a short report on

Image Seprator

created by

Muhammad Huzaifa Inshal

The following project is a command line interface with no GUI, designed and developed by me to test my computer vision skills. The following code separates the images in a dataset on the basis of whether it`s a group photo or a solo or features no face at all.

LIBRARIES USED

The following libraries are used:

- cv2
- sys
- os
- shutil

METHODOLOGY

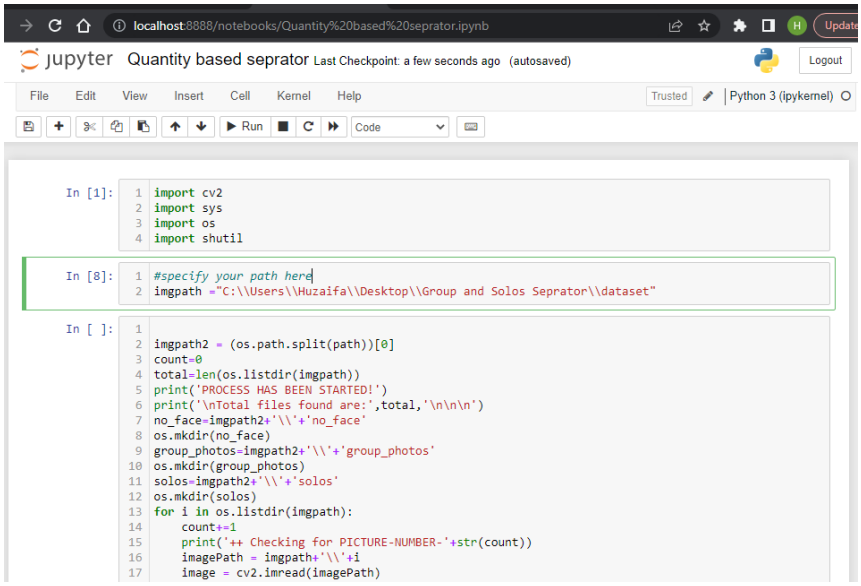
The user specifies the path to his dataset in this cell;

```
import os
import shutil
```

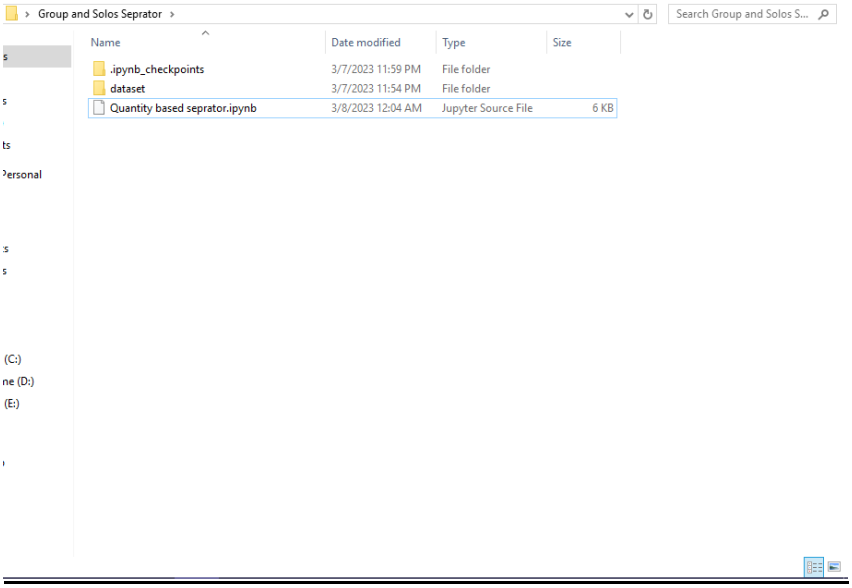
```
In [8]: imgpath ="C:\\Users\\Huzaifa\\Desktop\\Group and Solos Seprator\\dataset"
```

```
In [9]:
imgpath2 = (os.path.split(path))[0]
count=0
```

