

Assignment#3: Histogram Equalization

Histogram Equalization

Requirements:

Using the GUI you created in assignment 1:

1. After browsing for an image in a new tab, you are required to:
 - a. Display the image
 - b. Calculate (from scratch) its normalized histogram and display it
 - c. Perform histogram equalization (from scratch)
 - d. Display the equalized image
 - e. Calculate and display the equalized image's normalized histogram
2. Attached with the statement are sample images to use for equalization
3. You are not allowed to use built-in libraries for histogram and histogram equalization.
The code should be written from scratch

Submission

- The due date for submission is [Sunday, 07/11/2021](#)
- This is an individual based assignment.
- The submission will be in person.

General instructions

- Handle any errors or exceptions that might occur (e.g., corrupted image)
- You are allowed to use MATLAB (App Designer) or Python (PyQt)
- Your code should be clear, understandable, and documented (COMMENTS)
- Follow a consistent naming convention for variables and functions
- The assignment will be graded out of 5