work with.
- If time permits, download model weights and build UI for inference (can also upload to Roboflow for already built UI)

How-to-use-YOLO: <https://blog.roboflow.com/how-to-train-yolov8-on-a-custom-dataset/>

Datasets:

- Plane closeups: <https://universe.roboflow.com/test-j5noj/plane-zonaw/dataset/1>
- Planes in skies:
<https://universe.roboflow.com/testiharac/test-0.01/dataset/6/images>

Colab Link:

<https://colab.research.google.com/drive/1R6fC9SSZ0jGePDqLVMIVYQ0n4hQRfWsF?usp=sharing>