

SPRING SECURITY

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Spring Security:

Spring Security is a powerful, pluggable and flexible framework that focuses on providing both authentication and authorization to Java EE-based enterprise software applications.

Spring Security is not firewall, Proxy Server, intrusion detecting system, OS Security, JVM Security,...., It is a Framework to provide Authentication and Authorization Security in JAVA EE applications.

Spring Security Project was started by Ben Alex in 2003, later in 2004, It was introduced as Spring Security 2.0.0 under Apache Licence.

Spring Security Module focus mainly on the following two areas.

1. Authentication
2. Authorization

1. Authentication:

Authentication is first level checkup for any web application, It is the process of checking whether the user is right user or not to access the present website or web application on the basis of user identity existed in the form of User Name and Password.

Authentication is the combination of Identification[User Name] and Verification[Password] to check whether the user is right user or not to access our application.

2. Authorization:

Authorization is the process of giving special permissions and checking that permissions to the users while accessing particular area in our application.

In general, in web applications, Security Model will provide the following functionality.

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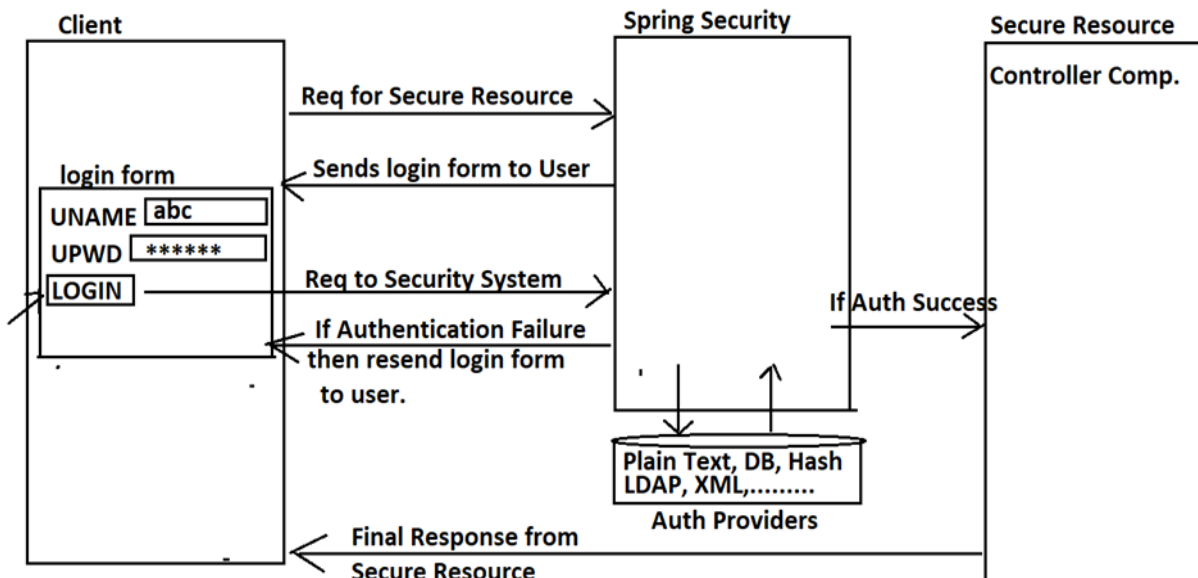


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From the above representation,

1. If we submit request from Client to Secure Resource then Security System will take request and Security System will submit login form to client.
2. After getting login form, User has to provide credentials and user has to submit request by clicking on login button.
3. When request is coming from Login Form then Security System will take user provided credentials like user name and password then Security System will check user credentials which are registered in Plain Text or DB or Hash or LDAP System,.....
4. If User credentials are existed in Authentication Provider then Authentication is Success, if Authentication is success then Security System will forward request to Secure resource.
5. If User credentials are not existed in Authentication Provider then Authentication Failure, if Authentication failure then Security System will resend login form to user again.

In the above process, Step 5 will be repeated until user provides right credentials.

