Team Name: sdmay24-11

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## **Summary of Progress in this Period**

The main goals of this period was to finish the next iteration of our designs as well as complete our testing plan. We wanted to complete the designs in order to have more detail in our testing plan about which specific resources would be tested. In our two groups, we worked on the designs for separate attack paths. We first brainstormed potential vulnerabilities or misconfigurations that would go together. After we had a list of more components than necessary, we layed out a proposed path using those components.

After completing our brainstorming, we met with our client who has experience with using AWS to get his feedback on our proposed designs. For attack path 1, he had us rework the intial entry as well one of the privilege escalation since they were not feasible or relevant to real world scenarios. The client thought attack path 2 was good, only some minor tweaks.

From there, we formalized the designs with a diagram of the attack paths as well as descriptions about the functionality of each component. At the same time, we had enough information to start our testing plan. The majority of our tests are in the unit testing where each step of the attack path will be its own unit that can be tested separately before combining as a whole system. Each attack path is also its own system so each one must meet all the requirements. We had some difficulty with the security testing since our project is designed to be purposefully vulnerable. After discussions, we decided that security testing would focus on ensuring only authorized users can use the attack paths and ensure there are no unintended vulnerabilities exist that would allow the users to deviate from the intended path.

## **Pending Issues**

## **Plans for Upcoming Reporting Period**

The next period, we will continue working on our attack paths. We will meet again with our client to get final feedback before finalizing our designs. Additionally, we will add details about remediation for each component within the attack path to the design. Lastly, we will start working on a small prototype of some of the components for our review presentation.