ONLINE ELECTION SYSTEM

TEAM

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Secure Voting is a complete solution for the online election system. The electronic voting system is 100% web based, easy to use, most convenient, user friendly, and integrated with ultimate security features. Our Internet voting system is a flexible, feature-rich election service ideal for all types of organizations large and small.

problem statement

- Voting at home would mean Elections could not ensure voters were able to vote in private and free of intimidation.
- While some experts say we have the technology to make it secure, there have been instances of security breaches in online voting systems. If a security breach did occur it could mean an entire election result would be thrown out.

Algorithm

Face Dataset

1. Import packages
2. Set video capture width and height.
3. Set face identification id counter.
4. Set count for image captures.
5. Set face color and designation to store Pictures.
6. Count reaches and leaves all permissions.

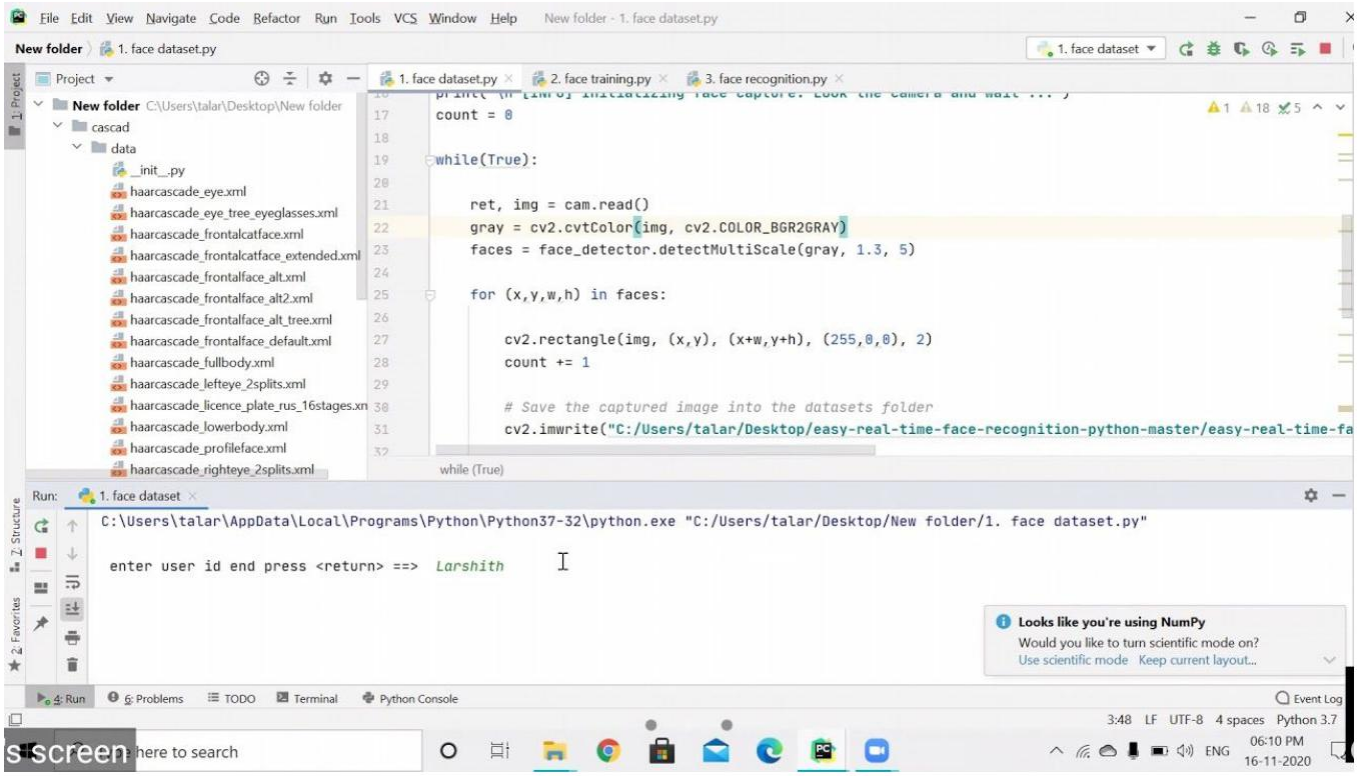
Face Training

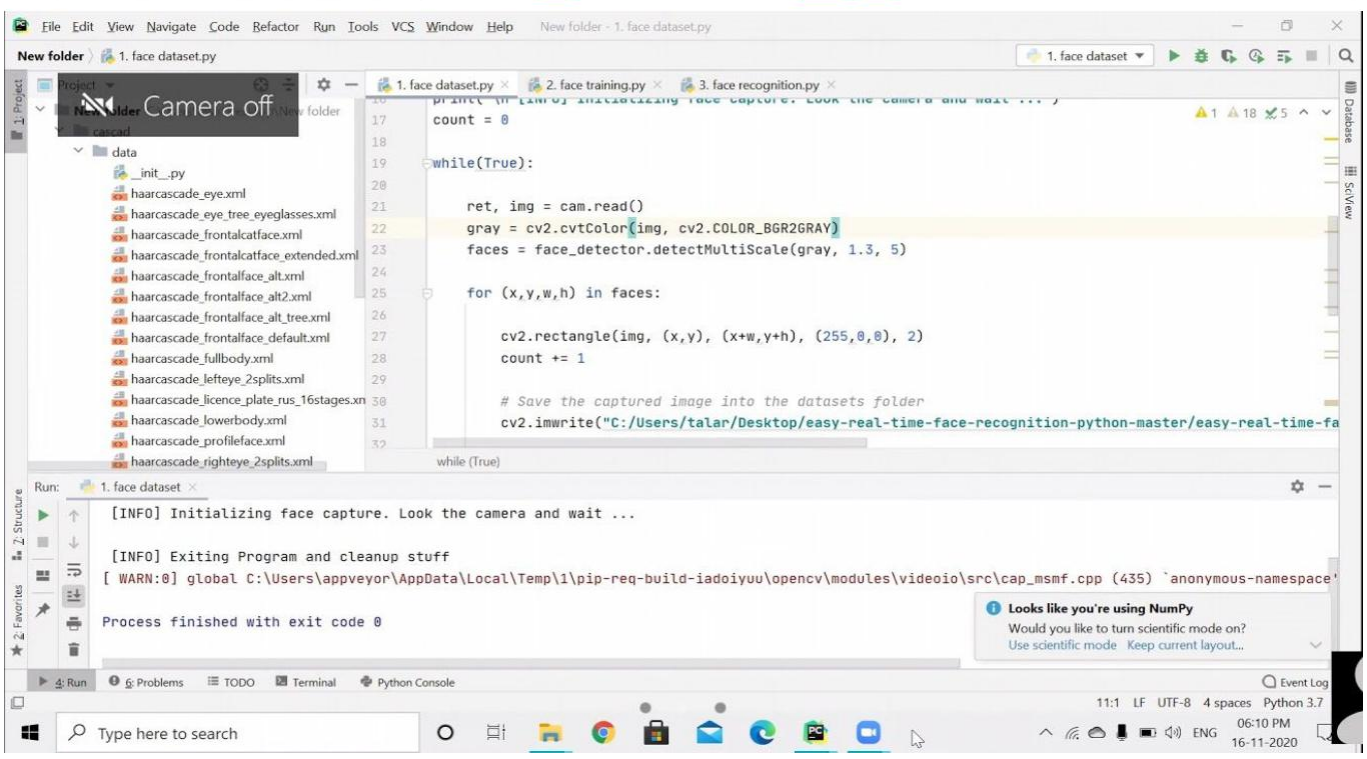
1. Import package PIllow (PIL).
2. Locate Images database.
3. Convert the image into grayscale .
4. Store grayscale into .yml format to analyze.

