



## Spring Core –Constructor and Setter Injection



Presented by



# Constructor Injection

Scenario : **Employee HAS-A Address.**

We can inject the dependency by constructor.

When using constructor injection, **setters are not used !**

The **<constructor-arg>** sub element of **<bean>** tag is used for constructor injection.

```
<bean id= "lasya" class= "com.mycompany.springcore.setterinjection.Employee">  
  <constructor-arg value= "10" type= "int"></constructor-arg>  
  <constructor-arg value= "Lasya" type= "String"></constructor-arg>  
</bean>
```

**\*\* Example**

# Setter Injection

Scenario : **Employee HAS-A Address.**

The Address class object will be termed as the **Dependent** object.

The Employee class object will be termed as the **Dependency**

```
<bean id= "address" class= "com.mycompany.springcore.setterinjection.Address">
<property name= "city" value= "Bangalore"></property>
<property name= "state" value= "Karnataka"></property>
<property name= "street" value= "Road No. 1"></property>
</bean>
```

```
<bean id= "lasya" class= "com.mycompany.springcore.setterinjection.Employee">
<property name= "id" value= "116"></property>
<property name= "name" value= "Lasya"></property>
<property name= "address" ref= "address"></property>
</bean>
```

**\*\* Example**

# Collection Injection - Set

```
<bean id= "cityBean" class= "com.mycompany.springcore.collectionsinjection.City">
```

```
<!-- java.util.Set -->
```

```
<property name= "citySet">
```

```
<set>
```

```
<value>Bangalore</value>
```

```
<value>Pune</value>
```

```
</set>
```

```
</property>
```

```
</bean>
```

**\*\* Example**

# Collection Injection - List

```
<bean id= "cityBean" class= "com.mycompany.springcore.collectionsinjection.City">  
  
  <!-- java.util.List -->  
  <property name= "citySet">  
    <list>  
  
      <value>Bangalore</value>  
      <value>Pune</value>  
    </list>  
  
  </property>  
  
</bean>
```

**\*\* Example**

# @Autowired

The **@Autowired** annotation allows you to skip configurations for component injection

Component need not be configured for POJO

EX : Without @Autowired

```
<bean id= "countryBean" class= "Country">
  <property name= "countryName" value= "India" />
  <property name= "capital" ref= "address" />
</bean>
<bean id= "capitalBean" class= "Capital">
  <property name= "capitalName" value= "New Delhi" />
</bean>
```

```
public class Country {

    String countryName;
    Capital capital;

    public void setCapital(Capital capital) {
        this.capital = capital;
    }
}
```

# @Autowired ...

With @Autowired

```
<context:annotation-config/>
<bean id= "countryBean" class= "Country">
  <property name= "countryName" value= "India" />
</bean>
<bean id= "capitalBean" class= "Capital">
  <property name= "capitalName" value= "New Delhi" />
```

```
public class Country {
```

```
    String countryName;
```

```
    Capital capital;
```

```
@Autowired
```

```
public void setCapital(Capital capital) {
    this.capital = capital;
}
```