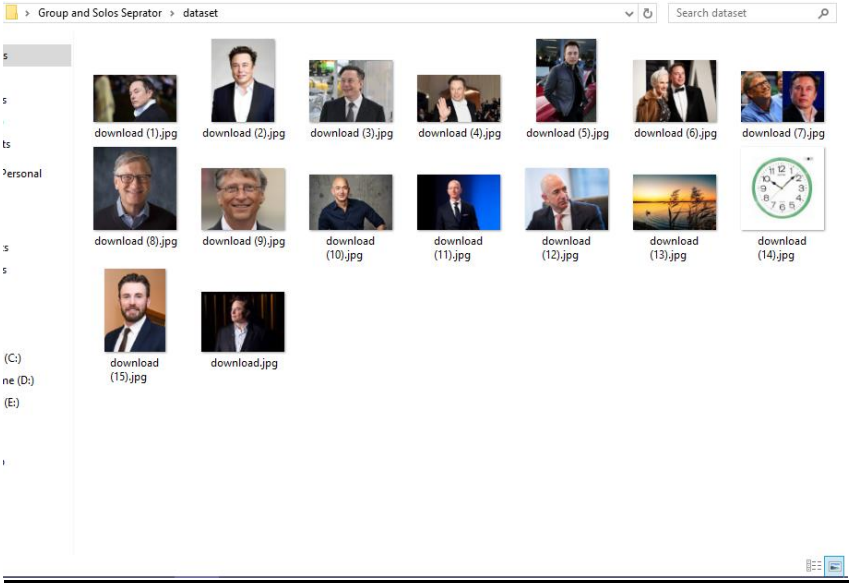
The following code runs by iterating through each picture and checking how many faces that image contains. If the image detect one face only then it's considered as a solo picture, it multiple i.e. more than one picture is detected than that image will be considered as a group photo. The library cv2 is used for detecting faces inside the image. In each folder a separated and a squared folder is also made.



