

## WIE-TASK 2

### FACE RECOGNITION BASED ATTENDANCE SYSTEM

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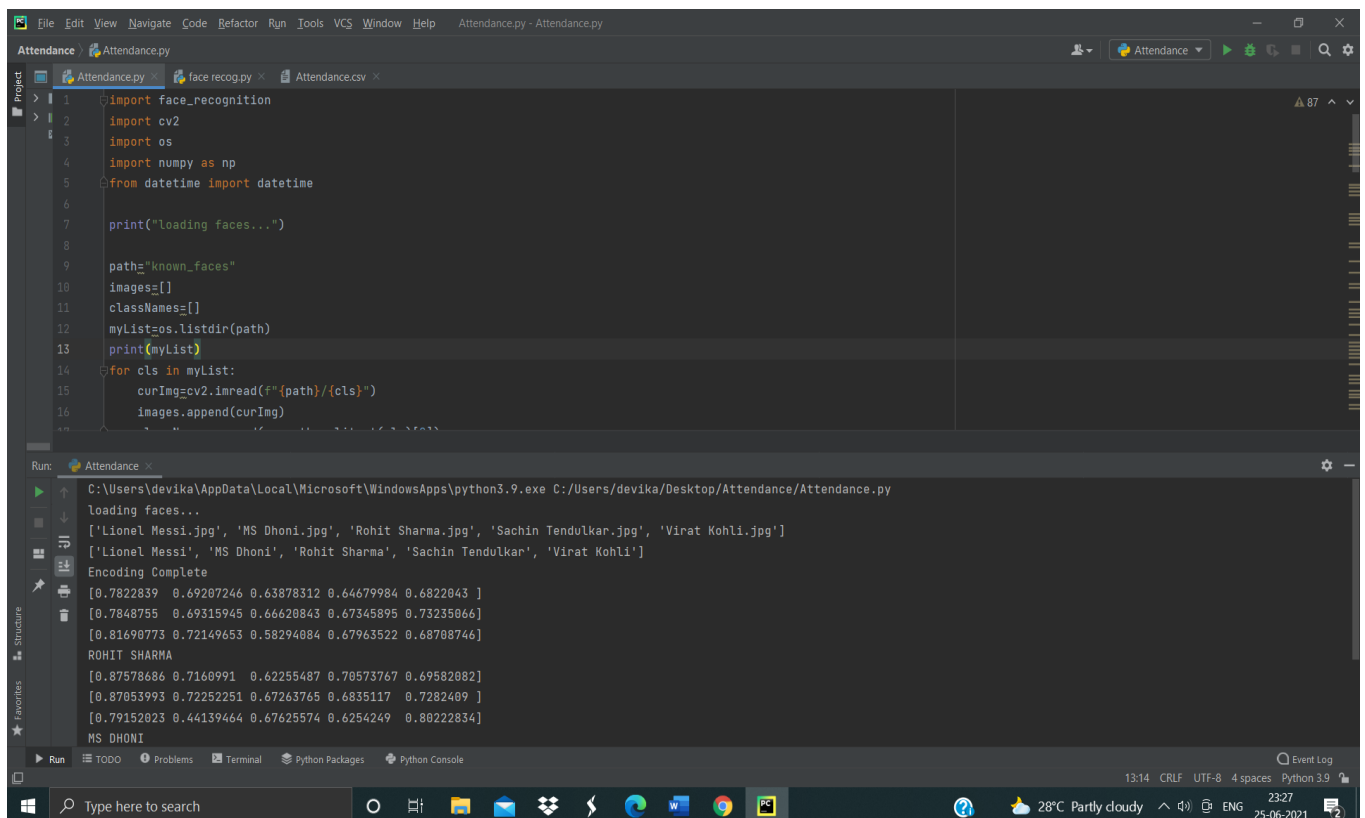
This project was done individually. I learnt working with numpy, pandas, matplotlib, cv2 libraries while developing on this project. I took help of one Udemy course to learn about basic python libraries and watched couple of YouTube videos to learn more face recognition.

**Libraries used**- face\_recognition, cv2, os, numpy, datetime

**Repository link** : <https://github.com/Devika2902/ATTENDANCE-SYSTEM>

In this project, we capture the image of the person in front of camera and compare it with the faces of certain people already stored in a file. Program will display the file name of matching face (if found) removing the file extension and store the name along with entry time in an excel sheet named Attendance. In order to make this project more efficient, we have to feed more data. Along with this project I made a face detection project also.

### SCREENSHOTS



```
File Edit View Navigate Code Refactor Run Tools VCS Window Help Attendance.py - Attendance.py
Attendance.py face_recog.py Attendance.csv
Project
1 import face_recognition
2 import cv2
3 import os
4 import numpy as np
5 from datetime import datetime
6
7 print("loading faces...")
8
9 path="known_faces"
10 images=[]
11 classNames=[]
12 myList=os.listdir(path)
13 print(myList)
14 for cls in myList:
15     curImg=cv2.imread(f'{path}/{cls}.jpg')
16     images.append(curImg)
17
18 Run: Attendance
C:\Users\devika\AppData\Local\Microsoft\WindowsApps\python3.9.exe C:/Users/devika/Desktop/Attendance/Attendance.py
loading faces...
['Lionel Messi.jpg', 'MS Dhoni.jpg', 'Rohit Sharma.jpg', 'Sachin Tendulkar.jpg', 'Virat Kohli.jpg']
['Lionel Messi', 'MS Dhoni', 'Rohit Sharma', 'Sachin Tendulkar', 'Virat Kohli']
Encoding Complete
[0.7822839 0.69207246 0.63878312 0.64679984 0.6822843 ]
[0.7848755 0.69315945 0.66620843 0.67345895 0.73235066]
[0.81690773 0.72149653 0.58294084 0.67963522 0.68708746]
ROHIT SHARMA
[0.87578686 0.7160991 0.62255487 0.70573767 0.69582082]
[0.87053993 0.72252251 0.67263765 0.6835117 0.7282409 ]
[0.79152023 0.44139464 0.67625574 0.6254249 0.80222834]
MS DHONI
```

