

Project Report

The largest challenge I faced when working on this project was during the design phase. I had never created a GUI or worked with sockets in Java to establish a client server connection. I had a lot to learn with how to set up a GUI. When starting out I was not sure whether to begin work implementing the interface for the server and client, or to work how the two would actually run and then create their respective interfaces. In the end I was unable to correctly allocate the time to get either working and thus my program is lacking in nearly all functionality. However, while reading through Oracle's Java API I learned quite a bit about building GUI's in Java and look forward to continuing to learn more about them.

The requirements phase taught me more about taking my time and identifying all the critical parts of the program before even beginning work on it. I think taking that time to identify each part, and what is required for that single part in order to make the entire project work, is a critical part of the workflow that I am beginning to implement in my own projects.

The analysis and design phase taught me more about systematically coming up with a plan on how to implement each requirement. Beforehand, I would generally design my code while I was implementing it. This obviously led to a host of inconsistencies and made my code more error prone.

Designing the test plan brought a new way of approaching implementing my code. Beforehand, I would simply test specific functionalities during their implementation. I never knew about branch testing or really taking the time to think through how each function or code artifact could function depending on given inputs. This is a new toolset that I think will become incredibly useful.

I had planned on taking an approach with my project that would allow the program to save most of it's data in text files. That way the data could be stored for later uses and it would also eliminate much of the need for storing data in the software. I could not figure out how to use Java for creating a GUI. Where I had started to run into problems was trying to figure out the differences between the different layout managers. In the end, I had started to use more of the GridBagLayout, but I still need to spend some more time to figure it out. I was not sure whether the layouts needed to be created and then how to create their action listeners so that a user could actually interact with them. In the end, I was unable to meet any of the project requirements, except for the proper documentation, and thus my program does not have any extra special features.