

Paths completed: 5

Targets compromised: 445

Ranking: Top 1%

PATHS COMPLETED

PROGRESS

Web Penetration Tester

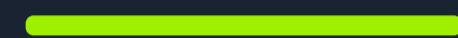
20 Modules

Medium



The Web Penetration Tester Job Role Path is for individuals who want to enter the world of web penetration testing with little to no prior experience in it. This path covers core web security assessment and web penetration testing concepts, and provides a deep understanding of the attack tactics used during web penetration testing. Armed with the necessary theoretical background, multiple practical exercises, and a proven web penetration testing methodology, students will go through all web penetration testing stages, from reconnaissance and vulnerability identification to exploitation, documentation, and communication to vendors. Upon completing this job role path, you will have become proficient in the most common web penetration testing and attack techniques against web applications and APIs, and be in the position of professionally reporting vulnerabilities to a vendor.

100% Completed



Cracking into Hack the Box

3 Modules

Easy



To be successful in any technical information security role, we must have a broad understanding of specialized tools, tactics, and terminology. This path introduces core concepts necessary for anyone interested in a hands-on technical infosec role. The modules also provide the essential prerequisite knowledge for joining the main Hack The Box platform, progressing through Starting Point through easy-rated retired machines, and solving "live" machines with no walkthrough. It also includes helpful information about staying organized, navigating the HTB platforms, common pitfalls, and selecting a penetration testing distribution. Students will complete their first box during this path with a guided walkthrough and be challenged to complete a box on their own by applying the knowledge learned in the Getting Started module.

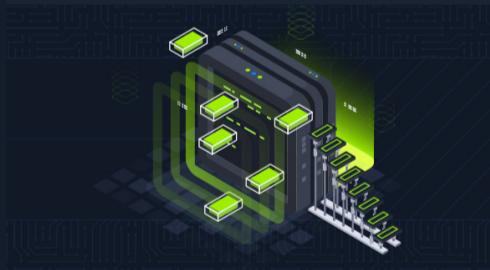
100% Completed



Local Privilege Escalation

2 Modules

Medium



Privilege escalation is a vital phase of the penetration testing process, one we may revisit multiple times during an engagement. During our assessments, we will encounter a large variety of operating systems and applications. Most often, if we can exploit a vulnerability and gain a foothold on a host, it will be running some version of Windows or Linux. Both present a large attack surface with many tactics and techniques available to us for escalating privileges. This path teaches the core concepts of local privilege escalation necessary for being successful against Windows and Linux systems. The path covers manual enumeration and exploitation and the use of tools to aid in the process.

100% Completed



Penetration Tester

28 Modules

Medium



The Penetration Tester Job Role Path is for newcomers to information security who aspire to become professional penetration testers. This path covers core security assessment concepts and provides a deep understanding of the specialized tools, attack tactics, and methodology used during penetration testing. Armed with the necessary theoretical background and multiple practical exercises, students will go through all penetration testing stages, from reconnaissance and enumeration to documentation and reporting. Upon completing this job role path, you will have obtained the practical skills and mindset necessary to perform professional security assessments against enterprise-level infrastructure at an intermediate level. The Information Security Foundations skill path can be considered prerequisite knowledge to be successful while working through this job role path.

100% Completed



Active Directory Enumeration

3 Modules Hard

Active Directory (AD) is widely used by companies across all verticals/sectors, non-profits, government agencies, and educational institutions of all sizes. By its nature, AD is easily misconfigured and has many inherent flaws and widely known vulnerabilities. Due to the sheer number of objects and in AD and complex intertwined relationships that form as an AD network grows, it becomes increasingly difficult to secure and presents a vast attack surface. AD environments can become quite large and often hold many obvious and more difficult to discover flaws. A deep understanding of AD enumeration techniques and tools is essential to becoming a well-rounded information security professional.

100% Completed

MODULE

PROGRESS



Intro to Academy

8 Sections Fundamental General

Your first stop in Hack The Box Academy to become acquainted with the platform, its features, and its learning process.

100% Completed



Hacking WordPress

16 Sections Easy Offensive

WordPress is an open-source Content Management System (CMS) that can be used for multiple purposes.

100% Completed



Linux Fundamentals

30 Sections Fundamental General

This module covers the fundamentals required to work comfortably with the Linux operating system and shell.

