Reflection Report

1. Strengths & weaknesses of the waterfall process:
    a. One of the biggest strengths of the waterfall process is its plan driven nature. The waterfall process has an emphasis on structure and clear documentation. By intensely focusing on documentation and design before working on implementation, there is much less room for error as one phase has to be fully complete before the next phase is started. Another strength of the waterfall process was its clearly defined scope, which allows for a predictable timeline for the completion of the project. The biggest weakness of the waterfall process is the inflexible partitioning of the project which makes it difficult to modify if changes are necessary. Thankfully, we already knew all of the requirements of the project and didn't have to deal with any changing customer requirements, so this was not a huge issue for us.
2. Comparison of actual vs. expected outcomes:
    a. At first, we expected the waterfall process to result in a longer overall process due to only being able to work on one phase at a time, but in reality the opposite was true. By focusing on design and documentation before ever beginning implementation, we were able to ensure that we wouldn't have to return to our documentation to fix issues with our project. We were able to completely rely on our project design to complete the assignment with relatively little issues. Overall, utilizing the waterfall process made for an enjoyable project experience and we can see ourselves using it again in the future.
3. How ChatGPT influenced requirements, design, coding, and testing:

a. ChatGPT did not have much influence on the requirements of the project, as the requirements were relatively set in stone by the assignment. ChatGPT was utilized multiple times for the design/documentation production. After generating a basis for our SRS, we reprompted ChatGPT several times and modified the document ourselves in order to get the desired result. ChatGPT was also used throughout the coding process to help refactor code and clean up our implementation. Since these changes were relatively small there was not as much influence from ChatGPT in this area. Finally, we used ChatGPT to help produce effective test cases for our implementation. By using ChatGPT, we ensured that our test cases covered several areas of input that we had not thought of yet.