ProTech Professional Technical Services, Inc.

Hibernate and Java Persistence API (JPA) with Spring

Course Summary

Description

This course teaches the basics of programming the Spring framework, the basics of programming the Hibernate Object-Relational Mapping (ORM) framework and the integration of the two. Since Hibernate implements the Java Persistence API (JPA), the course covers basic JPA concepts.

Objectives

After taking this course, students will be able to:
- Understand and program the fundamentals of Spring, including dependency injection and how to wire beans together
- Program Web applications using Spring MVC
- Create reliable programs that execute units of work using Spring's transaction support
- Write Spring programs that interoperate with heterogeneous applications using Spring Web services
- Understand the fundamental concepts of object-relational mapping
- Code objects that are persistent using Hibernate
- Use inheritance and relationships in your object model using Hibernate
- Retrieve sets of objects using Hibernate's object-query facilities
- Integrate Spring and Hibernate in applications

Topics

- Introduction to Spring
- The Spring Container
- Introduction to Dependency Injection
- Spring Beans
- Advanced Dependency Injection and Wiring
- Spring Transactions
- Introduction to SpringMVC
- Web Services Concepts
- Spring and Web Services

- Spring and JDBC
- Object-Relational Mapping Concepts
- Introduction to Hibernate
- Spring and Hibernate
- Programming Hibernate
- Hibernate Queries
- Hibernate Relationships
- Testing Spring/Hibernate Applications

Audience

This course is designed for experienced Java programmers.

Prerequisites

Before taking this course, students should have the following skills and experience:
- Basic Java programming experience is required
- Two years active Java development
- Successfully working on a project that has or is planning to implement the technology
- Able to share what is learned with other IRS developers

Duration

Four days