

# Dependency Injection

Spring will inject the values for your dependency.

Dependency -- Dependencies are the properties of class.

What is a Dependency?

**Whenever a class A uses another class or interface B, then A depends on B.** A cannot carry out its work without B, and A cannot be reused without also reusing B. In such a situation the class A is called the "dependant" and the class or interface B is called the "dependency".

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Two classes that use each other are called "coupled". The coupling between classes can be loose or tight, or somewhere in between. The tightness of a coupling is not binary. It is not either "loose" or "tight". The degrees of tightness are continuous, not discrete. You can also characterize dependencies as "strong" or "weak". A tight coupling leads to strong dependencies, and a loose coupling leads to weak dependencies, or even no dependencies in some situations.

Dependencies, or couplings, are directional. That A depends on B doesn't mean that B also depends on A.

Dependency Injection -- It means injecting the value in dependency.

Dependency Injection is the main functionality provided by *Spring* IOC(Inversion of Control).

Qualifier -- The @Qualifier annotation in Spring is **used to differentiate a bean among the same type of bean objects**. If we have more than one bean of the same type and want to wire only one of them then use the @Qualifier annotation along with @Autowired to specify which exact bean will be wired.