



Spring Boot

SPRING BOOT ROCKS IN JAVA!.

Chapter 1

- ▶ Introduction to Spring Boot
- ▶ Spring Applications
- ▶ Spring Boot to Rescue
- ▶ Why Spring Boot
- ▶ Spring Boot Features

Introduction to Spring Boot

- ▶ Spring Boot is the Spring Framework .You can view Spring Boot as new way to create spring application with ease
- ▶ Spring Boot simplifies the way you develop ,because it makes it easy to create production- Ready Spring –based application that you can just run.
- ▶ Spring Boot is an “opinionated” technology in that it will help you follow the best practices for creating robust, extensible, and scalable Spring applications.
- ▶ <http://projects.spring.io/spring-boot>

Spring Applications

- ▶ Use a utility to package your WAR file. You can use the jar tool , but most people are more used to running Apache Maven or Gradle ,or Apache Ant to compile, test and create the WAR file.
- ▶ Use an application server or container to run your WAR file, such as Tomcat ,Jetty ,Jboss or WebSphere.

Spring Boot to the rescue

- ▶ `package com.example.demo;`
- ▶ `import org.springframework.boot.SpringApplication;`
- ▶ `import org.springframework.boot.autoconfigure.SpringBootApplication;`
- ▶ `@SpringBootApplication`
- ▶ `public class DemoApplication { public static void main(String[] args) {`
`SpringApplication.run(DemoApplication.class, args);`
- ▶ `}`
- ▶ `@RequestMapping("/")`
- ▶ `public String greetings(){`
- ▶ `return "<h1> Spring Boot Rocks in Java!</h1>";`
- ▶ `}`
- ▶ `}`

Spring Boot to the rescue

- ▶ Spring run *.java
- ▶ Open the browser and point to the URL <http://localhost:8080>
- ▶ You should see the message ""Spring Boot Rocks in Java!"

Why Spring Boot?

- ▶ Spring Boot has many features that make it suitable for:
- ▶ Cloud Native Applications that follow the 12 factor patterns
- ▶ Productivity increases by reducing time of development and deployment
- ▶ Enterprise-Production-ready Spring applications
- ▶ Non-functional requirements, such as the Spring Boot Actuator(a module that brings metric, health checks, and management easily) and embedded containers for running web applications(such as Tomcat,Undertow,Jetty etc)
- ▶ The term “Micro services” is getting attention fro creating scalable, highly available, and robust applications, and Spring Boot fits the perfectly by allowing developers to focus only on the business logic and to leave the e heavy lifting to the Spring Framework.

Spring boot Features

- ▶ The Spring Application class. In a Java Spring Boot application, the main method execute this singleton class. This particular class provides a convenient way to initiate a Spring application.
- ▶ Spring Boot allows you to create applications without requiring any XML congifuration.Spring Boot doesn't generate code.
- ▶ Spring Boot is an “opinionated” technology.
- ▶ Spring boot allows you to execute code after the application has started.
- ▶ Spring Boot allows you to externalize configuration by using and application. Properties or application.yml file.
- ▶ Spring Boot allows you to have profiles that will help you application run in different environments.
- ▶ Spring Boot provides a simple way to configure and manage you dependencies by using starter poms

Spring Boot Features

- ▶ Spring Boot provides out-of-the-box no-functional requirements by using the Spring Boot Actuator
- ▶ Spring Boot Provides `@Enable<feature>` annotations that help you to include, configure and use technologies like databases(SQL and NoSQL), caching , scheduling ,messaging ,Spring integration ,Spring cloud, and more.