USEME - GUI

This user guide will walk you through the graphical user interface (GUI) of the application, providing step-by-step instructions on how to perform various image operations.

<u>Launching the Application</u>:

- The application starts from the **ImageProcessingApplication.java file**. Execute the main method in this class to launch the GUI (Without any command-line arguments).

<u>Loading an Image</u>:

- Click on the "**Load Imag**e" button to upload a new image. It is essential to load an image before performing any operations. Failure to do so will result in an error pop-up.

<u>Image Operations</u>:

1. Performing Operations:
   - Various buttons are available for specific image operations like "Visualize Red Component", "Visualize Green Component", "Blur", "Flip Horizontal" etc. Click on the desired operation button and make changes to the image.
2. Saving Operations:
   - To save the changes made during an operation, click on the "**Save Operation**" button.
3. Blur, Sharpen, Greyscale, Sepia, Color Correction, and Level Adjustment Operations:
   - For these operations, a split preview is available before applying changes. Click on "**Apply Operation**" in the split preview pop-up to preview changes, then click on "**Save Operation**" to make them permanent.
4. Cancel Operation:
   - Use the "**Cancel Operatio**n" button to revert any changes made during an operation.
5. Saving the Operated Image to local disk:

- Click on the **"Save Image"** button. A pop-up will appear, allowing you to select the save location and provide a filename with valid extensions (e.g., Filename.jpg, Filename.png, Filename.ppm, Filename.jpeg).
6. Exiting the Application:
    - Click on the **"Exit App"** button to quit the application.

JAR File Usage

We have also provided a JAR file called 'Image Processing.jar' which contains the data related to the src package of our assignment. The jar file should run and behave the same as when the main class- *ImageProcessingApplication.java* is executed using the terminal. The jar file can be run through terminal as follows-

If you want to run just the JAR file for using the GUI-
- The general format to run the JAR file is- *java -jar 'File path name.jar'*
- Eg- **java -jar 'Image Processing.jar'**

Note:
- Ensure that the correct file path is provided in the terminal command.
- To perform an operation on a previously operated image, make sure to click on "Save Operation" on the previously operated image before applying a new operation.