**Advanced Computer Science**

**Network Project – Final Report**

**Your name:**

**Brian Over**

**Who is your Project Manager?**

**Caleb**

**Describe the process the group underwent for designing the game itself. What obstacles did you face/overcome?**

**We began by attempting to utilize the previous chat program and convert it into a system that works for our Apples to Apples game. This quickly became troublesome as the old program did not easily convert and we had to restart design several times, resulting in many failed designs for the game. We final settled on a piece of code that framed a server-client system which we found online. The base of the code was finished, but we flushed out the precoded information and added greatly to its progression. This server code took a while to understand but when we understood the syntax, it resulted in the finished product design that we decided to go with. I was responsible for writing the bulk of the server class and the most of the client class, as I was the one who discovered the code and understood it the best. Ben and Caleb helped troubleshoot and solve many of the issues that came when designing the game which was extremely necessary as it is impossible for me to test everything at home, and often I would get stuck needing assistance to progress. Our finished product thusly is mostly identical for the client classes with very minor differences between each other.**

**Describe your process for the coding the interface. What obstacles did you face/overcome?**

**The ‘interface’ was not what was planned for the design, as all three of our client classes are nearly identical because of the necessity for uniform design in order to interact with the server correctly. However we all worked together to fix and write the code for the client classes and aided each other greatly. The main problems were understanding how the buffer reader system worked, and writing code to read/listen according to whose turn it was. This proved difficult as there is no way to trace through the hyperthreaded client system, and the multinetworked approach that we took.**

**Describe the testing phase. What obstacles did you face/overcome?**

**Testing phase was largely simple, as all we had to do was play the game until something broke or looked funny. This phase was by far the smallest and we only fully tested after the code was complete and worked correctly. Minor testing was done to troubleshoot during the main design phase, and was the main bulk of the project time rather than a full testing phase after code completion.**

**For non-project managers only: How would you rate your project manager? Why?**

**10/10 Caleb lead the code progression greatly, and aided in focus of the goals needed/ what was required to finish adequately.**

**What did you learn about networking?**

**Networking through java has several issues and requires a considerable amount of debugging/ exception code resulting in a system that is unstable and often overly complicated.**

**What did you learn about working as part of a development team?**

**Working as a group is extremely helpful as each individual will get stuck at specific times/places in the code, and having other minds to solve the problem results in much faster troubleshooting and ease of design. This is much better for difficult and/or larger projects as the results will always be better than if one person designed the code.**