

Design Document  
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Erinstagram

## DATA

- picturePixels- 2D array of ints
- userMenuChoice - int
- editMenuChoice- int
- userSaveChoice- char

## FUNCTIONS

- **main()**
  - **Data:** array for the size of the picture, variable for the user's menu decision, variable for the user's decision if they decide to edit the picture, variable for if the user wants to save their picture
  - **Functionality:** decide what to execute based on user's input, retrieve input images from files, and prompt the user to save their image into another file. If the user decides to exit the program, exit.
- **getMenuChoice()**
  - **Parameters:** int userInput
  - **Returned output:** Nothing
  - **Functionality:** Will display the menu to the user and prompt them to load a new image, display the current image, edit the current image, or exit the program
- **loadNewImage()**
  - **Parameters:** file pointer, 2d array for the picture
  - **Returned Output:** Nothing
  - **Functionality:** Read the contents of the image and allow user to input a new image into a file
- **displayImage()**
  - **Parameters:** file pointer, 2d array for the picture
  - **Returned Output:** Nothing
  - **Functionality:** Display the picture
- **editImage()**
  - **Parameters:** file pointer, 2d array for the picture, char editChoice
  - **Returned Output:** Nothing\*
  - **Functionality:** prompt user to decide what kind of editing they want to do

- **cropImage()**
  - **Parameters:** file pointer, 2d array, editChoice
  - **Returned Output:** a cropped version of the user's original image
  - **Functionality:** prompt user to select what portion of the image they would like to crop and display that cropped version
  
- **dimImage()**
  - **Parameters:** file pointer, 2d array, editChoice
  - **Returned Output:** a dimmed version of the user's original image
  - **Functionality:** figure out by how much the user wants to dim the brightness of the picture, dim the brightness of the picture, and display that dimmed version of the image
  
- **brightenImage()**
  - **Parameters:** file pointer, 2d array for the picture, editChoice
  - **Returned Output:** a brightened version of the user's original image
  - **Functionality:** figure out how much the user wants to brighten the image, brighten the picture, and display that brightened version of the image