

1. Spring

Spring is a comprehensive programming and configuration model for modern Java-based enterprise applications - on any kind of deployment platform.

2. Spring Boot

Spring Boot is a project within the Spring ecosystem that simplifies the process of setting up and developing new Spring applications. It favors convention over configuration and is designed to get you up and running as quickly as possible.

3. Relation between Spring platform and Spring Boot

Spring Boot is part of the Spring platform, acting as a quick-start toolkit to streamline the development process using Spring framework.

4. Relation between Spring platform and Spring framework

The Spring framework is the foundation of the Spring platform. The platform includes projects built on top of the core Spring framework, like Spring Boot, Spring Security, Spring Data, etc.

5. Dependency Injection in Spring

Dependency Injection (DI) is a design pattern where a class receives its dependencies from external sources rather than creating them itself. In Spring, DI is accomplished using the framework's Inversion of Control container, which injects objects into a class through constructors, methods, or fields.

6. Inversion of Control (IoC) and its relation to Spring

IoC is a principle where the control of objects or portions of a program is transferred to a container or framework. In Spring, IoC is implemented using the Spring IoC container, which manages the instantiation, configuration, and assembly of beans (objects) defined by the developer.