UNITED STATES MILITARY ACADEMY

PROJECT 1 WRITEUP

CY350X: COMPUTER NETWORKS

SECTION L2

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WEST POINT, NEW YORK

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\_ MY DOCUMENTATION IDENTIFIES ALL SOURCES USED AND ASSISTANCE RECEIVED IN COMPLETING THIS ASSIGNMENT.

CE I DID NOT USE ANY SOURCES OR ASSISTANCE REQUIRING DOCUMENTATION IN COMPLETING THIS ASSIGNMENT.

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My design philosophy for this project was fairly simple. I started with the simple client/server program we developed in class, ensured I understood what it was doing and how it was doing it, then started to make changes. I started by making small changes at a time, and making sure that the program still worked as I added features. When I added something, I would rerun the client and server to make sure the messages were being manipulated or the send/receive functionality worked properly. When the program checked for input, I made sure to run it with inputs that I thought would and would not work to make sure my error checking was correctly implemented. Doing this allowed me to find bugs quickly, and it kept those bugs small, so I could find and fix them easily.

I didn’t run into any major problems, just minor bugs that come with the style of development I used, which was to implement features and fix their bugs as I went. Other than the occasional syntax error or misuse of a function, which could easily be fixed by looking at Python documentation, I didn’t have to deal with anything too problematic.

As far as lessons learned, I think the biggest one was the benefit of developing programs in small pieces rather than trying to do the whole thing at once. Especially with two programs that interact with each other, it was very helpful to be able to implement something in the client and see how it interacted with the server, and vice versa. If I had tried to implement every constraint and functionality at the same time, there would almost certainly have been more bugs that were more difficult to locate and deal with.