IJEI FUMNANYA JAMES

Cybersecurity Assignment 2: Career Path Plan — Penetration Tester (Ethical Hacker)

Required Education or Background

A penetration tester, also known as an ethical hacker, typically has a background in Computer Science, Information Technology, Cybersecurity, or related fields. While a degree is helpful and according to my research, it's not strictly required for the individual to have hands-on experience and demonstrable skills. A strong foundation in networking, programming (e.g., Python, Bash, JavaScript), and operating systems (especially Linux) is important.

Recommended Certifications

- CEH (Certified Ethical Hacker)
- OSCP (Offensive Security Certified Professional)
- CompTIA PenTest+
- eLearnSecurity eJPT or Ecppt
- GIAC GPEN (GIAC Penetration Tester)

Daily Responsibilities of the Role

- Conduct simulated attacks to identify vulnerabilities in systems and applications.
- Perform reconnaissance, scanning, exploitation, and post-exploitation activities.
- Document findings and report them to stakeholders with mitigation strategies.
- Collaborate with IT and security teams to improve defenses.
- Stay up to date with the latest attack techniques and security trends.

Average Salary Range (Locally and Internationally)

- **Nigeria:** ₦3 million – ₦8 million annually (entry to mid-level); senior roles can earn ₦10M and above.
- **USA/UK/Canada:** $70,000 – $130,000 and above per year depending on experience, location, and certifications.

Long-term Career Progression Opportunities

- Senior Penetration Tester / Red Team Lead

- Security Consultant or Security Researcher
- Threat Hunter or Vulnerability Analyst
- Cybersecurity Architect
- Chief Information Security Officer (CISO)

With continuous learning and specialization, a Penetration Tester can evolve into high-level strategic and leadership roles, shaping an organization's entire cybersecurity posture.