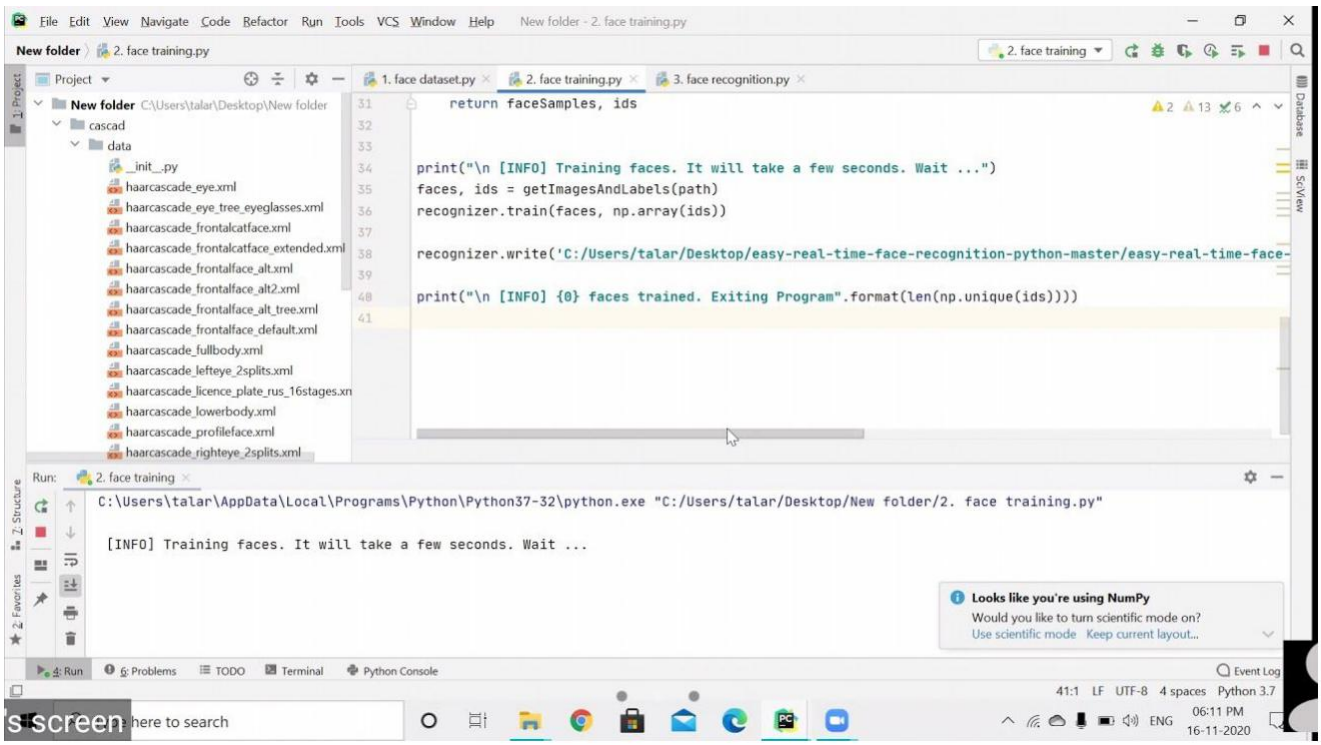
Face Recognition

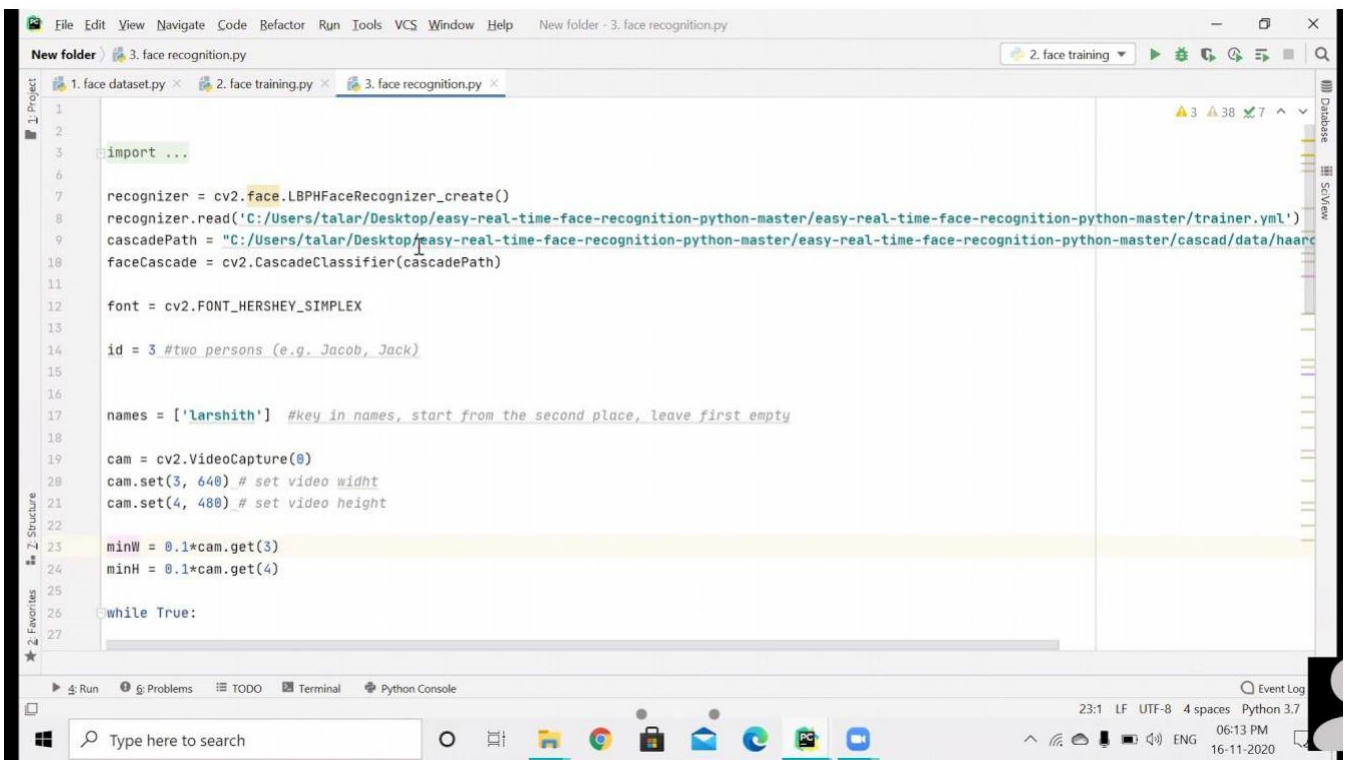
1. Import package CV2 ,numpy.
2. Initiate id counter, the number of persons you want to include
3. Load .yml file to read grayscale.
4. Capture face width and height and convert grayscale.
5. Compare grayscale with face dataset.
6. Generate score and check criteria reaches.
7. Release camera permissions .

