

Spring Developer Boot Camp | Spring Core, Boot, AOP, Data, REST & More

Duration: 4 Day(s)

Course Overview

The Spring framework is an application framework that provides a lightweight container that supports the creation of simple-to-complex components in a non-invasive fashion. Spring's flexibility and transparency is congruent and supportive of incremental development and testing. The framework's structure supports the layering of functionality such as persistence, transactions, view-oriented frameworks, and enterprise systems and capabilities. This course targets Spring 5.x, which includes full support for Java SE 11 and Java EE 8. Spring supports the use of lambda expressions and method references in many of its APIs.

Spring makes enterprise development easier. Spring simplifies common tasks and encourages good design based on programming to interfaces. Spring makes your application easier to configure and reduces the need for many JEE design patterns. Spring puts the OO design back into your enterprise application, and it integrates nicely with many view technologies and the new features of HTML5.

Mastering Spring 5.x Developer Boot Camp is a hands-on Spring training course geared for experienced Java developers who need to understand what the Spring Framework is in terms of today's systems and architectures, and how to use Spring in conjunction with other technologies and frameworks. This leading-edge course provides added coverage of Spring's Aspect-Oriented Programming and the use of Spring Boot. Students will gain hands-on experience working with Spring, using Maven for project and dependency management.

Review this course online at <https://www.alta3.com/courses/TT3335>

Objectives

- Understand the relationships between Spring and JEE, AOP, IOC and ORM
- Write applications utilizing Spring's container to configure and assemble components
- Develop REST applications using Spring 5
- Apply Aspect Oriented Programming (AOP) to Spring applications

Who Should Attend

- Experienced Java developers
- Enterprise application developers
- Java EE professionals
- Software architects

Prerequisites

Take Before: Students should have incoming practical skills aligned with those in the course(s) below, or should have attended the following course(s) as a pre-requisite:

- TT2104: Fast Track to Core Java Programming for OO Developers (C+, C#, etc.)

Course Outline

Session: Introduction to Spring

1. The Spring Framework

- 2. Configuring Spring Managed Beans
- 3. Defining Bean dependencies
- 4. Introduction to Spring Boot
- 5. Working with Spring Boot

Session: Spring AOP

- 6. Introduction to Aspect Oriented Programming
- 7. Spring AOP

Session: Spring Data

- 8. Spring Data Overview
- 9. Spring Data Query Methods
- 10. Spring Data JPA Queries

Session: Implementing REST with Spring

- 11. REST principles
- 12. Introduction to RESTful Services in Spring
- 13. Introduction to REST Clients in Spring
- 14. Bootstrapping the REST application
- 15. Content Representation
- 16. Implementing the REST Service

Session: Spring Boot 2

- 17. Spring Boot Actuator

Bonus Topics: Time Permitting

- 18. Developing in Spring Boot
- 19. Thymeleaf