100% Completed



Network Enumeration with Nmap

12 Sections Easy Offensive

Nmap is one of the most used networking mapping and discovery tools because of its accurate results and efficiency. The tool is widely used by both offensive and defensive security practitioners. This module covers fundamentals that will be needed to use the Nmap tool for performing effective network enumeration.

100% Completed



Introduction to Bash Scripting

10 Sections Easy General

This module covers the basics needed for working with Bash scripts to automate tasks on Linux systems. A strong grasp of Bash is a fundamental skill for anyone working in a technical information security role. Through the power of automation, we can unlock the Linux operating system's full potential and efficiently perform habitual tasks.

100% Completed

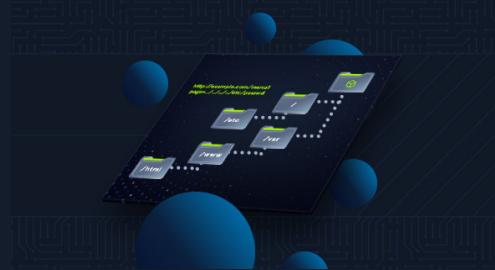


Active Directory LDAP

12 Sections Medium Offensive

This module provides an overview of Active Directory (AD), introduces core AD enumeration concepts, and covers enumeration with built-in tools.

100% Completed



File Inclusion

11 Sections Medium Offensive

File Inclusion is a common web application vulnerability, which can be easily overlooked as part of a web application's functionality.

100% Completed



File Transfers

10 Sections Medium Offensive

During an assessment, it is very common for us to transfer files to and from a target system. This module covers file transfer techniques leveraging tools commonly available across all versions of Windows and Linux systems.

100% Completed

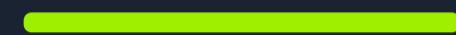


SQL Injection Fundamentals

17 Sections Medium Offensive

Databases are an important part of web application infrastructure and SQL (Structured Query Language) to store, retrieve, and manipulate information stored in them. SQL injection is a code injection technique used to take advantage of coding vulnerabilities and inject SQL queries via an application to bypass authentication, retrieve data from the back-end database, or achieve code execution on the underlying server.

100% Completed



Introduction to Networking

21 Sections Fundamental General

As an information security professional, a firm grasp of networking fundamentals and the required components is necessary. Without a strong foundation in networking, it will be tough to progress in any area of information security. Understanding how a network is structured and how the communication between the individual hosts and servers takes place using the various protocols allows us to understand the entire network structure and its network traffic in detail and how different communication standards are handled. This knowledge is essential to create our tools and to interact with the protocols.

100% Completed



Web Requests

8 Sections Fundamental General

This module introduces the topic of HTTP web requests and how different web applications utilize them to communicate with their backends.

100% Completed

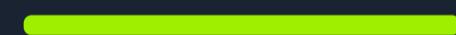


Using the Metasploit Framework

15 Sections Easy Offensive

The Metasploit Framework is an open-source set of tools used for network enumeration, attacks, testing security vulnerabilities, evading detection, performing privilege escalation attacks, and performing post-exploitation.

100% Completed

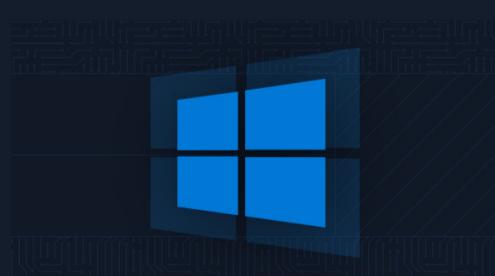


JavaScript Deobfuscation

11 Sections Easy Defensive

This module will take you step-by-step through the fundamentals of JavaScript Deobfuscation until you can deobfuscate basic JavaScript code and understand its purpose.

100% Completed

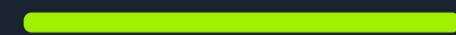


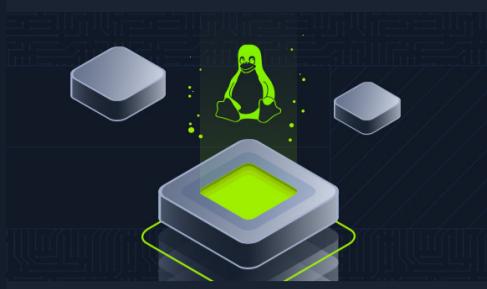
Windows Fundamentals

14 Sections Fundamental General

This module covers the fundamentals required to work comfortably with the Windows operating system.

