Final Project Report Zaid Badawiyeh

This project is one of the most challenging things that I have encountered in college so far and was a fitting way to cap off this undeniably rigorous class. The knowledge needed to complete this final project to the standards expected is the culmination of countless hours of working on homework, projects and studying for practicums. In other words, I believe that the class itself prepared us to be able to complete this project and that additional studying and explanations while helpful aren't necessarily needed. I have found that speaking with TAs in office hours is the best way to gain the knowledge needed to complete projects in this class. My partner Will and I began drawing up the idea for this project in a notebook where we outlined all of the different parts of our game and put the ideas in writing so that we would be able to put together a concrete plan that would be easier to visualize rather than just using our minds. After this we looked at the provided game and based it off of that because there were certain elements that needed to be used from the provided game. This led us to create different classes for our game elements and these included cpp file and h files for Challenges, the Market, pc's, the players, and the map. These files include the many member functions needed to make the game run smoothly and allow for the most direct implementation of the code that we would write, because we could use these classes to hold exactly the information that we needed it to hold. I feel that if we had taken more time to plan out how we were going to implement classes then it would have made this go much smoother. We had an easy enough time creating the classes and member functions within them, it was just difficult to implement them into our actual code and we had many issues with this in the main function. We also could have created a more in-depth algorithm and plan. While we did have all of our ideas and plans written out and our general ideas aligning with the requirements, it would have been beneficial to go more in depth into the actual implementation, including the algorithms for more specific steps such as the marketplace where you can buy potions, and the in all projects including project 3 I have had false starts and wrong directions. I've found that I have to play around a little bit with the code to figure out what ends up working out in the end. At first, we thought that we could just use a main menu and create the variables and text data inside the main function. Then we realized that it would be much simpler to just create text files and to read them into the function. Doing it this way we could write the files once and just use a split function to read it from the file. This would save us time because if we had to use the same text again, we could just pull it from the same file as before and we would always have it available. This would be useful for use in other games if we decided to make a sequel or someone wanted to create something with the same characters as our game.