Image editing with JavaFX images is a true nightmare. There is no easy way to handle Images as provided by JavaFX, leading to a need to work with BufferedImages provided by Swing compatibility tools. This limited my previous ambitions for the editing segment. While the image-editing capabilities of this project fell short of what I probably promised in the original proposal, I believe the other improvements make up for this.

First, the search results page now features a wonderfully responsive (try resizing!), visually appealing, Google-Images-style image grid for presenting pictures in a clean way. It took some effort to derive the (albeit simple) formula for resizing each picture appropriately, and making the process fast enough to be genuinely responsive.

The edit and export views were merged into a single window to streamline the usage of the application, which I believe is another upgrade. The old project was a little clunky with the transition between the two panes—this approach allows for a more compact, intuitive interface. Also, the "show metadata" option reveals some Unsplash data about each image that was not available in the original version. User input validation for the edit panel is the cherry on top.

Finally, the JavaFX rewrite resulted in significant decluttering of certain parts of the code (no need for two helper classes just to copy images!) and even new features (alert windows!) that I feel constitutes the last major upgrade to the project. From a more modern-looking interface to a more maintainable codebase, switching over from Swing to fully use just about everything I could reasonably use in JavaFX was well worth the effort.