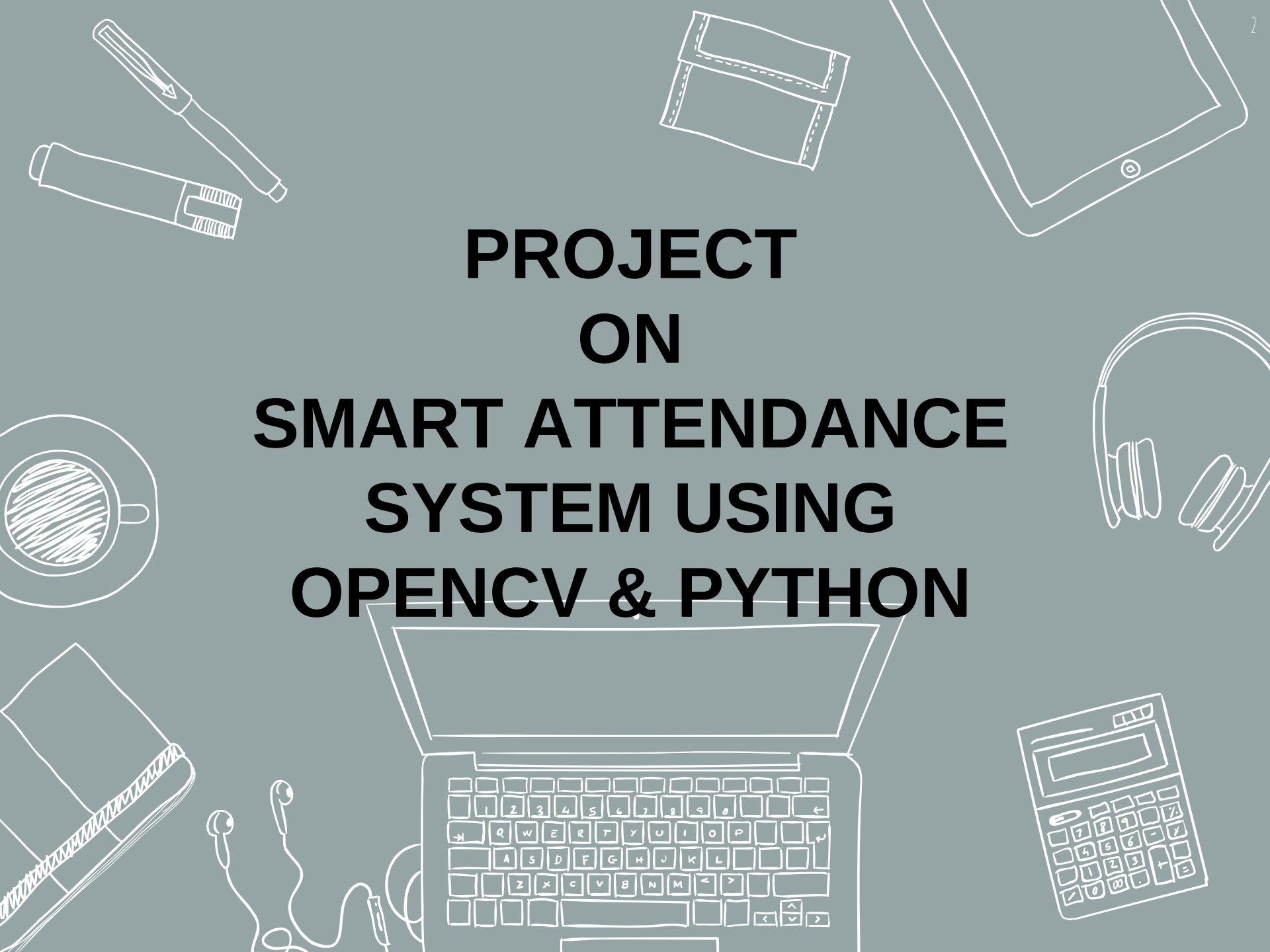
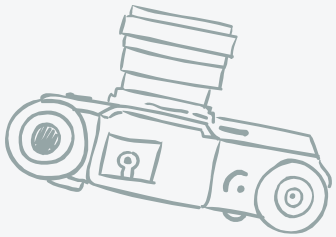
Welcome

