

Course Code	
Course Name	Spring Boot App

Duration (in days)	3	Proficiency Level	Building REST services with Spring
Pre-requisites	None	Target Audience	Campus Hires

Learning Outcome

At the end of the program, participants will be able to learn:

- Knowledge of Spring Core (focus on @Configuration) and maven - building blocks for Spring Boot.
- Use Spring Boot starters and start.spring.io to easily create new applications.
- Use Spring Boot's auto-configuration.
- Customize an application configuration.
- Use Spring Boot's Spring Data/Spring Data JPA capabilities.
- Use Spring Boot's Web capabilities (focusing on Spring REST), including embedded servlet containers.
- Use Spring Boot's Actuator.
- Use Actuator endpoints to monitor and manage applications.
- Work with Spring DevTools.

Day-wise Session Plan

Day	Unit	Objective(s)	Hours
1	Introduction	<ul style="list-style-type: none"> • A brief Overview of Maven • Intro to Spring Boot - What is Spring Boot and What It Does • Spring Boot Hello World • Different APIs such as SpringBootApplication, CommandLineRunner, ApplicationRunner 	2
1	Configuration & Customization	<ul style="list-style-type: none"> • Working with Properties - YAML and .properties • Logging and its Configuration • Auto-configuration Overview • Customization 	6
2	Spring Boot Database Support	<ul style="list-style-type: none"> • Basic Auto-configuration - DataSource and Pooling • Configuring Spring Data • Repositories and JPA Repositories • Using CrudRepository • Spring Data Querying • Naming Conventions for Querying 	8
3	Spring Boot Web/REST	<ul style="list-style-type: none"> • DispatcherServlet Review • Web Starters and Configuration spring-boot-starter-web • Using Embedded Servers (Tomcat, Netty) • Usage of template thymeleaf 	4
3	Actuator and Devtools	<ul style="list-style-type: none"> • Actuator Overview and Capabilities • Actuator Endpoints • Custom Actuators and Health Checks • Devtools Overview • Other Tools and Features 	4