Lab 6: Assessing Common Attack Vectors

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During this lab I excelled at configuring and executing tasks such as injection attacks and social engineering attacks. My prior experience with vulnerabilities like XSS and command injection allowed me to navigate these parts of the lab with relative ease. I was able to create malicious payloads and manipulate the DOM effectively, achieving successful results with each attack. This experience reinforced my understanding of the importance of properly validating user inputs and limiting direct shell access in application development.

However, I encountered challenges during the malware attack and denial-of-service (DoS) attack sections. Generating a malware payload using msfvenom required more troubleshooting than anticipated, partly due to compatibility issues within the virtual environment.

The lab's instructions were generally well-structured, but more details on troubleshooting would have been helpful. Additionally, understanding more about the attacks would have been interesting. I just executed everything from the terminal, but without understanding of what I was executing. What was really fun was actually sending the attack, and obviously the prompt was funny. Overall it was a fun lab.

To supplement my learning, I conducted research in the final section of the lab, focusing on additional attack vectors not covered in the hands-on exercises. This research provided insight into how diverse cyber threats can be and underscored the importance of staying informed about evolving attack methods. I specifically explored Man-in-the-Middle (MitM) attacks and examined how encryption and VPNs can serve as effective countermeasures. This additional research helped me understand how to secure communication channels and recognize interception threats, which is vital for securing sensitive data in real-world environments.

# References

Jones & Bartlett Learning. (2024, October 18). *Lab Access for Fundamentals of Information Systems Security*. Retrieved from Jones & Bartlett Learning: https://navigate2.jblearning.com/course/view.php?id=129690