

## Implementation

**Step-1:** Download the Zip file and Unzip the file and save it in a new folder.

**Step-2:** Open the folder in Visual Studio Code.

**Step-3:** Open the terminal in the Visual Studio Code.

**Step-4:** Run these Commands in terminal

### 1. Install Python:

Ensure Python is installed on your system. You can download Python from the [official Python website](https://www.python.org/). Make sure to check the option to add Python to your system's PATH during installation. This step is crucial for VS Code to recognize Python.

### 2. Install the Python Extension for VS Code:

- a. Open VS Code.
- b. Go to the Extensions view by clicking on the square icon on the sidebar or pressing **Ctrl+Shift+X**.
- c. Search for "Python" in the extensions marketplace.
- d. Click on the Python extension offered by Microsoft and install it.

### 3. Select Python Interpreter:

- a. After installing the Python extension, you'll see a Python version indicator in the bottom-left corner of VS Code. Click on it.
- b. If multiple Python interpreters are available on your system, you can select the desired one from the list.

### 4. Xampp Server Installation:

#### Download XAMPP:

Go to the Apache Friends website.

Download the version of XAMPP suitable for your operating system (Windows, macOS, or Linux).

#### Run the Installer:

Once the download is complete, run the installer.

Follow the on-screen instructions to install XAMPP. On Windows, you might need to allow the installer to make changes to your device.

### **Choose Components:**

During the installation process, you'll be asked to select the components you want to install. Typically, Apache, MySQL, PHP, and phpMyAdmin are selected by default. You can leave these selected unless you have specific reasons to exclude any component.

### **Choose Installation Directory:**

Choose the directory where you want to install XAMPP. The default directory is usually fine, but you can change it if needed.

5. **Flask Installation:** Flask is a lightweight WSGI web application framework in Python.

**Command:** pip install Flask

6. **MySQL Connector Installation:** MySQL Connector/Python enables Python programs to access MySQL databases.

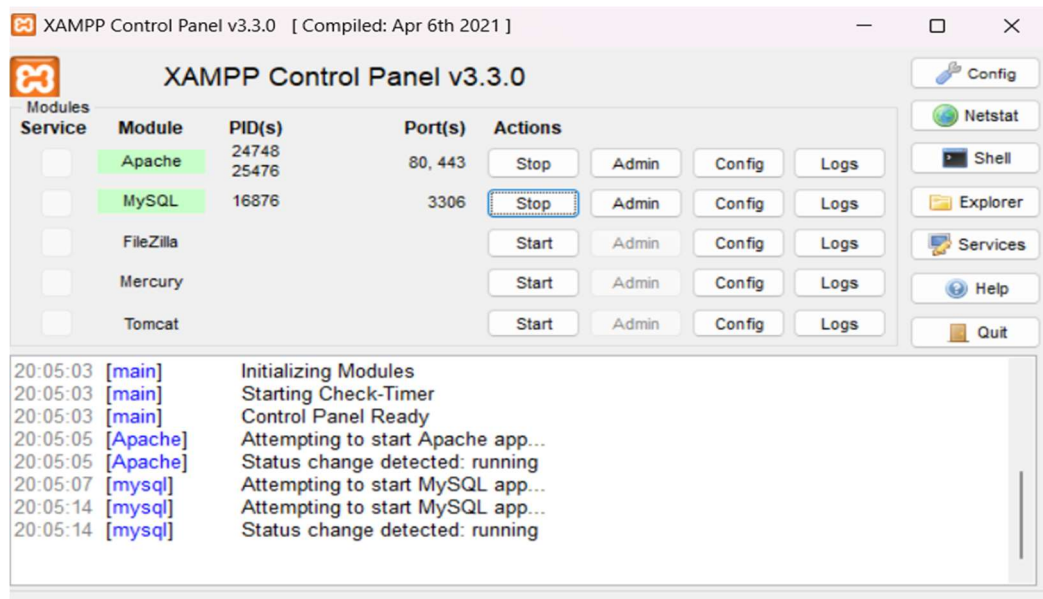
**Command:** pip install mysql-connector-python

7. **TensorFlow Installation:** TensorFlow is an open-source machine learning framework developed by Google.

