#### CYBERIUM ARENA



# Description

The Penetration Testing training equips learners with crucial skills to identify and exploit system vulnerabilities. Covering data gathering, system infiltration, post-breach techniques, and emphasizing WebApp Security, this program prepares participants to effectively safeguard digital assets against cyber threats.

# PENETRATION TESTING

# Module 1: Collecting Information

This module empowers learners with fundamental penetration testing skills. It commences with Information Gathering, enabling understanding of targeted systems. Scanning follows, teaching detection of open ports and services. Lastly, Enumeration provides detailed system information, critical for crafting effective cuberattack strategies.

### Information Gathering

Whois and Dmitry Google and GHDB Shodan CLI DNS Reconnaissance Online Databases

#### Scanning

Nmap Scanning **NSE Scripting** Enumeration

Services

Msfconsole

**Enumeration Tools** 

Vulnerabilities Detection Methods

Nessus

# Module 2: Exploitation

This module is focused on the practical aspects of penetration testing, with a keen focus on Exploitation. It starts by teaching the methodologies to leverage vulnerabilities for unauthorized system access. Further, it explores payloads, which are pieces of code executed post successful exploitation, providing crucial insights into cyberattack mechanics.

#### Exploitation

Brute Force Tools Exploits Database Msfconsole Exploiting Manually

Payloads

Msfvenom Payloads Payloads Automation

Meterpreter

## Module 3: Post Exploitation

Post exploitation tactics, used after gaining unauthorized access, are explored, giving insights into maintaining access, data extraction, and covering tracks. Furthermore, it examines social engineering, a human manipulation tactic for information or access, underscorina the human element in cybersecurity.

Local vs. Remote Exploits Privilege Escalation Persistence Disabling Security Social Engineering Online Services BeEF Phishing Frameworks Advanced Techniques

## Module 3: WebApp Security

This module sheds light on the crucial aspect of safeguarding web applications. It navigates through various aspects of web application security, highlighting common vulnerabilities, and providing effective strategies to counteract them. A key focus is on securing data transactions, user authentication processes, and ensuring overall application integrity.

HTML Basics About OWASP XSS LFI/RFI Brute Force SQL Injection Web Payloads Reverse Shell **Burp Suite** Proxy Repeater Intruder Encoder