Group No: 20

Project Title: Fire and Smoke Detection using Images

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Weekly Progress Report

➢ **Tasks Performed in the week:**

1. Trained YOLOv8 on a custom dataset of fire images.
2. Fine-tuned the YOLOv8 model to increase its accuracy in detecting fires.
3. Implemented the YOLOv8 model into the fire-detection.
4. Conducted initial testing of the system and made necessary adjustments
5. Refining the fire-detection system and conducting further testing


```
Results saved to runs/detect/train
[(base) dhavalmakwana@DHAVALs-MacBook-Air detect %  python predict.py model='best.pt' source='img_259.jpg'
Ultralytics YOLOv8.0.0 🚀 Python-3.10.9 torch-2.0.0 CPU
Fusing layers...
[W NNPACK.cpp:64] Could not initialize NNPACK! Reason: Unsupported hardware.
Model summary: 168 layers, 11125971 parameters, 0 gradients, 28.4 GFLOPs
image 1/1 /Users/dhavalmakwana/Downloads/Fire-Detection-using-YOLOv8-main/ultralytics/yolo/v8/detect/img_259.jpg: 640x640 2 Fires, 461.5ms
Speed: 2.6ms pre-process, 461.5ms inference, 15.6ms postprocess per image at shape (1, 3, 640, 640)
Results saved to runs/detect/train2
(base) dhavalmakwana@DHAVALs-MacBook-Air detect %
```