**Inversion OF Control** : **The approach of outsourcing the construction and management of objects.**

**Dependency Injection** : **The client delegates to another object the responsibility of providing its dependencies.**

**Spring Container primary Function:**

**Create And Manage Object (Inversion of Control).**

**Inject Object Dependency (Dependency Injection).**

**Injection Types 🡪 There are many injection types we will discus only two type of injection :**

**Constructor Injection & Setter Injection .**

**@Component Annotation**

@Component marks the class as a spring Bean. A Spring Bean is just a regular java class that is managed by Spring.

@Component also makes the bean available for Dependency Injection.

***What is spring Autowiring?***

For dependency Injection, Spring can use Autowiring.

Spring will look for a class that matches by type Class or Interface.

Spring will inject it automatically. Hence It is autowired.

Example : Injecting a Coach Implementation, Spring will scan for **@Components.** Any one implements the coach interface???If so lets inject them. For example : Cricket Coach.

Use this when you have optional dependency.

If dependency is not provided , your app can provided reasonable default logic.

Use this when you have required dependency.

Generally recommended by the spring.io development team as a first choice.