Design Document
Final Project CS 135
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Data:
Image - 2D Array of int 10 x 10
Crop - array of strings
Dim - array of strings
Brighten - array of strings
Rotate - array of strings
Saved brightness settings - array of strings
Saved image - array of strings
Continue choice - Char
File name Image

Execution:
User is asked four questions. Load a new file? Display the current image?
Edit the current image? Exit the program? If the user selects to load a new file it will prompt them to enter the file name to load. This will load the file then ask them if they would like to edit the image/file or save it. If the user selects to display the current image the image will display. If they choose to edit the current image. This will prompt another menu asking if they would like to either crop, dim or brighten the image. If they choose to edit the current image After completing any of the functions it will ask them to save the image, then asking for a file name to save it under.

Functions:
main()
Data: Variables for dimming, brightening, sizing, and cropping. Array for creating image.
Functionality: Display the menu options. Load the current image. In a loop, clear the image, and load the edited image.

Load image()
Input parameters: file pointer, int row, int columns, int image 2D Array
Returned output: none
Functionality: load values from file into image 2D array.

Edit image()
Input parameters: int rows, int columns, int image 2D Array
Returned output: void
Functionality: selection of options to either crop, dim, brighten, or rotate the image.

Crop image()
Input parameters: int rows, int columns, int crop 2D Array
Returned output: bool

Functionality: provide the user with a way to specify which smaller section of the original image they would like to use to create an edited image.

Dim image()
Input parameters: int rows, int columns, int dim 2D Array
Returned output: bool
Functionality: create an edited image where each pixel is one step "dimmer".

Brighten image()
Input parameters: int rows, int columns, int brighten 2D Array
Returned output: bool
Functionality: create an edited image where each pixel is one step "brighter".

Rotate image()
Input parameters: int rows, int columns, int rotate 2D Array
Returned output: bool
Functionality: create an edited image where every pixel in the image has been moved to a new location to create the "rotation" effect.