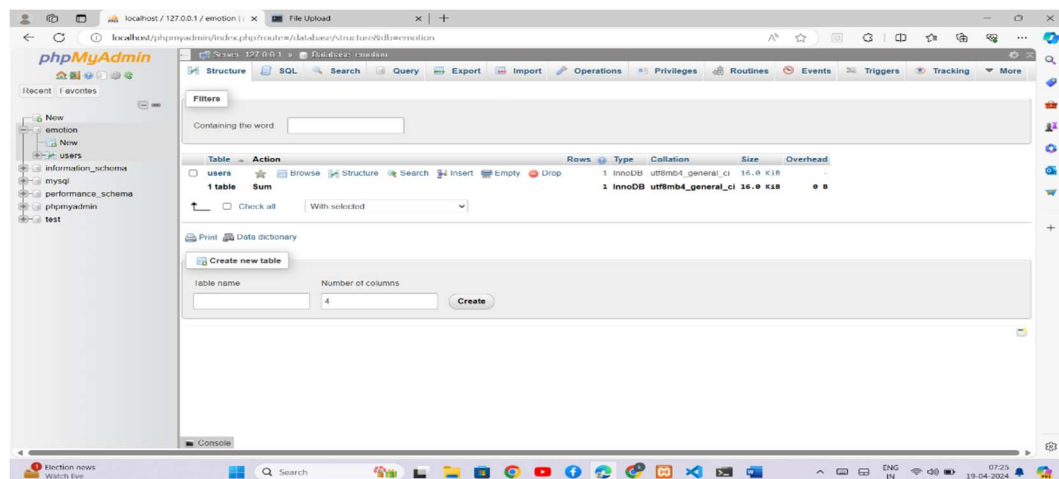
**Command:** pip install tensorflow

### **Step-5:** Execution of the code

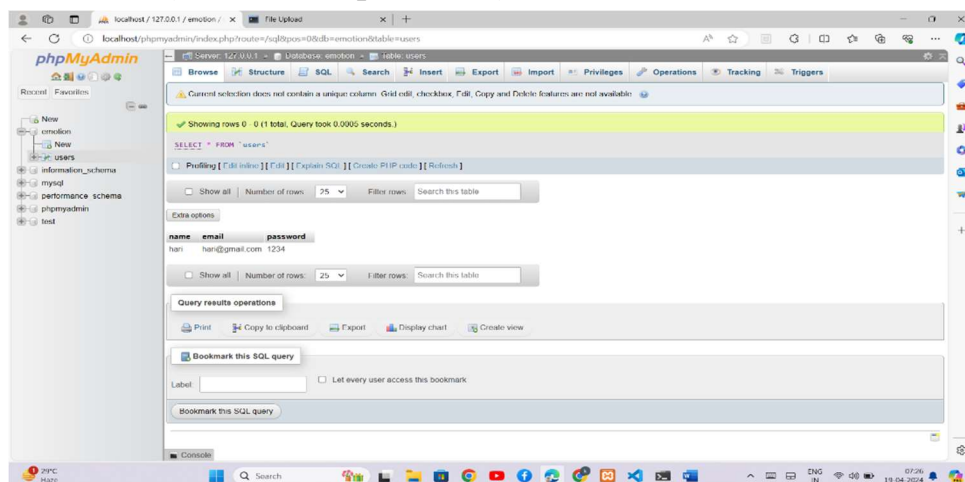
1. Start the control panel of xampp server
2. Start Apache and mysql in control panel of xampp server



