

# Spring MVC App - Java Config



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- Configure the Spring MVC app with Java code

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  - web.xml
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No XML!

# Development Process

*Step-By-Step*

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3. Create Spring Dispatcher Servlet Initializer

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Step-By-Step

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4. Develop our Spring controller

# Development Process

Step-By-Step

1. Add Maven dependencies for Spring MVC Web App
2. Create Spring App Configuration (@Configuration)
3. Create Spring Dispatcher Servlet Initializer
4. Develop our Spring controller
5. Develop our JSP view page

# Step 1: Add Maven dependencies for Spring MVC Web App

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spring-

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spring-

jstl

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spring-

javax.servlet-api

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javax.servlet-api

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javax.servlet.jsp-api

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File: pom.xml

```
<!-- Spring MVC support -->
<dependency>
    <groupId>org.springframework</groupId>
    <artifactId>spring-webmvc</artifactId>
    <version>...</version>
</dependency>
```

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<!-- Spring MVC support -->
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</dependency>
```

Will load all supporting  
dependencies:  
**spring-core, logging etc ...**

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File: pom.xml

```
<!-- Spring MVC support -->
<dependency>
    <groupId>org.springframework</groupId>
    <artifactId>spring-webmvc</artifactId>
    <version>...</version>
</dependency>

<!-- Servlet, JSP and JSTL support -->
<dependency>
    <groupId>javax.servlet</groupId>
    <artifactId>javax.servlet-api</artifactId>
    <version>...</version>
</dependency>

<dependency>
    <groupId>javax.servlet.jsp</groupId>
    <artifactId>javax.servlet.jsp-api</artifactId>
    <version>...</version>
</dependency>

<dependency>
    <groupId>javax.servlet</groupId>
    <artifactId>jstl</artifactId>
    <version>...</version>
</dependency>
```

Add Servlet, JSP and JSTL support

# Customize Maven Build

File: pom.xml

```
<build>  
  <pluginManagement>  
    <plugins>  
  
      </plugins>  
    </pluginManagement>
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Need to customize Maven build

Since we are not using web.xml

# Customize Maven Build

File: pom.xml

```
<build>  
  <pluginManagement>  
    <plugins>  
  
      <plugin>  
        <!-- Add Maven coordinates (GAV) for: maven-war-plugin -->  
        <groupId>org.apache.maven.plugins</groupId>  
        <artifactId>maven-war-plugin</artifactId>  
        <version>3.2.0</version>  
      </plugin>  
  
    </plugins>  
  </pluginManagement>
```

Need to customize Maven build

Since we are not using web.xml

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File: pom.xml

```
<build>  
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        <version>3.2.0</version>  
      </plugin>  
  
    </plugins>  
  </pluginManagement>
```

Need to customize Maven build

Since we are not using web.xml

Must add Maven WAR plugin

# XML config to Java config

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**web.xml**

**spring-mvc-demo-servlet.xml**

# XML config to Java config

Java Config

**web.xml**

**spring-mvc-demo-servlet.xml**

**Spring  
@Configuration**

**Spring Dispatcher  
Servlet Initializer**

# XML config to Java config

## Java Config

Spring  
@Configuration

Spring Dispatcher  
Servlet Initializer

# XML config to Java config

Java Config

Spring  
@Configuration

Spring Dispatcher  
Servlet Initializer

No XML!

# Flash Back to XML config (the old way)

File: spring-mvc-demo-servlet.xml

```
<beans>
```

```
</beans>
```

# Flash Back to XML config (the old way)

File: spring-mvc-demo-servlet.xml

```
<beans>
```

*Just an FYI*

```
</beans>
```

# Flash Back to XML config (the old way)

File: spring-mvc-demo-servlet.xml

```
<beans>  
  
    <!-- Add support for component scanning -->  
    <context:component-scan base-package="com.luv2code.springdemo" />  
  
</beans>
```

*Just an FYI*

# Flash Back to XML config (the old way)

File: spring-mvc-demo-servlet.xml

```
<beans>

    <!-- Add support for component scanning -->
    <context:component-scan base-package="com.luv2code.springdemo" />

    <!-- Add support for conversion, formatting and validation support -->
    <mvc:annotation-driven/>

</beans>
```

*Just an FYI*

# Flash Back to XML config (the old way)

File: spring-mvc-demo-servlet.xml

```
<beans>

    <!-- Add support for component scanning -->
    <context:component-scan base-package="com.luv2code.springdemo" />

    <!-- Add support for conversion, formatting and validation support -->
    <mvc:annotation-driven/>

    <!-- Define Spring MVC view resolver -->
    <bean
        class="org.springframework.web.servlet.view.InternalResourceViewResolver"
        >
        <property name="prefix" value="/WEB-INF/view/" />
        <property name="suffix" value=".jsp" />
    </bean>

</beans>
```

*Just an FYI*

# Enabling the MVC Java Config

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`@EnableWebMvc`

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- Provides similar support to `<mvc:annotation-driven />` in XML.

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- Adds conversion, formatting and validation support

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`@EnableWebMvc`

- Provides similar support to **<mvc:annotation-driven />** in XML.
- Adds conversion, formatting and validation support
- Processing of `@Controller` classes and `@RequestMapping` etc ... methods

# Step 2: Create Spring App Configuration

File: DemoAppConfig.java

```
@Configuration  
@EnableWebMvc  
@ComponentScan(basePackages="com.luv2code.springsecurity.demo")  
public class DemoAppConfig {  
  
}
```

# Step 2: Create Spring App Configuration

File: DemoAppConfig.java

```
@Configuration  
@EnableWebMvc  
@ComponentScan(basePackageNames = "com.luv2code")  
public class Demo AppConfig {
```

provides similar support to  
<mvc:annotation-driven />

```
}
```

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@Configuration  
@EnableWebMvc  
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```
@Configuration  
@EnableWebMvc  
@ComponentScan(basePackages="com.luv2code.springsecurity.demo")  
public class DemoAppConfig {  
  
    // define a bean for ViewResolver  
  
}  
-
```

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File: DemoAppConfig.java

```
@Configuration  
@EnableWebMvc  
@ComponentScan(basePackages="com.luv2code.springsecurity.demo")  
public class DemoAppConfig {  
  
    // define a bean for ViewResolver  
  
    @Bean  
    public ViewResolver viewResolver() {  
  
        InternalResourceViewResolver viewResolver = new InternalResourceViewResolver();  
  
        viewResolver.setPrefix("/WEB-INF/view/");  
        viewResolver.setSuffix(".jsp");  
  
        return viewResolver;  
    }  
}
```

# View Resolver Configs - Explained

```
InternalResourceViewResolver viewResolver = new InternalResourceViewResolver();  
  
viewResolver.setPrefix("/WEB-INF/view/");  
viewResolver.setSuffix(".jsp");
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```
InternalResourceViewResolver viewResolver = new InternalResourceViewResolver();  
  
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```

**/WEB-INF/view/ show-student-list .jsp**