100% Completed





Linux Privilege Escalation

28 Sections Easy Offensive

Privilege escalation is a crucial phase during any security assessment. During this phase, we attempt to gain access to additional users, hosts, and resources to move closer to the assessment's overall goal. There are many ways to escalate privileges. This module aims to cover the most common methods emphasizing real-world misconfigurations and flaws that we may encounter in a client environment. The techniques covered in this module are not an exhaustive list of all possibilities and aim to avoid extreme "edge-case" tactics that may be seen in a Capture the Flag (CTF) exercise.

100% Completed



Attacking Web Applications with Ffuf

13 Sections Easy Offensive

This module covers the fundamental enumeration skills of web fuzzing and directory brute forcing using the Ffuf tool. The techniques learned in this module will help us in locating hidden pages, directories, and parameters when targeting web applications.

100% Completed



Login Brute Forcing

13 Sections Easy Offensive

The module contains an exploration of brute-forcing techniques, including the use of tools like Hydra and Medusa, and the importance of strong password practices. It covers various attack scenarios, such as targeting SSH, FTP, and web login forms.

100% Completed



SQLMap Essentials

11 Sections Easy Offensive

The SQLMap Essentials module will teach you the basics of using SQLMap to discover various types of SQL Injection vulnerabilities, all the way to the advanced enumeration of databases to retrieve all data of interest.

100% Completed



Windows Privilege Escalation

33 Sections Medium Offensive

After gaining a foothold, elevating our privileges will provide more options for persistence and may reveal information stored locally that can further our access in the environment. Enumeration is the key to privilege escalation. When you gain initial shell access to the host, it is important to gain situational awareness and uncover details relating to the OS version, patch level, any installed software, our current privileges, group memberships, and more. Windows presents an enormous attack surface and, being that most companies run Windows hosts in some way, we will more often than not find ourselves gaining access to Windows machines during our assessments. This covers common methods while emphasizing real-world misconfigurations and flaws that we may encounter during an assessment. There are many additional "edge-case" possibilities not covered in this module. We will cover both modern and legacy Windows Server and Desktop versions that may be present in a client environment.

100% Completed



Active Directory PowerView

9 Sections Medium Offensive

This module covers AD enumeration focusing on the PowerView and SharpView tools. We will cover various techniques for enumerating key AD objects that will inform our attacks in later modules.

100% Completed



Active Directory BloodHound

14 Sections Medium Offensive

This module covers AD enumeration focusing on the BloodHound tool. We will cover various techniques for enumerating key AD objects that will inform our attacks in later modules.

100% Completed



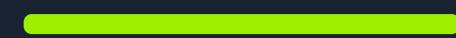


Introduction to Web Applications

17 Sections Fundamental General

In the Introduction to Web Applications module, you will learn all of the basics of how web applications work and begin to look at them from an information security perspective.

100% Completed



Getting Started

23 Sections Fundamental Offensive

This module covers the fundamentals of penetration testing and an introduction to Hack The Box.

100% Completed



Broken Authentication

14 Sections Medium Offensive

Authentication is probably the most straightforward and prevalent measure used to secure access to resources, and it's the first line of defense against unauthorized access. Broken authentication is listed as #7 on the 2021 OWASP Top 10 Web Application Security Risks, falling under the broader category of Identification and Authentication failures. A vulnerability or misconfiguration at the authentication stage can impact an application's overall security.

100% Completed



Intro to Network Traffic Analysis

15 Sections Medium General

Network traffic analysis is used by security teams to monitor network activity and look for anomalies that could indicate security and operational issues. Offensive security practitioners can use network traffic analysis to search for sensitive data such as credentials, hidden applications, reachable network segments, or other potentially sensitive information "on the wire." Network traffic analysis has many uses for attackers and defenders alike.

100% Completed



Introduction to Python 3

14 Sections Easy General

Automating tedious or otherwise impossible tasks is highly valued during both penetration testing engagements and everyday life. Introduction to Python 3 aims to introduce the student to the world of scripting with Python 3 and covers the essential building blocks needed for a beginner to understand programming. Some advanced topics are also covered for the more experienced student. In a guided fashion and starting soft, the final goal of this module is to equip the reader with enough know-how to be able to implement simple yet useful pieces of software.