PROJECT
ON
SMART ATTENDANCE SYSTEM USING OPENCV & PYTHON



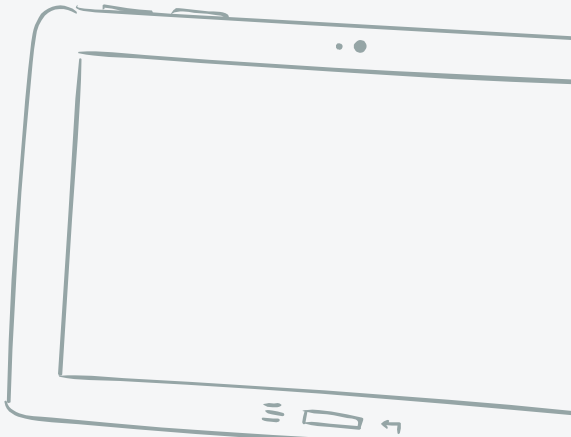


SUBMITTED TO:

SHUPTA RICHARD PHILIP

SENIOR LECTURER ,CITY UNIVERSITY

DEPARTMENT OF CSE



GROUP MEMBER

Name	ID Number
Abidur Rahman	142362004
Saimun Islam	153402316
MD. Hafijul Islam	153402354
Kamrul Islam	153402323
MD.Saddam Hossain	153402318
Sumya Jahan	153402315

The various techniques for marking attendance are:

- ❖Signature based System
- ❖Fingerprint based System
- ❖Iris Recognition
- ❖RFID based System
- ❖Face Recognition

Daily student attendance in schools, colleges and institutes. It facilitates to access the attendance information of a particular student in a particular class.

Some basic problems:

- **This method is not flexible.**
- **It’s risk.**
- **Losing the attendance sheet**
- **Unethical problem may be occurring such as cheating in signature.**

For example, a student does not attend his class but his attendance form has been signed by other student. This system is proposed to overcome these problems.

Objective

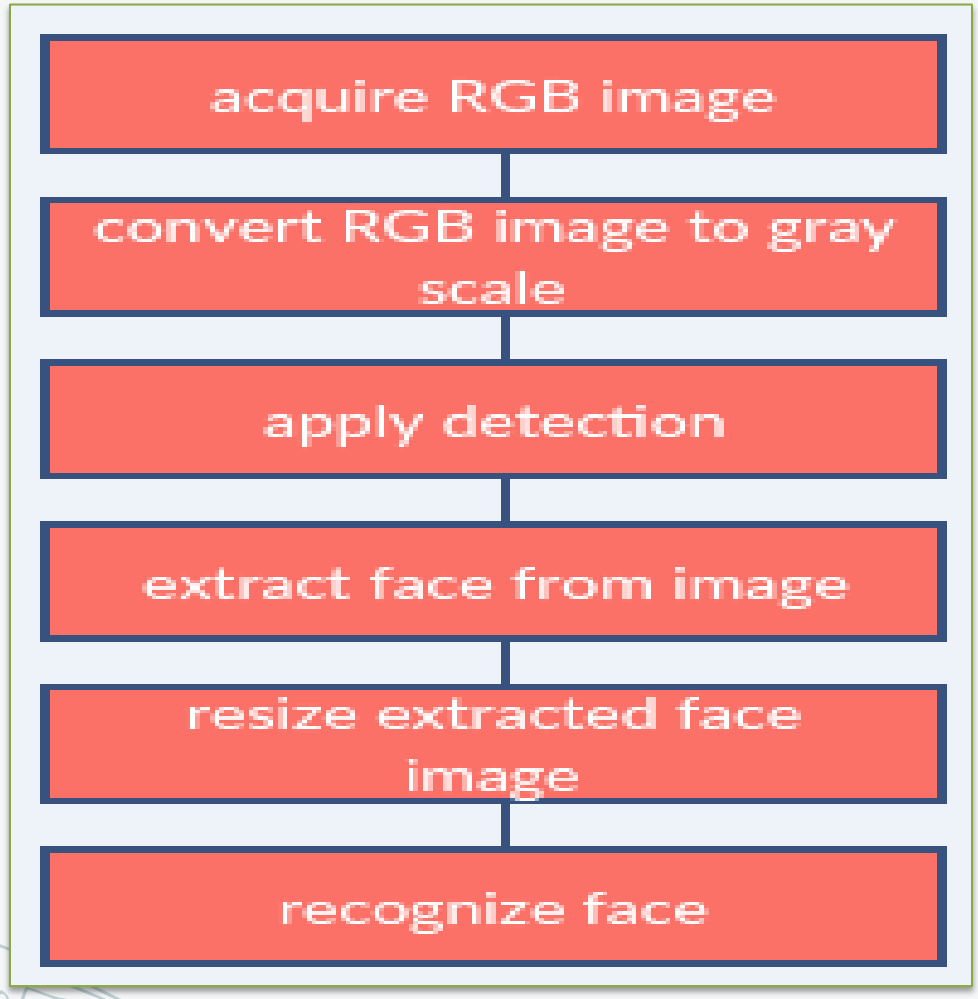
The prime objectives of research are:

