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Project 1 Design Requirements

Main Class: Swapping colors

1. The program’s main class must found in GreenScreen.java
2. The main method of GreenScreen.java must handle these input parameters (*in this particular*  *order*): args[0] (required) is the name of the image file that you want to manipulate (input image 1) args[1] (required) is the name of the “background” image file (input image 2) args[2] (required) is the name of file that you will save with any modifications args[3] (required) is the image filetype you will save (either “jpg” or “png”) args[4] (required) is the color of the green screen \* args[5] (optional) is an extra credit option for reverse output.  \* Args 3: the color of the green screen can be either **green**, or **white**, as defined by the color constants in the Java API.
3. Implement as many helper functions as needed, but you should use at least two helper functions: one to read in the image and perform the manipulations, and one to save the file of the manipulated image.

First input must be file name with .png or .jpg. loop to request correct input. Or catch error

This is foreground

Method-Look for white or green space, method-correct file

Second input must be file name with with .png or .jpg. loop to request correct input. Or catch error

This is background

3rd input modified green or white

Appropriate foreground?

search for green or white –method search pixels

error handle for incorrect input or loop to request proper input.

If statement, if green, else if white, else error or new input required

Loop through pixels in first image

2 dimensional array of pixels

Nested for loop

Going vertically first then horizontal

Look for much green or white – error handle if not much green or white

Replace white or green in first input with background image

Loop through pixels replacing white or green in first image with pixel from second image – method swap pixels

2 dimensional array of pixels

Nested for loop

Going vertically first then horizontal

Output file as mod.png or mod.jpg – method output