

Jacob Stephens

Professor Akbas/ Professor Chang

CS 490

9/13/2021 - 11/29/2021

### Engineering Notebook

Sep 13, 2021:

Had a meeting with Boeing to see what they wanted to see out of our group and did a little introduction. Anthony was assigned scrum master as he knows the most about the role and seems motivated to get things done. I am going to be working as part of the blue team, but also helping with pen testing.

Sep 15, 2021:

I took the role of software developer as I am in CS so the role makes the most sense for me. For the moment I am going to be helping build up the paperwork as there isn't much to do for the moment.

Sep 20, 2021:

We discussed our plans with Professor Akbas and Professor Chang last week so that we can make sure our visions are in line with what is expected. We are going to be using a software called QEMU to help emulate the network that we are building. As such, I am helping to set up and install QEMU on our machines so that we can at least start to play around with it and learn how it works. We have also begun to have weekly meetings with Boeing at 5:30 PM each day.

Oct 07, 2021:

We have been working on setting up a TFTP server in QEMU for a while now. What's more we have been thinking about how we are going to set up a pen testing toolkit moving into sprint two. I believe there were some mentions of using something called ParrotSec or a VirtualBox, but I believe we are for the main part going to be using Kali Linux. When we talked to Boeing they mentioned TFTP servers were a common problem in their networks as they weren't as secure. Good thing we are making one.

Oct 14, 2021:

We talked about funds at our last meeting with the professor. Specifically, for a Linux computer to act as the server for our project. Max Wilson sent a few pent testing resources in our group chat so that should help with sitting up our toolkit.

Oct 21, 2021:

The team worked on paperwork this week, unfortunately will not be able to work on it this week due to some personal issues that came up.

Oct 31, 2021:

Meeting today in order to discuss working on the cyber-security task for this sprint. Working on building a packet sniffer in Python. Once again won't actually be able to work on this one as it is part of the red teams job, but will hopefully be able to tag along by watching what they will be doing through our Discord.

Nov 4, 2021:

Red team finished the packet sniffer, and I did thankfully get to tag along with its development, I think it's a good experience since I don't have much knowledge on the cyber security aspect of

software development and computer science. Not much else going on at the moment, we are back to planning.

Nov 11, 2021:

Not much else going on still due to other things occurring in all of our lives. We are hopefully getting back into things soon, but we will have to wait until we see how school turns out for us. I believe some of red team has been working on a man-in-the-middle script in python, as we have a lot for resources for that.

Nov 18, 2021:

All that's happening is more work on the Trojan by red team.

Nov 25, 2021:

THANKSGIVING BREAK

Nov 28, 2021:

Working on the SDD and SRS, also started organizing the GitHub as it was a bit disorganized. Will be editing our SDD and SRS based on comments made the editor.