

Day 16: Python Training - Face Recognition Project (Recognition + Final GUI)

Objective:

Completed the real-time recognition phase and finalized the GUI for full user interaction.

Key Tasks Completed:

- Loaded the trained trainer.yml model and label mappings from labels.txt.
- Used webcam to detect and recognize faces in real-time.
- Compared detected faces with trained data and displayed the person's name and confidence score.
- Differentiated between known and unknown faces using a confidence threshold.
- Integrated the full pipeline into a GUI with two buttons: “ Collect Face” and “ Recognize Face”.
- Added final interface polish and exit instructions for usability.

Outcome:

Project now functions end-to-end—from collecting faces to training and recognizing them live through webcam, with a simple and effective GUI.