import cv2  
import face\_recognition  
import numpy as np  
import os  
from datetime import datetime  
  
path = 'Image attendance'  
images = []  
class\_names = {}  
my\_list = os.listdir(path)  
print("Total Classes Detected:", len(my\_list))  
print("Classes in the directory:")  
for item in my\_list:  
 print(item)  
for i, item in enumerate(my\_list):  
 cur\_img = cv2.imread(f'{path}/{item}')  
 images.append(cur\_img)  
 class\_name = os.path.splitext(item)[0]  
 class\_names[class\_name] = face\_recognition.face\_encodings(cur\_img)[0]  
  
print('Encodings Complete')  
  
present\_list = []  
  
cap = cv2.VideoCapture(0)  
while True:  
 success, img = cap.read()  
 img = cv2.resize(img, (0, 0), fx=0.25, fy=0.25)  
 img = cv2.cvtColor(img, cv2.COLOR\_BGR2RGB)  
  
 face\_locations = face\_recognition.face\_locations(img)  
 face\_encodings = face\_recognition.face\_encodings(img, face\_locations)  
  
 for (top, right, bottom, left), face\_encoding in zip(face\_locations, face\_encodings):  
 matches = face\_recognition.compare\_faces(list(class\_names.values()), face\_encoding)  
 name = "Unknown"  
 if True in matches:  
 first\_match\_index = matches.index(True)  
 name = list(class\_names.keys())[first\_match\_index]  
 if name not in present\_list:  
 present\_list.append(name)  
  
 cv2.rectangle(img, (left, top), (right, bottom), (0, 0, 255), 2)  
 cv2.putText(img, name, (left, top - 15), cv2.FONT\_HERSHEY\_SIMPLEX, 0.5, (0, 0, 255), 2)  
  
 cv2.imshow('Video', img)  
 if cv2.waitKey(1) & 0xFF == ord('q'):  
 break  
  
def markAttendance(name):  
 with open('Attendance.csv','r+') as f:  
 myDataList = f.readlines()  
 nameList = []  
 for line in myDataList:  
 entry = line.split(',')  
 nameList.append(entry[0])  
 if name not in nameList:  
 now = datetime.now()  
 dt\_string = now.strftime("%H:%M:%S")  
 f.writelines(f'\n{name},{dt\_string}')  
  
for name in present\_list:  
 markAttendance('Parth')  
  
cap.release()  
cv2.destroyAllWindows()

Attendance code

import cv2  
import face\_recognition  
  
imgElon = face\_recognition.load\_image\_file('image/Elon Musk.jpeg')  
imgElon = cv2.cvtColor(imgElon, cv2.COLOR\_BGR2RGB)  
imgTest = face\_recognition.load\_image\_file('image/Parth.jpg')  
imgTest = cv2.cvtColor(imgTest, cv2.COLOR\_BGR2RGB)  
  
faceLoc = face\_recognition.face\_locations(imgElon)[0]  
encodeElon = face\_recognition.face\_encodings(imgElon)[0]  
cv2.rectangle(imgElon, (faceLoc[3], faceLoc[0]), (faceLoc[1], faceLoc[2]), (255, 0, 255), 2)  
  
faceLocTest = face\_recognition.face\_locations(imgTest)[0]  
encodeTest = face\_recognition.face\_encodings(imgTest)[0]  
cv2.rectangle(imgTest, (faceLocTest[3], faceLocTest[0]), (faceLocTest[1], faceLocTest[2]), (255, 0, 255), 2)  
  
results = face\_recognition.compare\_faces([encodeElon], encodeTest)  
faceDis = face\_recognition.face\_distance([encodeElon], encodeTest)  
print(results, faceDis)  
cv2.putText(imgTest, f'{results} {round(faceDis[0], 2)}', (50, 50), cv2.FONT\_HERSHEY\_COMPLEX, 1, (0, 0, 255), 2)  
  
cv2.imshow('Elon Musk', imgElon)  
cv2.imshow('Parth', imgTest)  
cv2.waitKey(0)

main .py code