

Spring Security

1.myconfig.java

```
package com.example.demo;
```

```
import org.springframework.context.annotation.Configuration;
```

```
import org.springframework.web.servlet.config.annotation.ViewControllerRegistry;
```

```
import org.springframework.web.servlet.config.annotation.WebMvcConfigurer;
```

```
@Configuration
```

```
public class MyConfig implements WebMvcConfigurer {
```

```
    @Override
```

```
    public void addViewControllers(ViewControllerRegistry registry) {
```

```
        registry.addViewController("/home").setViewName("home");
```

```
        registry.addViewController("/").setViewName("home");
```

```
        registry.addViewController("/hello").setViewName("hello");
```

```
        registry.addViewController("/login").setViewName("login");
```

```
    }
```

```
}
```

2.security2Application

```
package com.example.demo;
```

```
import org.springframework.boot.SpringApplication;
```

```
import org.springframework.boot.autoconfigure.SpringBootApplication;
```

```
@SpringBootApplication
```

```
public class security2Application
{
    public static void main(String[] args)
    {
        SpringApplication.run(security2Application.class, args);
    }
}
```

3.webSecurity

```
package com.example.demo;

import org.springframework.context.annotation.Bean;
import org.springframework.context.annotation.Configuration;
import org.springframework.security.config.annotation.web.builders.H
ttpSecurity;

import org.springframework.security.config.annotation.web.configurat
ion.EnableWebSecurity;

import org.springframework.security.core.userdetails.User;
import org.springframework.security.core.userdetails.UserDetails;
import org.springframework.security.core.userdetails.UserDetailsServi
ce;

import org.springframework.security.provisioning.InMemoryUserDeta
ilsManager;

import org.springframework.security.web.SecurityFilterChain;

@Configuration
@EnableWebSecurity

public class webSecurity {
```

@Bean

```
public SecurityFilterChain securityFilterChain(HttpSecurity http)
throws Exception {
    http
        .authorizeHttpRequests(requests -> requests
            .requestMatchers("/", "/home").permitAll()
            .anyRequest().authenticated())
        .formLogin(form -> form
            .loginPage("/login")
            .permitAll())
        .logout(logout -> logout
            .permitAll());

    return http.build();
}
```

@Bean

```
public UserDetailsService userDetailsService() {
    UserDetails user1 = User.withDefaultPasswordEncoder()
        .username("user1")
        .password("password1")
        .roles("USER")
        .build();
}
```

```
        UserDetails user2 = User.withDefaultPasswordEncoder()
            .username("user2")
            .password("password2")
            .roles("ADMIN")
            .build();

        return new InMemoryUserDetailsManager(user1, user2);
    }
}
```

4.Hello.html

```
<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml"
      xmlns:th="http://www.thymeleaf.org"
      xmlns:sec="http://www.thymeleaf.org/thymeleaf-extras-
springsecurity6">
    <head>
        <title>Hello World!</title>
    </head>
    <body>
        <h1 th:inline="text">
            Hello <span th:remove="tag"
            sec:authentication="name">thymeleaf</span>!
        </h1>
        <form th:action="@{/logout}" method="post">
```

```
        <input type="submit" value="Sign Out"/>
    </form>
</body>
</html>
```

