

Spring Example Applications (XML, Java and Annotations) - by RAGHU SIR



STS 3 Download :

https://download.springsource.com/release/STS/3.9.11.RELEASE/dist/e4.14/spring-tool-suite-3.9.11.RELEASE-e4.14.0-win32-x86_64.zip

STS 4 Download:

https://download.springsource.com/release/STS4/4.5.0.RELEASE/dist/e4.14/spring-tool-suite-4-4.5.0.RELEASE-e4.14.0-win32.win32.x86_64.self-extracting.jar

Spring XML Configuration Example:-

Step#1 Create Maven Project

> File > new > maven project > choose check box "[v] Create Simple Project" > next > Enter Details

GroupId : in.nit

ArtifactId: SpringXmlEx

Version: 1.0

> Finish

Step#2 Add dependencies in pom.xml then press ctrl+A, ctrl+I and ctrl+S

<dependencies>

<dependency>

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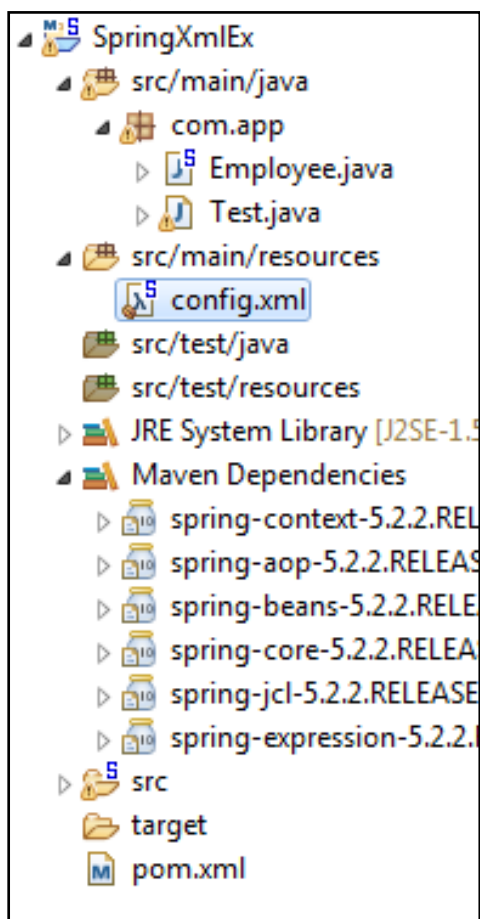
```
<groupId>org.springframework</groupId>
<artifactId>spring-context</artifactId>
<version>5.2.2.RELEASE</version>
</dependency>
</dependencies>
```

Step#3 create classes under src/main/java folder

Step#4 Create XML Config file under src/main/resources

> Right click on src/main/resources > new > Spring Bean Configuration File > provide name ex: config.xml > next > finish.

Folder System:



Code:-

1. Spring Bean

```
package com.app;
```

```
public class Employee {
```

```
private int eid;
private String ename;
private double esal;
//Default constructor
//alt+shift+S,0>Deselectall>OK
public Employee() {
    super();
}
//set,get
//alt+shift+S,R>Selectall>OK
public int getId() {
    return eid;
}
public void setId(int eid) {
    this.eid = eid;
}
public String getEname() {
    return ename;
}
public void setName(String ename) {
    this.ename = ename;
}
public double getEsal() {
    return esal;
}
public void setEsal(double esal) {
    this.esal = esal;
}
//alt+shift+S,S>OK
@Override
public String toString() {
    return "Employee [eid=" + eid + ", ename=" +
ename + ", esal=" + esal + "]\n";
}

}
```

2.config.xml

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

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```
<beans xmlns="http://www.springframework.org/schema/beans"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="http://www.springframework.org/sc
hema/beans
http://www.springframework.org/schema/beans/spring-
beans.xsd">
    <bean class="com.app.Employee" name="emp">
        <property name="eid" value="20"/>
        <property name="ename" value="RAGHU"/>
        <property name="esal" value="9.9"/>
    </bean>
</beans>
```

3. Test class:

```
package com.app;
```

```
import org.springframework.context.ApplicationContext;
import
org.springframework.context.support.ClassPathXmlApplication
nContext;
//ctrl+shift+O (to get imports)
public class Test {
```

