Written Report

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The multiplayer game I made is TicTacToe, the most basic game I could think of. I'm sure everyone knows the rules of TicTacToe, but just in case, I will explain them briefly. One player plays as the crosses, the other plays as the circles, they play on a 3x3 grid and the point of the game is to get either a row, a column or a diagonal of crosses/circles. It is also possible to tie if there are no more spaces left on the grid and no one won yet.

The reason I decided to make something as simple as TicTacToe is because it took me a long time to understand the theory behind all the networking concepts and because, at first, I wanted to make a 3d shooter, but that was way out of reach with my current understanding, so I wasn't left with much time to make anything more substantial.

The first week was particularly rough as it was entirely theory and I found it hard really understanding what I was reading. The lectures in the second week however helped me understand the concepts much better. Those and some really good hands-on tutorials I followed really helped me get a better grasp over the fundamentals and that's what made it possible for me to get this assignment done on time.

I think two major things really set me back during this course and this is how I'd fix them:

- 1. I need to read more and most importantly more frequently, so I can start learning to internalize the information I'm reading much quicker
- 2. I need to start asking for help from my fellow classmates (I don't really do it because I keep thinking I would distract them from their own work too much)

Speaking more about the game now, in terms of network features, I made it so one player would be the host, and the other a client. The server keeps track of a few different things, for example: the score, whichever player's turn it is, every object the players placed, their type (crosses/circles) and their position on the grid. I made it so that only the server is allowed to instantiate or destroy an object. And lastly, I made a very rudimentary chat function that allows the two players to communicate with one another (it does however not work very well with long messages as the words start overlapping a bit).

In conclusion, I think there's a lot of things I need to work on, but I'm still proud of what I made in the end.