42.86% Completed



Penetration Testing Process

15 Sections Fundamental General

This module teaches the penetration testing process broken down into each stage and discussed in detail. We will cover many aspects of the role of a penetration tester during a penetration test, explained and illustrated with detailed examples. The module also covers pre-engagement steps like the criteria for establishing a contract with a client for a penetration testing engagement.

100% Completed



Cross-Site Scripting (XSS)

10 Sections Easy Offensive

Cross-Site Scripting (XSS) vulnerabilities are among the most common web application vulnerabilities. An XSS vulnerability may allow an attacker to execute arbitrary JavaScript code within the target's browser and result in complete web application compromise if chained together with other vulnerabilities. This module will teach you how to identify XSS vulnerabilities and exploit them.

100% Completed





Vulnerability Assessment

17 Sections Easy Offensive

This module introduces the concept of Vulnerability Assessments. We will review the differences between vulnerability assessments and penetration tests, how to carry out a vulnerability assessment, how to interpret the assessment results, and how to deliver an effective vulnerability assessment report.

100% Completed



Command Injections

12 Sections Medium Offensive

Command injection vulnerabilities can be leveraged to compromise a hosting server and its entire network. This module will teach you how to identify and exploit command injection vulnerabilities and how to use various filter bypassing techniques to avoid security mitigations.

100% Completed



Using Web Proxies

15 Sections Easy Offensive

Web application penetration testing frameworks are an essential part of any web penetration test. This module will teach you two of the best frameworks: Burp Suite and OWASP ZAP.

100% Completed



Footprinting

21 Sections Medium Offensive

This module covers techniques for footprinting the most commonly used services in almost all enterprise and business IT infrastructures. Footprinting is an essential phase of any penetration test or security audit to identify and prevent information disclosure. Using this process, we examine the individual services and attempt to obtain as much information from them as possible.

100% Completed



Attacking Common Applications

33 Sections Medium Offensive

Penetration Testers can come across various applications, such as Content Management Systems, custom web applications, internal portals used by developers and sysadmins, and more. It's common to find the same applications across many different environments. While an application may not be vulnerable in one environment, it may be misconfigured or unpatched in the next. It is important as an assessor to have a firm grasp of enumerating and attacking the common applications discussed in this module. This knowledge will help when encountering other types of applications during assessments.

100% Completed



Shells & Payloads

17 Sections Medium Offensive

Gain the knowledge and skills to identify and use shells & payloads to establish a foothold on vulnerable Windows & Linux systems. This module utilizes a fictitious scenario where the learner will place themselves in the perspective of a sysadmin trying out for a position on CAT5 Security's network penetration testing team.

100% Completed

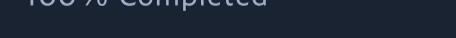


Attacking Common Services

19 Sections Medium Offensive

Organizations regularly use a standard set of services for different purposes. It is vital to conduct penetration testing activities on each service internally and externally to ensure that they are not introducing security threats. This module will cover how to enumerate each service and test it against known vulnerabilities and exploits with a standard set of tools.

100% Completed



Web Attacks

18 Sections Medium Offensive

This module covers three common web vulnerabilities, HTTP Verb Tampering, IDOR, and XXE, each of which can have a significant impact on a company's systems. We will cover how to identify, exploit, and prevent each of them through various methods.

100% Completed



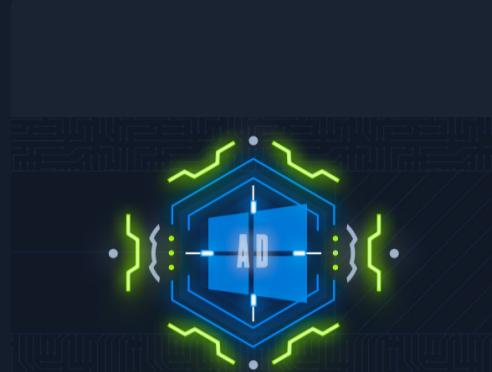


File Upload Attacks

11 Sections | Medium | Offensive

Arbitrary file uploads are among the most critical web vulnerabilities. These flaws enable attackers to upload malicious files, execute arbitrary commands on the back-end server, and even take control over the entire server and all web applications hosted on it and potentially gain access to sensitive data or cause a service disruption.