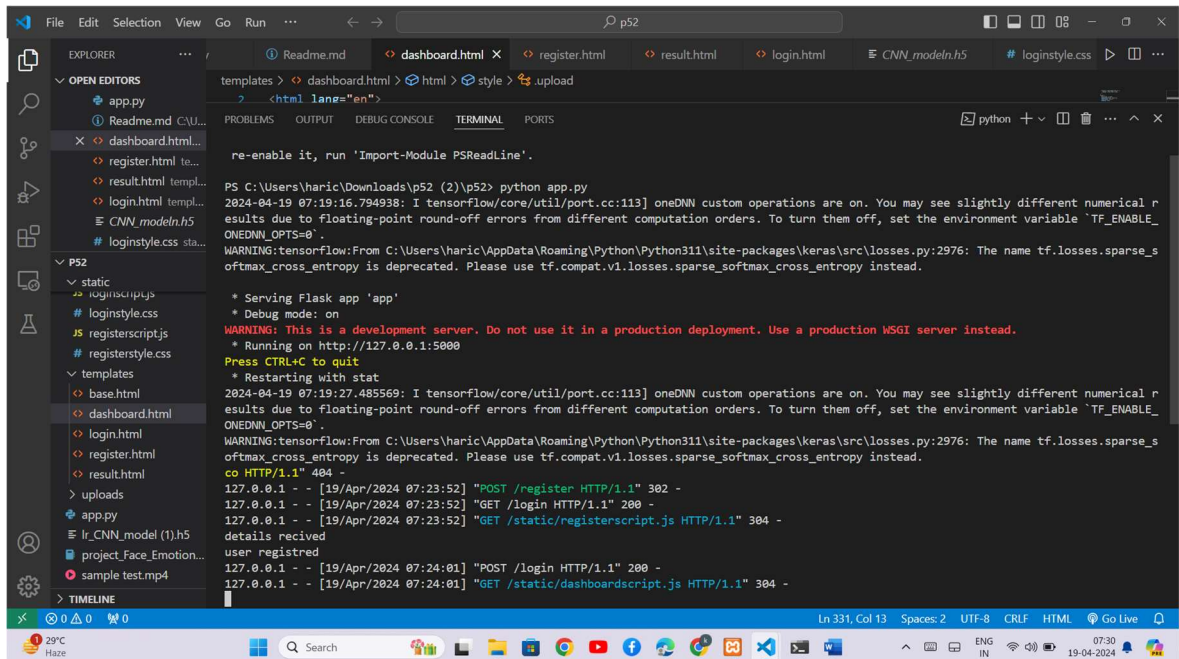
### 3. Create Database name “emotion” in Mysql



### 4. Create Table with name Users with required Attributes(name,email,password) in the created database



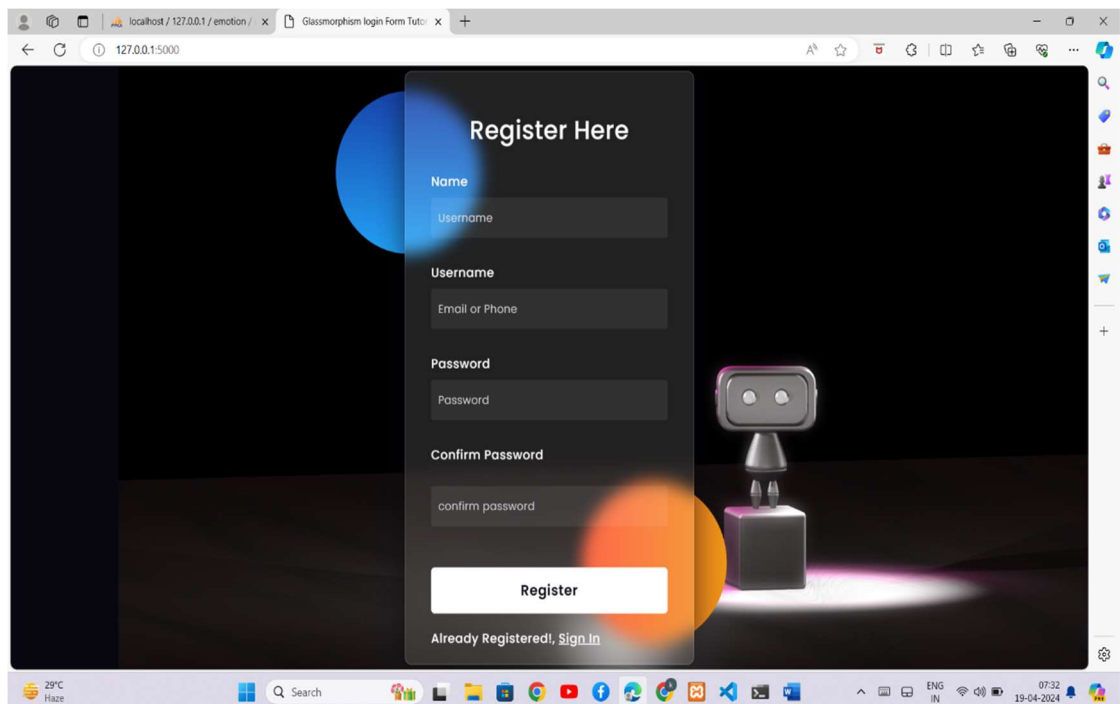
5. Open VS code Terminal
6. Type the command - **Python app.py**



