SE307J-*Developing Applications for the Java EE 7 Platform*

Duration: 5 Days; Instructor-led

Course Objectives

This course will teach you about building Java EE 7 applications. Course content covers essential Java EE components, including business components Enterprise JavaBeans (EJB), web components Servlets and Java Server Pages (JSP), Java Server Faces (JSF), WebSocket, Web Services (JAX-WS, JAX-RS), and Clients etc. using these components. You'll gain practical learning experience from End-to-End Distributed Business Application Development exercises, and you'll learn how to build applications using reusable components and how to deploy applications to the Java EE execution environment.

AUDIENCE

- Java technology programmers who wish to develop complete enterprise applications and EJB components following the Java EE standard
- This course provides an ideal environment for EJB technical experts to help build an integrated development team

PREREQUISITES

- Technical competency in Java SE programming language design and technical competency in the following course OO-226: UML Java Object Oriented Application Analysis and Design
- Java Basic Syntax
- The concept of Java RMI distributed technology

WHAT YOU WILL LEARN?

- Understand the Java EE architecture
- Understand the Java EE component development steps
- Learn to use JPA technology to develop data access logic elements
- Learn to use EJB technology to develop business logic components
- Learn to use Servlet technology to develop control logic elements
- Learn to use JSP technology to develop and display logic components
- Learn to use JAX-WS, JAX-RS to develop Web Service components
- Practice the declarative security control mechanism of Java EE

METHODOLOGY

This course will be conducted with interactive lectures, PowerPoint presentations, discussions and practical exercises

COURSE OUTLINES

1. **Introduction to Java EE, Java EE module and component development steps**
2. **Using Netbeans Development Tools**
3. **Access the database using JPA (Java Persistence API) technology**
4. **Use EJB (Enterprise Java Bean) technology to develop business logic elements**
5. **Use JMS (Java Message Service) technology to develop asynchronous business logic elements**
6. **Develop SOAP-Based Web Service using JAX-WS technology**
7. **Develop Java Web Applications Using Servlet Technology**
8. **Develop Java Web applications using JSP (Java Server Pages) technology**
9. **Develop Restful Web Service using JAX-RS technology**
10. **Develop Java applications using WebSocket**
11. **Develop web applications using JSF (Java Server Faces) technology**
12. **Practice Java EE security control mechanism**