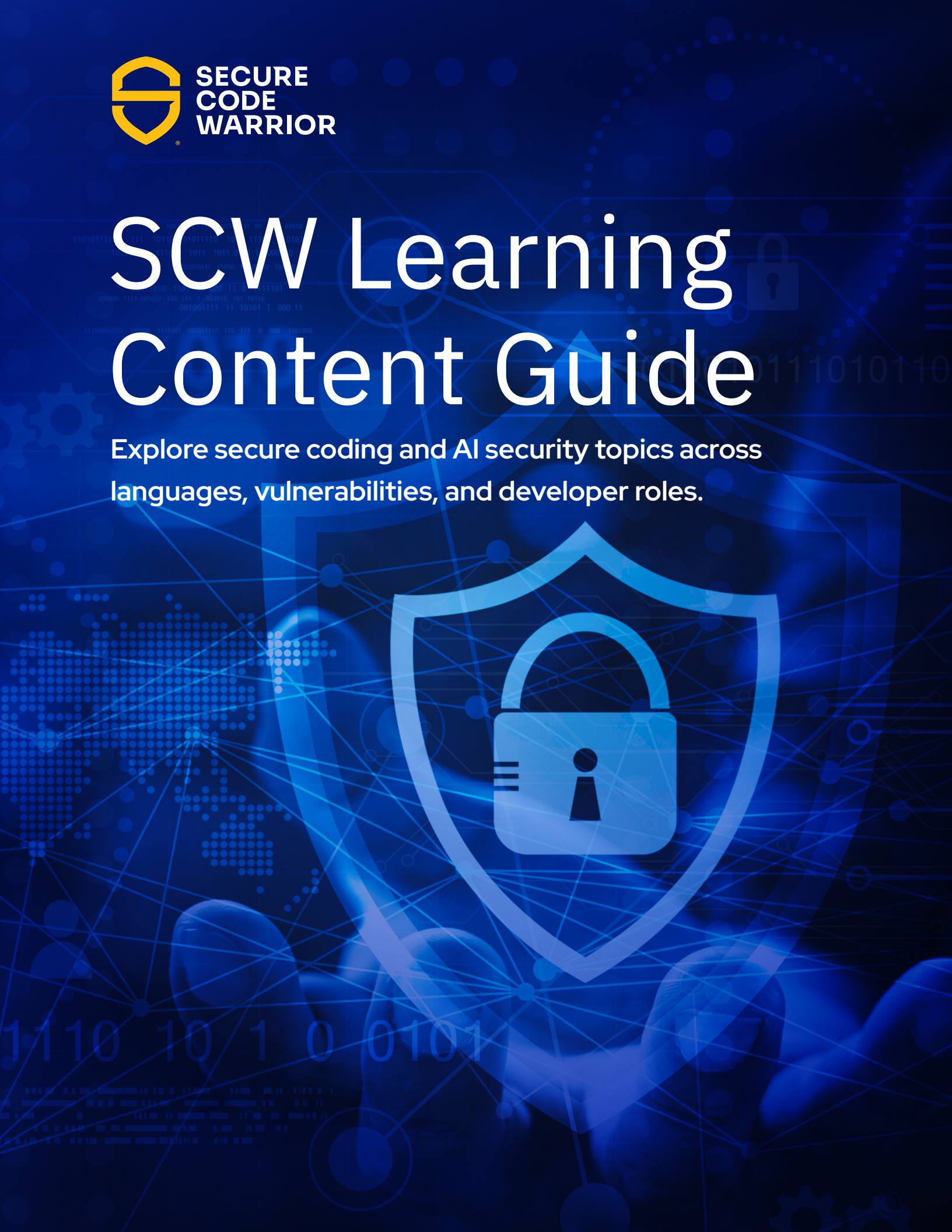
SECURE CODE WARRIOR

SCW Learning Content Guide

Explore secure coding and AI security topics across languages, vulnerabilities, and developer roles.



Introduction

SCW Learning offers the most comprehensive secure coding training library in the industry — designed for modern engineering teams building with AI. This guide highlights our featured coding languages and frameworks, vulnerability categories, and conceptual and role-based topics — so you can quickly understand what's available and how to map coverage to your AI Software Governance goals.

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Topics & Content as of March 2026. See the SCW Knowledge Base for current listings:
Quests Security Awareness and Design Concepts Catalogue and Course Templates Catalogue.

