

Web Application Security



Purpose of the training

The training is intended for IT practitioners – especially developers and QA engineers, but also system administrators and managers who want to know how web applications are attacked today and how to prevent it.



Benefits of completing the training

Participant will gain comprehensive, practical knowledge about web application attacks and defense mechanisms, backed by multiple examples and exercises.



Expected Listener Preparation

- Basic programming skills (any language)
- Basics knowledge about JavaScript and SQL syntax
- Basic knowledge about IT solutions architecture, web applications, OS and networks



Training Language

- Training: English



Duration

2 days / 14 hours

Training agenda

1. Introduction to web application security
 - Web application architecture
 - OWASP Top 10 2021
2. Network traffic security
 - TLS/SSL
 - HTTP security headers
 - Same-Origin Policy and Cross-Origin Resource Sharing (CORS)
3. Methodology
 - Network traffic analysis
 - HTTP request manipulation
 - Creating custom scripts
 - Vulnerability scanners
4. Vulnerability analysis (causes, fixes, exploitation)
 - Cross-site scripting (XSS)
 - Cross-Site Request Forgery (CSRF)
 - Directory Traversal
 - Unrestricted File Upload
 - Insecure Direct Object Reference (IDOR)
 - SQL/NoSQL injection
 - Server-Side Template Injection (SSTI)
 - Server-Side Request Forgery (SSRF)
 - Broken authentication and authorization
 - Denial of Service
5. API security
 - Authentication and authorization methods
 - OWASP API Security Top 10 2019
6. Blackbox web penetration test (CTF)