

Final Project Design Document  
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Image Processing

**Data:**

Array for Current Image  
File pointer for image file  
Char for user decision  
Char array for file name

**Functions:**

main()

Data: Image arrays, decision variables, file pointers

Functionality: In a loop: Make decisions based on user input regarding which functions to call, create working array to store image.

openMenu()

Input: None

Output: User Decision

Functionality: Display options and get choice

loadImage()

Input: file pointer, array for image, size

Output: None (Array values passed by address)

Functionality: access the file and store image in array

displayImage()

Input: Picture array, size

Output: None

Functionality: Access every element of the picture array and display it

editMenu()

Input: None

Output: User Decision

Functionality: Displays edit options and gets user input

crop()

Input: Section to use

Output: None

Functionality: Assigns a portion of the image array to a smaller image array

dim()

Input: Image array, size

Output: None

Functionality: Decrease the “brightness” of each pixel in the image array

brighten()

Input: Image array, size

Output: None

Functionality: Increase the “brightness” of each pixel in the image array

save()

Input: file pointer, image array, size

Output: None

Functionality: Save image array to file