

Developing Enterprise Applications on Java EE 7

Learn via: **Clasroom**

Duration: **5 Day**

Overview

Java Enterprise Edition (Java EE) is an independent Java-centric platform for developing, building, and deploying Web-based enterprise applications.

The Java EE platform, which includes many Java Standard Edition (Java SE) components, consists of a set of services, APIs, and protocols for developing multi-tier, Web-based applications.

Java EE is a multithreading technology that can be used for very large software (Web) projects with millions of users, so it is a little more difficult to learn than languages based on their own level.

Enterprise Applications Development Training on Java EE 7 aims to simplify application development by creating standardized, reusable, modular components and providing automatic processing of many programming directions in the layer.

Prerequisites

There are no prerequisites for this course.

Who Should Attend

- Java Developers
- Enterprise Application Developers
- Expert Developers

What You Will Learn

- Java EE 7 platform
- Enterprise Java Beans use
- How to improve enterprise application
- Create broad user support
- Extensive institutional support planning

Training Outline

1 - Introduction to Java EE 7 Platform

Java Technology Platforms, Enterprise Application Infrastructure Technologies, Java EE Technology Suite, Java EE Component Containers, Java EE Service Infrastructure, Java EE Platform Tiers and Architecture, N-Tier Architectural Model, Java EE-Tiered Architecture, Java EE Application Architecture, Java EE Web-Centric Architecture, Java EE EJB Component-Centric Architecture, Java EE Profiles

2 - Servlet

Servlet Filters, Event Listeners, Asynchronous Support, Nonblocking I/O, Web Fragments, Security, Resource Packaging, Error Mapping, Handling Multipart Requests, Upgrade Processing

3 - Java Server Faces

Facelets, Resource Handling, Composite Components, Request Processing Life-Cycle Phases, Ajax, Validating Data, Navigation Rules, Faces Flow, Resource Library Contracts, Pass-through Attributes and HTML5-Friendly Markup, Component Tags

4 - Enterprise JavaBeans

Stateful Session Beans, Stateless Session Beans, Singleton Session Beans, Life-Cycle Event Callbacks, Message-Driven Beans, Portable Global JNDI Names,

5 - Contexts and Dependency Injection

Discovery of Beans, Injection Points, Qualifier and Alternative, Producer and Disposer, Interceptors, Decorators, Scopes and Contexts, Stereotypes, Events, Portable Extensions, Built-in Beans, Life-Cycle Callbacks

6 - Concurrency Utilities

Asynchronous Tasks, Schedule Tasks, Managed Threads, Dynamic Contextual Objects

7 - Bean Validation

Built-in Constraints, Defining a Custom Constraint, Validation Groups, Method and Constructor, Constraint

8 - Java Persistence

Entities, Persistence Unit, Persistence Context, and Entity Manager, Schema Generation, Create, Read, Update, and Delete Entities, Entity Listeners, Stored Procedures, Validating the Entities, Transactions and Locking, Caching

9 - Java Transaction

User-Managed Transactions, Container-Managed Transactions, @TransactionScoped

10 - Java Message Service

Sending a Message, Receiving a Message Synchronously, Receiving a Message Asynchronously, Quality of Service, Temporary Destinations

11 - Batch Processing

Chunk-Oriented Processing, Custom Checkpointing, Exception Handling, Batchlet Processing, Listeners, Job Sequence, Flow, Split, Decision

12 - Restful Web Services

Resources, Binding HTTP Methods, Multiple Resource Representations, Binding a Request to a Resource, Entity Providers, Client API, Mapping Exceptions, Filters and Entity Interceptors, Validation of Resources

13 - XML Web Services

Web Service Endpoints, Provider-Based Dynamic Endpoints, Endpoint-Based Endpoints, Web Service Client, Dispatch-Based Dynamic Client, Handlers

14 - JSON Processing

Streaming API, Consuming JSON Using the Streaming API, Producing JSON Using the Streaming API, Object Model API, Consuming JSON Using the Object Model API, Producing JSON Using the Object Model API

15 - WebSocket

Annotated Server Endpoint, Programmatic Server Endpoint, Annotated Client Endpoint, Programmatic Client Endpoint, JavaScript WebSocket Client, Encoders and Decoders