100% Completed



Active Directory Enumeration & Attacks

36 Sections | Medium | Offensive

Active Directory (AD) is the leading enterprise domain management suite, providing identity and access management, centralized domain administration, authentication, and much more. Due to the many features and complexity of AD, it presents a large attack surface that is difficult to secure properly. To be successful as infosec professionals, we must understand AD architectures and how to secure our enterprise environments. As Penetration testers, having a firm grasp of what tools, techniques, and procedures are available to us for enumerating and attacking AD environments and commonly seen AD misconfigurations is a must.

100% Completed

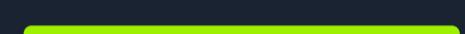


Information Gathering - Web Edition

19 Sections | Easy | Offensive

This module equips learners with essential web reconnaissance skills, crucial for ethical hacking and penetration testing. It explores both active and passive techniques, including DNS enumeration, web crawling, analysis of web archives and HTTP headers, and fingerprinting web technologies.

100% Completed

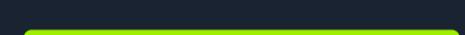


Server-side Attacks

19 Sections | Medium | Offensive

A backend that handles user-supplied input insecurely can lead to devastating security vulnerabilities such as sensitive information disclosure and remote code execution. This module covers how to identify and exploit server-side bugs, including Server-Side Request Forgery (SSRF), Server-Side Template Injection (SSTI), and Server-Side Includes (SSI) injection attacks.

100% Completed

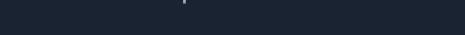


Password Attacks

26 Sections | Medium | Offensive

Passwords are still the primary method of authentication in corporate networks. If strong password policies are not enforced, users often choose weak, easy-to-remember passwords that can be cracked offline and leveraged to escalate access. As penetration testers, we encounter passwords in many forms during our assessments. It's essential to understand how passwords are stored, how they can be retrieved, methods for cracking weak passwords, techniques for using hashes that cannot be cracked, and how to identify weak or default password usage.

100% Completed

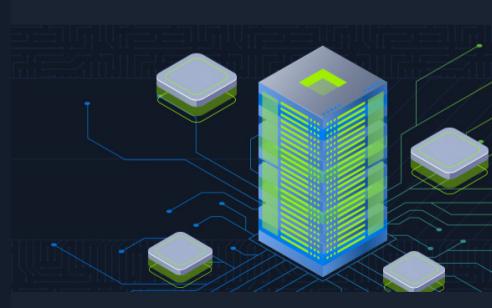
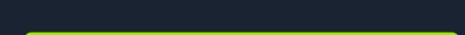


Incident Handling Process

11 Sections | Easy | General

Security Incident handling has become a vital part of every organization's defensive strategy, as attacks constantly evolve and successful compromises are becoming a daily occurrence. In this module, we will review the process of handling an incident from the very early stage of detecting a suspicious event to confirming a compromise and responding to it.

100% Completed



Session Security

14 Sections | Medium | Offensive

Maintaining and keeping track of a user's session is an integral part of web applications. It is an area that requires extensive testing to ensure it is set up robustly and securely. This module covers the most common attacks and vulnerabilities that can affect web application sessions, such as Session Hijacking, Session Fixation, Cross-Site Request Forgery, Cross-Site Scripting, and Open Redirects.

100% Completed



Pivoting, Tunneling, and Port Forwarding

18 Sections Medium Offensive

Once a foothold is gained during an assessment, it may be in scope to move laterally and vertically within a target network. Using one compromised machine to access another is called pivoting and allows us to access networks and resources that are not directly accessible to us through the compromised host. Port forwarding accepts the traffic on a given IP address and port and redirects it to a different IP address and port combination. Tunneling is a technique that allows us to encapsulate traffic within another protocol so that it looks like a benign traffic stream.

100% Completed



Web Service & API Attacks

13 Sections Medium Offensive

Web services and APIs are frequently exposed to provide certain functionalities in a programmatic way between heterogeneous devices and software components. Both web services and APIs can assist in integrating different applications or facilitate separation within a given application. This module covers how to identify the functionality a web service or API offers and exploit any security-related inefficiencies.