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Python:MCP
Terraform:AWS (Bedrock)

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JavaScript:Vue.js

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Java:Enterprise Edition (JSF)
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Learn more: https://www.securecodewarrior.com/product/platform-content

Topics & Content by Category

Vulnerability Topics

Access Control
Insecure Direct Object Reference
Missing Function Level Access Control
Missing Object Level Access Control
Using Input from Untrusted Sources

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Improper Authentication
Insecure Password Change Function
Insecure Password Reset Function
Insufficient Anti-Automation
Insufficiently Protected Credentials
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Cross-Site Request Forgery

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Denial of Service
Failure to Release Resource
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Unrestricted File Upload

Improper Assets Management
Improper Assets Management

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Sensitive Data Exposure

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CSS Injection
Deserialization of Untrusted Data
Email Injection
HTTP Injection
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Path Traversal
Resource Injection
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XQuery Injection

Insecure Cryptography
Exposed Key
Insecure Randomness
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Insufficient Logging and Monitoring
Insufficient Logging and Monitoring

Insufficient Transport Layer Protection
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Unprotected Transport of Sensitive Information
Weak Algorithm or Protocol Use

Lack of Resources & Rate Limiting
Lack of Resources & Rate Limiting

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Direct Prompt Injection
Excessive Agency
Improper Output Handling
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Mass Assignment

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Server-Side Request Forgery

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Data sent to 3rd parties (analytics/error handling)

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Unvalidated Redirects and Forwards

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XML External Entities (XXE)

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Use of Short Encryption Keys
Use of Insecure/Deprecated Algorithms
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Misuse of Intents
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Client Side Authentication for Authenticating to Server
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Misuse of Fingerprint
Storing Credentials With 'Remember Me' Functionality
Use of Spoofable Parameters for Authentication
Use of Weak Passwords
Weak Lockout Mechanism

Insecure Authorization
Insecure Direct Object Reference
Using inputs from untrusted sources

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LLM Security Design Patterns
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Threat Modeling with AI
Vibe Coding: Risk Management Framework

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Securely Granting Access to an API Using OAuth 2.0

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Open-Source Software (OSS)
Threat Modelling
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Promptgeist: Vector and Embedding Weaknesses
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Data Security: Security for Data Scientists & Analysts
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DevSecOps Security
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Secure Development for Healthcare

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Secure Communication for the Internet of Things

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Kotlin Android Security
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Modern C Security
Modern C++ Security

Web Security
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Introduction to HTML5 Security
Secure Programming for Go
Web Application Security 101

Interactive Topics & Content

SCW Missions

Deeply immersive interactive learning delivering coding simulations to developers in a risk-free environment.

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Missing Function Level Access Control
Missing Object Level Access Control

Authentication
Improper Authentication
Insecure Password Reset Function

Business Logic
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Cross-Site Request Forgery
Cross Site Request Forgery

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Using Components from Untrusted Source
Using Known Vulnerable Components

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SCW Coding Labs

Hands-on interactive learning with intuitive feedback delivered through a powerful in-browser IDE.

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Missing Object Level Access Control

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Insecure Password Reset Function
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Insufficiently Protected Credentials
Use of Single-factor Authentication

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Lack of Resources & Rate Limiting

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XML External Entities (XXE)

Topics & Content by Role

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Audience: Engineers, Architects, Technical Managers, Product Managers

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OWASP Top 10 for Large Language Model (LLM) Applications
Threat Modeling with AI
Vibe Coding: Risk Management Framework

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Audience: Architects, Engineering Managers, Platform Engineers, Lead Engineers

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Cross-Site Request Forgery

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Audience: Backend Engineers, API Engineers

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Audience: Data Scientists, Data Analysts, Data Engineers

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Introduction to GDPR
Introduction to the Cyber Resilience Act (CRA)
LLM Security Design Patterns
Secure Development for Healthcare
Secure Password Storage
Security for Data Scientists & Analysts

DevOps & Cloud Topics & Content

Audience: DevOps Engineers, System Administrators, Platform Engineers, Kubernetes Engineers, Docker Engineers, CI/CD Engineers, Cloud Engineers, AWS Engineers, Azure Engineers

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Audience: Embedded and Automotive Industry Engineers

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Data sent to 3rd parties (analytics, error handling)

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Using Known Vulnerable Components

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Mobile Topics & Content

Audience: Mobile Engineers, Android Engineers, iOS Engineers

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Insecure Storage of Encryption Keys
Reuse of Initialization Vector
Use of Encoding
Use of Hardcoded Keys
Use of Insecure/Deprecated Algorithms
Use of Short Encryption Keys

Client Code Quality
Format String Vulnerabilities
Improper Memory Management
Overflow Vulnerabilities

Client Side Injection
DOM-Based Cross-Site Scripting
JavaScript Injection
SQL Injection
Untrusted third party sites
XML Injection

Code Tampering
Backups Enabled
Tampering Detection

Extraneous Functionality
Autofill Password
Debugging Features Enabled

Improper Platform Usage
Incorrect Activity Configuration
Insecure File/Directory Permissions
Insecure Use of Pasteboard
Misuse of Broadcast Receivers
Misuse of Intents
Misuse of Keychain
Misuse of URL Schemes
Tapjacking
Webview Settings

