

Introduction to Spring Boot 2

Duration: 3 Days (Face-to-Face & Remote-Live), or 21 Hours (On-Demand)

Price: \$1695 (Face-to-Face & Remote-Live), or \$1495 (On-Demand)

Discounts: We offer multiple discount options. <u>Click here</u> for more information.

Delivery Options: Attend face-to-face in the classroom, <u>remote-live</u> or via <u>on-demand</u>

training.

Description

As the Spring framework has grown, creating and configuring Spring applications has become more and more complex. Spring Boot takes an "opinionated" view of an application (via intelligent defaults) that minimizes configuration and boilerplate Spring code. Spring Boot makes it easier to use Spring's many frameworks, and adds advanced capabilities such as health monitoring. This course introduces Spring Boot from the ground up, including overviews of building blocks such as Maven. It covers the key features and capabilities of Spring Boot, and teaches experienced Spring developers the skills they need to use Spring Boot productively. This course covers Spring Boot 2 and Spring 5 - the current releases of these frameworks.

The standard platform does all labs with the Eclipse IDE, and the lab instructions include detailed directions for setting up and using it. The course can be made available for all major development environments, including IBM RAD and IntelliJ.

Prerequisites

Java SE programming experience equivalent to attending the <u>Java Programming</u> course and basic knowledge of Spring equivalent to attending the 3-day <u>Introduction to Spring 5 Framework</u> course.

Course Overview

Spring Configuration Overview

Introduction to Spring Boot

- Spring Review
- Using the Spring Container
- Maven Overview
 - Core Maven Concepts

- Overview of XML and @Component
- Dependency Injection (DI) in Spring
 - Dependencies in Configuration Classes
 - Injecting Configuration Classes
- Using Java-based Configuration

(@Configuration)

- Integrating Configuration of Different Types
- Importing Between XML and @Configuration

- The Project Object Model (POM)
- Spring Boot Overview
 - Dependency Management
 - Configuration with Spring Boot
 - Programming with Spring Boot
- Spring Boot Hello World / SpringApplication
- SpringApplication Overview
 - @SpringBootApplication
 - CommandLineRunner
 - ApplicationRunner

Configuration and Customization Spring Boot Database Support

- Working with Properties
- Overview of YAML
- Configuring File Logging
- Using the Spring TestContext Framework
- Auto-Configuration Overview
- Customizing SpringApplication
- JDBC Auto-Configuration Using spring-boot-starter-jdbc
- Embedded Database Auto-Configuration
- Configuring DataSource Properties
- Spring Boot's JPA Support Using spring-boot-starter-data-jpa
- Spring Data Overview
 - Using the CrudRepository/JpaRepository Methods
 - Defining Queries with Spring Boot Data

Spring Boot Web/REST and Security

- DispatcherServlet Review
- Web Starters and
 Configuration Using
 spring-boot-starterweb
- Using Embedded Servers (Tomcat, Netty)
- Deploying to an External Server
- Spring Security Overview
- Auto-configuration and Customization Using spring-boot-startersecurity
- Overview of Spring Boot Data REST

Spring Boot Actuator and DevTools

- Overview of spring-boot-starter-actuator
 - Actuator Endpoints
 - Configuring Endpoint Access
 - Customizing Actuators and Health Checks
- Overview of spring-boot-starterdevtools

Spring Boot CLI

- Overview of Spring Boot CLI
- Installing and Running the CLI
- Grabbing / @Grab

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