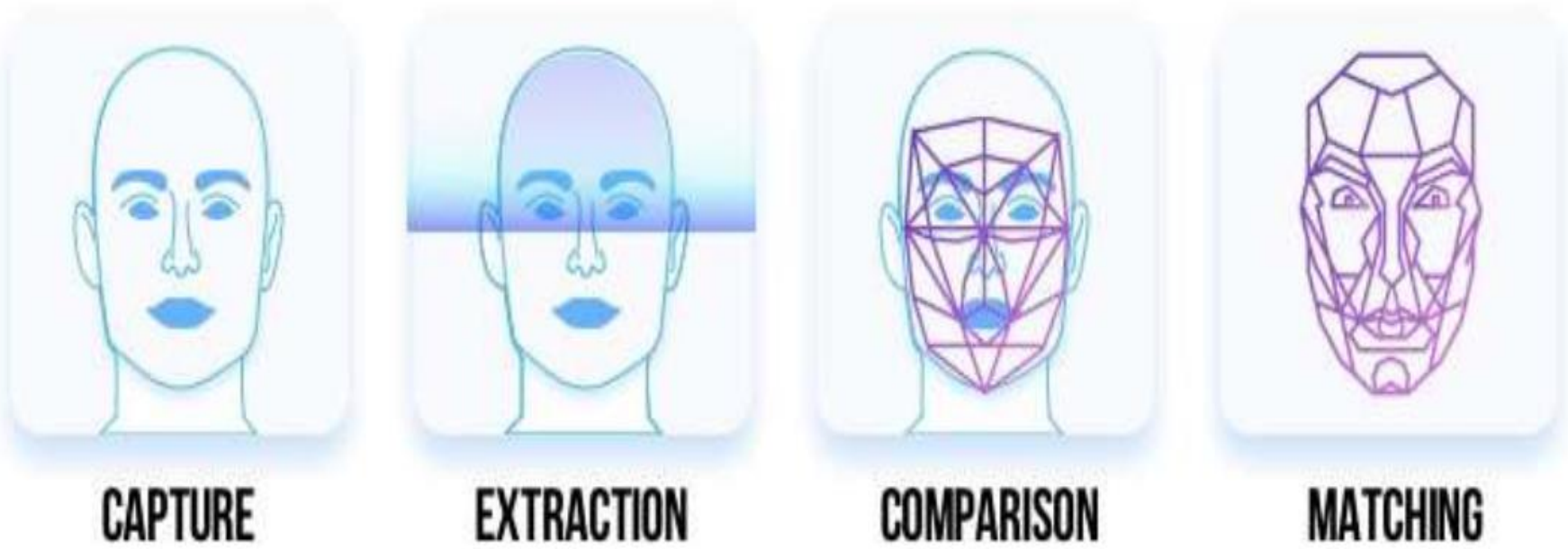
- ✖ To discover, verify and test new and important facts.
- ✖ To analyses an event or process or phenomenon to identify the cause and effect relationship.
- ✖ To develop new scientific tools, concepts and theories to understand scientific and nonscientific Problems.
- ✖ To find solutions to scientific, non-scientific and social problems.

