Module 3

Assignment 3

# 1. Write a Spring application that demonstrates Dependency Injection using the

**constructor, implemented through XML-based configuration or annotation-based configuration**

**Account.java**

**package** mod3;

**public class** Account {

**private** String AccNo;

**private** String AccName;

**public** String getAccNo() {

**return** AccNo;

}

**public void** setAccNo(String accNo) { AccNo = accNo;

}

**public** String getAccName() {

**return** AccName;

}

**public void** setAccName(String accName) { AccName = accName;

}

}

**Config.xml**

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<beans xmlns=*"*[*http://www.springframework.org/schema/beans*](http://www.springframework.org/schema/beans)*"* xmlns:xsi=*"*[*http://www.w3.org/2001/XMLSchema-instance*](http://www.w3.org/2001/XMLSchema-instance)*"* xmlns:p=*"*[*http://www.springframework.org/schema/p*](http://www.springframework.org/schema/p)*"* xsi:schemaLocation=*"*[*http://www.springframework.org/schema/beans*](http://www.springframework.org/schema/beans)[*http://www.springframework.org/schema/beans/spring-beans-3.0.xsd*](http://www.springframework.org/schema/beans/spring-beans-3.0.xsd)*"*>

<bean id=*"account"* class=*"mod3.Account"*>

<property name=*"AccNo"* value=*"123"*></property>

<property name=*"AccName"* value=*"ABC"*></property>

</bean>

</beans>

**Program1.java**

**package** mod3;

**import** org.springframework.context.ApplicationContext;

**import** org.springframework.context.support.ClassPathXmlApplicationContext;

**public class** program1 {

**public static void** main(String[] args) {

// **TODO** Auto-generated method stub

ApplicationContext Context = **new** ClassPathXmlApplicationContext("config.xml");

Account acc = Context.getBean("account" , Account.**class**); System.***out***.println("Account No : " +acc.getAccNo()); System.***out***.println("Account Name: " +acc.getAccName());

}

}

**Output:-**

****

# 1. Write a Spring application that demonstrates Dependency Injection using the setter method, implemented through XML-based configuration or annotation-based configuration

**Fullname.java**

**package** demo;

**public class** FullName {

**private** String firstName; **private** String middlename; **private** String lastName;

**public** FullName() {

**super**();

// **TODO** Auto-generated constructor stub

}

**public** FullName(String firstName, String middlename, String lastName) {

**super**();

**this**.firstName = firstName;

**this**.middlename = middlename;

**this**.lastName = lastName;

}

@Override

**public** String toString() {

**return** "FullName [firstName=" + firstName + ", middlename=" + middlename + ", lastName=" + lastName + "]";

}

}

**Employee.java**

**package** demo;

**public class** Employee {

# private int id;

**private** FullName fullname;

**public** Employee(**int** id, FullName fullname) {

**super**();

**this**.id = id;

**this**.fullname = fullname;

}

**public** Employee() {

**super**();

// **TODO** Auto-generated constructor stub

}

@Override

**public** String toString() {

**return** "Employee [id=" + id + ", fullname=" + fullname

+ "]";

}

}

**Config.xml**

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<beans xmlns=[*"http://www.springframework.org/schema/beans"*](http://www.springframework.org/schema/beans)xmlns:xsi=[*"http://www.w3.org/2001/XMLSchema-instance"*](http://www.w3.org/2001/XMLSchema-instance)

xmlns:p=[*"http://www.springframework.org/schema/p"*](http://www.springframework.org/schema/p)

xsi:schemaLocation=[*"http://www.springframework.org/schema/beans*](http://www.springframework.org/schema/beans)[*http://www.springframework.org/schema/beans/spring-beans-3.0.xsd*](http://www.springframework.org/schema/beans/spring-beans-3.0.xsd) *"*>

<bean id=*"fullname"* class=*"demo.FullName"*>

<constructor-arg index=*"0"* value=*"abc"*></constructor-arg>

<constructor-arg index=*"1"* value=*"uvw"*></constructor-arg>

<constructor-arg index=*"2"* value=*"xyz"*></constructor-arg>

</bean>

<bean id=*"emp"* class=*"demo.Employee"*>

<constructor-arg index=*"0"* value=*"1"*></constructor-arg>

<constructor-arg><ref bean=*"fullname"*/> </constructor-arg>

</bean>

</beans>

**MainApp.java**

**package demo;**

**import org.springframework.context.ApplicationContext;**

**import org.springframework.context.support.ClassPathXmlApplicationContext; public class MainApp {**

**public static void main(String[] args) {**

**// TODO Auto-generated method stub**

**ApplicationContext context = new ClassPathXmlApplicationContext("config.xml");**

**Employee emp = context.getBean("emp", Employee.class); System.out.println("");**

**System.out.println(emp);**

**}**

**}**

**Output:**