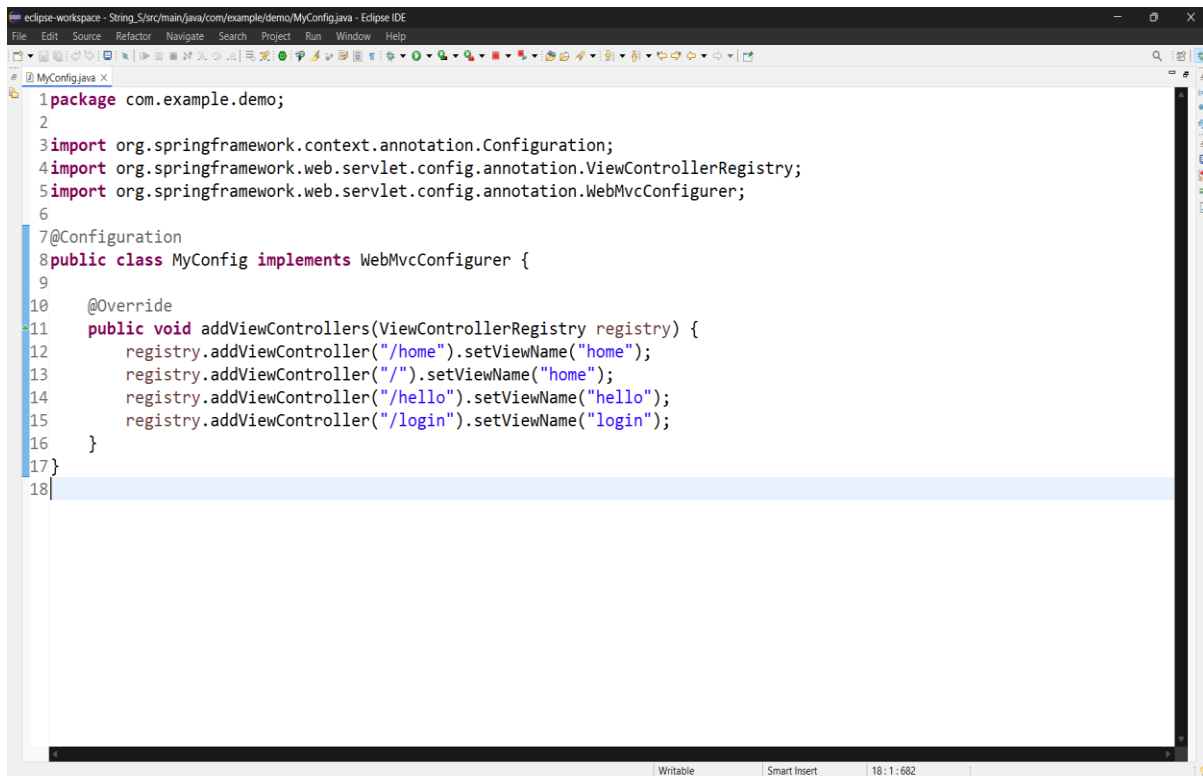
5.Home.html

```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml"
      xmlns:th="http://www.thymeleaf.org">
<head>
    <title>Spring Security Example</title>
</head>
<body>
    <h1>Welcome!</h1>
    <p>Click <a th:href="@{/hello}">here</a> to see a greeting.</p>
</body>
</html>
```

6.login.html

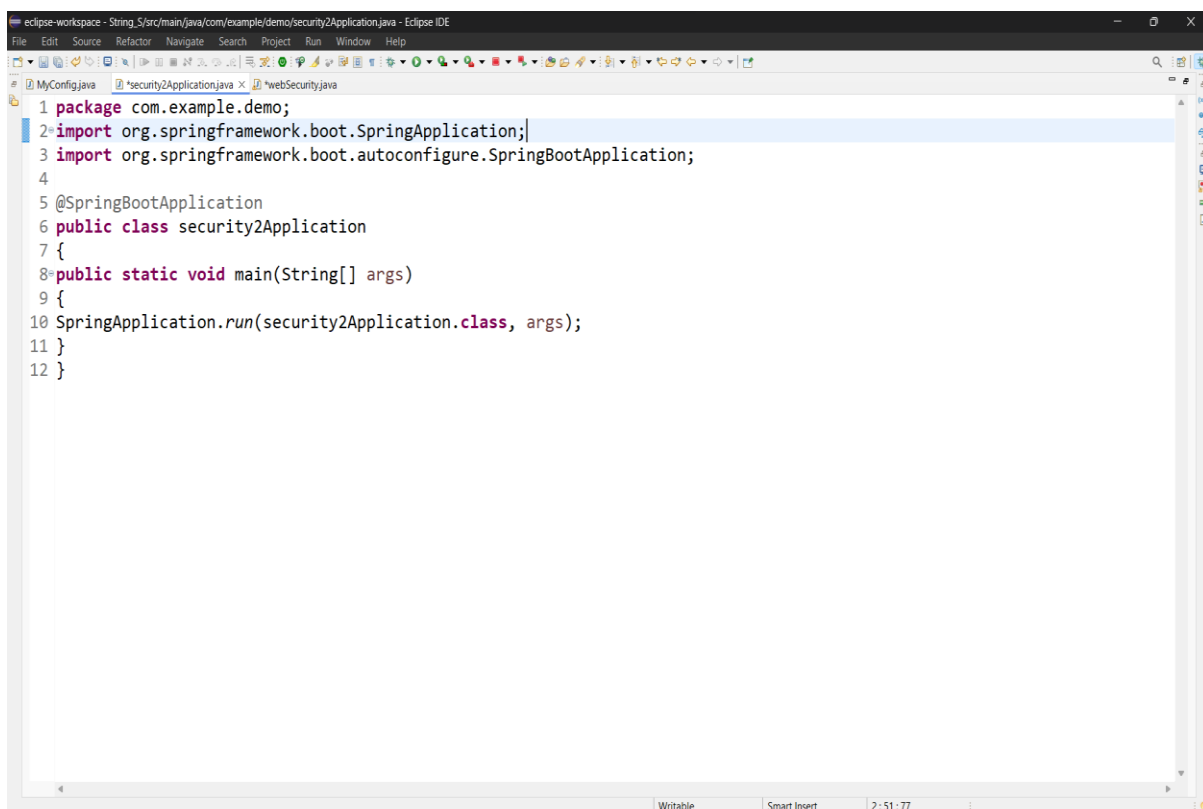
```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml"
      xmlns:th="http://www.thymeleaf.org">
<head>
    <title>Spring Security Example</title>
</head>
```

```
<body>
<div th:if="{param.error}">
    Invalid username and password.
</div>
<div th:if="{param.logout}">
    You have been logged out.
</div>
<form th:action="@{/login}" method="post">
    <div>
        <label>User Name:
            <input type="text" name="username" />
        </label>
    </div>
    <div>
        <label>Password:
            <input type="password" name="password" />
        </label>
    </div>
    <div>
        <input type="submit" value="Sign In" />
    </div>
</form>
</body>
</html>
```



