

Course Description

This course is intended for developers who have responsibility for designing and implementing J2EE based applications and who wish to simplify development by using features of the Spring Framework.

Spring is a layered Java/J2EE application framework, based on code published in Expert One-on-One J2EE Design and Development by Rod Johnson. A central focus of Spring is to allow for reusable business and data access objects that are not tied to specific J2EE services. You can use all of Spring's functionality in any J2EE server, and most of it in a non-managed environments.

Course Outline

1. Introduction
 - Classroom logistics
 - Course overview
 - Tools and software discussion
2. The Spring Container and Dependency Injection
 - Spring Beans
 - Injecting Dependencies with Spring
 - Writing junit Tests
3. Spring Model View Controller
 - Using Spring MVC
 - Writing Spring Controllers
 - Alternative Spring Views: PDF using iText
4. Integrating Spring with Struts
 - Turning Struts Actions into Spring Beans
 - Replacing Struts RequestProcessor
5. Using JDBC
 - Using Spring JDBC Templates
 - Refactoring Out Common Code
6. Using Spring with Hibernate
7. Aspect Oriented Programming with Spring
 - Overview of AOP
 - Creating and configuring AOP advice objects
8. Transactions and Security
 - Programmatic Transactions
 - Configuring Simple Transactions
 - Transactions on Multiple Databases
 - Securing Application Methods
9. Messaging
 - Sending Email Messages
 - Working with JMS
 - Testing JMS Applications
10. Remoting
 - Remoting Overview
 - Remoting with Hessian and Burlap
 - Working with EJBs
 - Working with JAX-RPC Web Services