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**“Documentation of Task 6”**

**Face Profiling (Without dlib)**

**1. Introduction**

This project detects and analyzes human faces from an uploaded image without using the dlib library. **I tried many times to install Dlib in my setup and I also install C++ desktop development but I fail to do this then I use simple Mediapipe for my Face profiling model.** It uses **OpenCV and Haar cascade** **classifer** to detect faces efficiently. The system provides a simple Flask-based web interface for uploading an image and viewing the analysis result.

**2. Objectives**

* To detect human faces from an image using OpenCV.
* To create a simple and attractive web interface using Flask.
* To perform face profiling without depending on dlib or heavy deep learning models.

**3. Tools and Technologies**

* Python 3
* Flask (for web interface)
* OpenCV (for face detection)
* Mediapipe
* HTML, CSS (for front-end design)

**4. Working Process**

1. The user uploads an image through the web interface.
2. The system reads the image and applies OpenCV’s **Haar Cascade Classifier** to detect faces.
3. The detected face(s) are highlighted in the image.
4. The processed image is displayed back to the user with results.

**5. Features**

* Detects faces without using dlib.
* Lightweight and fast detection process.
* Simple, modern, and glowing web design.
* Works with most common image formats (JPG, PNG).

**6. Limitations**

* Works best with clear, front-facing images.
* May not detect faces at extreme angles or in poor lighting.

**7. Conclusion**

This project demonstrates basic **face detection and profiling** using only OpenCV and Flask, proving that accurate face analysis can be done even without advanced libraries like dlib.

**8. URL for Chrome(Front end) :**

http://127.0.0.1:5000

