

Face_Recognition Attendance System Guide

Libraries Used:

- OpenCV
- Opencv-python
- Pickle
- Numpy
- Face_recognition
- OS
- DateTime
- MySQL-connector
- Tkinter

Installation:

1. Install python 3.6.0 : (<https://www.python.org/ftp/python/3.8.5/python-3.8.5-amd64.exe>)
2. install pip : (<https://www.liquidweb.com/kb/install-pip-windows/>)
3. install opencv-python (pip install opencv-python)
4. install Numpy : (pip install numpy)
5. install face_recognition:(pip install face-recognition)
6. install tkinter : (pip install python-tk)
7. install mysql-connector-python :(pip install mysql-connector-python)
8. install mysql-connector :(pip install mysql-connector)

- If you're still having a problem with OpenCV , you have to install it manually, check these links to help you install it. (try opencv contrib version).

It took me days to finally get it working

(<https://pypi.org/project/opencv-python/>)

(<https://www.pyimagesearch.com/2018/09/19/pip-install-opencv/>) this worked for me personally.

- You have to install all the libraries dependencies , there is a lot so I cannot list them.

Implementation

Setting up the database:

- 1) download and install Xamp (local host)
- 2) after installation is complete go to 127.0.0.1/phpmyadmin and create a new database and name it 'student_db' and keep everything as default values
- 3) then click on Import tab next to Export, and choose the file student_db.sql I provided in the project and click Go
- 4) Now copy the attendance folder to xamp installation folder for me its "C:\xampp\htdocs"
- 5) now you can go to "127.0.0.1/attendance" and check the file
- 6) now connect a USB Camera and open the project folder and run the files

File Explanation

- 7) '__init.py' lets the project.py file has access to store data in directories (images)
- 8) Add_students_info.py is the graphical user interface to add students data
- 9) students.py is the class to store all students information. (first name , last name , major and email)
- 10) Project.py is the main file.