Week 4 - Define Databases & Dependencies

Databases for Spring Boot

Spring boot can connect multiple databases for any project. Spring boot provides a datasource that can connect to the database of your choosing. The rest controller can use the datasource to make connections and get the data.

Dependencies for Spring Boot

Spring boot is built upon Spring framework and one of the key features of Spring framework is injecting dependencies. The “@” sign will help inject dependencies into Spring Boot using annotations. Some of the key ideas are that an object is created by the spring container, the developer will then get this object in our application. This object is known as a bean, which is a dependency injection. Otherwise, a bean is simply one of many objects in your application. Even if we do not want the object the spring framework will give it to us. In addition, Spring annotation is a component of component annotation. This will help instantiate components and inject them into Spring. Where Instantiating things create new instances of objects to be used. An external service will inject the dependencies, they are then responsible for adding the dependencies. There are many other annotations that can be used depending on the type of project desired to be created.

Annotations used in my program

@Qualifier:

* Eliminate which bean needs to be injected

@Autowired:

* Making a dependency injection disambiguous
* Injects the actual service into the constructor

@PostMapping:

* Telling spring it is a post request

@Component:

* Allows for custom bean detection

Sources:

<https://www.digitalocean.com/community/tutorials/spring-repository-annotation>

<https://docs.oracle.com/javase/tutorial/java/javaOO/objectcreation.html>

<https://www.baeldung.com/spring-qualifier-annotation>

<https://docs.spring.io/spring-framework/docs/3.2.x/spring-framework-reference/html/beans.html#:~:text=In%20Spring%2C%20the%20objects%20that,many%20objects%20in%20your%20application>.

<https://www.youtube.com/watch?v=rbBNFnq4qoI&ab_channel=DiveIntoDevelopment>

<https://www.geeksforgeeks.org/singleton-and-prototype-bean-scopes-in-java-spring/>

<https://www.baeldung.com/spring-component-annotation>

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