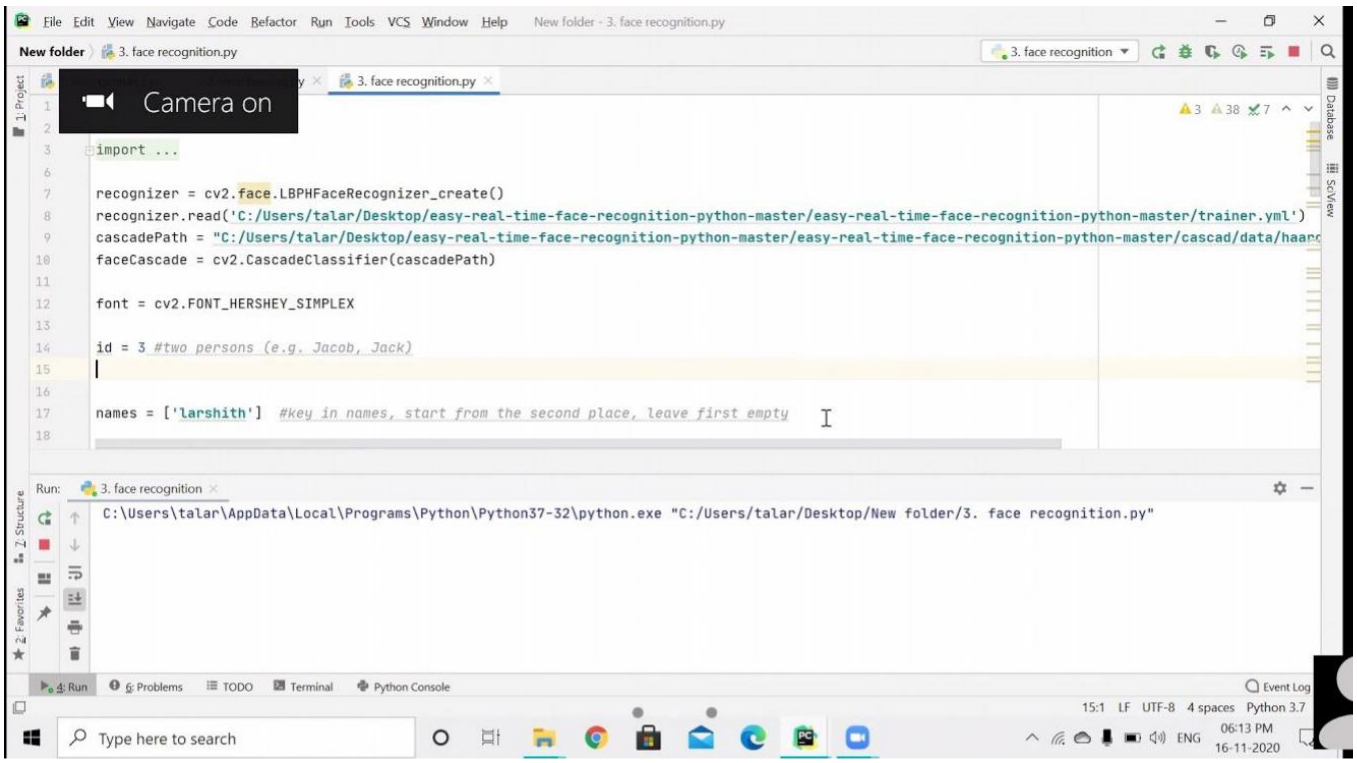
Output

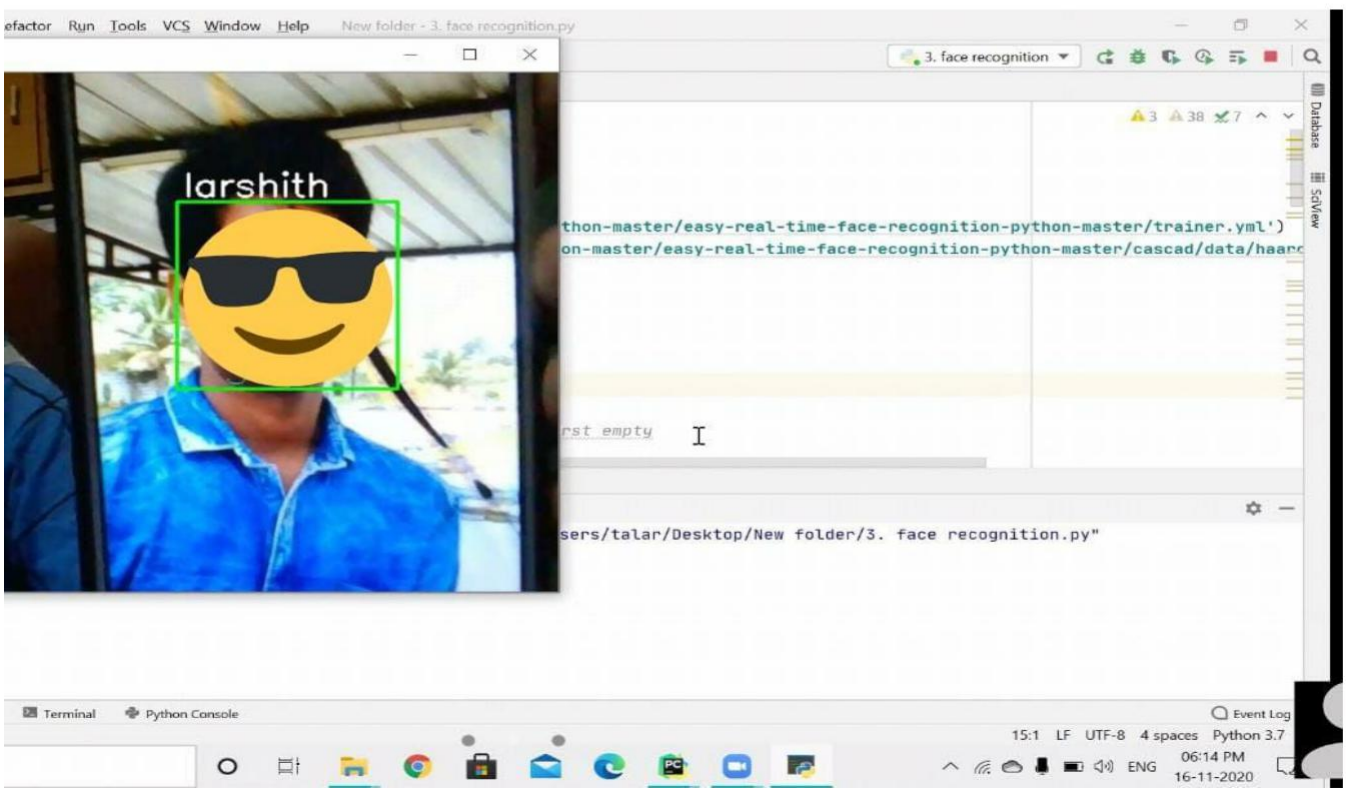

File Edit View Navigate Code Refactor Run Tools VCS Window Help
New folder - 1. face dataset.py
New folder 1. face dataset.py
1. face dataset
Project
1. face dataset.py
2. face training.py
3. face recognition.py
New folder C:\Users\talar\Desktop\New folder
cascad
data
__init__.py
haarcascade_eye.xml
haarcascade_eye_tree_eyeglasses.xml
haarcascade_frontalcatface.xml
haarcascade_frontalcatface_extended.xml
haarcascade_frontalface_alt.xml
haarcascade_frontalface_alt2.xml
haarcascade_frontalface_alt_tree.xml
haarcascade_frontalface_default.xml
haarcascade_fullbody.xml
haarcascade_lefteye_2splits.xml
haarcascade_licence_plate_rus_16stages.xm
haarcascade_lowerbody.xml
haarcascade_profileface.xml
haarcascade_righteye_2splits.xml
count = 0
while(True):
ret, img = cam.read()
gray = cv2.cvtColor(img, cv2.COLOR_BGR2GRAY)
faces = face_detector.detectMultiScale(gray, 1.3, 5)
for (x,y,w,h) in faces:
cv2.rectangle(img, (x,y), (x+w,y+h), (255,0,0), 2)
count += 1
Save the captured image into the datasets folder
cv2.imwrite("C:/Users/talar/Desktop/easy-real-time-face-recognition-python-master/easy-real-time-fa
while (True)
Run: 1. face dataset
C:\Users\talar\AppData\Local\Programs\Python\Python37-32\python.exe "C:/Users/talar/Desktop/New folder/1. face dataset.py"
enter user id end press <return> ==> Larshith
