



Kamal Badran
Software Engineer

SPRING BOOT ANNOTATIONS

2025





Kamal Badran

Software Engineer

@SpringBootApplication

This annotation marks the main class of a Spring Boot application, combining @Configuration, @EnableAutoConfiguration, and @ComponentScan. It serves as the entry point, enabling Spring Boot's auto-configuration and component scanning for seamless application setup.



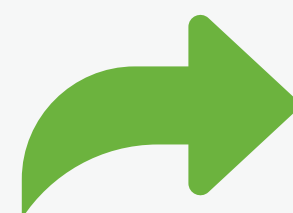


Kamal Badran

Software Engineer

@Controller

Identifying a class as a Spring MVC controller, this annotation handles HTTP requests, responding with the appropriate view or data. It plays a crucial role in web request processing.





Kamal Badran

Software Engineer

@RestController

Similar to @Controller, this annotation is specifically designed for RESTful web services. • Combining @Controller and @ResponseBody, it simplifies the development of RESTful APIs by automatically converting methods' return values to JSON or XML.





Kamal Badran

Software Engineer

@Request Mapping

This annotation maps HTTP requests to handler methods within a controller. It specifies the URL patterns to handle and the methods to execute, providing a powerful way to define the request-handling logic.





Kamal Badran

Software Engineer

@Autowired

Used for automatic dependency injection, @Autowired reduces the need for manual bean wiring. Whether applied to a constructor, field, or method, it signals that Spring should inject the required dependency, promoting cleaner and more maintainable code.



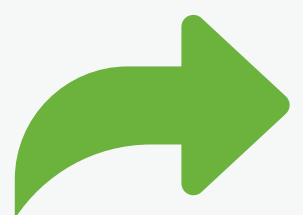


Kamal Badran

Software Engineer

@Service

Marking a class as a service, this annotation is typically used for encapsulating business logic. It aids in component scanning and code organization, helping to structure an application with a dedicated service layer.





Kamal Badran

Software Engineer

@Repository

Identified as a Spring Data repository, this annotation allows a class to interact with a data source, handling database operations and exceptions translation. It simplifies data access in a Spring application.





Kamal Badran

Software Engineer

@Configuration

Designating a class as a configuration class, this annotation defines application beans, replacing XML configuration with Java-based configuration. It plays a crucial role in configuring the Spring application context.





Kamal Badran

Software Engineer

@Component

Serving as a generic stereotype annotation for any Spring-managed component, `@Component` marks a class as such, allowing it to be automatically detected and configured by Spring. It simplifies the process of declaring and managing Spring components.



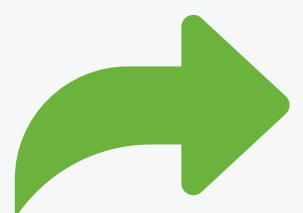


Kamal Badran

Software Engineer

@Value

This annotation injects values from properties files or environment variables into fields, providing a clean and concise way to handle external configuration. It simplifies the retrieval of configuration values within the application.





KAMAL BADRAN

FOLLOW

Thank you for watching

