

Project Title:

Funny Eye-Tracking Face App

Objective:

Create a Python application that displays a random face and makes the **eyes follow the user's mouse cursor** in real time, with a **funny cartoonish effect**.

Technologies Used:

- **Python 3.7–3.11**
- **OpenCV** – for image processing
- **Mediapipe** – for face and eye landmark detection
- **Pygame** – for GUI rendering and animation
- **Requests** – to fetch random images online
- **NumPy** – for math and coordinate calculations

Python Dependencies:

Install with:

```
pip install mediapipe pygame opencv-python numpy requests
```

Image Source:

- Uses <https://thispersondoesnotexist.com/> to get a random human face every time the app starts.

How It Works:

1. A random face is downloaded from the internet.
2. **Mediapipe** detects facial landmarks, especially eye regions.
3. **Pygame** displays the image in a window.
4. Two white circles represent eyeballs; a smaller black dot (pupil) moves inside each eye to follow the mouse.
5. This creates a **funny and interactive eye-tracking effect**.

Features:

- Real-time eye movement following the mouse
- Auto-detection of eyes using ML landmarks
- Random new face every time you run it
- Cartoon-like funny white eyes

Files Included:

- main.py — main Python script
- No extra files or assets needed

System Requirements:

- Python 3.7–3.11
- Any OS (Windows, Linux, macOS)
- Internet connection (to fetch face)
- 2GB+ RAM recommended