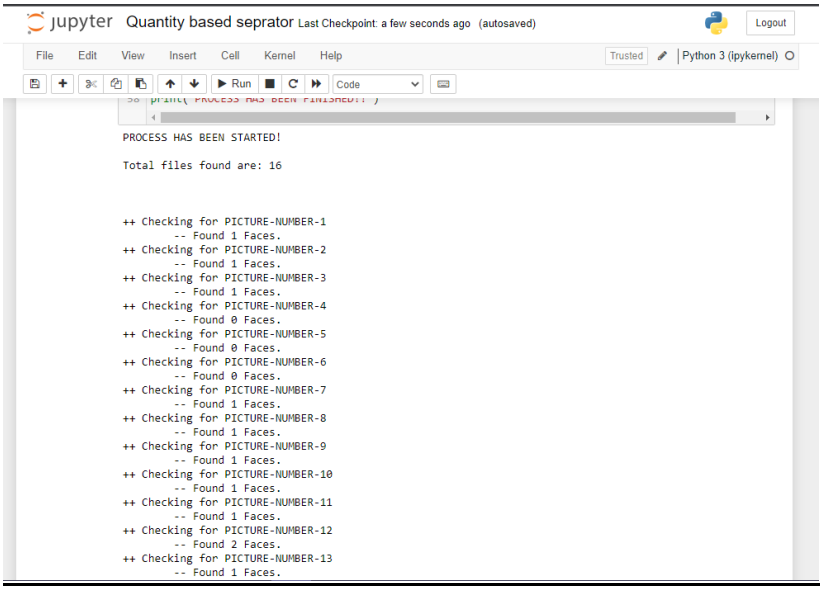
Main code



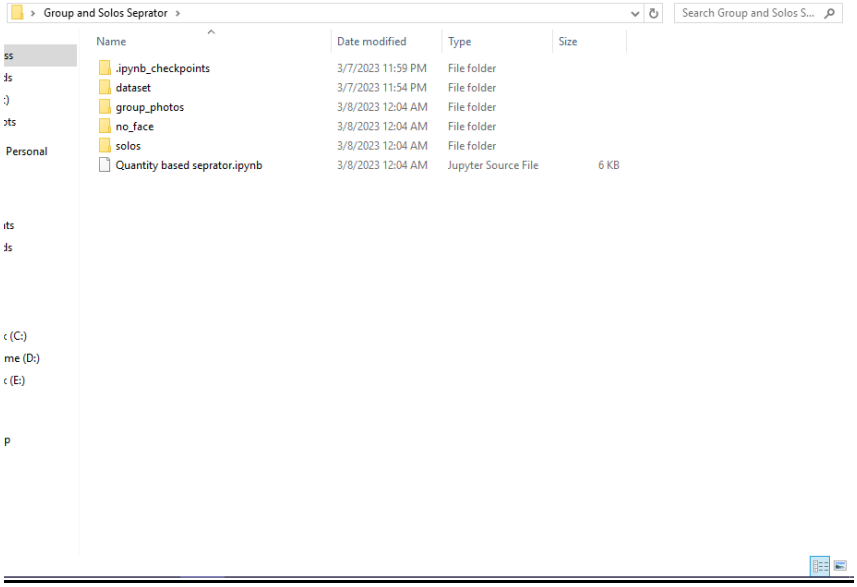
Folder before execution of code



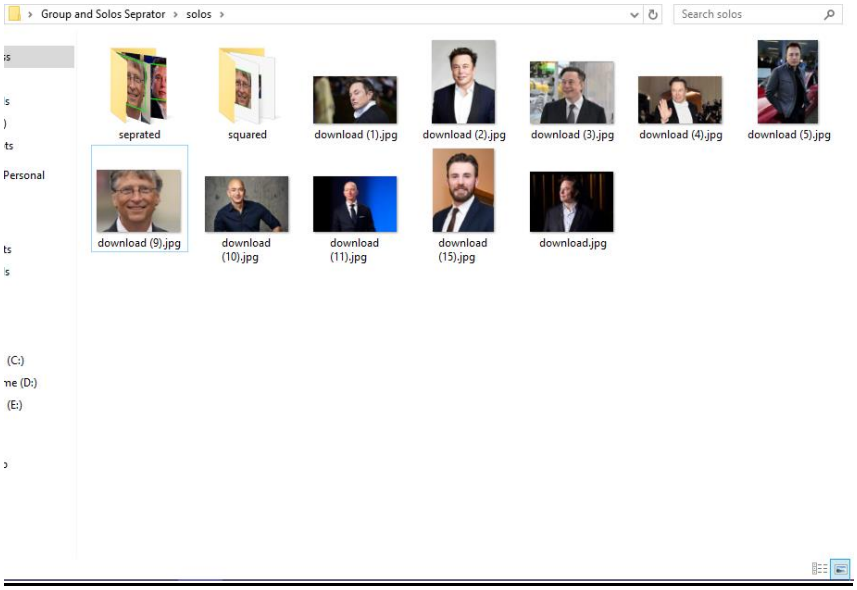
Sample Dataset



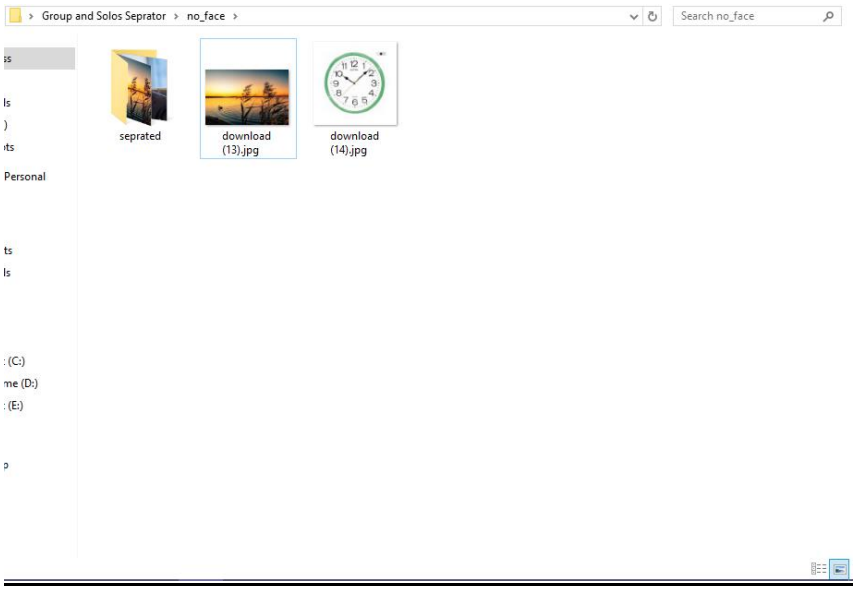
Programm being executed



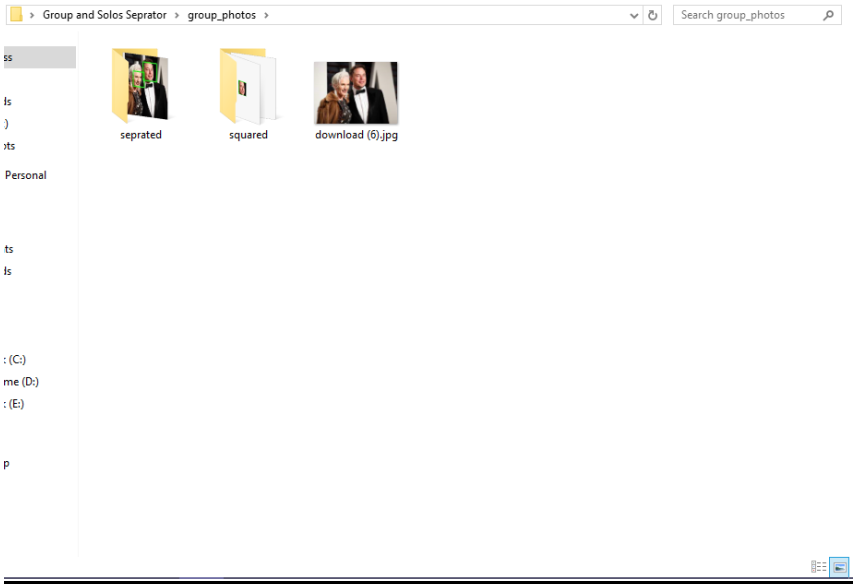
Folder after execution new folders are created



