Research Document

Spring boot: how does @Autowired actually work

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# What is Spring Boot?

Spring Boot is an**open-source micro framework** maintained by a company called Pivotal (Mulders, 2019). It provides Java developers with a platform to get started with an auto configurable production-grade Spring application (Mulders, 2019). With it, developers can get started quickly without losing time on preparing and configuring their Spring application (Mulders, 2019).

# What is @Autowired annotation in Spring?

Spring boot autowired is the feature of the spring boot framework, which was used to enable us to inject the dependency object implicitly (EDUCBA, n.d.). It is used in setter or in constructor injection internally. Spring boot autowired requires less code because we have no need to write the code while injecting dependency explicitly (EDUCBA, n.d.).

# Where should it be used?

The annotation can be used mainly when we inject one class to another like using the service class in the controller class, using repository class in service class and etc.

# Why should it be used?

Developers who use full autowiring with the @Autowired annotation for Spring have no problems leaving their external XML configs behind (Pronschinske, 2010). One of the most important reasons why someone would use autowiring (@Autowired) is to have one**less abstraction in your system (Pronschinske, 2010).** Even though it might be a simple layer, that’s one less layer of complexity (Pronschinske, 2010).

# How does it work?

@Autowired is one of the key annotation in annotation based Dependency Injection (Varma, 2022). Since version 2.5, Spring provides the @Autowired annotation to**discover the beans automatically and inject collaborating beans (other associated dependent beans) into our bean (Varma, 2022).**

# Resources

EDUCBA. (n.d.). *Spring boot autowired*. EDUCBA. <https://www.educba.com/spring-boot-autowired/>

Mulders, M. (2019, September 16). *What Is Spring Boot?*. Stackify. <https://stackify.com/what-is-spring-boot/>

Pronschinske, M. (2010, April 6). *Why You Should Use Spring's Annotations-Based Autowiring.* DZone. <https://dzone.com/articles/why-you-should-use-springs>

Varma, S. (2022, May 6). *Spring – @Autowired.* JavaByDeveloper. <https://javabydeveloper.com/tutorial-on-spring-autowired/#3-13-autowired-in-spring-boot>