

# **Security Testing for Test Professionals**

Integrating security into your testing process

### Description

Today's software applications are often security-critical, making security testing an essential part of a software quality program. This 2-day course provides software testers with the knowledge necessary to integrate security testing into their everyday testing activities. Learn how to:

- define sound security requirements (functional and non-functional)
- effectively test security features,
- identify security risks and validate their absence,
- test web applications for common web security vulnerabilities,
- test API's and other subsystems for security

Practice testing a variety of security features that are common on today's software applications Take home valuable tools and techniques for effectively testing your applications for security going forward.

*Security Testing for Test Professionals* includes exercises to practice identifying actual software vulnerabilities within applications. Tools and techniques for effectively security testing applications will be demonstrated.

Attendees will leave *Security Testing for Test Professionals* with an in-depth understanding of how to integrate security testing into your existing software testing process.

#### Who Should Attend?

The audience includes software testers and software engineers in test as well as test managers and software developers who need to understand security testing.



## **2 Day Course Outline**

- 1. Introduction to Security Testing
  - a. History of information security
  - b. The software security problem
  - c. Understanding software risk
  - d. Security testing approaches
- 2. Security requirements
  - a. Functional security requirements
  - b. Non-functional security requirements
  - c. Integrating security requirements into test plans
- 3. Testing Authentication and Session Management
  - a. Common approaches to authentication
  - b. Testing password functionality
  - c. Testing credentials
- 4. Testing Access Control
  - a. Access control policies
  - b. Testing access control across application layers
- 5. Input Validation
  - a. Common input mistakes
  - b. Validating web input
  - c. Cross site scripting
- 6. Database Testing for Security
  - a. Introduction to database security
  - b. Testing database access
  - c. Testing for SQL injection vulnerabilities
- 7. Testing Data Privacy
  - a. Introduction to privacy methods and concerns
  - b. Testing cryptographic libraries
  - c. Avoiding replay attacks
- 8. Integrating Security Testing into Your Testing Process
  - a. Security requirements
  - b. Security test planning
  - c. Tools to support security testing

#### **Contact Us for More Information:**

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