8. Spring Security Architecture:

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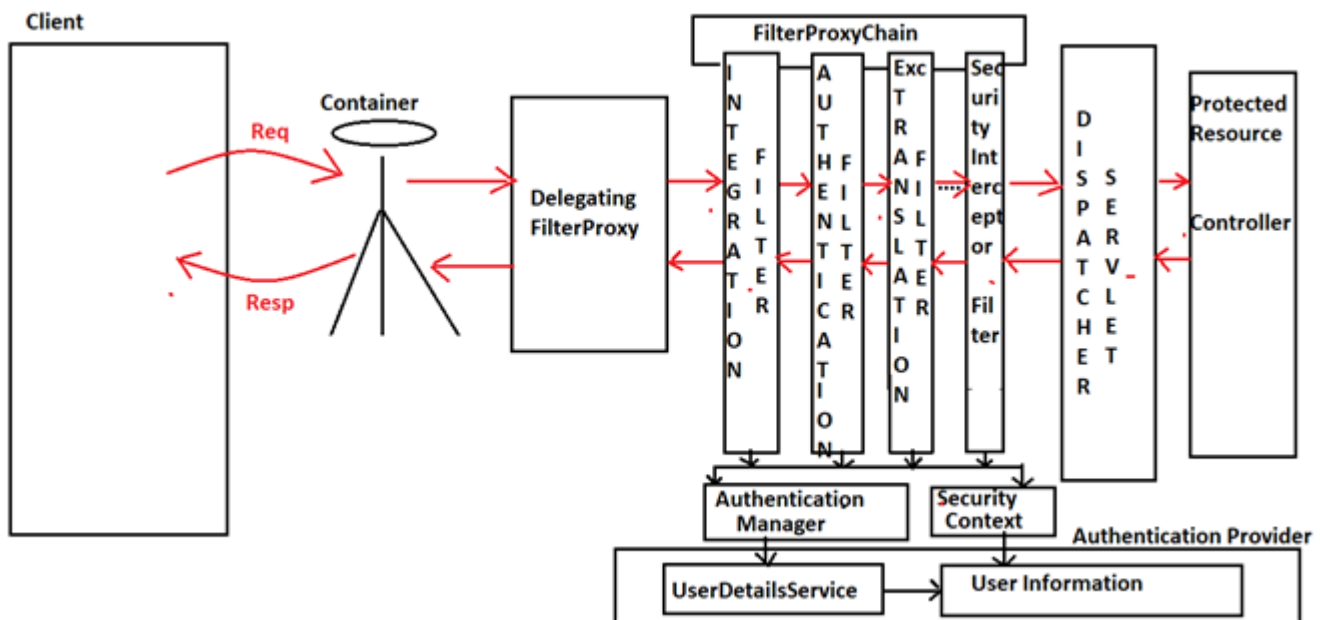
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Spring Security Architecture:

Spring Security Arch contains the following elements.

1. DelegatingFilterProxy
2. FilterChainProxy
3. Sequence of Authentication Filters.
4. AuthenticationManager
5. AuthenticationProvider
6. SecurityContext
7. UserDetailsService



From the above representation, When we start server, Container will perform the following actions.

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1. Container will check whether any filter is configured in web.xml file or not. If any Filter is configured then container will perform Filter loading, Filter Instantiation and Filter Initialization. In Spring Security Applications, DelegatingFilterProxy a Filter is configured with “springSecurityFilterChain” filter name. In Spring Security applications, Container will recognize DelegatingFilterProxy and Container will perform loading, instantiation and initialization of DelegatingFilterProxy.

2. As part of DelegatingFilterProxy initialization, DelegatingFilterProxy will prepare FilterProxyChain, it will make ready all the default and Spring injected Security Filters in a stack.

3. After the Server startup, if we submit request from client then Container will take request, container will pass request from all the Security filter, where Security Filters will send user form to the user.

4. After getting user form, user will provide user credentials and user will submit request to container, again container will send that request to Security Filter, where Security Filter will take user name and password and security filters will interact with AuthenticationManager, where AuthenticationManager will check whether user credentials are registered with AuthenticationProvider or not through UserDetailsService.

