

Java Enterprise Edition 6 Development

(5 days hands-on)

Java Enterprise Edition defines a platform for multi-tier enterprise development. This training course describes how to use Java EE 6 to create Web applications, implement middle-tier application components, and persist data to a back-end database. The course covers the latest techniques and APIs in the Java EE 6 platform.

Contents:

- **Java EE Architecture:** Multi-tier architectures; Issues confronting distributed programming and web deployment; Java EE overview; Java EE application development; Java EE deployment
- **Java Database Connectivity (JDBC) Overview:** Database connections; JDBC drivers; Table access; JDBC types; Transactions; Connection pooling
- **Java Naming and Directory Interface (JNDI):** Introduction to JNDI; Performing naming operations; Using JNDI in Java EE 6
- **Remote Method Invocation (RMI):** RMI architecture; Programming conventions; Programming the client; Programming the server; Security and firewalls; RMI over IIOP
- **Java Servlets:** A request-response model for web usage; HTML forms; Servlet requests and responses; Parameterizing servlets; Servlet lifecycle; Session tracking; Cookies; HTTP headers; Annotation-based configuration via the Servlet 3.0 specification
- **Java Server Pages:** Embedding active content or results in a web page; JSP syntax; JSP and servlets; Expression Language (EL); JSP Standard Tag Library (JSTL)
- **JavaServer Faces (JSF) 2.0:** Overview of JSF; Creating a simple JSF-based Web application; Overview of templating
- **Introduction to Enterprise JavaBeans (EJBs):** What are EJBs? Types of EJBs
- **Session EJBs:** Overview of session beans; Stateless session beans; Stateful session beans; Transactions; Security management; Simplified packaging via EJB 3.1
- **Persistence in Java EE:** Entity beans; EntityManager and Persistence Units; Mapping entity classes to relational databases; Using the Java Persistence API (JPA)
- **Java Message Service (JMS):** Reliable asynchronous messaging; JMS features; Point-to-point messaging; Publish-subscribe messaging; Quality-of-service control; Message-driven beans
- **Web Services:** Overview of Web services and SOAP; Creating a Web Service; Consuming a Web Service

Who Should Attend:

This training course is aimed at developers who need to create distributed applications for the Java EE 6 platform.

Prerequisites:

Delegates must have experience using the Java programming language. Familiarity with creating distributed applications would be beneficial, but is not a requirement.