Deeploy CV Project

Assignment: 2

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Summary

I did the 1st and 3rd question. The 1st question was about implementing YOLO and SSD models on a video and comparing the two results. YOLO worked fine in my case, but the SSD model was not giving expected results.

YOLO and SSD are both object detection models, but they differ in architecture and performance. YOLO divides an image into a grid and predicts bounding boxes and class labels for each cell in one pass, making it faster for real-time applications. SSD, on the other hand, uses multiple feature maps at different scales to detect objects of various sizes, which can improve accuracy for smaller objects. While YOLO is typically faster and better suited for high-speed tasks, SSD offers better accuracy, especially for small object detection. YOLO is preferred for real-time applications, while SSD is often chosen for more accuracy-dependent tasks.

The 3rd question was about detecting the flag of Poland or Indonesia using object detection.

Link to GitHub Code: Click here.

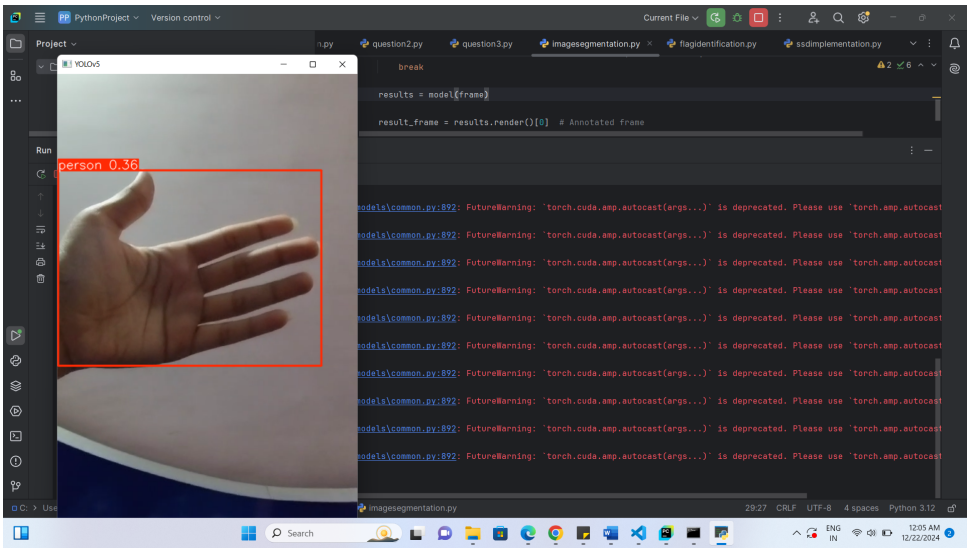

Figure 1: Output in PyCharm for Question 1 using YOLO

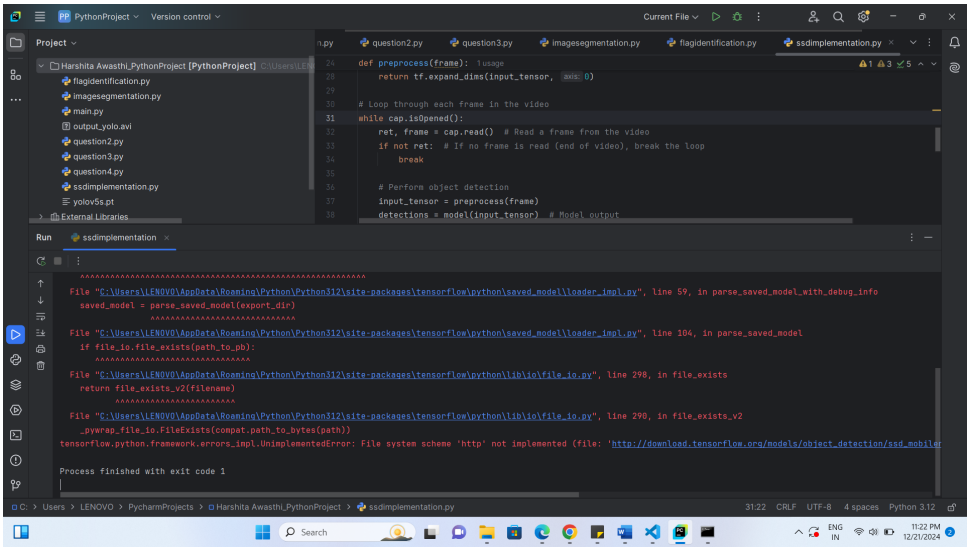

Figure 2: Output in PyCharm for Question 1 using SSD

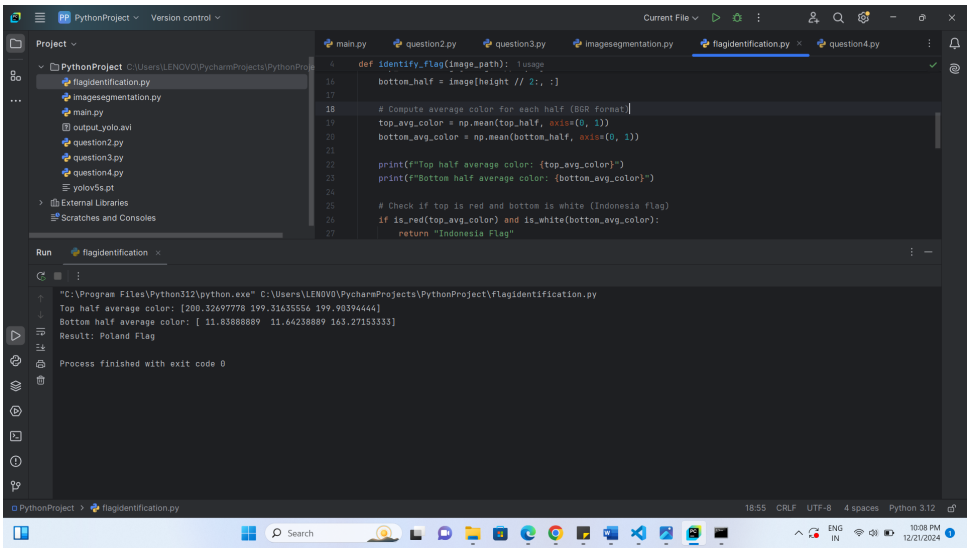

Figure 3: Output image for Question 3

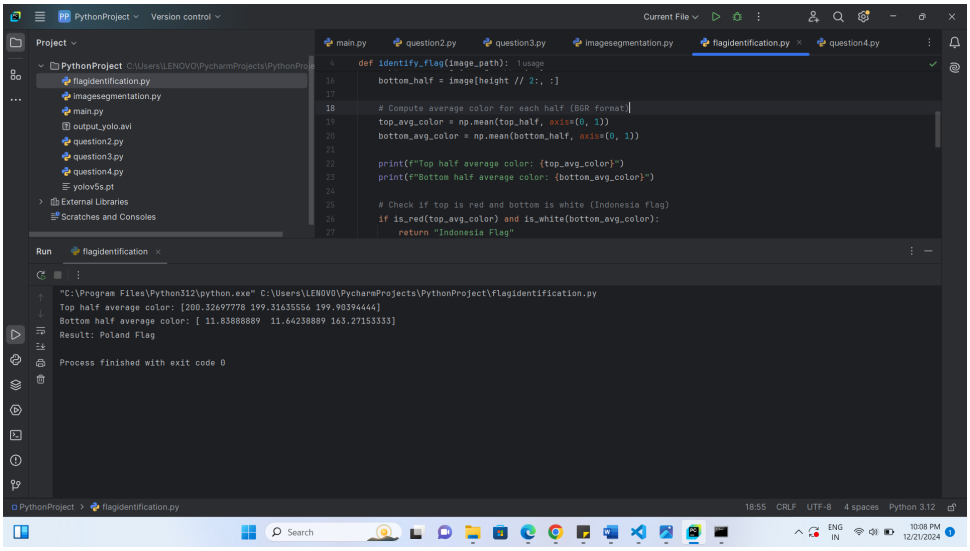

Figure 4: Question 3 output in PyCharm