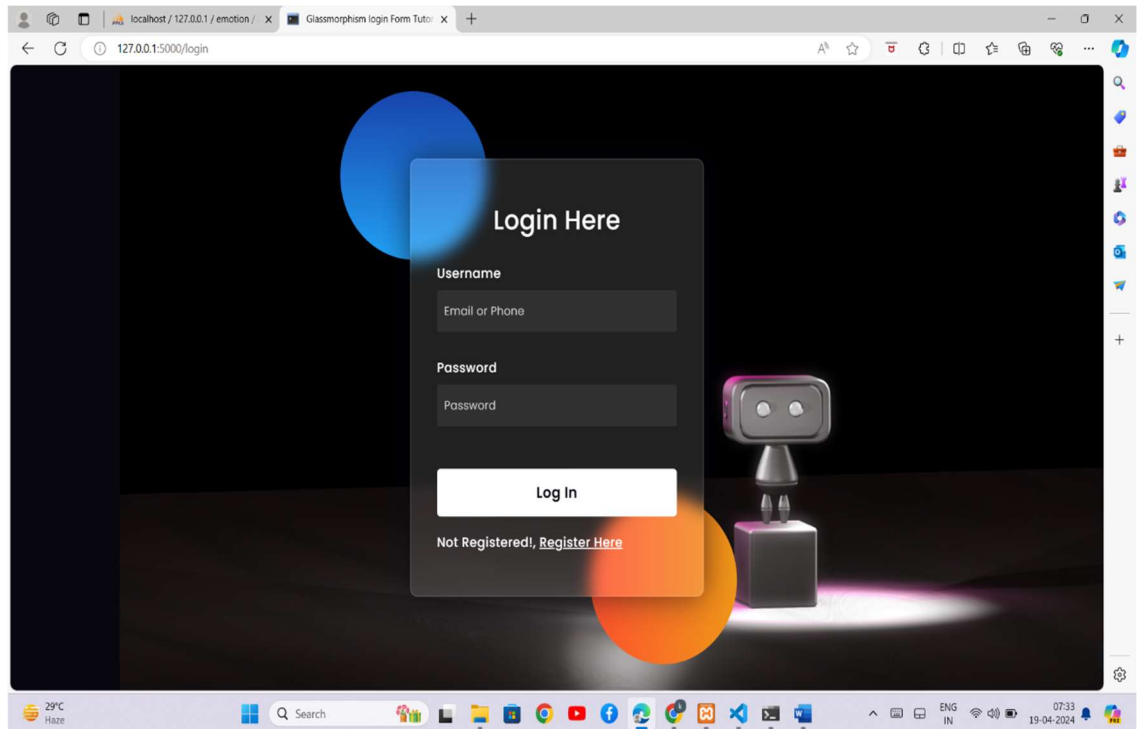
The screenshot shows the VS Code interface with a terminal window open. The terminal displays the output of running `python app.py`. It shows the Flask application starting, serving on `http://127.0.0.1:5000`. The terminal also shows several HTTP requests and responses, including `POST /register`, `GET /login`, and `GET /static/registerstyle.css`. The status bar at the bottom indicates the file is at line 331, column 13, with 2 spaces, UTF-8 encoding, and CRLF line endings.

