Business components development with EJB and JPA (Java EE) (code: JPA-EJB-EE)

Overview

The course covers the three Java EE technologies used for programming business logic: Enterprise Java Beans (EJB 3.1) and Java Persistence API entities (JPA 2) and Context and Dependency Injection (CDI, new in Java EE6).

The training provides its participants with instant possibility of applying their freshly acquired knowledge, as most of the class consists of guided, hands-on exercises and work on real-life scenarios. Participants will also benefit from practical tips on building and maintaining enterprise applications.

The focus of the training is solely the business logic layer. Those who wish to learn building complete applications should rather choose one of our full stack trainings, such as Glassfish, PrimeFaces. Building Applications for the Java Enterprise Edition 6.

Duration

2 days

Agenda

1. Domain model and the database layer - *Java Persistence Architecture 2*:
    — basic mappings and relations, life cycle of an entity;
    — complex mappings: inheritance, composition, uni- and bidirectional relations;
    — surrogate and natural primary keys, multicolumn keys, implied values;
    — JPQL queries;
    — typed queries: *Criteria API*;
    — collections of simple and embeddable types, ordering collections;
    — validation using *Bean Validation*:
        — built-in validators,
        — custom validators.
2. The service layer:
    — resources and the JNDI tree: *java:comp/env*, *java:global/env*, *java:app/env*;
    — EJB 3.1: stateless and stateful session beans;
    — remote, local and no-interface views, remote calls and argument passing;
    — desktop applications as remote EJB clients;
    — services using JPA, persistence context propagation;
    — *Container Managed Transactions* and *Application Managed Transactions*;
    — asynchronous calls, scheduling;
    — CDI: managed beans, factories, dependency injection, events;
    — coexistence of CDI and EJB beans;
    — basic SOAP service with JAXB mapping;
    — basic RESTful service (using JSON and XML).

Target audience and prerequisites

Good command of the Java language is required, participants are expected to write programs featuring classes, methods and attributes, enumerations, collections, operations on strings and numbers. However, knowledge of

algorithms or design patterns is not necessary.

Certificates

Course participants receive completion certificates signed by ALX.

Locations

— Warsaw (English) – Jasna 14/16A
— Online (English) – your home, office or wherever you want
— any other location (London, UK, EU) on request

Price

740 EUR

The price includes:

— course materials,
— snacks, coffee, tea and soft drinks,
— course completion certificate,
— one-time consultation with the instructor after course completion.

Ask for details

Phone +44 203 608 6289
info@alx.training