

USEME

Command

1. LOAD

- Command: `load <path> <name>`
- Description: Load an image from a specified path and assign it a name.

2. SAVE

- Command: `save <path> <name>`
- Description: Save the image with the given name to the specified path.

3. COLOR COMPONENT EXTRACTION

- Red: `red-component <oldImage> <newImage>`
- Green: `green-component <oldImage> <newImage>`
- Blue: `blue-component <oldImage> <newImage>`
- Description: Extract the respective color component of the image.

4. VALUE COMPONENT

- Command: `value-component <oldImage> <newImage>`
- Description: Extract the value component of the image.

5. INTENSITY COMPONENT

- Command: `intensity-component <oldImage> <newImage>`
- Description: Extract the intensity component of the image.

6. LUMA COMPONENT

- Command: `luma-component <oldImage> <newImage>`
- Description: Extract the luma component of the image.

7. IMAGE FLIPPING

- Horizontal: `horizontal-flip <oldImage> <newImage>`

- Vertical: `vertical-flip <oldImage> <newImage>`
- Description: Flip the image horizontally or vertically.

8. BRIGHTEN/DARKEN

- Brighten: `brighten <value> <oldImage> <newImage>`
- Darken: `darken <num> <oldImage> <newImage>`
- Description: Brighten or darken the image by the given value.

9. RGB SPLIT AND COMBINE

- Split: `rgb-split <oldImage> <imageR> <imageG> <imageB>`
- Combine: `rgb-combine <imageR> <imageG> <imageB> <newImage>`
- Description: Split the image into its RGB components or combine them into a single image.

10. BLUR/SHARPEN

- Blur: `blur <oldImage> <newImage>`
- Sharpen: `sharpen <oldImage> <newImage>`
- Description: Apply a blur or sharpen effect to the image.

11. SEPIA

- Command: `sepia <oldImage> <newImage>`
- Description: Convert the image to sepia tone.

12. RUN SCRIPT

- Command: `run <scriptFilePath> <image key>`
- Description: Execute a script containing a sequence of commands.

13. HELP

- Command: `help`
- Description: Display a help message.

14. QUIT

- Command: `quit`

- Description: Quit the application.

15. LEVEL ADJUST SPLIT

- Command: `level-adjust-split <num b> <num m> <num w> <oldImage> <newImage> <num split>`
- Description: Level adjust split of an image.

16. HISTOGRAM

- Command: `histogram <oldImage key> <newImage>`
- Description: Generate a histogram of the image.

17. COLOR CORRECT

- Command: `color-correct <oldImage> <newImage>`
- Description: Correct the coloring of an image.

18. COMPRESSION

- Command: `compression <num> <oldImage> <newImage>`
- Description: Apply compression to the image.

19. COLOR CORRECT SPLIT

- Command: `color-correct-split <oldImage> <newImage> <num>`
- Description: Apply color correction with a split effect.

20. LEVEL ADJUST

- Command: `level-adjust <num b> <num m> <num w> <oldImage> <newImage>`
- Description: Adjust the level of an image.

21. BLUR SPLIT

- Command: `blur-split <oldImage> <newImage> <num>`
- Description: Apply a blur effect with a split.

22. SHARPEN SPLIT

- Command: `sharpen-split <oldImage> <newImage> <num>`
- Description: Apply a sharpen effect with a split.

23. SEPIA SPLIT

- Command: `sepia-split <oldImage> <newImage> <num>`
- Description: Convert the image to sepia tone with a split effect.

