**Post Mortem**

**What well in the project**

* My UI was easy to navigate and looks like a Ui used in many image viewers which makes it more appealing to a customer buying the product. The user has an easy and simple way of applying all the features I have added and it is not difficult to navigate.
* All the test cases were fulfilled in the project all the edge detection methods were completely made, the contrast and brightness scales were successful, the camera activated and created a live image with all the filters applied to it, and the save file feature was created successfully.
* I have tested the program so there aren’t any bugs that cause the program to stop or fail.
* When the program is full-screened the ratio of displays and toolbar on the left do not change but the program still takes up the whole screen.

**What didn’t go well in the project**

* I spent too much time trying to get the OpenCV library to cooperate with the Qt software and if I spent less time on that I could have added more features to the program and maybe made it more visually appealing to the user.
* I spent too much time on the Qt Ui which was finicky because when the window resizes the display images wouldn’t stretch and I had to spend lots of time looking for a solution online.
* For the Prewitt edge detection method, I made the matrix for the method and because of that, I couldn’t adjust the kernel size for the Prewitt method while for the Sobel and Laplacian their kernel sizes were much easier to change. (Kernel size is the dimension of the matrix being multiplied into the image matrix)
* If you have multiple camera devices you can’t choose between them, the program chooses the first one.
* For the user to be able to save in a path with admin privileges they need to run the program as an admin to be able to save a file in an admin path

**How to improve for next time:**

* Add more features for the image processing module
* Make the output module directly print an image through your printer or send the image through email
* The input module would take different input sources like a pre-recorded video or a computer screen.
* Run my program on other platforms like macOS, Android or Linux.