

Implementing JEE architecture with Hibernate, JPA, JSF and Spring

Description

This training dedicated to JEE Hibernate offers a comprehensive approach to understanding and implementing the main frameworks used in enterprise application development. It highlights Hibernate for data persistence, JSF for presentation, and Spring for dependency management and application security. Thanks to this combination, participants gain a clear and practical understanding of modern Java architectures.

Training tailored to enterprise projects

Today's applications require solutions that are reliable, efficient, and easy to maintain. With Hibernate, managing relational databases becomes smooth and standardized. JSF provides robust tools to design clear and scalable web interfaces. As for Spring, it simplifies development and adds flexibility, which is highly valued in complex projects. This course demonstrates how to combine these technologies to create solutions that meet the real needs of businesses.

Course Content

Module 01: Spring

- Spring Architecture
- Spring Bean Lifecycle
- Dependency Injection
 - XML-based Bean Wiring
 - Annotation-based Bean Wiring
 - Autodetect Bean Wiring
 - JavaConfig – Programmatic Wiring
- Aspect-Oriented Programming in Spring
 - @AspectJ Configuration
 - Pure-POJO (XML) Configuration
- Spring Data Access
 - JDBC
 - ORM
- Spring Web Applications
- Spring Security
- Spring Testing Framework
 - Unit Testing
 - Integration Testing

Module 02: JPA/Hibernate

- Object Persistence
- Hibernate Architecture
- JPA Architecture
- Persistent Entity Lifecycle
- Transaction Management

- The Java Persistence API
- Hibernate as a JPA Provider
- JPA EntityManager API
- JPA ORM Annotations
- JPA Query Language

Module 03 : JSF 2.0

- Introduction to JSF
- JSF Lifecycle
- Views and JSF Tags
- Managed Beans
- Page Navigation
- Converters and Validators
- Event Handling
- JSF and AJAX
- Facelets
 - Composite Components
 - Templating
- Spring Integration in Detail

Lab / Exercises

- This course includes hands-on exercises designed to reinforce your knowledge and apply your skills in real-world professional scenarios.

Documentation

- Digital courseware included

Participant profiles

- J2EE Developers
- Java and Java EE Developers
- Software Architects
- Java Development Trainers

Prerequisites

- Participants should have followed or have knowledge covered by: [JAVA SE 17 Programming I](#)

Objectives

- Master the basics of the Java EE platform
- Develop a complete enterprise application with JEE
- Build a data access layer with Hibernate
- Implement web interfaces with JSF
- Apply dependency injection with Spring
- Ensure security and testing with the Spring framework
- Adopt best practices of modern Java architectures

Description

Implementing JEE Hibernate/JPA Architectures – JSF and Spring

Niveau

Fondamental

Classroom Registration Price (CHF)

3100

Virtual Classroom Registration Price (CHF)

2900

Duration (in Days)

4

Reference

SHJSF