

Red Hat Application Development I: Programming in Java EE (AD183VT)

Modality: Virtual Classroom

Duration: 5 Days

About this course:

Helping Java SE developers write Java EE applications

Red Hat Application Development I: Programming in Java EE (JB183) exposes experienced Java Standard Edition (Java SE) developers to the world of Java Enterprise Edition (Java EE).

This course is based on Red Hat® Enterprise Application Platform 7.0.

In this course, you will learn about the various specifications that make up Java EE. Through hands-on labs, you will transform a simple Java SE command line application into a multi-tiered enterprise application using various Java EE specifications, including Enterprise Java Beans, Java Persistence API, Java Messaging Service, JAX-RS for REST services, Contexts and Dependency Injection (CDI), and JAAS for securing the application.

Course Objective:

- Generating multi-tiered Java EE applications.
- Packaging and deploying Java EE applications.
- Creating Enterprise Java Beans, including message-driven beans.
- Managing persistence.
- Creating REST services with JAX-RS.
- Implementing Contexts and Dependency Injection.
- Creating messaging applications with JMS.
- Securing Java EE applications with JAAS.

Audience:

- This course is designed for Java developers who want to learn more about the specifications that comprise the world of Java Enterprise Edition (Java EE).

Prerequisite:

- Proficiency in developing Java SE applications, with 2+ years of experience required
- Proficiency in using an IDE such as Red Hat Developer Studio or Eclipse
- Experience with Maven is recommended but not required

Course Outline:

Transition to multi-tiered applications

Describe Java EE features and distinguish between Java EE and Java SE applications.

Package and deploying applications to an application server

Describe the architecture of a Java EE application server, package an application, and deploy the application to an EAP server.

Create Enterprise Java Beans

Develop Enterprise Java Beans, including message-driven beans.

Manage persistence

Create persistence entities with validations.

Manage entity relationships

Define and manage JPA entity relationships.

Create REST services

Create REST APIs using the JAX-RS specification.

Implement Contexts and Dependency Injection

Describe typical use cases for using CDI and successfully implement it in an application.

Create messaging applications with JMS

Create messaging clients that send and receive messages using the JMS API.

Secure Java EE applications

Use JAAS to secure a Java EE application.

Comprehensive review of Red Hat JBoss Development I: Java EE

Demonstrate proficiency of the knowledge and skills obtained during the course.