Final Project Design

Domenico DiStefano

CS Tools

File IO
Pointers
Expressions
Variables
Arrays
2D Arrays
Functions
Programming Basics
Formatting IO

Functions

main()

Data: Arrays for images and edits, variables for brightness values
Functionality: Load the image file, display edited image, display edit menu, prompt user to return to start/exit, save new image to file

imageSave()

Input Parameters: File pointer, int rows, int column, int image 2D array
Functionality: Save the new image 2D array to a specified file using file IO write
Returned Output: None

imageLoad()

Input Parameters: File pointer, int rows, int column, int image 2D array
Functionality: Take pre existing image 2D array from user prompted file using file IO read
Returned Output: None

imageDisplay()

Input Parameters: int rows, int column, int image 2D array
Functionality: Display current updated 2D image array in terminal with nested loop
Returned Output: None

imageCrop()

Input Parameters: int rows, int column, int image 2D array, int croprow, int crop column
Functionality: Reduce 2D array for the image to specified column and row length from user prompt
Returned Output: None

imageDim()

Input Parameters: int rows, int column, int image 2D array, int brighnessvalue
Functionality: Lower brightness value pointer by 1 and update image based on new brightness value
Returned Output: New brightness value

imageBrighten()

Input Parameters: int rows, int column, int image 2D array, int brighnessvalue
Functionality: Increase brightness value pointer by 1 and update image based on new brightness value

Returned Output: New brightness value

imageRotate() - Extra Credit

Input Parameters: int rows, int column, int image 2D array, int 90degreeamount
Functionality: Move every value in the 2D array to reflect the chosen rotation amount by user prompt
Returned Output: None