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Professor Akbas
CS 491 - Group 6
2/8/22

Engineering Notes

1/13/22:
First meeting back we discussed our goals for the semester, as well as if anyone would be transferring off the team. We were introduced to the new professor who would be helping with the class and added him to the Github repository. Lastly, we left with the plan of working on the backlog for the semester and have it completed by the next meeting.

1/18/22:
In our next meeting back, we came up with what we wanted to do with each sprint and break those down into smaller tasks for the backlog. Anthony and I discussed via discord how to distribute the tasks for each sprint, as well as what we wanted to prioritize first.

1/20/22:
In this meeting, we figured out who was going to come into class on certain days versus who would stay in the lab or work from home on other days. I offered to continue working on the penetration testing toolkit, along with Matthieu who would work on the MITM attack. The main task for our first sprint was also decided upon and will be collecting a bill of materials to merge all our networks into one.

1/25/22:
I attended this meeting in class, as I decided at the last meeting I would work from the lab/from home on Thursdays. Matthieu and I went over our plans for this sprint. We also talked to the TA about how to break down our tasks into smaller pieces to make them more manageable for the team.

1/27/22:
I worked from home today and reviewed the points I went over with Boeing on Monday at our meeting, as well as the ideas they gave for how to focus our project for this semester. The goal is to leave an easy pick-up project for the next team that takes over the project next year. I also researched more about network security.

2/1/22:
This meeting was mostly discussing the implementation of the cloud software, the overall progress of the sprint, and working on documentation for finishing up sprint 1. This sprint went by quickly and the demo is next week, but it was important to lay a good foundation for the next

sprints this semester. I think we have a good plan overall for how to help leave an easy setup for next year's team.

2/3/22:
We had a meeting with the Prescott campus Wednesday to discuss how we are going to implement the capture the flag element at the end of the semester. So today I spent reviewing what we learned and how to make it easy for the Prescott team to access our network when the time comes.

2/8/22:
We worked on the presentation for the sprint 1 demo, as well as discussed who has which slides on the presentation. I let the team know I'd have to join via Discord because I had the flu.

2/10/22:
This meeting continued the completion of sprint 1. Anthony, Max G., and I worked on the documentation to make sure it was up to date.

2/15/22:
We met in class to discuss what goals we missed in sprint 1 and what we would accomplish in sprint 2. We also coordinated with professor Akbas in regards to using our funds for the purchase of a cloud-based VM host. We found out that implementation via a physical computer would take too long to set up because of the computer part shortage currently going on.

2/17/22:
I researched other penetration testing methods we could use to set up for the final capture-the-flag at the end of the semester. We determined that a RAT Trojan wouldn't be possible with the current situation and have pivoted to network packet modification. We also are looking into how to pen-test the network logs for our cloud server.

2/22/22:
Due to how busy the team is there has not been much progress, we are also waiting on the final bill of materials to send to Professor Akbas that Anthony and a few other teammates are working on.

2/24/22:
I continued researching the various ways to penetration test a network log, as well as give an update to Professor Akbas on the overall goal for sprint 2 for our team.

3/1/22:
Due to a busy week, I have been unable to progress on my portion of the project. I met up in class with Max G. and Professor Akbas to let them know the overall team progress for the week.

3/3/22:
I worked from home on sprint 2 by updating the backlog with Anthony and assigning tasks for each team member. We are still waiting on the paperwork to go through for the cloud server, but we have submitted the bill of materials to Professor Akbas.

3/8/22:
Due to Mattheui having something come up, I stepped up to help get screen captures of our network and how bettercap works. Once I completed setting it up and testing it, I sent the screenshots to Anthony to upload to the presentation for Thursday.

3/11/22:
We presented our sprint 2 demo to the class, but I was unable to attend as I had an emergency come up. I helped work on preparing the slides with Anthony though beforehand.

3/15-17: Spring Break

3/19/22-3/21/22:
After spring break, I worked with the team this week to figure out the plan for the CTF and how we were going to conduct it. We decided on having encryption keys hidden within our environment for Prescott to find and decrypt as their part of the CTF. This was discussed with both Boeing and Prescott over a meeting this Wednesday.

3/29/22-3/31/22:
This is a consolidated update again due to being unable to work on much of the project, as we are waiting to get access to the cloud services needed to combine all aspects of the team's work. Once we have access we will work quickly to add in each of our portions of the project and make sure they all work correctly.

4/5/22-4/7/22:
I was unable to complete much this week as I am still waiting for the cloud server to be purchased and accounts created. We plan to work next week on the project if we get access by then. Each team member has been busy with other classes wrapping up as well.

4/12/22-4/14/22:
We finally got access to the cloud server yesterday (April 14th), and Anthony hopes to start making accounts today or this weekend. I plan to upload my TFTP Unix portion to the server this

weekend and test the capabilities of the pentesting toolkit with all components of the server. We are mostly just waiting for each VM to upload and install, as that is taking up the most time. Next Monday is the CTF for Prescott's portion of the project and we hope to have a connection test with them sometime this weekend.