Looks like you're using NumPy
Would you like to turn scientific mode on?
Use scientific mode Keep current layout...
4: Run 6: Problems TODO Terminal Python Console
Event Log
3:48 LF UTF-8 4 spaces Python 3.7
Type here to search
ENG 06:10 PM 16-11-2020


File Edit View Navigate Code Refactor Run Tools VCS Window Help
New folder - 1. face dataset.py
New folder 1. face dataset.py
1. face dataset
Camera off
1. face dataset.py
2. face training.py
3. face recognition.py
count = 0
while(True):
ret, img = cam.read()
gray = cv2.cvtColor(img, cv2.COLOR_BGR2GRAY)
faces = face_detector.detectMultiScale(gray, 1.3, 5)
for (x,y,w,h) in faces:
cv2.rectangle(img, (x,y), (x+w,y+h), (255,0,0), 2)
count += 1
Save the captured image into the datasets folder
cv2.imwrite("C:/Users/talar/Desktop/easy-real-time-face-recognition-python-master/easy-real-time-fa
while (True)
Run: 1. face dataset
[INFO] Initializing face capture. Look the camera and wait ...
[INFO] Exiting Program and cleanup stuff
[WARN:0] global C:\Users\appveyor\AppData\Local\Temp\1\pip-req-build-iadoiyuu\opencv\modules\videoio\src\cap_msmf.cpp (435) `anonymous-namespace'
Process finished with exit code 0
Looks like you're using NumPy
Would you like to turn scientific mode on?
Use scientific mode Keep current layout...
4: Run 6: Problems TODO Terminal Python Console
Event Log
11:1 LF UTF-8 4 spaces Python 3.7
Type here to search
ENG 06:10 PM 16-11-2020


