

Secure coding in Java

Group Training

Training code	CGASECCJCE
Spoken Language	English
Language Materials	English
Dayparts	6
Price	€2.100,00 excl. VAT No extra costs.

What is Secure coding in Java

Secure coding in Java means writing Java code that is free from the most common security risks.

In application development security requirements play an important role in all parts of the process. Some of these requirements must be handled by Java developers. It is therefore important to be able to identify those components that may pose a higher risk and to be able to mitigate these risks by using proven solutions (i.e. from the OWASP site).

By the end of this course participants will be able to:

- Identify code components that may be subject to security weaknesses.
- Mitigate security risks by using proven solutions.
- Build a Java web application that is protected against most common security threats.

Who should attend Secure coding in Java

Any Java developer who contributes to building a Java web application where risk mitigation is an important requirement.

Prerequisites

Java developer

During this training you need a laptop on which you can install software: IntelliJ IDEA – The Leading Java and Kotlin IDE (<https://www.jetbrains.com/idea/download>).

Objectives

- The participant can explain the benefits of security
- The participant can explain the importance of using SSD
- The participant can explain why companies need to comply to security standards



- The participant can explain the concept of RSA encryption
- The participant can explain the use of SSL
- The participant can explain the concept of certificates in SSL
- The participant can explain the use of certificates for website identification
- The participant can explain the use of certificates for signing content
- The participant can generate a self-signed certificate
- The participant can explain and implement the concept of hashing
- The participant can explain the difference between hashing and encryption
- The participant can explain the need for GDPR and identify GDPR sensitive data
- The participant can explain why companies need to comply to GDPR
- The participant can use the OWASP site for identifying security vulnerabilities and risks
- The participant is familiar with the top 10 vulnerabilities on the OWASP site
- The participant can explain the concept of injection attacks
- The participant can explain the concept of sanitizing user input
- The participant can explain the concept of xss attacks
- The participant can explain the concept of xxe attacks
- The participant can explain the concept and use of security headers to prevent attacks
- The participant can explain the concept of basic authentication
- The participant can implement basic authentication
- The participant can explain the concept of form based authentication
- The participant can implement form based authentication
- The participant can explain the concept of authorization
- The participant can implement authorization
- The participant can explain the concept of OAuth 2
- The participant can implement OAuth 2
- The participant can explain the concept of a csrf token
- The participant can implement to use of a csrf token
- The participant can explain the concept of an IDP
- The participant can explain the concept of a JWT
- The participant can implement a JWT
- The participant can explain the importance of logging security related events
- The participant can explain the importance of NOT logging GDPR related events

To participate in this training, you should bring your own laptop and be able to install software on it.

If a third-party copyright applies to this course, you will find the copyright on <https://academy.capgemini.nl/en/topic/trademarks/>

Capgemini Academy's general terms and conditions are applied to all products and services mentioned within this document. For the latest version please check <https://academy.capgemini.com/>. The rates of products and services mentioned in this document are subject to change. For the most recent rates, please also visit our website.

About Capgemini Academy

Capgemini Academy's professionals offer what people in IT need. Our professionals have a keen eye for motivation, talent and are aware of specific contexts and circumstances. They move people to move. Programmes and courses that originate from daily experience of our both didactical and substantively strong trainers, light a fire within the individual IT professionals. Real life stories of our professionals' experience that tell how to solve problems and work with the people around it, do the rest.

An organization, like ours, helps people and their organizations day by day to get the best out of themselves and each other. We prepare them to defy tomorrow's challenges. We stimulate learning and curiosity. In order for individual IT professionals and their employers, to build better, longer and more intensive relationships. For mutual benefit.

Capgemini Academy. We transform IT professionals
academy.capgemini.nl

IN/3A-018.18