24. GREYSCALE SPLIT

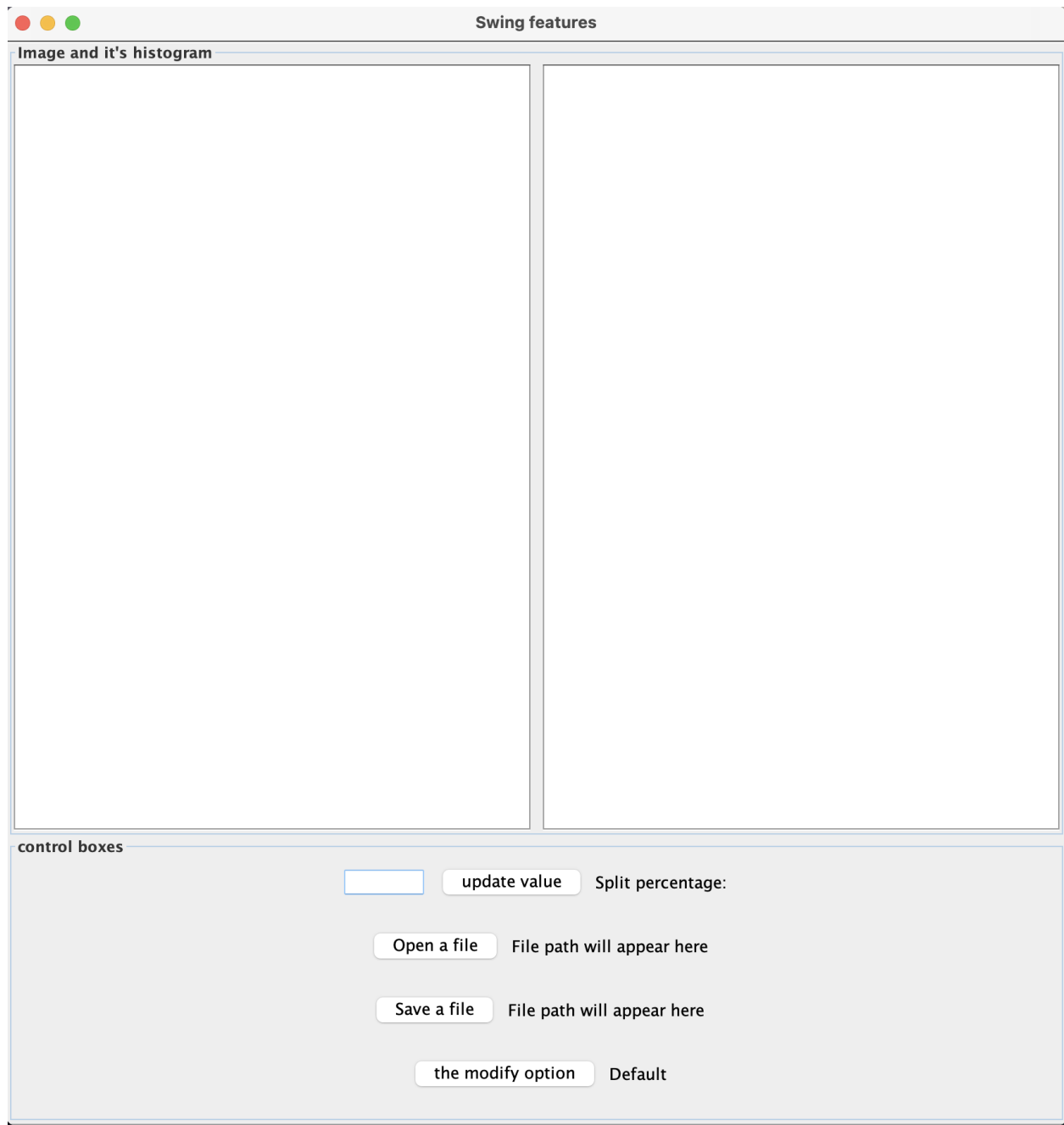
- Command: `greyscale-split <oldImage> <newImage> <num>`
- Description: Convert the image to greyscale with a split effect.

Rules

1. Before you run other commands, please load a exist image first.
2. Also, for all scale we put, it shall be number. And in the right range.
3. Once you forgot how to write command, use “help” in the command. that will show the information of the command.
4. Before you save the image, create new name for each image you modify, if you create same Image name for different image, it will be overwrite by the new one.
5. For the Jar file, we need run that in any please, but we need placed it with a folder call res, and that folder shall contain the image you want to modify. And we will save the image in this folder. If you have the script, also placed in here.

GUI

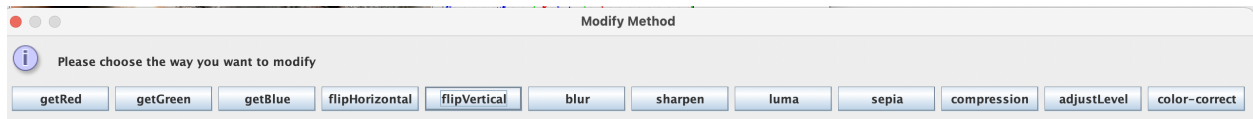
in the Jar file, run the jar file. and in the main.The GUI view will exist.



Then, we need click “Open a file” which you can select the image in jpg, png, and ppm type.

After that, we can see This

now, we can click the modify option button to choose the way you want to modify the image. you will see this.



Then click the one you want to modify, For example, we choose blur, we will get

Then, we can set the percentage we want to split, in the top input box, let's set it as 50, this is what we have.

notes, this image is too big, so you can use the scroll bar at the bottom to see it.

Also, if you put illegal number in there, it will jump a box to notice you to change your input.

After the modify, you can click the save button to save the image in the direction you want to save with proper type.