PyPixelator User Documentation

GitHub: https://github.com/sunanth123/pypixelator

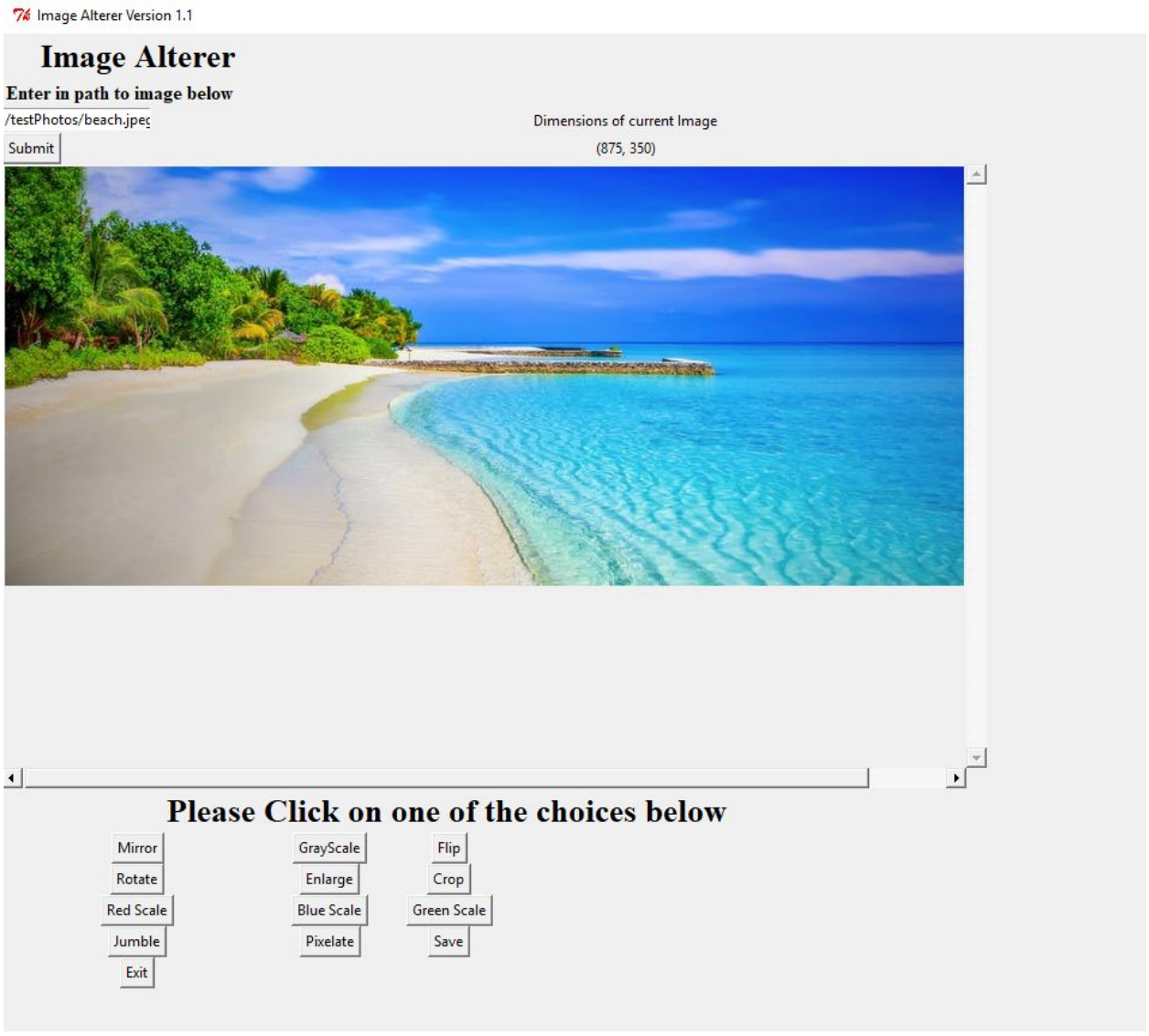
Starting Software

To start the pypixelator you have to be in the current directory of the pypixelator.py file (also make sure you have followed to steps in the README to have the necessary requirements installed). You can then run the following command on the command line.

python pypixelator.py

This should start a seperate window containing a screen with a entry box, submit button, and a red area with with the text “No Image Selected”. Screen shot below.

