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**YEAR** - PERSUING 3RD YEAR

1ST Major Project-

<https://colab.research.google.com/drive/1uSq132Txlg1LyXTZdBU35S_ytITJRgx9?usp=sharing>



2ND Major project-

ONLINE ATTENDANCE SYSTEM

CODE-

import face\_recognition

import cv2

import numpy as np

import csv

import os

import glob

from datetime import datetime

video\_capture = cv2,VideoCapture(0)

tata\_img = face\_recognition.load\_image\_file("photos/tata.jpg")

tata\_encoding =face\_recognition.face\_encodings(tata\_img)[0]

shah\_img = face\_recognition.load\_image\_file("photos/shah.jpg")

shah\_encoding =face\_recognition.face\_encodings(shah\_img)[0]

deep\_img = face\_recognition.load\_image\_file("photos/deep.jpg")

deep\_encoding =face\_recognition.face\_encodings(deep\_img)[0]

anu\_img = face\_recognition.load\_image\_file("photos/anu.jpg")

anu\_encoding =face\_recognition.face\_encodings(anu\_img)[0]

known\_face\_encoding = [

tata\_encoding,

shah\_encoding,

deep\_encoding,

anu\_encoding

]

known\_faces\_names = [

"tata",

"shah",

"deep",

"anu"

]

students = known\_faces\_names.copy()

face\_location = []

face\_encoding = []

face\_names = []

s=True

now =datetime.now()

current\_date = now.strftime("%Y-%m-%d")

f = open(current\_date+'.csv','w+',nweline='')

lnwriter = csv.writer(f)

while True:

\_,frame = video\_capture.read()

small\_frame = cv2.resize(frame,(0,0),fx=0.25,fy=0.25)

rgb\_small\_frame = small\_frame[:,:,::-1]

if s:

face\_locations = face\_recognition.face\_locations(rgb\_small\_frame)

face\_encoding = face\_recognition.face\_encoding(rgb\_small\_frame,face\_locations)

face\_names = []

for face\_encoding in face\_encodings:

matches = face\_recognition.compare+faces(known\_face\_encoding,face\_encoding)

name=""

face\_distance = face\_recognition.face\_distance(known\_face\_encoding,face\_encoding)

best\_match\_index = np.argmin(face\_distance)

if matches[best\_match\_index]:

name = known\_faces\_names[best\_match\_index]

face\_name.append(name)

if name in known\_faces\_names:

if name in students:

students.remove(name)

print(students)

current\_time = now.strftime("%H-%M-%S")

lnwriter.writernow([name,current\_time])

cv2.imshow("attendance system",frame)

if cv2.waitKey(1) & 0xFF == ord('q'):

break

video\_capture.release()

cv2.destroyAllWindows()

f.close()

