INSTRUCTIONS

FILES IN THE REPO

- train_emotion_classifier.py
- haarcascade_files/haarcascade_frontalface_default.xml
- models/_mini_XCEPTION.102-0.66.hdf5
- fer2013/fer2013.csv – dataset for emotion recognition
- main+movie_recommendation.py
- music_recommendation.py
- Songs
- Angry.py, sad.py, surprised.py , neutral.py, happy.py , disgust.py

MODULES TO BE INSTALLED

* Tensorflow
* Keras
* Pyaudio
* Cv2
* Imutils
* Numpy
* Gtts

- Train_emotion_classifier.py :
  - You can retrain the classifier with the dataset (fer2013) provided by running the above file.
- Run the main+movie_recommendation.py file and you can check how the project works
- Music_recommendation.py file is imported to the above file. If you wish to run it separately, you can do that too.
- Make sure there is proper lighting for your face to be detected, only then will the rest of the program run. Or you will receive an error message and the program will terminate
- For movie recommendation, a list of 10 movies from IMDb will be displayed through tkinter window.
- For music recommendation, a set of sons corresponding to the emotion detected will be played.

* **Once the webcam opens up to capture your face as video input, the probabilities of the emotions will be displayed alongside in another window.**
* **You can stop the video input process by pressing the letter ‘s’ (stopping condition’).**
* **Once video input process is done, then the recommendation part starts.**