File Edit View Navigate Code Refactor Run Tools VCS Window Help
New folder - 2. face training.py
New folder 2. face training.py
2. face training
1. face dataset.py
2. face training.py
3. face recognition.py
New folder C:\Users\talar\Desktop\New folder
cascad
data
__init__.py
haarcascade_eye.xml
haarcascade_eye_tree_eyeglasses.xml
haarcascade_frontalcatface.xml
haarcascade_frontalcatface_extended.xml
haarcascade_frontalface_alt.xml
haarcascade_frontalface_alt2.xml
haarcascade_frontalface_alt_tree.xml
haarcascade_frontalface_default.xml
haarcascade_fullbody.xml
haarcascade_lefteye_2splits.xml
haarcascade_licence_plate_rus_16stages.xn
haarcascade_lowerbody.xml
haarcascade_profileface.xml
haarcascade_righteye_2splits.xml
return faceSamples, ids
print("\n [INFO] Training faces. It will take a few seconds. Wait ...")
faces, ids = getImagesAndLabels(path)
recognizer.train(faces, np.array(ids))
recognizer.write('C:/Users/talar/Desktop/easy-real-time-face-recognition-python-master/easy-real-time-face-
print("\n [INFO] {0} faces trained. Exiting Program".format(len(np.unique(ids))))
Run: 2. face training
C:\Users\talar\AppData\Local\Programs\Python\Python37-32\python.exe "C:/Users/talar/Desktop/New folder/2. face training.py"
[INFO] Training faces. It will take a few seconds. Wait ...
Looks like you're using NumPy
Would you like to turn scientific mode on?
Use scientific mode Keep current layout...
4: Run 6: Problems TODO Terminal Python Console
Event Log
41:1 LF UTF-8 4 spaces Python 3.7
Type here to search
ENG 06:11 PM 16-11-2020


File Edit View Navigate Code Refactor Run Tools VCS Window Help
New folder - 3. face recognition.py
New folder 3. face recognition.py
2. face training
1. face dataset.py
2. face training.py
3. face recognition.py
import ...
recognizer = cv2.face.LBPHFaceRecognizer_create()
recognizer.read('C:/Users/talar/Desktop/easy-real-time-face-recognition-python-master/easy-real-time-face-recognition-python-master/trainer.yml')
cascadePath = "C:/Users/talar/Desktop/easy-real-time-face-recognition-python-master/easy-real-time-face-recognition-python-master/cascad/data/haarc
faceCascade = cv2.CascadeClassifier(cascadePath)
font = cv2.FONT_HERSHEY_SIMPLEX
id = 3 #two persons (e.g. Jacob, Jack)
names = ['larshith'] #key in names, start from the second place, leave first empty
cam = cv2.VideoCapture(0)
cam.set(3, 640) # set video widht
cam.set(4, 480) # set video height
minW = 0.1*cam.get(3)
minH = 0.1*cam.get(4)
while True:
4: Run 6: Problems TODO Terminal Python Console
Event Log
23:1 LF UTF-8 4 spaces Python 3.7
Type here to search
ENG 06:13 PM 16-11-2020


File Edit View Navigate Code Refactor Run Tools VCS Window Help
New folder - 3. face recognition.py
New folder
3. face recognition.py
Camera on
import ...
recognizer = cv2.face.LBPHFaceRecognizer_create()
recognizer.read('C:/Users/talar/Desktop/easy-real-time-face-recognition-python-master/easy-real-time-face-recognition-python-master/trainer.yml')
cascadePath = "C:/Users/talar/Desktop/easy-real-time-face-recognition-python-master/easy-real-time-face-recognition-python-master/cascad/data/haarc
faceCascade = cv2.CascadeClassifier(cascadePath)
font = cv2.FONT_HERSHEY_SIMPLEX
id = 3 #two persons (e.g. Jacob, Jack)
names = ['larshith'] #key in names, start from the second place, leave first empty
Run: 3. face recognition
C:\Users\talar\AppData\Local\Programs\Python\Python37-32\python.exe "C:/Users/talar/Desktop/New folder/3. face recognition.py"
4: Run
6: Problems
TODO
Terminal
Python Console
Event Log
15:1 LF UTF-8 4 spaces Python 3.7
Type here to search
ENG
06:13 PM
16-11-2020


larshith
thon-master/easy-real-time-face-recognition-python-master/trainer.yml')
on-master/easy-real-time-face-recognition-python-master/cascad/data/haarc
rst empty
sers/talar/Desktop/New folder/3. face recognition.py"
Terminal
Python Console
Event Log
15:1 LF UTF-8 4 spaces Python 3.7
ENG
06:14 PM
16-11-2020

Code LInk :

https://drive.google.com/drive/folders/12nGL7tG0oQNymIFI9Odc8kEfVe08IJhP?usp=sharing