Why we using this

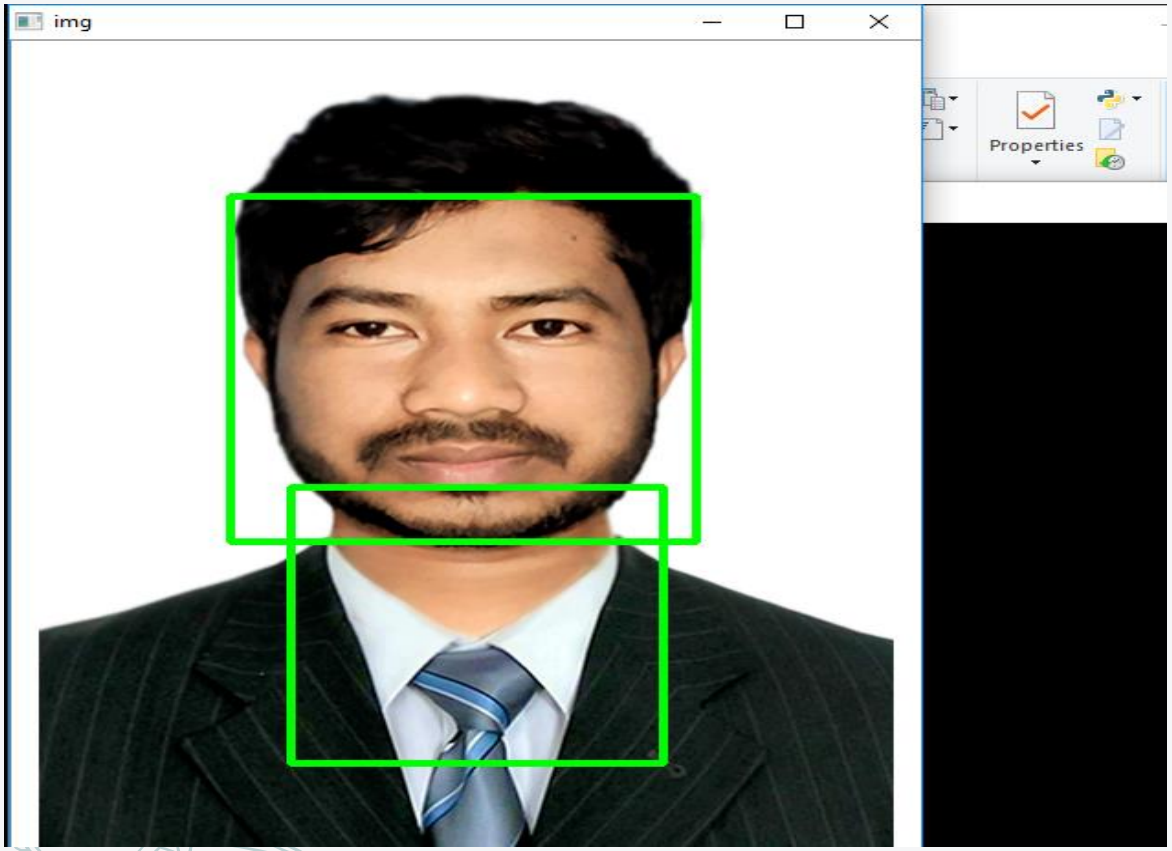
- It's take less time.
- It’s built for automating the processing of attendance.
- It also enhances the speed of performing attendance task easily.
- After recognition, it will mark the attendance of the recognized student and update the attendance record.
- The admin will be able to print these record details afterward.

