

# Red Hat Application Development I: Programming in Java EE (AD183)

**Duration: 4 Days** 

# **Prerequisites:**

- 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 Description:**

Red Hat Application Development I: Programming in Java EE (AD183) 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.

#### **Intended 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).

#### **Course Outlines:**

#### **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 messagedriven 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.