5. If Authentication is success then SecurityFilters will forward request Secure Resource, that is, to DispatcherServlet and the respective Controller class. If Authentication is Failure then Security Filters will resubmit login form to user.

Spring Security Module is able to support the following Security Models

1. HTTP BASIC Authentication
2. HTTP Digest authentication
3. HTTP X.509 client certificate
4. LDAP (Lightweight Directory Access Protocol)
5. Form-based authentication
6. OpenID authentication

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7. Automatic remember-me authentication
8. Kerberos
9. JOSSO (Java Open Source Single Sign-On)
10. AppFuse

Advantages of Spring Security:

1. Comprehensive Support for Authentication and Authorization.
2. Protection against Common tasks.
3. Servlet API integration.
4. Optional Integration with Spring Web MVC.
5. Optional Spring Data Integration.
6. Web Socket Support.

If we want to prepare Spring Secure application then we have to use the following steps.

1. Prepare Spring Web application as per Spring MVC rules and regulations.
2. Provide DelegatingFilterProxy configuration in web.xml file:
3. Provide Spring security configuration file.

In Web.xml file, we have to provide DispatcherServlet and DelegatingFilterProxy and Spring Security configuration file.

Web.xml

```
1. <?xml version="1.0" encoding="UTF-8"?>
2. <!DOCTYPE xml>
3.     <web-app xmlns="http://xmlns.jcp.org/xml/ns/javaee"
4.             xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
5.             xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee
6.             http://xmlns.jcp.org/xml/ns/javaee/web-app_3_1.xsd"
7.             version="3.1">
8.
9.         <!-- Spring Configuration -->
```

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```

10.         <servlet>
11.             <servlet-name>spring</servlet-name>
12.             <servlet-
13. class>org.springframework.web.servlet.DispatcherServlet</servlet-class>
14.             <load-on-startup>1</load-on-startup>
15.         </servlet>
16.         <servlet-mapping>
17.             <servlet-name>spring</servlet-name>
18.             <url-pattern>/</url-pattern>
19.         </servlet-mapping>
20.         <filter>
21.             <filter-name>springSecurityFilterChain</filter-name>
22.             <filter-
23. class>org.springframework.web.filter.DelegatingFilterProxy</filter-class>
24.         </filter>
25.         <filter-mapping>
26.             <filter-name>springSecurityFilterChain</filter-name>
27.             <url-pattern>/*</url-pattern>
28.         </filter-mapping>
29.         <context-param>
30.             <param-name>contextConfigLocation</param-name>
31.             <param-value>
32.                 /WEB-INF/spring-servlet.xml
33.                 /WEB-INF/spring-security.xml
34.             </param-value>
35.         </context-param>
36.     </web-app>

```

In Spring Secure configuration File we have to provide Http configuration and Authentication Provider.

EX:
Spring-security.xml

```

1. <beans:beans xmlns="http://www.springframework.org/schema/security"
2.     xmlns:beans="http://www.springframework.org/schema/beans"
3.     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4.     xsi:schemaLocation="http://www.springframework.org/schema/beans

```

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```
5. http://www.springframework.org/schema/beans/spring-beans.xsd
6. http://www.springframework.org/schema/security
7. http://www.springframework.org/schema/security/spring-security.xsd">
8. <http auto-config="true">
9.     <intercept-url pattern="/admin" access="ROLL_ADMIN" />
10. </http>
11.     <authentication-manager>
12.         <authentication-provider>
13.             <user-service>
14.                 <user name="user" password="1234" authorities="ROLL_ADMIN" />
15.             </user-service>
16.         </authentication-provider>
17.     </authentication-manager>
18. </beans:beans>
```

To prepare Spring Secure applications we need the following JARs in web application LIB folder.

Spring-security-config-version.jar

Spring-security-core-version.jar

Spring-security-web-version.jar

Basic Authentication:

In case of Basic Authentication, when we submit request to secured resource then Spring Security system will send a status code to the browser, where Browser will open its own security window to enter user name and password credentials.

Note: In Basic Authentication, user name and password data will be submitted to the server as plain text data, it will not provide security for the user name and password.

