## **Purpose of @SpringBootApplication annotation:**

The @SpringBootApplication annotation is a **convenience annotation** in Spring Boot that serves as the **entry point** for your Spring Boot application.

**Purpose of @SpringBootApplication:**

It combines **three core annotations** into one:

@SpringBootApplication ==>

@Configuration , @EnableAutoConfiguration , @ComponentScan

**What each component does:**

1. **@Configuration**
   * Marks the class as a source of bean definitions (@Bean methods).
   * Equivalent to an XML configuration file.
2. **@EnableAutoConfiguration**
   * Tells Spring Boot to automatically configure beans based on the dependencies in the classpath.
   * Example: If Spring Boot detects spring-boot-starter-web, it auto-configures a Tomcat server and DispatcherServlet.
3. **@ComponentScan**
   * Tells Spring to scan the current package and all sub-packages for components, configurations, and services.
   * Finds classes annotated with @Component, @Service, @Repository, or @Controller and registers them as Spring beans.

**Typical Usage:**

**Code:**

@SpringBootApplication

public class MyApplication {

public static void main(String[] args) {

SpringApplication.run(MyApplication.class, args);

}

}

* This line starts the entire Spring Boot framework and initializes your application context.

## **Open Dependency Hierarchy and show dependency tree.**

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