Simple Report: YOLOv8 Real-Time Object Detection

This project detects objects live from a webcam using the YOLOv8 model.

How it works:
- The webcam captures video frames.
- Each frame is sent to the YOLOv8 model, which finds objects and draws boxes around them.
- The annotated frames show on screen in real-time.
- The system shows FPS (speed) and inference time to track performance.

Approach:
- Uses a fast pre-trained YOLOv8 model optimized for real-time use.
- Runs on GPU if available for faster processing.
- Uses smaller input size to improve speed with good accuracy.
- Limits detections by confidence and max count to reduce noise.
- Displays results and can save video if needed.

This makes object detection fast and accurate enough for live use.