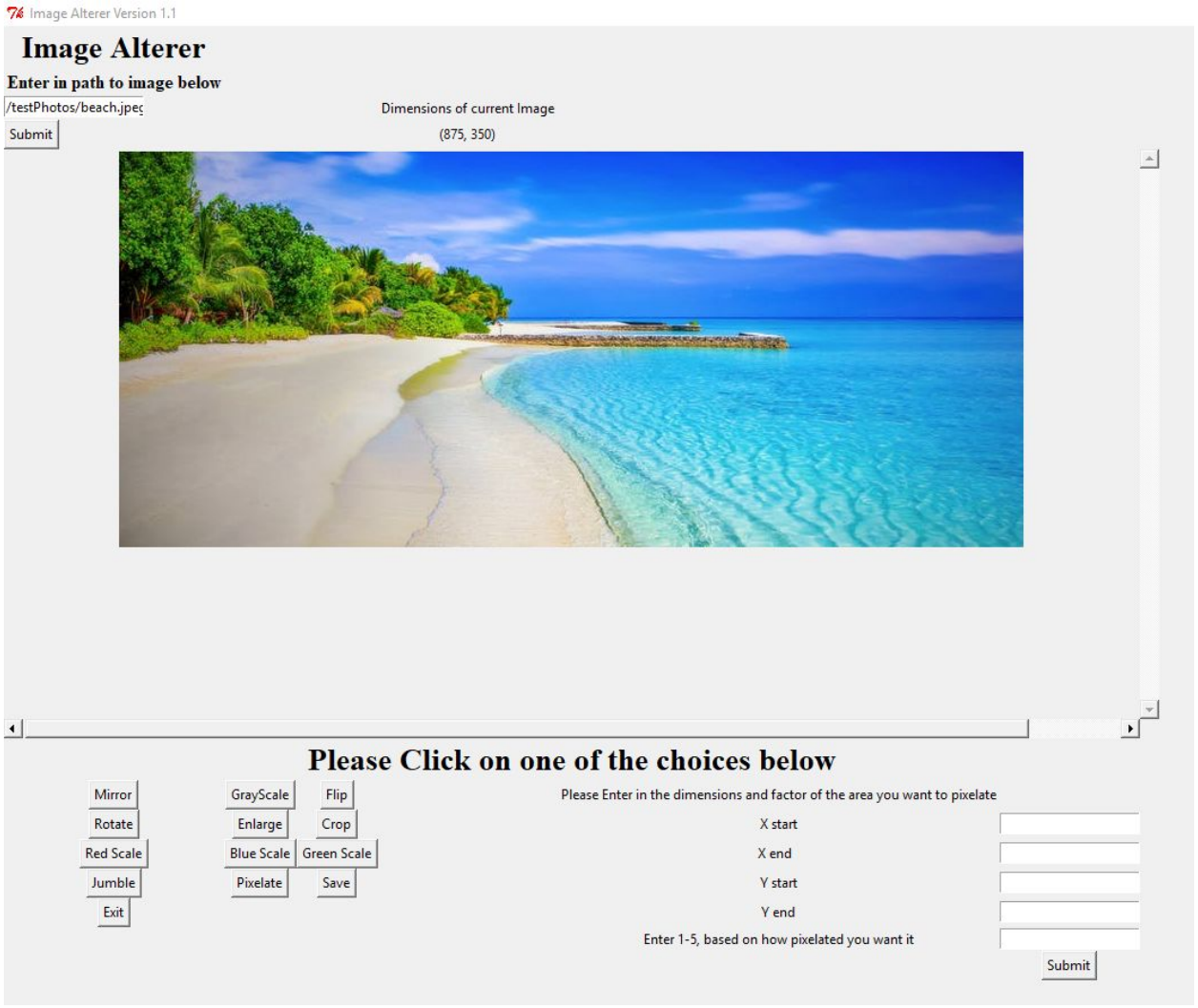
You can now enter in the path to the image you want to alter in the entry field and click the submit button, which will then show you the options you can choose from to alter your image. (Screen shot below)



Using the software

To alter your image simply press one of the buttons which have appeared below your image. Once clicked your image will be updated automatically and you are free to click another feature or save and exit.

For the Pixelate, Crop, and Rotate functionality you will be asked for extra information in order to complete the altercation. Once clicked a new set of entries will appear to the right of all the choices (Image Below). Once you hit submit those entries will disappear until needed again.



Clicking on the save button will save your image under the current directory of the program as “Output.jpg”. The program will not shut down upon clicking the save button, so hitting the save button more than once with different images on the screen will save it to the same file.

Clicking on the Exit button will close the program and window. It will not automatically save your current image so make sure to hit the “save” button.

Features

Mirror-Mirrors the image across the x axis

GrayScale-Grays out each pixel in the image
Flip- Flips the image across the y axis
Rotate-Rotates the image 90,180, or 270 degrees based on user preference
Enlarge- Enlarges image by 1.5x
Crop- Crops the image by a x and y coordinates given by the user, the area cropped will be returned.
RedScale- Changes each pixel in image to a red value
BlueScale- Changes each pixel in image to a blue value
GreenScale- Changes each pixel in image to a green value
Jumble- Takes each pixel in the image and places it into a random spot.
Pixelate- Pixelates a portion of the image by x and y coordinates given by the user.

Starting Unit Tests

To run unit tests type in command line:

python unit_test.py

This will run the series of unit tests while printing a Test Report on the standard out indicating all the tests that passed and failed.