

1. Initially proposed but not implemented

- a. One of the functions that we initially proposed was hiding data in the coefficients of a discrete cosine transform, which would have allowed us to hide information in JPEG images. This function was more technically challenging to implement than the LSB substitution method and by the time we finished implementing LSB substitution we needed to focus our efforts on building the web application.
- b. We also planned on adding a function that could determine if there was hidden data inside an image. Upon further consideration, we decided that this was not a good idea for a few reasons. No such function could be 100% accurate, and making the function reasonably accurate would require an injection of metadata that would decrease the amount of information the user could store.

2. Implemented but not initially proposed

- a. We added login and registration functionality so that the user could review an archive of their documents and a function that allows users to delete items from their archive. We also added a password reset view which facilitates users changing their passwords.
- b. Initially we planned on encrypting only text and images, but we decided the software would be more useful if we allow users to store any type of file. The final version of the software allows users to store multiple files in one image. When a user decrypts an image that holds multiple files, the files are delivered to them as a single compressed tar ball.

3. Lessons learned

- a. We learned how important constant communication is in a large group. Coordinating everyone's activities and making sure everyone was on the same page was a challenge, but by the end of this semester we were able to communicate effectively.
- b. It was interesting to see how the project evolved over the semester as we recognized our limitations as programmers and identified the need for features that we did not include in the initial requirements.