Course : Developping with Java/JEE frameworks

Practical course - 5d - 35h00 - Ref. DFJ
Price : 2930 CHF E.T.

★★★★★ **5 / 5**

Course schedule

1 **Introduction**

- Presentation and comparison of 2-tier, 3-tier, and n-tier architectures.
- Overview of the JEE ecosystem, leading frameworks, their role in the development of Java applications.

2 **Industrially employed frameworks**

- Organizing Java development.
- Ant, a task-automation framework.
- Maven, to simplify the production and management of builds.
- JUnit, a framework for creating and running unit tests.

Hands-on work
Setting up the development environment in Eclipse.

3 **The Hibernate framework**

- Overview of persistence.
- The Hibernate project.
- Creating an object/relational map. Context, persistent classes.
- Working with persistent data. Object lifecycle. Database syncing.
- Common errors to avoid.

Hands-on work
Creating a map Writing HQL queries

4 **The Spring framework**

- Overview of the role of the light container.
- Overview of interface programming.
- Combining Spring/Hibernate.
- Third-party framework support.
- Demonstration of AOP (Aspect-Oriented Programming).

Hands-on work
Creating the context, combining with Hibernate.

PARTICIPANTS

PREREQUISITES

TRAINER QUALIFICATIONS
The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS
The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.
Participants also complete a placement test before and after the course to measure the skills they've developed.

TEACHING AIDS AND TECHNICAL RESOURCES
• The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
• At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
• A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

⑤ The Struts framework

- Introduction to the MVC model.
- Components of Struts.
- Implementing a Web navigation process.
- JSP tag libraries.
- Application deployment.

Hands-on work
Creating an HMI to benefit from developments completed with Hibernate and Spring.

Dates and locations

REMOTE CLASS
2026 : 1 June, 1 June, 14 Sep., 14 Sep., 23 Nov.,
23 Nov.