Instruction Manual for Geometric Shapes Detection project:

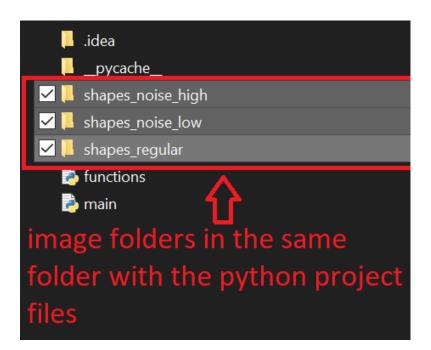
Environment: the project was built in PyCharm.

Required Installed Libraries: numpy, matplotlib (or more specifically pyplot), cv2, os

1)

Included with the rest of the files are 3 folders: "shapes_regular", "shapes_noise_low", "shapes_noise_high" – each folder contains 50 images that were used for testings, verifications and for demonstrations of the program.

The program uses images in file paths such as "shapes_regular//shapes1.jpg", therefore it is important to make sure all 3 of the folders are located in the directory of the python project where the code is running.

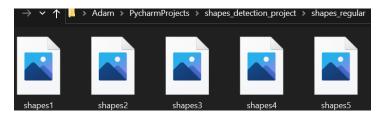


Within each of the 3 image folders above you'll find 50 images. It's important to not change their names. Each folder contains a different version of the image:

a)

shapes_regular contains the original images of the shapes. The naming format of these images is:

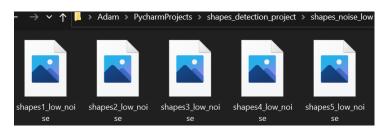
"shapes[number of image, from 1-50].jpg". For example, "shapes13.jpg"



b)

shapes_noise_low contains the same original images but with a low noise level distortion. The naming format for these images is:

"shapes[number of image, from 1-50]_low_noise.jpg"



c)

shapes_noise_high contains the same original images but with a high noise level distortion. The naming format for these images is:

"shapes[number of image, from 1-50]_high_noise.jpg"