Note: In Basic Authentication, we are able to get Browser provided security window, it will not provide very good look and feel.

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EXAMPLE ON BASIC AUTHENTICATION:

home.jsp

```
1. <html>
2. <head>
3. <meta content="text/html; charset=UTF-8">
4. <title>Home</title>
5. </head>
6. <body>
7. <h2>Welcome to Durga Software Solutions!</h2>
8. <h3>
9. <a href="admin">Admin</a>
10. </h3>
11. </body>
12. </html>
```

adminPage.jsp

```
1. <html>
2. <head>
3. <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
4. <title>Admin</title>
5. </head>
6. <body>
7. <h1>
```

Welcome To Admin Page

```
1. </h1>
2. <h2>
3. <a href="home">|Home Page|</a>
4. </h2>
5. </body>
6. </html>
```

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HomeController.java:

```
1. package com.durgasoft.controller;
2.
3. import org.springframework.stereotype.Controller;
4. import org.springframework.web.bind.annotation.RequestMapping;
5. import org.springframework.web.bind.annotation.RequestMethod;
6.
7. @Controller
8. public class HomeController {
9.
10.     @RequestMapping(value="/*", method=RequestMethod.GET)
11.     public String home() {
12.         return "home";
13.     }
14.
15.     @RequestMapping(value="/admin", method=RequestMethod.GET)
16.     public String adminPage() {
17.         return "adminPage";
18.     }
19.
20. }
```

Spring-security.xml:

```
1. <beans:beans xmlns="http://www.springframework.org/schema/security"
2.     xmlns:beans="http://www.springframework.org/schema/beans"
3.     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4.     xsi:schemaLocation="http://www.springframework.org/schema/beans
5.         http://www.springframework.org/schema/beans/spring-beans.xsd
6.         http://www.springframework.org/schema/security
7.         http://www.springframework.org/schema/security/spring-security.xsd">
8.     <http auto-config="true" use-expressions="true">
9.         <intercept-url pattern="/admin" access="hasRole('ROLE_ADMIN')"/>
10.             <http-basic/>
11.         </http>
12.         <authentication-manager>
13.             <authentication-provider>
14.                 <user-service>
15.                     <user name="durga" password="durga" authorities="ROLE_ADMIN" />
```

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```

16.         </user-service>
17.         </authentication-provider>
18.     </authentication-manager>
19. </beans:beans>

```

Ds-servlet.xml:

```

1. <?xml version="1.0" encoding="UTF-8"?>
2. <beans xmlns="http://www.springframework.org/schema/beans"
3. xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4. xmlns:mvc="http://www.springframework.org/schema/mvc"
5. xmlns:context="http://www.springframework.org/schema/context"
6. xsi:schemaLocation="
7. http://www.springframework.org/schema/mvc
8. http://www.springframework.org/schema/mvc/spring-mvc.xsd
9. http://www.springframework.org/schema/beans
10. http://www.springframework.org/schema/beans/spring-beans.xsd
11. http://www.springframework.org/schema/context
12. http://www.springframework.org/schema/context/spring-context.xsd">
13.     <mvc:annotation-driven />
14.     <context:component-scan base-package="com.durgasoft.controller">
15.     </context:component-scan>
16.     <context:annotation-config></context:annotation-config>
17.     <bean class="org.springframework.web.servlet.view.InternalResourceViewR
18. esolver">
19.         <property name="prefix" value="/WEB-INF/"></property>
20.         <property name="suffix" value=".jsp"></property>
21.     </bean>
22. </beans>

```

Web.xml

