**Design Document**

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**Project: Erinstagram!**

**Data**

Brightness Values – an array of type int size 5

User file in – FILE\*

User choice – char

User file out – FILE\*

Image – 2Darray of type int size to be determined in the program

**Process**

The user loads a file into the program. Then, the user chooses different things to do with the image. Then, the user can load a new file.

**Functions**

main()

**Data:** int brightVal[5] FILE\* userFileIn char userChoice FILE\* userFileOut int rows int colsint Image [][] int x int y

**Algorithm: get file from user, check null, get image from file, show menu, save image**

crop()

**Input Parameters:** int rows int cols int Image [][cols] int x int y

**Algorithm:** starting from x, go to rows, and starting from y, go to cols

dim()

**Input Parameters:** int brightVal[5] 5 int rows int cols int Image [][cols]

**Algorithm:** going through the entire array, switch out the vault for the one in brightVal[somethig in funtion - 1]

brighten()

**Input Parameters:** int brightVal[5] 5 int rows int cols int Image [][cols]

**Algorithm:** going through the entire array, switch out the vault for the one in brightVal[somethig in funtion + 1]

rotate90Deg()

**Input Parameters:** int rows int cols int Image [][cols]

**Algorithm:** **:** going through the entire array colloum then row, copy into new arrayand return that instad

outputImage()

**Input Parameters:** int rows int cols int Image [][cols] FILE\* userFileOut

**Algorithm:** going through the entire array and outputting to a give file ponter