

REQUIREMENTS OF FACE RECOGNITION SYSTEM (with GUI)

Hardware:

- Panasonic IP cam BL-C131/C111
- Logitech C170 Webcam

Python 3.6.x

Libraries:

- opencv-contrib-python
- Numpy
- scipy
- sk-learn
- Tensorflow==1.5
- Requests
- Autocrop
- Imutils
- Tkinter
- PIL

Files:

1. Facenet model file in path (*model.pb*)
2. Haar-Cascade file (*haarcascade_frontalface_alt*)
3. Embedding file (*Extracted_Dict_Infogen.pickle*)
4. User name list (*EachIndividual_Infogen.pickle*)
5. Face recognition python file using IP cam (*mainip.py*)
6. Face recognition python file using USB/Integratated cam (*mainusb.py*)

Execution:

Run following files

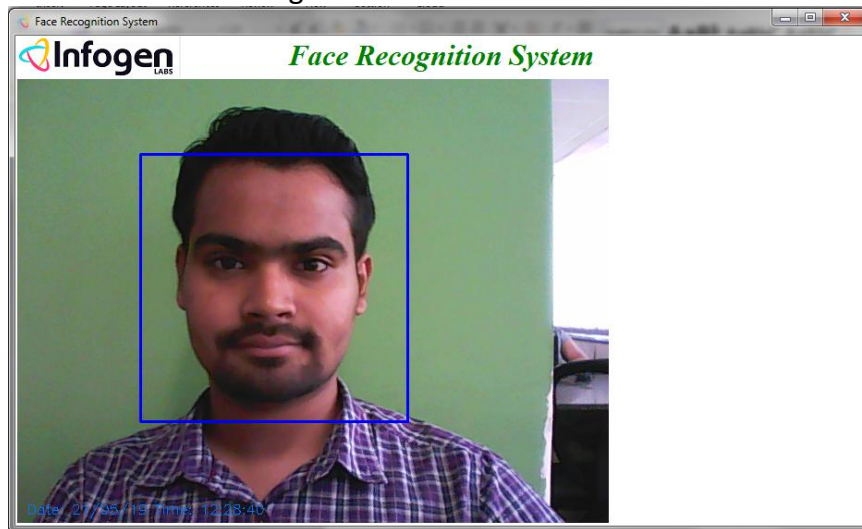
- Using **IP camera**: *python mainip.py model18.pb*

OR

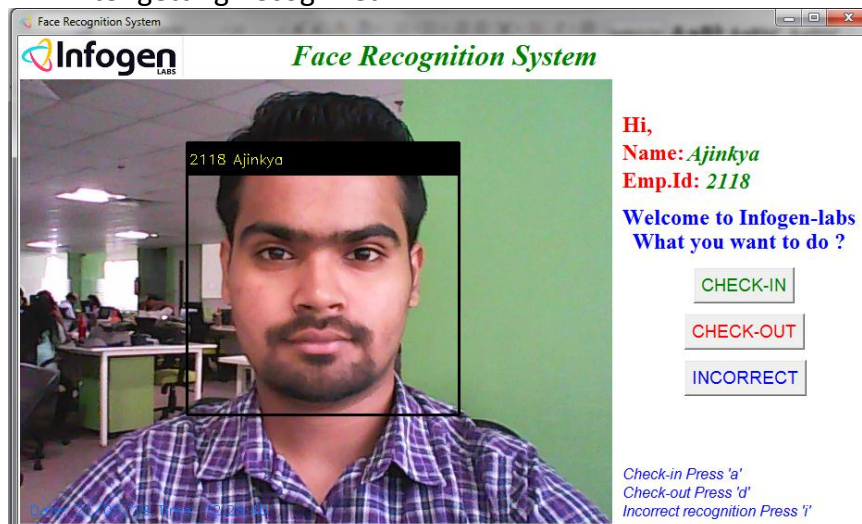
- Using **USB/Integrated camera**: *python mainusb.py model18.pb*

