

# Spring, Hibernate and Spring MVC (code: SPRINGMVC-HIBERNATE)

## Overview

Mature technologies such as Spring and Hibernate are cornerstone of many an enterprise systems.

The four-day training covers all the technologies required to build advanced, modern web applications using Spring. Participants will be able to create solutions integrating database layer, business logic and web presentation tier.

## Ask for details

Phone +44 203 608 6289

info@alx.training

## Duration

4 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. Introduction to Spring 3
  - Installation and configuration of Spring and the associated pitfalls;
  - Spring dependencies;
  - Supported types of dependency injection: setter, constructor, getter;
  - Configuration using XML files and tagged factories;
  - Design patterns often used in Spring applications (Facade, DAO, Application Service, Business Delegate);
  - Aspect programming;
  - Transactions;
  - Creating Spring database applications using SQL;
  - Creating Spring database applications using Hibernate / JPA;
  - Weavers in an SE and EE.
3. The basic Spring integration with servlet (web) environment:
  - Spring and JavaServer Faces;
  - Spring and Jersey (JAX-RS).
4. The presentation layer: Spring MVC:
  - scopes specific to web applications (session, request);
  - creating and registering controllers;
  - main components: controller, validator, command, form, model;
  - views, view resolvers;
  - mapping handlers;
  - Spring MVC and JSP: themes, binding;
  - *spring-form* taglib.

## Target audience and prerequisites

Participants should know the basics of HTML and SQL. Deeper knowledge of other web technologies and platforms is an advantage.

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.

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## **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**

1240 EUR

The price includes:

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