100% Completed



Bug Bounty Hunting Process

6 Sections Easy General

Bug bounty programs encourage security researchers to identify bugs and submit vulnerability reports. Getting into the world of bug bounty hunting without any prior experience can be a daunting task, though. This module covers the bug bounty hunting process to help you start bug bounty hunting in an organized and well-structured way. It's all about effectiveness and professionally communicating your findings.

100% Completed



Documentation & Reporting

8 Sections Easy General

Proper documentation is paramount during any engagement. The end goal of a technical assessment is the report deliverable which will often be presented to a broad audience within the target organization. We must take detailed notes and be very organized in our documentation, which will help us in the event of an incident during the assessment. This will also help ensure that our reports contain enough detail to illustrate the impact of our findings properly.

100% Completed

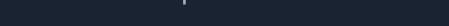


Attacking Enterprise Networks

14 Sections Medium Offensive

We often encounter large and complex networks during our assessments. We must be comfortable approaching an internal or external network, regardless of the size, and be able to work through each phase of the penetration testing process to reach our goal. This module will guide students through a simulated penetration testing engagement, from start to finish, with an emphasis on hands-on testing steps that are directly applicable to real-world engagements.

100% Completed



Introduction to Windows Command Line

23 Sections Easy General

As administrators and Pentesters, we may not always be able to utilize a graphical user interface for the actions we need to perform. Introduction to Windows Command Line aims to introduce students to the wide range of uses for Command Prompt and PowerShell within a Windows environment. We will cover basic usage of both key executables for administration, useful PowerShell cmdlets and modules, and different ways to leverage these tools to our benefit.

100% Completed



Windows Event Logs & Finding Evil

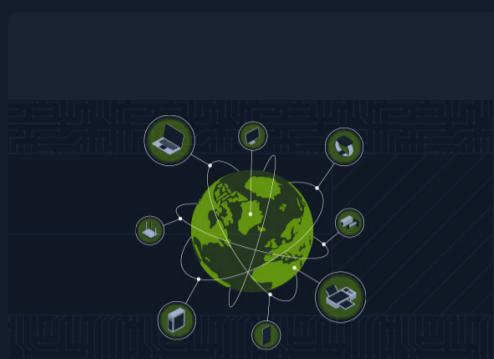
6 Sections Medium Defensive



This module covers the exploration of Windows Event Logs and their significance in uncovering suspicious activities. Throughout the course, we delve into the anatomy of Windows Event Logs and highlight the logs that hold the most valuable information for investigations. The module also focuses on utilizing Sysmon and Event Logs for detecting and analyzing malicious behavior. Additionally, we delve into Event Tracing for Windows (ETW), explaining its architecture and components, and provide ETW-based detection examples. To streamline the analysis process, we introduce the powerful Get-WinEvent cmdlet.

16.67% Completed

100% Completed



Network Foundations

12 Sections Fundamental General

This course introduces the basic concepts essential to understanding the world of networking. Students will learn about various network types such as LANs and WANs, discuss fundamental networking principles including the OSI and TCP/IP models, and explore key network components like routers and servers. The course also covers important topics such as IP addressing, network security, and internet architecture, providing a comprehensive overview of networking that is crucial for any IT professional.



Introduction to Information Security

24 Sections Fundamental General

This theoretical module provides a comprehensive introduction to the foundational components of information security, focusing on the structure and operation of effective InfoSec frameworks. It explores the theoretical roles of security applications across networks, software, mobile devices, cloud environments, and operational systems, emphasizing their importance in protecting organizational assets. Students will gain an understanding of common threats, including malware and advanced persistent threats (APTs), alongside strategies for mitigating these risks. The module also introduces the roles and responsibilities of security teams and InfoSec professionals, equipping students with the confidence to advance their knowledge and explore specialized areas within the field.

100% Completed



Introduction to Penetration Testing

21 Sections Fundamental Offensive

In this module, we will get into the fundamentals of penetration testing, a critical aspect of cybersecurity theory that explains how professionals in the field operate and underscores the significance of penetration testing within cybersecurity practices.

100% Completed



Pentest in a Nutshell

24 Sections Easy Offensive

This module focuses on providing a detailed, guided simulation of a real penetration test, emphasizing the fine details of the penetration testing process. It guides you through each step, from reconnaissance to exploitation, mirroring the techniques and methodologies used by professional penetration testers. It offers hands-on experience in a controlled environment and aims to deepen understanding and sharpen skills essential for effective cybersecurity assessments.

100% Completed