Final Report

SDE 2

Senior Design 2

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**Introduction:**

The final report aims to detail the progress and results of my Senior Design Project titled "Implementing VMs for Workplace Phishing Simulation/Training." Throughout this project my goal was to create a platform that uses machines (VMs) to simulate phishing situations, for training employees in a workplace setting. The report covers the projects background a schedule showing advancements and concludes with reflections on the development journey, as a whole.

**Background:**

The idea, for starting this project came from the increasing demand for cybersecurity training, in companies. Phishing attacks remain a concern and the usual training techniques might not fully equip staff to identify and deal with phishing incidents. My goal was to use VM technology to develop a training platform that simulates life phishing situations helping employees improve their awareness and response skills.

**Project Schedule:**

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| --- | --- | --- | --- | --- |
| Week | Activity | Description | Due Date | Comments |
| 1-2 | Project Kick Off | Meet with stakeholders and define objectives. | September 10th, 2023 | Identify key team members and roles. |
| 3-4 | Research on Virtual Machines | Research and Requirements Analysis | September 24h, 2023 | Engage IT and security teams for input. |
| 5-6 | Virtual Machine Setup | Choose and setup VM environment. (Kali Linux). | October 8th, 2023 | Consideration for scalability and compatibility |
| 7-8 | Phishing Simulation Implementation | Develop and test phishing scenarios. | October 22nd, 2023 | Involve end users in simulations |
| 9 | Integration with Security Infrastructure | Connect VM system with existing security | Nov 5th, 2023 | Coordinate with IT for seamless integration. |
| 10 | Documentation and Training  | Create user manuals and conduct training | Nov 12th , 2023 | Ensure comprehensive materials for end-users. |

**Conclusion:**

In ending, creating the "Using VMs for Workplace Phishing Simulation/Training" project was hard but I learned a lot. I set up the VM system and made phishing situations work. But I had trouble getting everything together which made the system not work well.

I think things went bad during Week 7 when I faced unexpected tech issues that slowed progress. I also got testing time wrong, so some issues were not fixed on time.

Now, I see the need to plan better and use resources well, especially to predict and handle issues early. To get the results I wanted, I think a more set testing and fixing process, and often talks with others involved, would have helped.

Overall, though the project didn't meet all my hopes, I'm proud of what I did and learned. I'm sure what I went through will help me in future work in cybersecurity and software dev.