

Design Document  
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## Data

Image files - 2D arrays in order to get the image

File pointers - files to save

## Background information

Will give the user options on the image they would like to display and afterwards they have the option to edit, save, and generate new images

## Functions

*main ()*

Data: Menu and switch statements

Functionality: Users will utilize the menu option provided written with switch and if statements to allow the user to decide if they want to load, edit, and/ or display the image.

*loadimage()*

Input parameters: Entering file names, reading images and scanning images

Returned output: the image and the file

Functionality: helps to load the actual image for the user

*displayimage ()*

input parameters: if statement, printf statement, switch statements containing the different cases

Returned Output: In the case the size is equal or less than 0 it will say no image. If greater than, its going to take the image and render the different pixels and switch them accordingly

Functionality: When the images break down and the pixels get translated to the table provided

*editimage ()*

input parameters: given another menu in order to edit. Printf, scanf, and if and switch cases will be used.

Returned Output: Going to ask what they want to do to the image and will open that option

Functionality: Breaks down the several ways to edit an image such as crop, dim, and save

*cropimage()*

input parameters: Will ask how many pixels they want to remove and will remove accordingly

Returned Output: It will crop and save

Functionality: To cut down on the pixels in the image specified

*dimimage()*

input parameters: It will ask how dim to dim it

Returned Output: It will lower the associated gray scale on it and will dim it

Functionality: To dim and save image

*brightenimage()*

Similar to *dimimage()* but the opposite

*saveimage()*

input parameters: Ask which file to put it in and will do so

Returned Output: Save the image to the file

Functionality: To save files to be able to utilize them later