## Step-6: Working of the code:

1. After typing the command user will get the port address to open in the browser <http://127.0.0.1:5000> then the register page will appear



2. Fill the Fields mentioned in the registration page(name,email,password,confirmpassword)
3. After Successful registration it will move to login page.
4. Enter the fields in the login page(Make sure you enter the correct details that should match with registration detail



5. After Successful login Dashboard will appear which contains basic details and abstract of our project. At the end of the dashboard page user will be provided with a File uploading button.

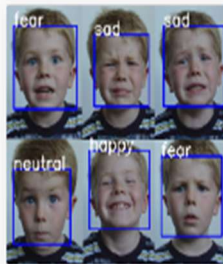
# STATISTICAL ANALYSIS OF FACIAL EXPRESSION AND EMOTION RECOGNITION

Think of it like teaching a computer to recognize emotions by studying millions of faces and their corresponding feelings

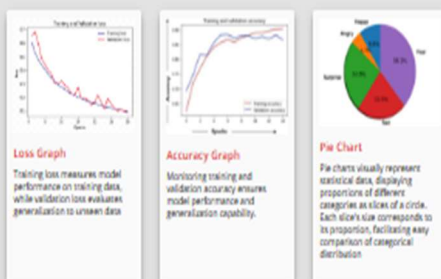
upload

## ABOUT US

Welcome to our website dedicated to the captivating field of statistical analysis of facial expressions and emotion detection! Dive into the realm where science meets emotion as we unravel the complexities of human feelings through the lens of facial expressions. Our platform offers a gateway to understanding how statistical techniques empower cutting-edge technologies to recognize and interpret emotions accurately. Discover how advanced algorithms dissect facial features, capturing the subtle nuances that reveal joy, sadness, anger, surprise, and beyond. Whether you're intrigued by the potential applications in healthcare, psychology, or artificial intelligence, our comprehensive resources will engage and enlighten you. Join us on this journey of exploration and unlock a deeper understanding of human emotions like never before.



## RESULTS



## OUR SERVICE



### Accurate

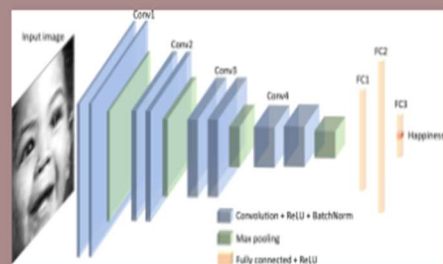
Through rigorous testing and refinement, we strive to achieve results that are not just impressive but reliable getting of 85%



### Satisfying

We understand the importance of providing results that not only meet but exceed expectations. With a relentless pursuit of excellence, our platform is dedicated to delivering solutions that consistently satisfy our users' needs.

