# **Ethical Hacking**

security seen from an offensive perspective

**Gabriel Avramescu** 

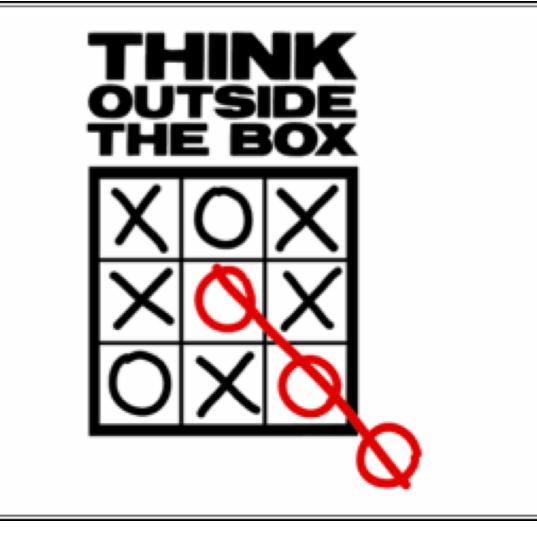
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## BEFORE TAKING THIS COURSE, STUDENTS SHOULD

• Basic Computer Networking, OS and Web concepts

# **Course learning objectives**

- Develop "Out-of-box" thinking
- See security from an offensive perspective



# **Course learning modules**

- Penetration testing overview
- Various types of footprinting, footprinting tools, and countermeasures
- Network scanning techniques and scanning countermeasures
- Enumeration techniques and enumeration countermeasures
- System hacking methodology
- Different types of Trojans, Trojan analysis, and Trojan countermeasures
- Packet sniffng techniques and how to defend against sniffing, session hijacking

- Social Engineering techniques, identify theft, and social engineering countermeasures
- Different types of webserver attacks, attack methodology, and countermeasures
- Different types of web application attacks, web application hacking methodology, and countermeasures
- Wireless Encryption, wireless hacking methodology, wireless hacking tools, and wisecurity tools
- Different types of cryptography ciphers, Public Key Infrastructure (PKI), cryptography attacks, and cryptanalysis tools

## Practice, practice, practice ...

- Damn Vulnerable Web Application, WebGoat, Metasploit Rings a bell?
- Networking, Metasploit demos- to see the importance of servers upgrade
- Attacker's mindset: "what an attacker would do?"
- Demos, demos, demos (practice vs theory)



# About your trainer

- Gabriel Avramescu
- Penetration Tester and Security Consultant
- Trainer, Speaker
- Certifications: OSCP, CEH, CHFI, ECSA, CEI, ISO 27001 Lead Auditor, CREST CRT, CCNA SECURITY
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### Introductions

- Name
- Company
- Your job role
- Your current experience, certifications
- Do you meet the course prerequisites?
- What you expect from this class



- **1. Introduction to Ethical Hacking**
- 2. Information Gathering Footprinting, Reconnaissance
- 3. Scanning, Enumeration
- 4. System Hacking
- 5. Malware Threats
- 6. Sniffing and Session Hijacking
- \*Each module include labs or demos



7. Social Engineering

8. Hacking Web Applications and Web Servers

9. Cryptography

**10. Hacking Wireless Networks** 

\*Each module include labs or demos

# Environment

Materials for:

- Theory
- Practice
- Videos

For labs virtual machine with:

- Two Virtual Machines
  - Kali Linux With Nessus
  - Metasploitable VM with different vulnerabilities

## Administrative Items

- Course environment
- Materials in your student packet
- Lab exercise procedures
- Topics not on the agenda
- Evaluations
- Restrooms
- Fire exits

# Logistics

Program: 09:00 – 17:00

Morning

• 10 minutes breaks

Lunch

• 1 hour

Afternoon

• 2 x 10 minutes breaks