Improper Session Handling
Client Side Session Token Generation
Improper Flags in Cookie Headers
Improper Timeout of Session ID
Same Session ID With Change in Privilege
Weak Session Token Generation Algorithm

Insecure Authentication
Client Side Authentication for Authenticating to Server
Hardcoded API Keys
Misuse of Fingerprint
Password Enumeration
Storing Credentials With 'Remember Me' Functionality
Use of Spoofable Parameters for Authentication
Use of Weak Passwords
Username Enumeration
Weak Lockout Mechanism

Insecure Authorization
Insecure Direct Object Reference
Using inputs from untrusted sources

Insecure Data Storage
Plaintext Storage of Credentials
Storage in Log Files
Storage in Plist or XML Files
Storage in SQLite Databases
Storage of Binary Cookies
Storage on SDCard/External Storage

Insufficient Transport Layer Protection
Communication Over Cleartext Protocol
Improper Certificate Pinning Configuration
Trusting Self-Signed or Untrusted Certificates
Weak Certificate Validation
Weak Cipher Suites

Lack of Binary Protections
Lack of Adequate Security Controls
No Code Obfuscation
No Protection from Debuggers
No Protection from Piracy
No Protection from Runtime Injection

Mobile Topics & Content Continued

Reverse Engineering
Code Information Leakage
Emulation Detection

Unintended Data Leakage
Analytics Data Sent to 3rd Parties
Application Backgrounding Screenshots
Browser Cookie Objects
Copy/Paste Buffer Caching (Pasteboard)
Keyboard Caching
Logging Sensitive Information
Request/Response Caching
Use of Hardcoded Secrets

Conceptual Content

Foundations of Mobile Security
Fundamentals of iOS (Objective-C)
Fundamentals of iOS (Swift)
Java Android Security
Kotlin Advanced Android Security
Kotlin Android Security
Secure Programming for iOS (Objective-C)
Secure Programming for iOS (Swift)

Product Management Topics & Content

Audience: Product Management, Project Management, Business Analysts

Vulnerability Topics

Authentication
Improper Authentication
Username Enumeration
Insufficient Anti-Automation
Weak Password Policy
Insecure Password Change Function
Use of Single-factor Authentication

Business Logic
Insufficient Validation
Logical Error

Extraneous Functionality
Autofill Password

File Upload Vulnerability
File Upload Vulnerability: Unrestricted File Upload

Insecure Authentication
Weak Lockout Mechanism
Misuse of Fingerprint
Using inputs from untrusted sources

LLM
Direct Prompt Injection
Indirect Prompt Injection
Excessive Agency
Misinformation
Vector and Embedding Weaknesses

Conceptual Content

AI Agents and their Protocols (MCP, A2A and ACP)
Foundations of Mobile Security
Foundations of Software Security
GDPR for Development and Project Managers
Introduction to AI Risk & Security
Introduction to CCPA
Introduction to GDPR
Introduction to the Cyber Resilience Act (CRA)
Low-Code and No-Code (LCNC)
PCI DSS v4.0 Concepts and Compliance
Security Requirements
Vibe Coding: Risk Management Framework
Web Application Security 101

Quality Assurance Topics & Content

Audience: Quality Assurance Engineers, Quality Assurance Managers, Quality Assurance Testers

Vulnerability Topics

Access Control
Insecure Direct Object Reference
Missing Function Level Access Control

Authentication
Improper Authentication

Business Logic
Insufficient Validation

Cross-Site Scripting (XSS)
DOM-Based Cross-Site Scripting
Reflected Cross-Site Scripting
Stored Cross-Site Scripting

File Upload Vulnerability
Unrestricted File Upload

Information Exposure
Error Details
Sensitive Data Exposure

Injection Flaws
Deserialization of Untrusted Data
NoSQL Injection
OS Command Injection
Path Traversal
SQL Injection

Insecure Cryptography
Insecure Randomness
Weak Algorithm Use

Insufficient Logging and Monitoring
Insufficient Logging and Monitoring

LLM
Direct Prompt Injection
Excessive Agency
Improper Output Handling
Indirect Prompt Injection
Sensitive Information Disclosure
Vector and Embedding Weaknesses

Mass Assignment
Mass Assignment

Memory Corruption
Buffer Overflow|Null Dereference

Security Misconfiguration
Disabled Security Features

Sensitive Data Storage
Plaintext Storage of Passwords
Plaintext Storage of Sensitive Information

Server-Side Request Forgery
Server-Side Request Forgery

Session Handling
Exposed Session Tokens

Vulnerable Components
Log4j
Using Components from Untrusted Source
Using Known Vulnerable Components

XML External Entities (XXE)
XML External Entities (XXE)

Conceptual Content

Attack and Defence
Overview of Application Security Testing
Risk-Based Security Testing Strategy
Vulnerability Handling

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