Developing Applications for the Java EE 7 Platform

Oracle

- **Nível:**
- **Duração:** 35h

Sobre o curso

The Developing Applications for the Java EE 7 Platform training teaches you how to build and deploy enterprise applications that comply with Java Platform, Enterprise Edition 7

The technologies presented in this course include annotations, Enterprise JavaBeans (EJB), Java Persistence API (JPA), Java Transaction API (JTA), Servlets, JavaServer Pages(JSPs), JavaServer Faces (JSF), Contexts and Dependency Injection (CDI), JAX-RS RESTful and SOAP Web Services, the Java API for WebSocket, Java Message Service API (JMS), Bean Validation, Batch API, Timer services, and Java EE Concurrency.

Learn how to:

- Use Java Persistence and Java Transaction APIs.
- Create a flexible component model using EJB and CDI technology.
- Provide Timer, Concurrency and Batch services.
- Create SOAP and REST WebServices.
- Develop web-based interfaces using Servlets, Java Server Pages, JavaServer Faces.
- Assemble and deploy Java applications to a JEE Application Server.

Benefits to you:

By taking this course, you'll gain hands-on experience building Java EE 7 Applications. You will get the chance to create web-based user interfaces using HTML5 and JavaScript along with JSPs JSFs and servlets. Web-based user interfaces will use AJAX to communicate with RESTful web services you create. Business logic will be handled using CDI and EJB components. You will also create and use JMS resources, Batch and Timer components. You will learn how to persist application data using JPA and JTA APIs.

During this course practice sessions you develop a product management application. This application is

going to start as a simple client-server application, but will evolve into a Java Enterprise Application having the following components:

- Java Persistence API components to handle product database objects
- Enterprise JavaBeans components to handle product management application business logic
- Java Message Service API components to produce and consume messages
- SOAP WebService to produce a product quotes
- Web user interface to search, display and update products designed with Servlets, Java Server Pages, and Java Server Faces
- REST Service to check product discount
- WebSockets application to implement chat between users
- You will also secure this application using both programmatic and declarative approaches.

Destinatários

- Application Developers
- Java Developers
- Developer
- J2EE Developer
- Java EE Developers
- Mobile and Web Applications Developer

Objetivos

- Deploy Java EE applications
- Handle business logic using POJOs, EJBs, SOAP WebServices, and JMS
- Manage persistency using JPA entities
- Create Java web applications using servlets, JSPs, JSFs, REST Services, and WebSockets
- Secure Java EE applications

Pré-requisitos

Suggested Prerequisite

- Java SE Programming I and II
- Java SE Certification

Required Prerequisite

- Experience with the Java language
- Experience with XML
- Experience with basic database concepts and a basic knowledge of SQL

Programa

- Introduction to Java EE
- Managing Persistence by Using JPA Entities
- Implementing Business Logic by Using EJBs
- Using Java Message Service API
- Implementing SOAP Services by Using JAX-WS
- Creating Java Web Applications by Using Servlets
- Creating Java Web Applications by Using JSPs
- Implementing REST Services using JAX-RS API
- Creating Java Applications with WebSockets
- Develop Web Applications Using JavaServer Faces
- Securing Java EE Applications

- Introduction to Java EE
- Managing Persistence by Using JPA Entities
- Implementing Business Logic by Using EJBs
- Using Java Message Service API
- Implementing SOAP Services by Using JAX-WS
- Creating Java Web Applications by Using Servlets
- Creating Java Web Applications by Using JSPs
- Implementing REST Services using JAX-RS API
- Creating Java Applications with WebSockets
- Develop Web Applications Using JavaServer Faces
- Securing Java EE Applications

Appendixes/Additional Content

- Java Logging
- CDI Beans
- BeanValidation and JPA API
- Batch and Concurrency APIs
- JAXB API
- “Pre-CDI” Servlet Examples