Computer Systems Report

Approach

When we first were assigned this project, we decided to meet at the next lab and read through the coursework specification together. This was to make sure everyone had a clear understanding of the task we had been set. After this we read through it again and made a checklist of all the things we had to achieve. This led to us discussing what tasks we would all be best suited to do. We all agreed and made sure every member was comfortable with completing their task. For the rest of the lab we discussed approaches to the more challenging tasks and brainstormed ideas on possible ways to approach them. One being how to create a backup after every edit. This was very productive as everyone knew what they were doing and we had a rough idea of how we would do it so when putting the code together it wouldn’t be as difficult.

Problems

Throughout the assignment we ran into several problems. One being with the checkout and check-in function. We couldn’t come up with an idea of how this should work. We needed the file to be inaccessible to other users when it was checked out but were unsure on how to achieve this. Another problem we ran into was to do with how the log file would record all the changes made to a file. Also, when would this be created? Would it be one log file for one or many files? These sorts of things we hadn’t put a great deal of thought into when planning our approach to this aspect of the assignment.

Solutions

For all our problems we would bring them up in our group chat to notify the other members that we were have difficulties with one of the parts we had been assigned. If the problem could not be solved though this we would all approach it together in the next lab meeting. This worked out very well and proved to be most effective to make sure we could complete as much of the project as we could. As previously mentioned we had problems with the check-in and checkout concept, so this was one of the first things we all attempted in person. After looking at the code the person had done so far and researching online for inspiration we finally decide on an approach on how to achieve this. It was to have a separate folder to hold any files that had been checked out so nobody else could access them from the directory. So the file would be moved her, edited and then checked back into its original repository. This is what we decided would be the best solution and the person who was assigned this continued and completed this after the meeting at the lab. Another problem that we had to tackle in person was also previously mentioned in the task of making a log of all changes to a file. We came to the conclusion that adding the log file when a repository has been made would be the most sound way to achieve this. This log file would then record the changes to all the files in that repository. One of the best solutions we found to making sure all our code would work together and know what everyone had done was GitHub. With this it was easy to know if things weren’t going to be completable and just generally easier to share work we had completed. Finally, with all the other small problems we were mostly able to solve them by asking in the chat and researching (online and in the lecture notes) which normally ended with finding commands that we had either forgotten or did not know about.

Word count: 630