

Design Document
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Erinstagram

Data

Prompting user - int
First menu - switch cases (4)
Second menu - switch cases (4)
Picture Rows - macro
Picture Columns - macro
Image - 2D array
File name - array of strings

How the program should run

User chooses from the menu. User has the option of loading a new image, displaying the current image, editing the current image, or exiting the program. Within the edition option the user can either crop, dim, brighten, or rotate an image 90 degrees. After they have chosen an option, the user may save their image to a file. If the option is yes, the user will be prompted for a file name. Once saved, the user will be shown the menu again.

Functions

main()
First Menu function (menuOne())

menuOne()

Input parameters: char, ints

Functionality: in the main function so that it firstly prompts the user with a menu of options

loadImage()

Input parameters: file name string, int rows, int cols, int 2D array for image

Returned output: none

Functionality: The loadImage function will read an image and then updates the rows and columns

displayImage()

Input parameters: file name string, int rows, int cols, int 2D array for image

Returned output: none

Functionality: The displayImage function displays the current image given by the user

MenuTwo()

Input parameters: char, ints

Returned output: none

Functionality: The menuTwo function displays a second menu for the “edit image” option that appears in the first menu. In this menu, the user can choose to crop, dim, brighten, and rotate an image 90 degrees.

editImage()

Input parameters: int 2D array for image, int rows, int cols

Returned output: none

Functionality: The edit image function dims, crops, and rotates the image. When the user selects the option to edit, this function performs any of the tasks chosen.