

## Spring Core – IoC



Presented by

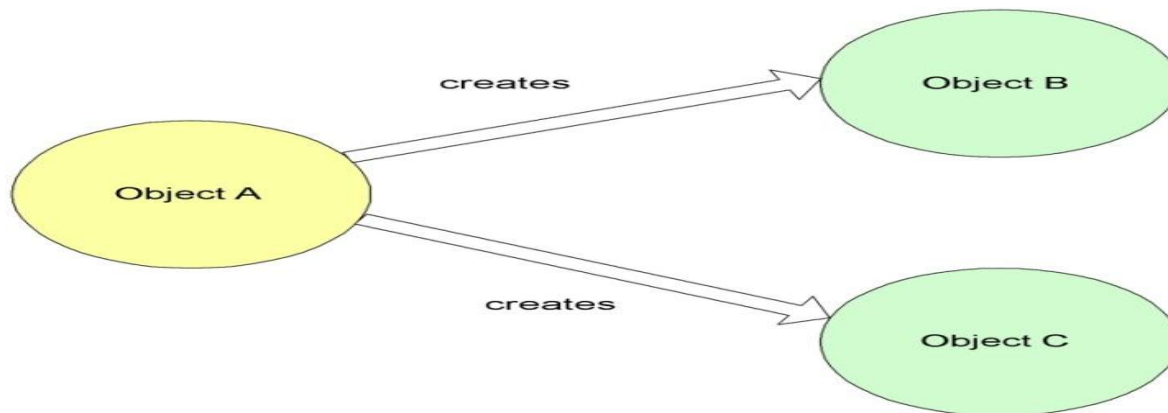


# Dependency Injection & Inversion Of Control

Dependency : A POJO / bean / Entity

Non IOC – Getting a POJO by pulling – Hard Coding

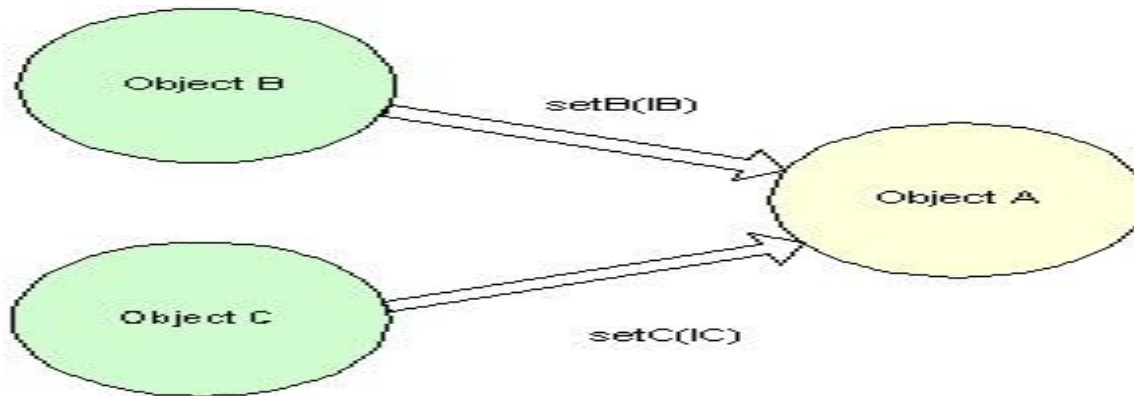
```
Employee emp1 = new Employee();  
Employee emp1 = new Employee();  
// Explicit creation
```



# Inversion of Control

IOC : Getting a POJO Object by Pushing on demand by  
Spring Core Container

```
Employee emp1 = (Employee)xxxxx.getBean("emp1");  
Employee emp2 = (Employee)xxxxx.getBean("emp2");
```



*The act of Dependency Injection is known as 'wiring'.*

# Spring Core Container

Spring's Container uses IoC to manage components of the application.

- **Application context**  
(`org.springframework.context.ApplicationContext`)  
provides application framework services

# Spring way of DI

- Java classes should be as independent as possible from each other
- Spring Framework injects these dependencies via the container.
- Piecing together all beans in the Spring Container is called **wiring**.
- Wiring can be done through xml.



# Bean Configuration

Beans are listed in the configuration file

```
<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns="http://www.springframework.org/schema/beans"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.springframework.org/schema/beans
    http://www.springframework.org/schema/beans/spring-beans-3.0.xsd">

  <bean id="helloWorld" class="com.mycompany.springcore.hw.HelloWorld">
    <property name="wish" value="Hello World !"/>
  </bean>

</beans>
```

*\*HelloWorld application*