## EXPLANATION



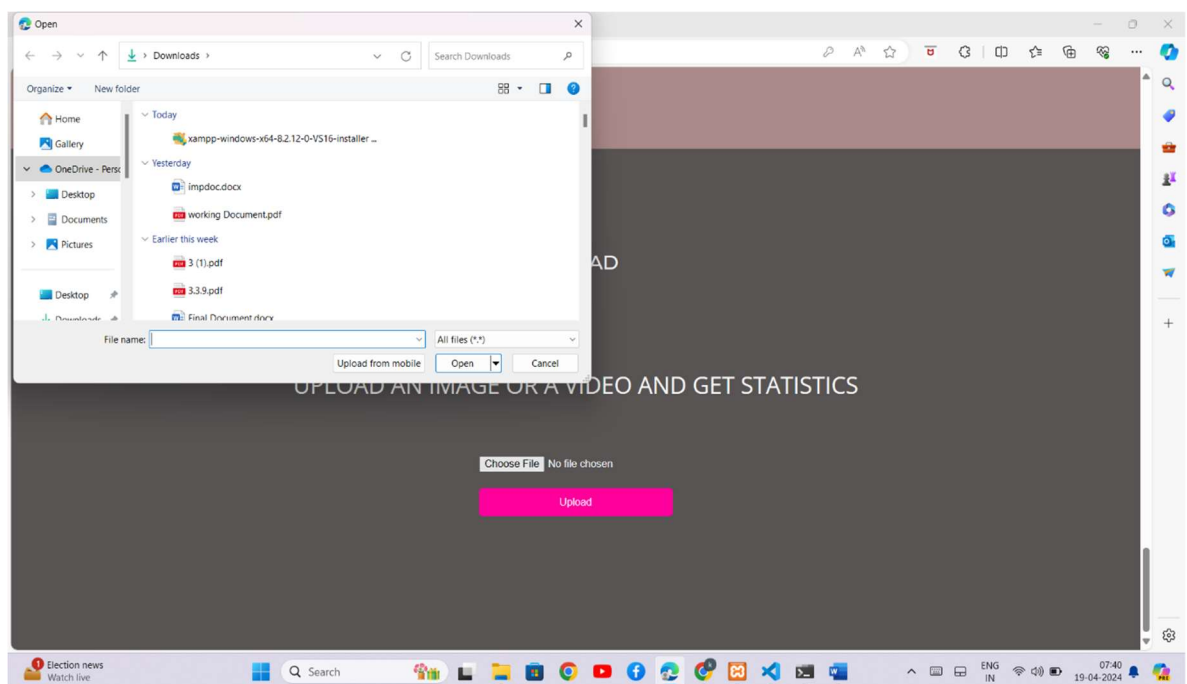
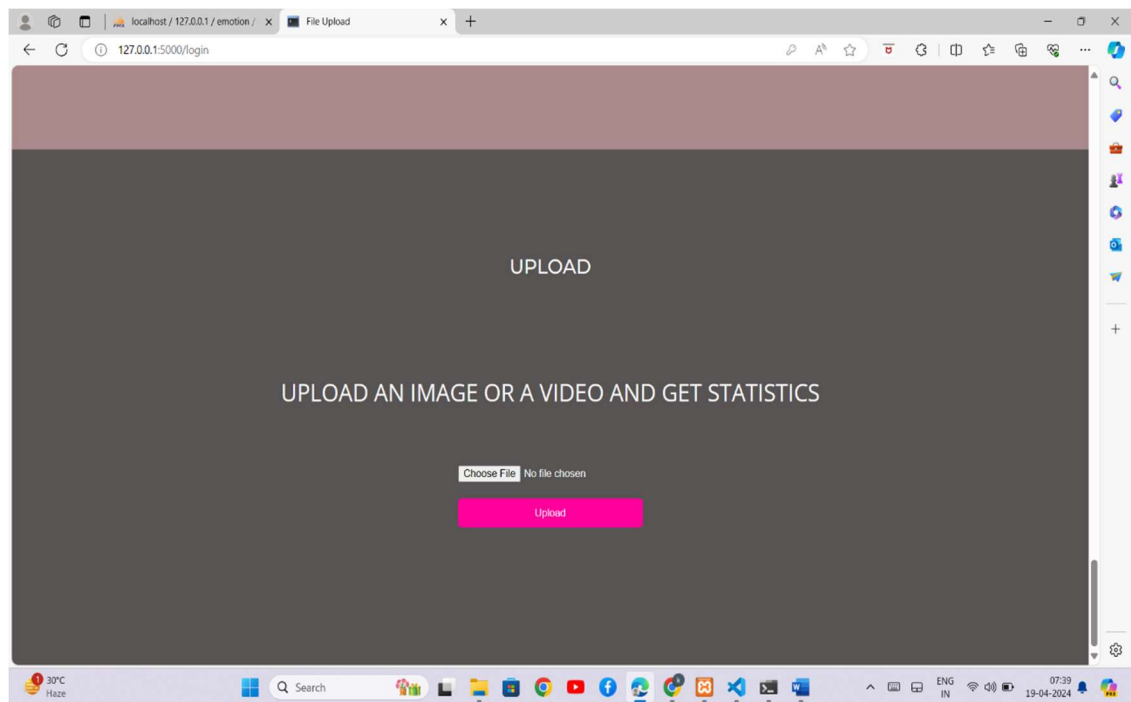
## UPLOAD