Graphical User Interface:

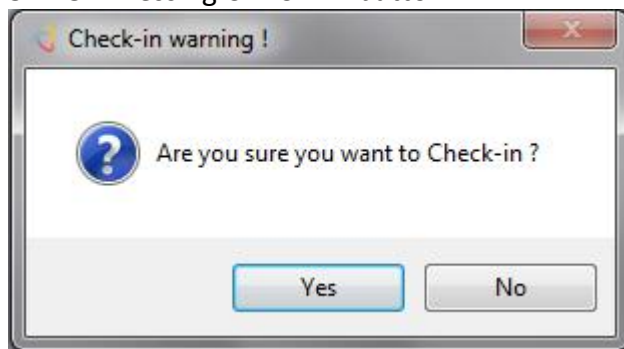
1. Before Face Recognition



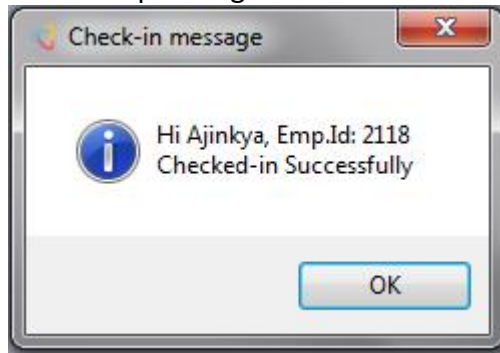
2. After getting Recognized



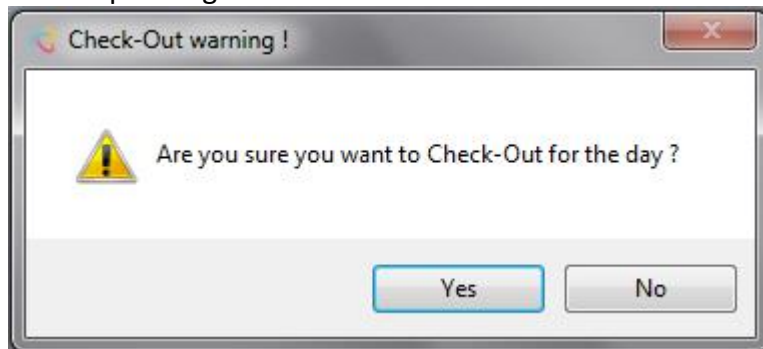
3. On Pressing CHECK-IN button



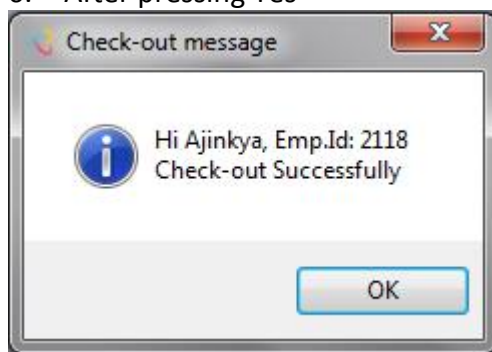
4. After pressing Yes



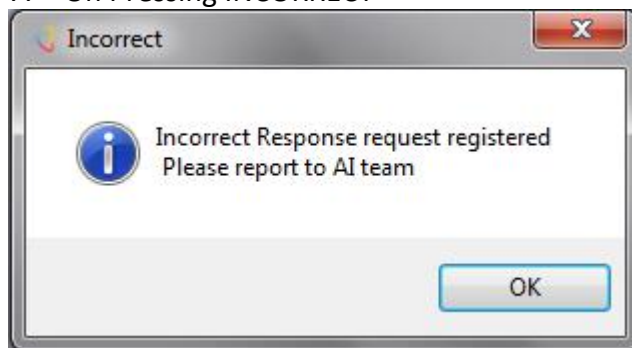
5. On pressing CHECK-OUT



6. After pressing Yes



7. On Pressing INCORRECT



8. Demo video([FR_GUI](#))