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Deep-dive of Spring Boot Annotations

In an hour we will
deal with relevant
annotations

Annotations

Add metadata on your code



Example Annotation

```
@Target(ElementType.FIELD)
@Retention(RetentionPolicy.RUNTIME)
public @interface Header {
}
```

Java Specification Requests (JSR) for Annotations

JSR 175: A Metadata Facility for the Java™ Programming Language

- Standardize the way how annotations works in classes, methods, fields and other constructs

JSR 250: Common Annotations for the Java™ Platform

- Standard set of annotations used in J2EE platform
 - @PostConstruct, @PreDestroy, @Resource and @Generated

JSR 305: Annotations for Software Defect Detection

- Infer-annotations for software detection. Usually used in IDEs

JSR 308: Annotations on Java Types

- Use of annotations in any type not just declaration
 - e.g. Use of @Nullable and @Nonnull to Array, Generic, Type Cast, New Object Creation and Local Variable types

Annotation Demo

Spring Boot

Simplify Java development through auto-configuration

What is Spring Boot?

- Creates enterprise grade stand-alone applications
- Uses auto-configuration to detect dependencies
- No XML generation by reading annotations through reflection
- Provide different starters to build your application



Relevant Spring Annotations

Spring Containers

Application Context

A specialized Bean Factory that can manage the following:

- Resources
- Messaging
- Event Listeners

Bean Factory

A Spring Container that manages the following:

- Bean Lifecycle
- Environment
- The Application Context
- The Servlet Context
- Properties

Spring Core - Dependency Injection Annotations

Annotations that affect how beans will be managed.

Annotations mentioned focuses on how a bean is injected in the Application Context.

@Autowired
@Qualifier
@Primary
@Bean
@Lazy
@Required
@Value
@Scope
@PostConstruct
@PreDestroy

Spring Core - Context Annotations

Annotations that affect how beans will be managed.

Annotations mentioned focuses on how a bean is injected in the Application Context.

@Profile

@Import

@PropertySource

@Configuration

@NestedConfiguration

Spring Stereotype Annotations

Specialized annotations to managed Spring Beans automatically in Spring Boot.

@Component
@Controller
@Service
@Repository

Spring Boot/MVC Annotations

Annotations used to auto-configure dependencies in the classpath of your application.

Including in Spring Boot Annotations are metadata that can help you consume and produce data as an API.

@SpringBootApplication
@EnableAutoConfiguration
@ComponentScan

@Controller
@RestController
@RequestMapping
@ResponseBody
@GetMapping
@PostMapping
@DeleteMapping
@PutMapping

Spring Data Annotations

Annotations for data persistence and transactions. It is used to abstract on how we store and retrieve data from the database.

@Entity

@Table

@Column

@Id

@Repository

@Query

@EnableJpaRepositories

Code with me!

Questions?

Connect with me!

