

Project Proposal

Introduction:

Bug Bounty Platform or Hacking Platform

Platform Selection: Hack The Box

Hack The Box is an online platform that provides an environment where individuals can practice and enhance their cybersecurity skills through hands-on experiences. This platform is known for its realistic and diverse range of labs and challenges, catering to different skill levels, from beginners to experts. The platform allows us to legally test and enhance our skills in identifying and exploiting vulnerabilities. The suitability of this platform for our project lies in its structured training labs, which enable us to methodically approach the task at hand while also offering a community of like-minded individuals to collaborate and learn from.

Project Details:

Application/System: Training Labs

The selected target for this project is one of the training labs available on the Hack The Box platform. The exact lab will be selected based on a careful assessment of its relevance to our project goals and the skill sets we intend to develop. These labs simulate real-world systems and applications, offering a realistic environment for vulnerability assessment. While the technology stack of each lab will vary.

Scope

The scope of this project encompasses the assessment of vulnerabilities within the training lab from the Hack The Box platform. The project will strictly adhere to the guidelines and rules set by the platform to ensure ethical hacking practices. While the details will depend upon specific training lab, the focus will be on identifying and exploiting vulnerabilities within the application or system, including but not limited to:

1. Code Injection Vulnerabilities
2. Cross-Site Scripting (XSS)
3. SQL Injection
4. Privilege Escalation
5. Session Hijacking

Motivation

The motivation behind selecting a lab from Hack The Box as our target is many-sided. Firstly, it presents a worthwhile cybersecurity challenge, allowing us to apply theoretical knowledge in a practical, hands-on setting. Secondly, it offers a realistic environment where we can hone our skills in identifying and exploiting vulnerabilities, a skill set that is highly valuable in the current digital age. Lastly, successfully identifying and reporting vulnerabilities within this platform can potentially lead to recognition and rewards, further motivating us to excel in this project.

Methodology

Skills and Tools

Group: 8

Over the course of doing the training labs, we plan to learn on how to utilize various cybersecurity skills and tools to aid in the vulnerability assessment. The skills and tools that will be leveraged include:

1. Skills:

- Vulnerability Assessment
- Penetration Testing
- Ethical Hacking
- Secure Coding Practices

2. Tools:

- Burp Suite
- Metasploit
- Nmap
- SQLmap
- OWASP ZAP

Our efforts will be supported by relevant coursework.

Conclusion

Through this project, we aim to achieve the following expectations:

1. Identifying and responsibly reporting vulnerabilities within the training lab.
2. Enhancing our skills in cybersecurity, particularly in vulnerability assessment and exploitation.
3. Learning new tools and techniques in the field of cybersecurity.
4. Potentially earning rewards and recognition through the Hack The Box platform.

We aspire to make a significant contribution to the cybersecurity community by helping to identify and mitigate vulnerabilities, thus fostering a safer digital environment.