

Nithya: ~27 hours

I worked on the following tasks:

- Finish refactoring
- Fix Bugs
 - Empty output file was being written when photos were not sent
 - A user can log in twice from separate consoles
 - If an admin tries to create a user that already exists then we get some sort of key error
- Performing Code Coverage Analysis
- Fixing an instance of the EC2 Demo
- Additional features
 - Users can block other users to prevent photos being sent to them
 - Add a Created By column in Auditing
- Writing slides outline for our presentation

Since this was our last sprint, I focused on making sure our core functionality was cleaned up and added any last, additional features that we wanted for our demo. I also set up the EC2 Demo instance with the help of Prof. Birrell, and started on some code coverage analysis. I anticipate that we will not be able to do a thorough code coverage analysis for every single file that we have, but I also think that this is reasonable given our time constraints. We have around ~30% of code coverage analysis. Lastly, I helped write the slides outline for our presentation.

Earn: ~27 hours

I worked on the following tasks:

- File handling
 - Implemented parameters for file extensions and size that will be accepted by our system
- Integrated and refactored verification code to be repurposed for password recovery
- Expanded create user function to prompt unverified users to be verified
- Added audit capabilities to log when users have three failed login attempts

During this sprint, I spent time on file handling to ensure that users can only upload images with the correct extension and under a maximum file size. I also helped Ben as he refactored and integrated the email verification code with our existing code. For my own refactoring, I updated our create user function to correctly handle client-server communication. I also added a user verification feature, where if a user is created by an admin (and is not verified by email), they are prompted to verify their email the first time they log in. Lastly, I added to our audit feature to log when a user committed three incorrect login attempts.

Ben: ~27 hours

I worked on the following tasks:

- Fixed email verification

- All verification/checks (PIN, username presence check, valid password check) now correctly done on the server side
- Implemented password/password reset function
 - Non logged-in users have a forgot password function and can reset their passwords
 - A PIN is sent to the user's email and the user is prompted to verify their pin
 - If the PIN is verified, the user is enabled to reset their password
- Fixed "update password"
- Integrated and refactored verification code with Nithya and Earn's code
- Fixed minor issues with GUI navigation (unending loops, etc)
- Completed presentation outline and slides
- Completed final documentation

The majority of this sprint was spent completing the email verification system that I began last sprint. After email verification was completed for user creation, it was repurposed for a "forgot password" function. As I refactored my email verification code, I had to separate GUI functions from our helper functions, which broke some other functions. After building out the new functions, most of my time was spent fixing the things that subsequently broke. Some issues that arose included improper communication between the client and server, resulting in unexpected system behavior. I also spent time creating our presentation outline, slide deck, and final documentation.