Image processing

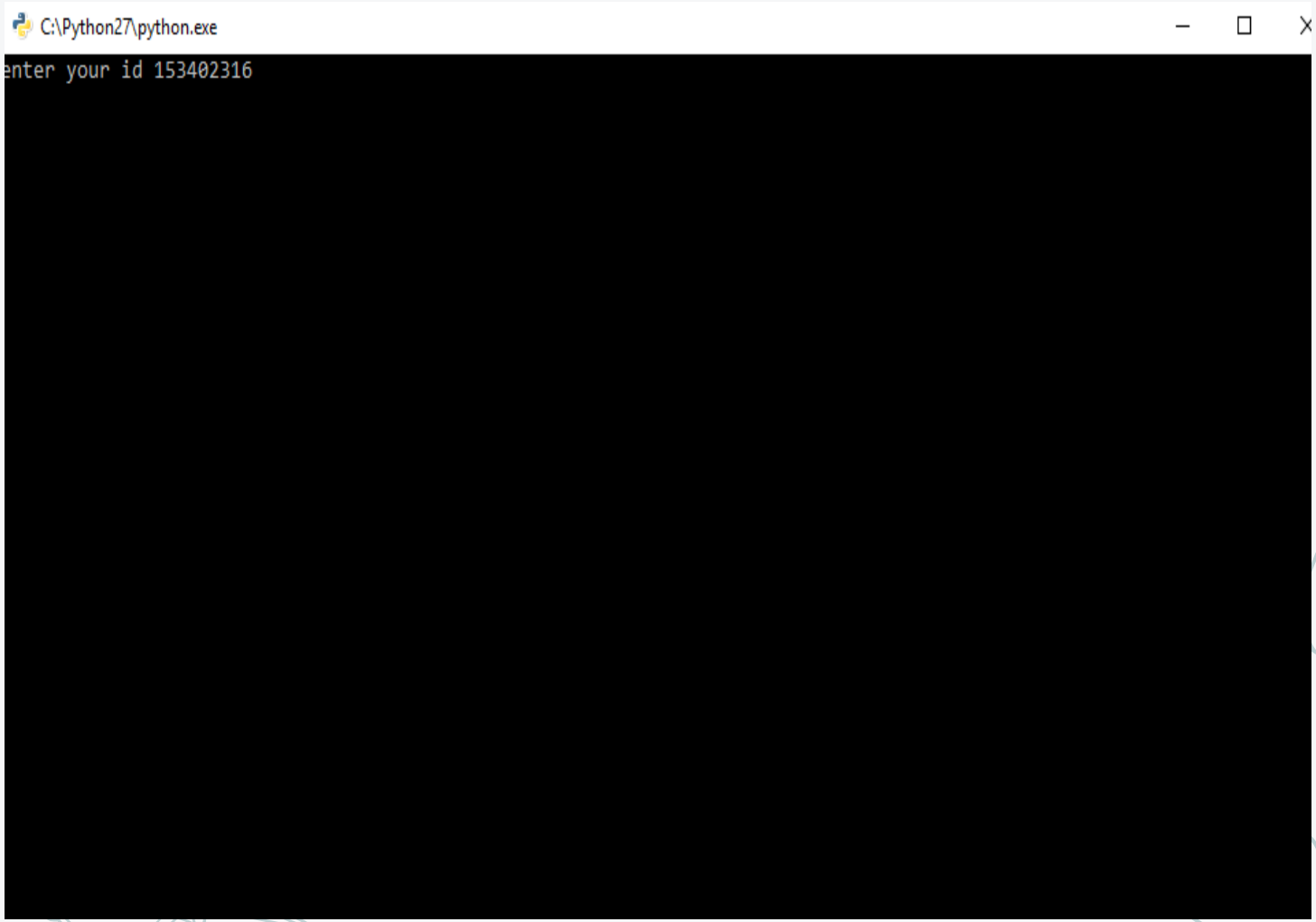



CAPTURE
EXTRACTION
COMPARISON
MATCHING

- When we applied the openCV python code, the code was able to successfully recognize the faces, it detect the faces and write the names of recognized persons as shown



How to add student:



THE PROBLEM THAT WE FACED

In our project we have faced many of problems and we have overcome them:

1- Download Python and library for it on Anaconda and opencv.

2- Version of the Anaconda and Opencv.

Conclusion:

- From our experiment, we noticed the face recognition was sensitive to face background, light, and head orientations. This technique described the accurate and efficient method of automatic attendance in the classroom which could replace the traditional method. An automatic attendance has many advantages, most of the existing systems are time consuming and require semi manual interference from lecturers, our system seeks to solve these issues by using face recognition in the process to save the time and labor. And No need for installing complex hardware for taking the attendance in classroom, all we need is a camera and laptop. We used algorithms that can detect and recognize faces in the image.

Future Work:

- Automatic attendance system can be improved by increasing the number of features which can be extracted to increase accuracy of face recognition. Once the software is developed and tested properly, it could be improved to cover full institutions such as the faculty of engineering.

Thanks!

To All