SETC Training Corporate Logo

Java Training: Enterprise Java Development Complete (JARCH, 4 jours)

Description

The course Enterprise Java Development Complete (Java Training) discusses enterprise application development with Java enterprise technologies. Starting with analysis and design of a JEE application, the content moves to JEE and its modules, including security and deployment. The training includes session beans, stateful & stateless session beans, JMS messaging beans & web service development. Best practices and enterprise design patterns are continuously reinforced through the course.

Tarifs

- Tarification: $3,750/person
- Rabais de 10% lorsque vous inscrivez 3 personnes.

Plan de cours

Introduction

- Business Analysis
- Analysis Perspectives
- Functional and Non-Functional Requirements
- The Service Tiers: Presentation, Business and Data

JEE Overview

- JEE Architecture
- An Overview of JEE Servers: WebLogic, WebSphere, JBoss and Glassfish
- JSP and Struts Overview
- Enterprise Java Beans Overview
- JMS Overview
- SOA and Web Services
- JEE Security

Best Practices of Software Engineering

- Characteristics of a good software solution
- How good software is built
- Iterative development
- Requirements management
- Use of component-based architectures
- Ongoing verification of software quality
- Control of software changes
- JEE Considerations

The Software Engineering Process

- The Rational Unified Process
- The Inception Phase
- The Elaboration Phase
- The Construction Phase
- The Transition Phase
- The RUP: Dynamic Structure
- About Agile Development
- Symptoms and Root Causes of Software Development Problems
- RUP and JEE

Use Cases in the Overall Process

- Business Process Modeling
- Use Cases in the Software Development Process
- Use Cases and Requirements
- Management of Requirements and Use Cases

Writing Use Cases

- Graphical Notation
- Use Case Formats
- Use Case Sections
- The Supplementary Specification
- Use Case Points: Estimting Effort

When to Use JEE Solutions

- The Decision to use JEE: Distributed versus Local Architecture
- When to use Specific Web Technologies: JSP, Struts, JSF, etc
- When to use Session Beans: Design and State Considerations
- When to use Entity Beans: CMP, BMP and maybe ORM
- The Message Driven Bean and JMS Decision
- When to use Web Services
- When to use a Queuing Product
- Clustering and QoS Considerations

Architecting a JEE Solution

- Desiging the Layers: Presentation, Business and Data
- Building the Interface: JSP, Struts and other web technologies
- Building Business Services: Stateful versus Stateless Session Beans
- Building the Data Layer: Introducing BMP and CMP Entity Beans
- Building the Data Layer: Introducing ORM Technology
- Building Communications: Message Driven Beans and JMS
- Building Reliable Communications: Using a Queueing Product

Security Architecture

- Security Essentials
- JEE Security
- Planning Security
- Implementing J2EE Security
- Security in a Clustered, Multi-Server Environment

Distributed Architecture

- XML Essentials: Schemas, XSL and other Essential Topics
- Web Service Technology: SOAP, WSDL, UDDI, etc
- Web Service Communications: From Client to Server
- Business Use Cases and the need for Web Services
- Introducing Web Services
- Publishing the Web Service
- Securing the Web Service

JEE Patterns

- Overview of JEE Patterns
- Presentation Tier Patterns
- Business Tier Patterns
- Integration Tier Patterns
- Connection to Tiers using Patterns

Distribution

- Documentation Considerations