

Week 15: Research

2. What are the annotations used for CRUD operations in Spring Boot?

<https://www.javatpoint.com/spring-boot-crud-operations>

In Spring Boot, you can use annotations such as `@Entity`, `@Id`, `@GeneratedValue`, `@Column`, `@Table`, `@OneToMany`, `@ManyToOne`, `@JoinColumn` and others to define your entities and map them to the database tables. You can also use the `CrudRepository` interface to perform basic CRUD operations without writing any implementation code. The `CrudRepository` interface provides methods such as `save()`, `findOne()`, `findAll()`, `count()`, `delete()`, and others. Spring Boot provides a range of annotations that can be used for CRUD (Create, Read, Update, Delete) operations. Some of the most commonly used annotations include:

- `@RestController`: Used to define a RESTful web service that can handle HTTP requests.
- `@GetMapping`: Used to map HTTP GET requests to a specific method.
- `@PostMapping`: Used to map HTTP POST requests to a specific method.
- `@PutMapping`: Used to map HTTP PUT requests to a specific method.
- `@DeleteMapping`: Used to map HTTP DELETE requests to a specific method.
- `@RequestBody`: Used to bind the request body to a method parameter.
- `@PathVariable`: Used to bind a URI template variable to a method parameter.

4. What is Tomcat? How does it relate to Spring Boot?

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

Tomcat is an open-source web server and servlet container developed by the Apache Software Foundation. It implements several Java specifications such as Java Servlet, JavaServer Pages (JSP), Java Expression Language (EL), and WebSocket, and provides a pure Java HTTP web server environment for running Java code. In relation to Spring Boot, Tomcat is often used as the embedded servlet container that comes bundled with Spring Boot applications by default.