

Java Spring Boot Training

1. Introduction to Spring

- Spring Modules

2. Spring Core

- Introduction to IOC
- Types of DI
- Setter VS Constructor
- Collection DI
- Bean Inheritance
- Inner Beans
- Bean Scopes
- Inner Beans
- Bean auto wiring
- Static Factory Method
- Instance Factory Method
- Bean Lifecycle

3. Spring AOP

- AOP Concepts
- Programmatic VS Declarative AOP
- Programmatic AOP
- Types of Advices
- Types of Pointcuts

4. Spring MVC

- Introduction to Spring MVC
- Handler Mapping
- Controllers
- Validations
- Views
- Form tags

5. Introduction to Spring Boot

- Intro to Spring Boot - What is Spring Boot and What It Does
- Spring Boot Hello World / Spring Application
- Download and Install STS IDE
- Brief maven Overview
- Spring Beans & Dependency Injection
- Configuration
- Configuration Properties
- Application Properties & YAML Configuration

Spring Boot Annotations

- `SpringBootApplication`
- `EnableAutoConfiguration`
- `SpringBootConfiguration`

- Embedded server and its uses
- What is Spring Boot Actuator

6. RESTFUL WEB SERVICES

- REST Overview (Characteristics/Capabilities, URI Templates, REST vs SOAP)
- REST and Spring MVC
- Spring support for REST
- @RequestMapping/@PathVariable, @RequestBody, @ResponseBody, HTTP Method conversion
- URI Templates and @PathVariable
- Writing RESTful Controllers / @RestController

7. Accessing Data with Spring Boot and Database Support

- Data Access Introduction
- Spring Data JDBC
- Basic Auto-configuration - Data source
- Configuration Properties
- Spring Boot's JPA Support - spring-boot-starter-data-JPA

8. SPRING BOOT SECURITY

- Adding the spring boot security starter
- Apply the security configuration by writing our own authorization and authentication