```

1. ?xml version="1.0" encoding="UTF-8"?>
2. <web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
3. xmlns="http://xmlns.jcp.org/xml/ns/javaee"
4. xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/
5. xml/ns/javaee/web-app_4_0.xsd"
6. id="WebApp_ID" version="4.0">
7.     <display-name>securityapp1</display-name>

```

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```

7.     <welcome-file-list>
8.         <welcome-file>index.html</welcome-file>
9.         <welcome-file>index.htm</welcome-file>
10.        <welcome-file>index.jsp</welcome-file>
11.        <welcome-file>default.html</welcome-file>
12.        <welcome-file>default.htm</welcome-file>
13.        <welcome-file>default.jsp</welcome-file>
14.    </welcome-file-list>
15.    <servlet>
16.        <servlet-name>spring</servlet-name>
17.        <servlet-
18.            class>org.springframework.web.servlet.DispatcherServlet</servlet-class>
19.            <load-on-startup>1</load-on-startup>
20.        </servlet>
21.        <servlet-mapping>
22.            <servlet-name>spring</servlet-name>
23.            <url-pattern>/</url-pattern>
24.        </servlet-mapping>
25.        <listener>
26.            <listener-
27.                class>org.springframework.web.context.ContextLoaderListener</listener-class>
28.            </listener>
29.        <filter>
30.            <filter-name>springSecurityFilterChain</filter-name>
31.            <filter-
32.                class>org.springframework.web.filter.DelegatingFilterProxy</filter-class>
33.            </filter>
34.            <filter-mapping>
35.                <filter-name>springSecurityFilterChain</filter-name>
36.                <url-pattern>/*</url-pattern>
37.            </filter-mapping>
38.        <context-param>
39.            <param-name>contextConfigLocation</param-name>
40.            <param-value>
41.                /WEB-INF/spring-servlet.xml
42.                /WEB-INF/spring-security.xml
43.            </param-value>
44.        </context-param>
45.    </web-app>

```

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Form Based Authentication:

In case of Form based authentication, we will not use Browser provided security window, we will get an user login form which may be provided by Spring Security System or may be by user.

If we want to use Form Based Authentication then we have to use the following tag in spring-security.xml under <http> tag.

<form-login/>

Example on Form Based Authentication :

home.jsp:

```
1. <html>
2. <head>
3. <meta content="text/html; charset=UTF-8">
4. <title>Home</title>
5. </head>
6. <body>
7. <h2>Welcome to Durga Software Solutions!</h2>
8. <h3>
9.     <a href="admin">Admin</a>
10. </h3>
11. </body>
12. </html>
```

adminPage.jsp

```
1. <html>
2. <head>
3. <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
4. <title>Admin</title>
5. </head>
6. <body>
7. <h1>
8. Welcome To Admin Page
```

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```
9. </h1>
10.     <h2>
11.     <a href="home">|Home Page|</a>
12.     </h2>
13. </body>
14. </html>
```

HomeController.java

```
1. package com.durgasoft.controller;
2.
3. import org.springframework.stereotype.Controller;
4. import org.springframework.web.bind.annotation.RequestMapping;
5. import org.springframework.web.bind.annotation.RequestMethod;
6.
7. @Controller
8. public class HomeController {
9.
10.     @RequestMapping(value="/*", method=RequestMethod.GET)
11.     public String home() {
12.         return "home";
13.     }
14.
15.     @RequestMapping(value="/admin", method=RequestMethod.GET)
16.     public String adminPage() {
17.         return "adminPage";
18.     }
19.
20. }
```

Spring-security.xml:

```
1. <beans:beans xmlns="http://www.springframework.org/schema/security"
2.     xmlns:beans="http://www.springframework.org/schema/beans"
3.     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4.     xsi:schemaLocation="http://www.springframework.org/schema/beans
5.         http://www.springframework.org/schema/beans/spring-beans.xsd
6.         http://www.springframework.org/schema/security
7.         http://www.springframework.org/schema/security/spring-security.xsd">
```

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```

8.     <http auto-config="true" use-expressions="true">
9.         <intercept-url pattern="/admin" access="hasRole('ROLE_ADMIN')"/>
10.        <form-login/>
11.    </http>
12.    <authentication-manager>
13.        <authentication-provider>
14.            <user-service>
15.                <user name="durga" password="durga" authorities="ROLE_ADMIN" />
16.            </user-service>
17.        </authentication-provider>
18.    </authentication-manager>
19. </beans:beans>

