OCR Application Documentation

This is an OCR (Optical Character Recognition) - GUI application which can detect text from pictures into a readable format.

Installation

These are the prerequisites for using the OCR application.

- Python 3.7 : https://www.python.org/downloads/
- Numpy package: use command pip install numpy
- OpenCV library : use command pip install opencv-python
- Tesseract OCR library : https://tesseract-ocr.github.io/tessdoc/Home.html
- Tkinter library

After meeting the above requirements, download OCR.py from OCR app folder.

Open command prompt (for windows) / terminal (for Mac). Change the directory to where you have downloaded the application and run using command python3 OCR.py / python OCR.py

(You can also use VS code by opening the OCR.py file and executing using "run" .But make sure to install python extension and the above mentioned packages , library using command python -m pip install somePackage if not done.)

Features

Following are the features of this app

<u>IMPORT IMAGE</u>: By clicking on 'Open image' button you can load any image of your choice from your PC.

<u>AUTO CROP</u>: By clicking on 'Auto Crop' button the loaded image will be cropped into a four cornered image.

<u>MANUAL CROP</u>: By clicking on 'Manual Crop' button you can crop the loaded image by selecting any four corners in the manner specified in the text box on the screen.

<u>DETECT TEXT</u>: By clicking on 'Detect Text' button the loaded image's text will be auto detected and displayed on the text box(in blue).

<u>SHOW TEXT</u>: By clicking on 'Show Text' button the detected words (text) on the image loaded will be bounded in blue boxes.

<u>BLUR IMAGE</u>: By clicking on 'Blur image' button you can blur any image.

<u>SAVE</u>: By clicking on 'Save Image' button you can save the image modified by using any of the above methods in directory of your choice.

<u>CLOSE ALL WINDOWS</u>: By clicking on 'Close All Windows' button all the open window will be closed.

OCR -GUI app screen

