

STEPS FOR EXECUTION OF THE PROJECT

STEP 1: Install Anaconda and Python in the system. Import all necessary libraries and install python modules which are needed by using pip command.

STEP 2: Download the UTKFace dataset from the given website - <https://www.kaggle.com/jangedoo/utkface-new>.

STEP 3: Now download the Haar cascade XML file which is used for Face detection from this website - https://github.com/opencv/opencv/blob/master/data/haarcascades/haarcascade_frontalface_default.xml.

STEP 4: Now open Anaconda Terminal and run Train.py file which is used to train our model on the given dataset. This process takes about 6hrs for 500 epochs and 10,000 images.

STEP 5: After training is completed a “.h5” file is created.

STEP 6: Now run the Test.py file in the Anaconda terminal. Now the webcam is triggered which detects and recognizes the face and then Age and Gender of a person are detected.

STEP 7: We can also give image as an input in the terminal. For this run WithImageInput.py in the terminal.

STEP 8: Now you'll be asked to enter the Image name which is saved on your local device. Enter the image name. Now the age and gender are detected for the given input image.