```

ds-servlet.xml:

```

1. <?xml version="1.0" encoding="UTF-8"?>
2. <beans xmlns="http://www.springframework.org/schema/beans"
3. xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4. xmlns:mvc="http://www.springframework.org/schema/mvc"
5. xmlns:context="http://www.springframework.org/schema/context"
6. xsi:schemaLocation="
7. http://www.springframework.org/schema/mvc
8. http://www.springframework.org/schema/mvc/spring-mvc.xsd
9. http://www.springframework.org/schema/beans
10. http://www.springframework.org/schema/beans/spring-beans.xsd
11. http://www.springframework.org/schema/context
12. http://www.springframework.org/schema/context/spring-context.xsd">
13.     <mvc:annotation-driven />
14.     <context:component-scan base-package="com.durgasoft.controller">
15.     </context:component-scan>
16.     <context:annotation-config></context:annotation-config>
17.     <bean class="org.springframework.web.servlet.view.InternalResourceViewR
18. esolver">
19.         <property name="prefix" value="/WEB-INF/"></property>
20.         <property name="suffix" value=".jsp"></property>
21.     </bean>
22. </beans>

```

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Web.xml:

```

1. <?xml version="1.0" encoding="UTF-8"?>
2. <web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
3.     xmlns="http://xmlns.jcp.org/xml/ns/javaee"
4.     xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/
xml/ns/javaee/web-app_4_0.xsd"
5.     id="WebApp_ID" version="4.0">
6.     <display-name>securityapp1</display-name>
7.     <welcome-file-list>
8.         <welcome-file>index.html</welcome-file>
9.         <welcome-file>index.htm</welcome-file>
10.        <welcome-file>index.jsp</welcome-file>
11.        <welcome-file>default.html</welcome-file>
12.        <welcome-file>default.htm</welcome-file>
13.        <welcome-file>default.jsp</welcome-file>
14.    </welcome-file-list>
15.    <servlet>
16.        <servlet-name>spring</servlet-name>
17.        <servlet-
18.            class>org.springframework.web.servlet.DispatcherServlet</servlet-class>
19.        <load-on-startup>1</load-on-startup>
20.    </servlet>
21.    <servlet-mapping>
22.        <servlet-name>spring</servlet-name>
23.        <url-pattern>/</url-pattern>
24.    </servlet-mapping>
25.    <listener>
26.        <listener-
27.            class>org.springframework.web.context.ContextLoaderListener</listener-class>
28.        </listener>
29.    <filter>
30.        <filter-name>springSecurityFilterChain</filter-name>
31.        <filter-
32.            class>org.springframework.web.filter.DelegatingFilterProxy</filter-class>
33.        </filter>
34.        <filter-mapping>
35.            <filter-name>springSecurityFilterChain</filter-name>
36.            <url-pattern>/*</url-pattern>
37.        </filter-mapping>
38.    <context-param>

```

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```

39.         <param-name>contextConfigLocation</param-name>
40.         <param-value>
41.             /WEB-INF/spring-servlet.xml
42.             /WEB-INF/spring-security.xml
43.         </param-value>
44.     </context-param>
45. </web-app>

```

In the above example we are able to get only Spring Security defined login form, which may not provide very good look and feel, where if we want to provide very good look and feel for the login form then it is possible to prepare our own login form, error page,..... and we can configure that login form in <form-login> tag configuration.

If we want to use customization on Form based Authentocation then we have to prepare the following resources.

1.Prepare login page:

- a)User j_spring_security_check as value to "action" attribute in login form.
- b)User "username" and "password" to the "name" attribute in text field and password field.

2.Prepare error page to display login failure message.

3.Provide all custom configurations like login form, error page, In spring-security.xml under <http> tag and along with <form-login> tag.

