



Spring Boot

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Spring Framework

- [Spring Framework](#) is an **open-source Java Framework** developed by Rod Johnson in 2002
- It aims to **simplify enterprise Java development** through a variety of features organized into modules.
- In Java development, [Spring Framework](#) has been a prominent framework for over a decade, helping developers build robust, scalable, and maintainable applications.
- **Spring IoC (Inversion of Control)** Container is the core of Spring Framework. It creates the objects, components, configures and assembles their dependencies and manages their entire life cycle.
- In recent years, [Spring Boot](#) has emerged as a **game-changer**, simplifying the development process further.
- [Spring Boot](#) enables the **rapid development** of modern, internet-centric applications, including **microservices**, while adhering to industry best practices and reducing development time.
- Spring Boot makes it easy to create stand-alone, production-grade Spring based Applications
- **Spring Framework 6.0** has been released on 16 November 2022 and came with a Java 17+ baseline and a move to Jakarta EE 9+

Advantages of Spring Boot

- 1) One click project setup for microservices and cloud based applications
- 2) Simplified configuration with auto configuration and dependencies
- 3) Rapid development using starter modules
- 4) Simplified Unit Testing and Integration Testing
- 5) Built-in features of application monitoring and metrics
- 6) Offers Robust Security framework for applications
- 7) Support for data access, web clients, static and dynamic web pages
- 8) Offers Day 1 Production Ready features to deploy to live environment
- 9) Supports integration and extensions for trending technologies

Spring Boot Modules

- 1) spring-boot-starter-web
- 2) spring-boot-starter-data-jpa
- 3) spring-boot-starter-test
- 4) spring-boot-starter-thymeleaf
- 5) spring-boot-starter-security
- 6) spring-boot-starter-data-ldap
- 7) spring-boot-starter-mail
- 8) spring-boot-starter-kafka

Hands On

<https://start.spring.io/>

<https://spring.io/guides/gs/spring-boot/>

<https://spring.io/projects/spring-boot/>

<https://www.baeldung.com/spring-boot-starters>