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**Multiplayer Networking System**

In this project, my team and I worked on creating a game-like system. We approached the project as a game-like system with the intent to focus on what we wanted to learn.

Specifically in my case, I set out to learn more about networking difficulties and decisions involving latency and non-local synchronous gameplay for a multiplayer networking system supporting 1-4 players at once. I also wanted to develop advanced skills with data structures and object oriented programming in an extensive system. As well as understand and apply software development principles with focus on deployment on an established platform and maintenance after the fact.

In order to achieve what I wanted to learn, we found that creating a game-like application would be a suitable solution. In the application we created, I was able to apply and practice networking in building a multiplayer system. I was also able to practice with data structures by building an extensive inventory and crafting system into the application.

The goal of what I set out to learn was achieved through the building of the game-like system. While the application was not as polished and robust as we first aimed to have, my individual goals were met as I learned very much from practicing building the systems for the application. The overall goal our team wanted to achieve with building the application was to provide a multiplayer experience for people to connect over the internet in order to promote human connection. This experience that we crafted, while it has many kinks to iron out, is one that we witnessed bring people together as they played.

When I first set out on this project, I outlined how I would know if I accomplished my goals. While some goals such as the intent to practice deploying our application and maintaining it thus after the fact fell to the wayside, I believe that the majority of the other goals involving learning were accomplished. We were able to create a multiplayer experience that delivered on complex systems in which users could interact with each other and their own private systems and I was able to learn a lot in terms of networking, game design, and building bigger systems.