```
    public static void main(String[] args) {
        //ctrl+F11 :to run code
        ApplicationContext ac=new
ClassPathXmlApplicationContext("config.xml");
        Object ob=ac.getBean("emp");
        Employee e=(Employee)ob;
        System.out.println(e);
    }
}
```

=====

Spring Java Configuration Example:-

1. Spring Bean

```
package com.app;
```

```
public class Employee {
```

```
    private int eid;
```

```
    private String ename;
```

```
    private double esal;
```

```
    //Default constructor
```

```
    //alt+shift+S,0>Deselectall>OK
```

```
    public Employee() {
```

```
        super();
```

```
    }
```

```
    //set,get
```

```
    //alt+shift+S,R>Selectall>OK
```

```
    public int getId() {
```

```
        return eid;
```

```
    }
```

```
    public void setId(int eid) {
```

```
        this.eid = eid;
```

```
    }
```

```
    public String getName() {
```

```
        return ename;
```

```
    }
```

```
    public void setName(String ename) {
```

```
        this.ename = ename;
```

```
    }
```

```
    public double getEsal() {
```

```
        return esal;
```

```
    }
```

```
    public void setEsal(double esal) {
```

```
        this.esal = esal;
```

```
    }
```

```
    //alt+shift+S,S>OK
```

```
    @Override
```

```
    public String toString() {
```

```
        return "Employee [eid=" + eid + ", ename=" +  
ename + ", esal=" + esal + "];"
```

```
    }
```

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```
}
```

2. Java Config File

```
package com.app;
```

```
import org.springframework.context.annotation.Bean;  
import  
org.springframework.context.annotation.Configuration;  
//ctrl+shift+O (to get imports)  
@Configuration  
public class AppConfig {
```

```
    //no.of methods = no.of objects  
    @Bean  
    public Employee emp() {  
        Employee e=new Employee();  
        e.setEid(10);  
        e.setName("RAGHU");  
        e.setEsal(9.9);  
        return e;  
    }  
}
```

3. Test class:

```
package com.app;
```

```
import org.springframework.context.ApplicationContext;  
import  
org.springframework.context.annotation.AnnotationConfigApp  
licationContext;  
//ctrl+shift+O (to get imports)  
public class Test {  
  
    public static void main(String[] args) {  
        //ctrl+F11 :to run code  
        ApplicationContext ac=new  
        AnnotationConfigApplicationContext(AppConfig.class);
```

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```
        Object ob=ac.getBean("emp");
        Employee e=(Employee)ob;
        System.out.println(e);
    }
}
```

Spring Annotation Configuration Example:-

1. Spring Bean and Spring Annotation Config File

```
package com.app;
```

```
import org.springframework.beans.factory.annotation.Value;
import org.springframework.stereotype.Component;
```

```
@Component("emp")
public class Employee {
    @Value("101")
    private int eid;
    @Value("RAGHU")
    private String ename;
    @Value("6.6")
    private double esal;
    //Default constructor
    //alt+shift+S,0>Deselectall>OK
    public Employee() {
        super();
    }
    //set,get
    //alt+shift+S,R>Selectall>OK
    public int getEid() {
        return eid;
    }
    public void setEid(int eid) {
        this.eid = eid;
    }
    public String getEname() {
        return ename;
    }
}
```

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```
public void setName(String ename) {
    this.ename = ename;
}
public double getEsal() {
    return esal;
}
public void setEsal(double esal) {
    this.esal = esal;
}
//alt+shift+S,S>OK
@Override
public String toString() {
    return "Employee [eid=" + eid + ", ename=" +
ename + ", esal=" + esal + "]\n";
}

}
```

2. AppConfig File

```
package com.app;

import
org.springframework.context.annotation.ComponentScan;
import
org.springframework.context.annotation.Configuration;
//ctrl+shift+O (to get imports)
@Configuration
@ComponentScan("com.app")
public class AppConfig {

}
```

3. Test class

```
package com.app;

import org.springframework.context.ApplicationContext;
```


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```
import
org.springframework.context.annotation.AnnotationConfigApp
licationContext;
//ctrl+shift+O (to get imports)
public class Test {

    public static void main(String[] args) {
        //ctrl+F11 :to run code
        ApplicationContext ac=new
AnnotationConfigApplicationContext(AppConfig.class);
        Object ob=ac.getBean("emp");
        Employee e=(Employee)ob;
        System.out.println(e);
    }
}
```

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