Grace Bottoms
Final Project
Erinstagram!

Data

Image - 2D array of any size
Editing - 2D array of specific coordinates of an image
File - brightness int and corresponding inputs
File - be able to save edited or unedited images
Iteration - display menu(s) depending on what the user inputs

Program in use

Users are prompted to: upload a new image, display the current image, edit the current image, or exit the program. If the user selects edit, they will be prompted with: crop, dim, brighten, rotate 90 degrees (extra credit). When cropping, the program will provide the user a way to specify a smaller section of the image they would like to use. Dim and brighten will do the respective task and change by one step. If the user selects rotate, the image will rotate 90 degrees. After any of the editing tasks are done, the user will be asked if they want to save the image and if so provide a file name. Afterwards, the user will be brought back to the original menu.

Functions

main()
Data: display menus, variable for menu choice. Save image to file.
Functionality: A menu will display: upload image, edit image, display current image, exit program. The user will select an option. If the option is “edit” another menu will display: crop, dim, brighten.

loadImage()
Input Parameters: file pointer, int image 2d Array
Return Output: none
Functionality: the function will load the image into the 2d array given

dispImage()
Input Parameters: int image 2d Array
Return Output: none
Functionality: the function will display the image in the 2d array to the user in the window

imageToFile()
Input Parameters: int image 2d array, file pointer output file
Return Output: none

Functionality: the function will write the parameters for the image to another file

cropImage()
Input Parameters: file pointer, int xCrop, int yCrop
Return Output: none
Functionality: the function will take the file input from the user and crop the image based on the x and y inputs given to the user, removing the extra space on the 2d array.

brightenImage()
Input Parameters: file pointer, int brightnessChange
Return Output: none
Functionality: the function will take the input image and brighten the image an amount that is decided by the user from 0 to 4

dimImage()
Input Parameters: file pointer, int dimChange
Return Output: none
Functionality: the function will take the input image, and dim the image by an amount that is decided by the user from 0 to 4