```

1. <http auto-config="true" >
2.
3.     <intercept-url pattern="/admin" access="hasRole('ROLE_ADMIN')"/>
4.     <form-login login-page="/login" default-target-url="/admin" login-
        processing-url="/j_spring_security_check" always-use-default-
        target="true" authentication-failure-url="/loginFailed" />
5.     <logout logout-success-url="/logout"/>
6. </http>

```

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Example on Form Based Authentication with Customization of login form, error page:

Index.jsp

```
1. <%@ page language="java" contentType="text/html; charset=ISO-8859-1"
2.     pageEncoding="ISO-8859-1"%>
3. <!DOCTYPE html PUBLIC "-
4.     //W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
5. <html>
6. <head>
7. <meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
8. <title>Insert title here</title>
9. </head>
10. <body>
11.     <jsp:forward page="/home"/>
12. </body>
13. </html>
```

Home.jsp

```
1. <html>
2. <head>
3. <meta content="text/html; charset=UTF-8">
4. <title>Home</title>
5. </head>
6. <body>
7. <h2>Welcome to Durga Software Solutions!</h2>
8. <h3>
9.     <a href="admin">Admin</a>
10. </h3>
11. </body>
12. </html>
```

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adminPage.jsp:

```
1. <html>
2. <head>
3. <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
4. <title>Admin</title>
5. </head>
6. <body>
7. <h1>
8. Welcome To Admin Page
9. </h1>
10. <h2>
11. <a href="home">|Home Page|</a><br>
12. <a href="logout">|Logout|</a>
13. </h2>
14. </body>
15. </html>
```

loginPage.jsp

```
1. <%@ page language="java" contentType="text/html; charset=ISO-8859-1"
2.   pageEncoding="ISO-8859-1"%>
3. <%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
4.
5.
6. <!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
7. <html>
8. <head>
9. <meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
10. <title>Insert title here</title>
11. </head>
12. <body bgcolor="lightblue">
13. <h2 style="color: red;">User Login Form</h2>
14. <form name="loginForm" action="<c:url value='j_spring_security_check'/'>" m
    ethod="POST">
15. <table>
16. <tr>
17. <td>User Name</td>
18. <td><input type="text" name="username"/></td>
19. </tr>
```

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```
20.     <tr>
21.         <td>Password</td>
22.         <td><input type="password" name="password"/></td>
23.     </tr>
24.     <tr>
25.         <td><input type="submit" value="Login"/></td>
26.     </tr>
27.     <input type="hidden" name="${_csrf.parameterName}" value="${_csrf.token}"/>
28. </table>
29. </form>
30. </body>
31. </html>
```

loginFailedPage.jsp:

```
1. <%@ page language="java" contentType="text/html; charset=ISO-8859-1"
2.     pageEncoding="ISO-8859-1"%>
3. <!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
4. <html>
5. <head>
6. <meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
7. <title>Insert title here</title>
8. </head>
9. <body>
10.     <h1 style="color: red;">
11.         Sorry User!<br>
12.         Your Credentials are wrong.
13.     </h1>
14.     <h2>
15.         <a href="logout">| Logout |</a>
16.     </h2>
17. </body>
18. </html>
```

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HomeController.java:

```
1. package com.durgasoft.controller;
2.
3. import org.springframework.stereotype.Controller;
4. import org.springframework.web.bind.annotation.RequestMapping;
5. import org.springframework.web.bind.annotation.RequestMethod;
6.
7. @Controller
8. public class HomeController {
9.
10.     @RequestMapping(value="/home", method=RequestMethod.GET)
11.     public String home() {
12.         return "home";
13.     }
14.
15.     @RequestMapping(value="/admin", method=RequestMethod.GET)
16.     public String adminPage() {
17.         return "adminPage";
18.     }
19.
20.     @RequestMapping(value="/login", method=RequestMethod.GET)
21.     public String loginPage() {
22.         return "loginPage";
23.     }
24.
25.     @RequestMapping(value="/loginFailed", method=RequestMethod.GET)
26.     public String loginFailedPage() {
27.         return "loginFailedPage";
28.     }
29.     @RequestMapping(value="/logout", method=RequestMethod.GET)
30.     public String logoutPage() {
31.         return "loginPage";
32.     }
33. }
```