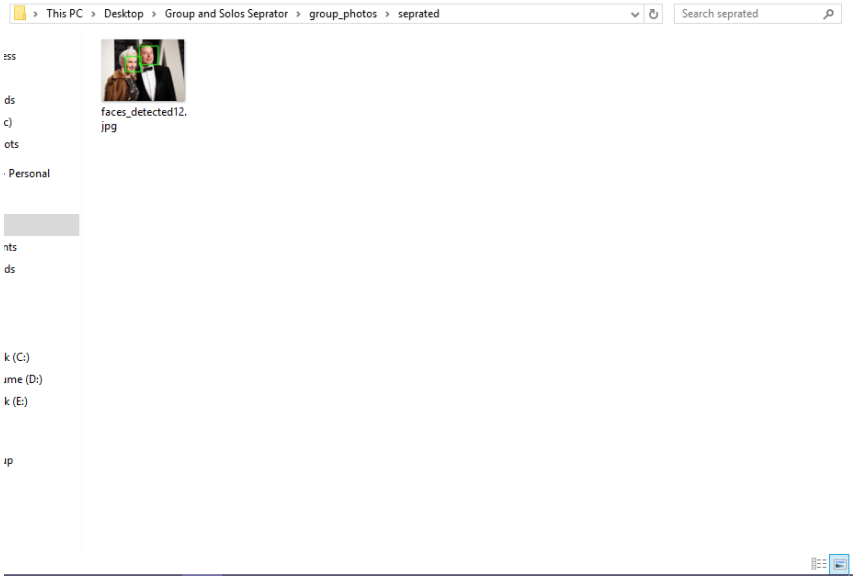
Solos folder



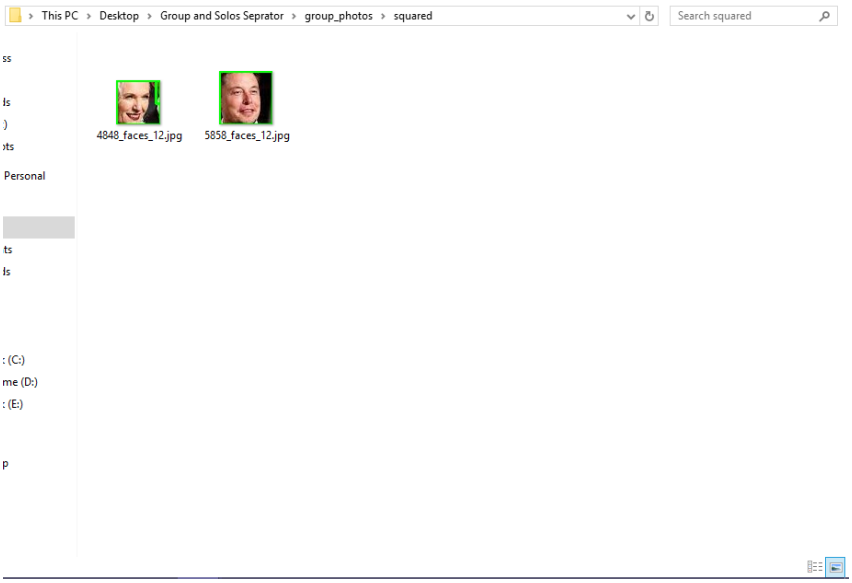
No face folder



Group photos folder



Seprated folder



Squared

LIMITATIONS

The accuracy of the code depends solely on the ability of cv2 library to detect the correct faces. The cv2 library may produce different or inaccurate results on different dataset or images.