UPLOAD AN IMAGE OR A VIDEO AND GET STATISTICS

Choose File No file chosen

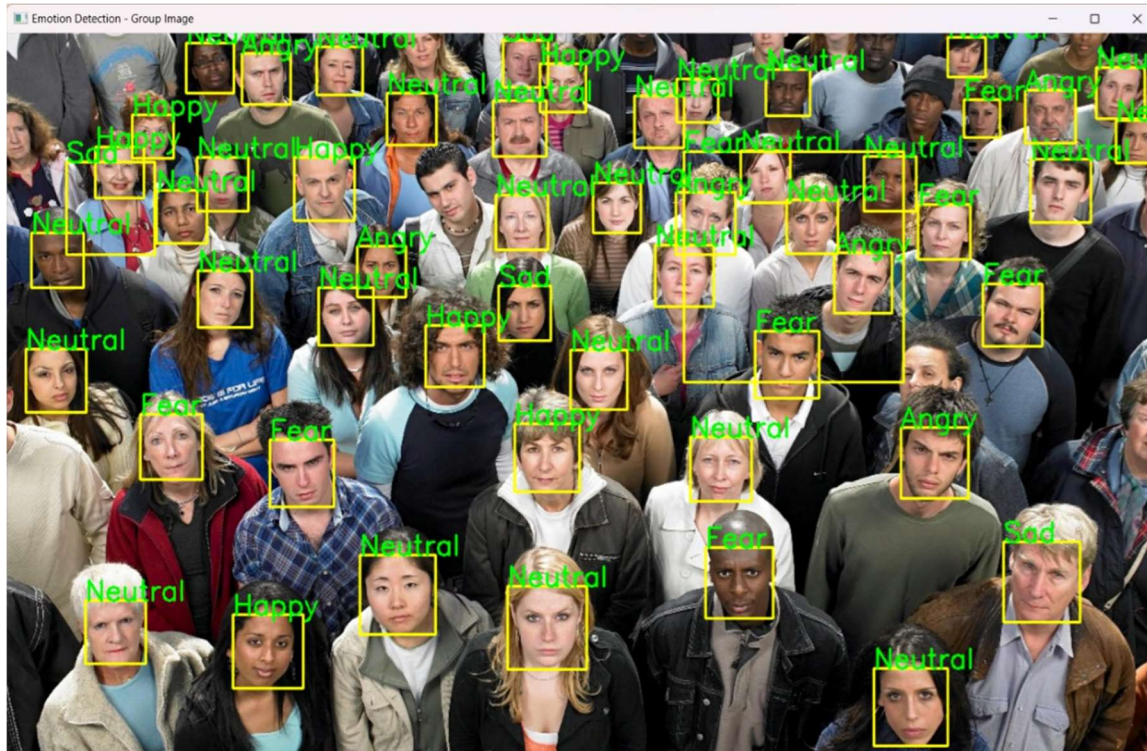
Upload

6. On clicking the upload button the user need to upload the video or a group image.



7. On Successfully uploading the video or a group image. The user can see a window of face detection on the video or a group image that the user uploaded.





8. close the window the user need to press any alphabet key on the keyboard.
9. After that the result page will appear which contains the statistics of that video or a group image uploaded(Pie Chart).