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Spring-security.xml:

```

1. <beans:beans xmlns="http://www.springframework.org/schema/security"
2.     xmlns:beans="http://www.springframework.org/schema/beans"
3.     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4.     xsi:schemaLocation="http://www.springframework.org/schema/beans
5.         http://www.springframework.org/schema/beans/spring-beans.xsd
6.         http://www.springframework.org/schema/security
7.         http://www.springframework.org/schema/security/spring-security.xsd">
8.     <http auto-config="true" >
9.
10.         <intercept-url pattern="/admin" access="hasRole('ROLE_ADMIN')"/>
11.         <form-login login-page="/login" default-target-
12.             url="/admin" login-processing-url="/j_spring_security_check" always-use-
13.             default-target="true" authentication-failure-url="/loginFailed" />
14.         <logout logout-success-url="/logout"/>
15.     </http>
16.     <authentication-manager>
17.         <authentication-provider>
18.             <user-service>
19.                 <user name="durga" password="durga" authorities="ROLE_ADMIN" />
20.             </user-service>
21.         </authentication-provider>
22.     </authentication-manager>
23. </beans:beans>

```

ds-servlet.xml:

```

1. <?xml version="1.0" encoding="UTF-8"?>
2. <beans xmlns="http://www.springframework.org/schema/beans"
3.     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4.     xmlns:mvc="http://www.springframework.org/schema/mvc"
5.     xmlns:context="http://www.springframework.org/schema/context"
6.     xsi:schemaLocation="
7.         http://www.springframework.org/schema/mvc
8.         http://www.springframework.org/schema/mvc/spring-mvc.xsd
9.         http://www.springframework.org/schema/beans
10.         http://www.springframework.org/schema/beans/spring-beans.xsd
11.         http://www.springframework.org/schema/context
12.         http://www.springframework.org/schema/context/spring-context.xsd">
13.     <mvc:annotation-driven />

```

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```

14.      <context:component-scan base-package="com.durgasoft.controller">
15.      </context:component-scan>
16.      <context:annotation-config></context:annotation-config>
17.      <bean class="org.springframework.web.servlet.view.InternalResourceViewR
resolver">
18.          <property name="prefix" value="/WEB-INF/"></property>
19.          <property name="suffix" value=".jsp"></property>
20.      </bean>
21.  </beans>

```

Web.xml:

```

1.  <?xml version="1.0" encoding="UTF-8"?>
2.  <web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
3.      xmlns="http://xmlns.jcp.org/xml/ns/javaee"
4.      xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/
xml/ns/javaee/web-app_4_0.xsd"
5.      id="WebApp_ID" version="4.0">
6.      <display-name>securityapp1</display-name>
7.      <welcome-file-list>
8.          <welcome-file>index.html</welcome-file>
9.          <welcome-file>index.htm</welcome-file>
10.         <welcome-file>index.jsp</welcome-file>
11.         <welcome-file>default.html</welcome-file>
12.         <welcome-file>default.htm</welcome-file>
13.         <welcome-file>default.jsp</welcome-file>
14.      </welcome-file-list>
15.      <servlet>
16.          <servlet-name>spring</servlet-name>
17.          <servlet-
class>org.springframework.web.servlet.DispatcherServlet</servlet-class>
18.          <load-on-startup>1</load-on-startup>
19.      </servlet>
20.      <servlet-mapping>
21.          <servlet-name>spring</servlet-name>
22.          <url-pattern>/</url-pattern>
23.      </servlet-mapping>
24.
25.      <listener>
26.          <listener-
class>org.springframework.web.context.ContextLoaderListener</listener-class>
27.      </listener>
28.

```

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```
29.         <filter>
30.             <filter-name>springSecurityFilterChain</filter-name>
31.             <filter-
32. class>org.springframework.web.filter.DelegatingFilterProxy</filter-class>
33.         </filter>
34.         <filter-mapping>
35.             <filter-name>springSecurityFilterChain</filter-name>
36.             <url-pattern>/*</url-pattern>
37.         </filter-mapping>
38.         <context-param>
39.             <param-name>contextConfigLocation</param-name>
40.             <param-value>
41.                 /WEB-INF/spring-servlet.xml
42.                 /WEB-INF/spring-security.xml
43.             </param-value>
44.         </context-param>
45.     </web-app>
```

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