Internship Final Report

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University: University Of Benin
Major: Civil Engineering
Internship Duration: August 1st, 2024 - August 31st, 2024
Company: ShadowFox
Domain: Cyber Security
Mentor: Mr. Surendharan
Assistant Mentor: Mr. Pranshu
Coordinator: Mr. Aakash

Objectives

My major objectives for this internship include the following:

1. Complete a series of tasks in order build the required technical skills for tackling security issues.
2. Understand the different cybersecurity tools and its applications
3. Develop a robust understanding of the fundamental concept of cybersecurity

Tasks and Responsibilities

For the duration of my internship, I completed the tasks listed below;

1. **Port Scanning:** scanned a website with the use of Nmap software to check for open ports
2. **Brute Force A Website:** Made use of Burp Suite tool to log in to the website and discover the hidden directories on the website.
3. **Network Traffic Interception:** Made Use of the Wireshark tool to find the credentials that are transferred over the network.
4. **Veracrypt File Decryption:** Decoded a password in its hash format and then use the password in Veracrypt software to decrypt a file containing a secret code.
5. **Entry Point Address:** Used the PE Explorer tool to identify the address of entry point of an executable file.
6. **Payload Creation:** Used the Metasploit framework to carry out reverse connection and create a payload.

Learning Outcomes

- **Robust cybersecurity mindset:** I learned to be security-minded and solution-oriented when tackling cybersecurity problems.
- **Technical Expertise:** I added more skill sets to my technical portfolio throughout my various application of the cyber security tools such as Metasploit for payload creation, Veracrypt for file decryption, Nmap for port scanning and Burp Suite for directory enumeration.
- **Career Advancement:** I gained the required professional skills such as effectively communicating my ideas through verbal and written form which serves to improve my credibility in a work environment.

Challenges and Solutions

- The major and only challenge I had in the course of the internship was understanding the application of the cybersecurity tools required to complete my tasks. I overcame this challenge by utilizing every available forums, video lessons on YouTube and documentation I found on the Internet to aid my understanding of these tools. This in turn improved my approach to handling each task in a more efficient way.

Conclusion

My experience at the ShadowFox internship program has been very fulfilling. I am very glad to have completed the beginners and intermediate level tasks. Now I am more equipped with the technical and non-technical skills to continue advancing in field of cybersecurity and my passion to be a high-value and competent cybersecurity professional.

Acknowledgments

My heartfelt gratitude goes out to our Mentor, Mr. Surendharan and Assistant Mentor, Mr. Pranshu for their guidance throughout the internship as they ensured that the instructions to follow and material guide needed to successfully complete this internship were made available. Also I want to thank the Coordinator, Mr. Aakash, for his timely response in providing clarifications to my questions during the internship. He is in fact the reason I did not miss out on a very important update that could have cost me this internship opportunity.
Thank you so much ShadowFox! God bless you!!!