Ammar wael – 212721

Moahmmed essam – 212807

Mohammed gomaa – 213707

Momen hesham – 213217

**Scenario TUIO:**

1. Launch the servers
2. You can log in easily using Face ID for TUIO or use your username and password for the regular setup with a mouse and keyboard.
3. Leverage TUIO with ID 0 to effortlessly navigate the pie menu, exploring its various options based on the specific angle you choose.
4. The camera screen form will detect emotions in real-time, providing an enhanced and intuitive user experience.
5. On the camera screen, switch to the training assignment form. Use TUIO with IDs 1, 2, and 3, considering their rotation angles, to assign individualized training for each swimmer.
6. Each form will feature a convenient back circle within the pie menu, allowing effortless navigation to the previous screen.

**Scenario of mediapipe:**

1. Launch the server.
2. Launch the login window form.
3. The user can login easily using FaceID for mediapipe or use the user's username and password for the regular setup with a mouse and keyboard.
4. Once the camera opens, the user can switch between forms by swiping his hand to the right or left.
5. When the user goes to the form called camera screen the user acts to commit or start the button.
6. The user will perform a unique motion from hand gestures to a new form that he can allocate on more than one occasion if he has to assign a new swimmer.

**Concrete Scenario for AR:**

1. user can login easily using face ID for AR or use the user’s user name and password for the regular setup with a mouse and keyboard

2. user select the AR simulator button

3. the user will scan what he needs to be visualized before buying

4. the user will hold the camera 15 second on the title of the item he needs to be delivered for his home address

**Scenario: Exploring Gaze Tracking and Heatmap Generation**

Open the terminal and navigate to the script's directory.

Run the script using `python your\_script\_name.py`.

Launching the Application

A webcam feed window appears with face detection.

Blinking Detection

Intentionally blink to trigger "BLINKING" text on the screen.

Observe gaze direction feedback ("RIGHT," "CENTER," or "LEFT").

Explore the gaze heatmap in the secondary window.

Close the script and check the "Points.csv" file for gaze points.

Reflect on the experience and note any challenges or suggestions.

Interaction complete. Share feedback or proceed with further testing.