# 100 days cybersecurity plan.

## Days 1-10: Introduction to Cybersecurity

- 1. Familiarize yourself with the basics of cybersecurity, including common threats, attack vectors, and security principles.
- 2. Understand the importance of cybersecurity in protecting systems, networks, and data.
- 3. Learn about various cybersecurity roles and career paths.

# Days 11-20: Networking Fundamentals

- 1. Gain a solid understanding of networking concepts, including TCP/IP, OSI model, IP addressing, and subnetting.
- 2. Learn about network protocols, such as HTTP, DNS, and SMTP.
- 3. Explore network security fundamentals, including firewalls, VPNs, and intrusion detection systems.

#### Days 21-30: Operating System Security

- 1. Study the security features and vulnerabilities of popular operating systems (e.g., Windows, Linux, macOS).
- 2. Learn about user access controls, privilege escalation, and securing system configurations.
- 3. Understand the importance of patching and updating operating systems to mitigate vulnerabilities.

# Days 31-40: Web Application Security

- 1. Familiarize yourself with common web application vulnerabilities, such as SQL injection, cross-site scripting (XSS), and cross-site request forgery (CSRF).
- 2. Learn about secure coding practices, input validation, and web application firewalls (WAFs).

3. Explore tools like Burp Suite and OWASP ZAP for web application security testing.

#### Days 41-50: Cryptography

- 1. Understand the principles of cryptography and encryption algorithms.
- 2. Learn about symmetric and asymmetric encryption, digital signatures, and hashing algorithms.
- 3. Explore cryptographic protocols like SSL/TLS and their role in securing data in transit.

#### Days 51-60: Security Assessments and Penetration Testing

- 1. Study the methodologies and techniques used in security assessments and penetration testing.
- 2. Learn how to perform vulnerability scanning, reconnaissance, and exploitation of common vulnerabilities.
- 3. Familiarize yourself with tools like Nmap, Metasploit, and Wireshark for penetration testing.
- 4. Days 61-70: Incident Response and Forensics
- 1. Gain an understanding of incident response procedures and the incident handling lifecycle.
- 2. Learn about evidence collection, preservation, and analysis in digital forensics.
- 3. Explore tools like EnCase, Autopsy, or The Sleuth Kit for digital forensics investigations.

## Days 71-80: Network Security

- 1. Dive deeper into network security concepts, including secure network design, segmentation, and defense-in-depth strategies.
- 2. Learn about network intrusion detection and prevention systems (IDS/IPS) and security information and event management (SIEM) solutions.

3. Understand wireless network security principles and secure Wi-Fi configurations.

## Days 81-90: Cloud Security

- 1. Study the security considerations and best practices for cloud computing environments (e.g., AWS, Azure, GCP).
- 2. Learn about securing cloud instances, network configurations, and access controls.
- 3. Understand container security and the challenges of securing containerized applications.

#### Days 91-100: Capstone Project and Practical Applications

- 1. Apply your knowledge by working on a cybersecurity project, such as setting up a secure network, conducting a penetration test, or creating a security incident response plan.
- 2. Continuously practice and stay updated on emerging threats, security trends, and new technologies.
- 3. Engage in cybersecurity communities, participate in Capture the Flag (CTF) competitions, or pursue relevant certifications like CompTIA Security+ or Certified Ethical Hacker (CEH).

Remember to adapt the plan to your learning pace and interests. Actively engage in hands-on exercises, practice ethical hacking responsibly, and stay informed about the latest cybersecurity news. Developing strong cybersecurity skills takes time and dedication,

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 edX: Offers cybersecurity courses and programs from renowned universities and organizations.

- Cybrary: Provides free and paid cybersecurity training, covering a broad range of topics.
- 2. Cybersecurity Blogs and Websites:
- KrebsOnSecurity: Brian Krebs' blog covering cybersecurity news, investigations, and insights.
- Schneier on Security: Bruce Schneier's blog offering analysis and commentary on various security topics.
- OWASP: Open Web Application Security Project provides resources, tools, and guidelines for web application security.
- SANS Institute: Offers a wealth of free resources, including whitepapers, webcasts, and newsletters.