The screenshot shows the Eclipse IDE with the file `MyConfig.java` open. The code is as follows:

```
1 package com.example.demo;
2
3 import org.springframework.context.annotation.Configuration;
4 import org.springframework.web.servlet.config.annotation.ViewControllerRegistry;
5 import org.springframework.web.servlet.config.annotation.WebMvcConfigurer;
6
7 @Configuration
8 public class MyConfig implements WebMvcConfigurer {
9
10     @Override
11     public void addViewControllers(ViewControllerRegistry registry) {
12         registry.addViewController("/home").setViewName("home");
13         registry.addViewController("/").setViewName("home");
14         registry.addViewController("/hello").setViewName("hello");
15         registry.addViewController("/login").setViewName("login");
16     }
17 }
18
```

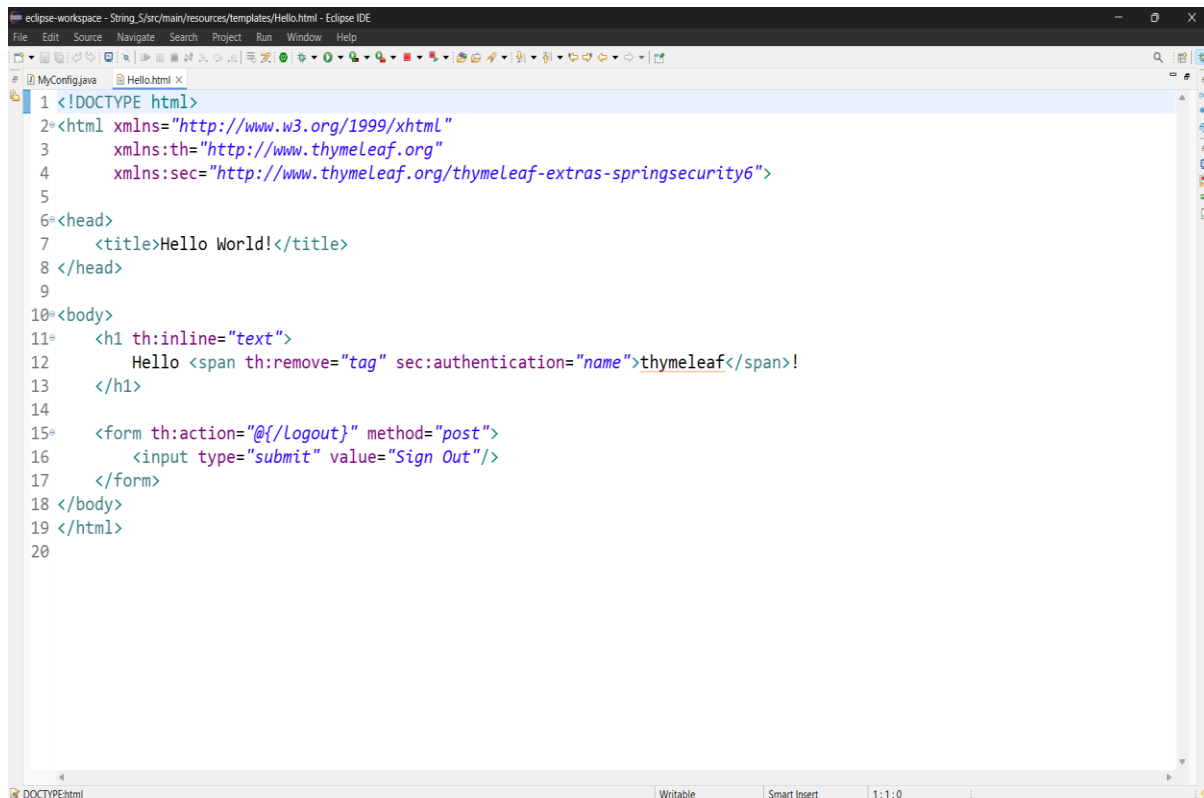


The screenshot shows the Eclipse IDE with the file `security2Application.java` open. The code is as follows:

```
1 package com.example.demo;
2 import org.springframework.boot.SpringApplication;
3 import org.springframework.boot.autoconfigure.SpringBootApplication;
4
5 @SpringBootApplication
6 public class security2Application
7 {
8     public static void main(String[] args)
9     {
10         SpringApplication.run(security2Application.class, args);
11     }
12 }
```

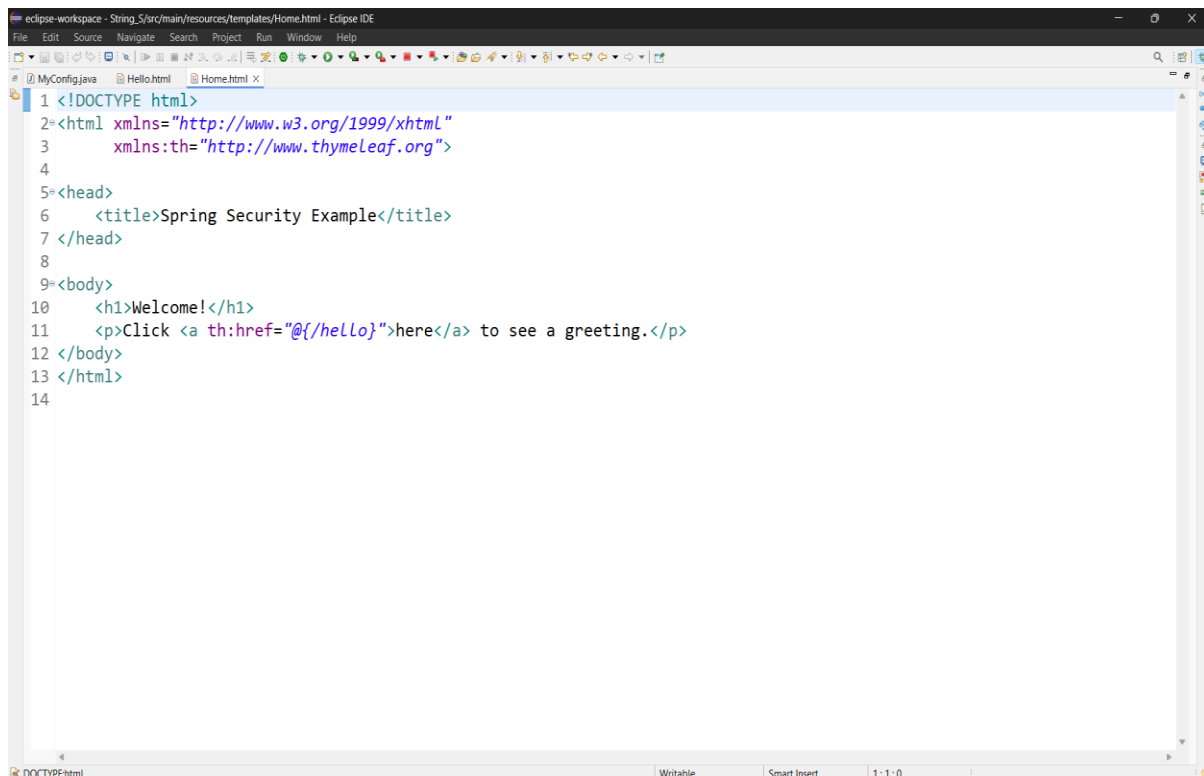
```
eclipse-workspace - String_Src/main/java/com/example/demo/webSecurity.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
MyConfig.java *security2Application.java *webSecurity.java
2
3 import org.springframework.context.annotation.Bean;
4 import org.springframework.context.annotation.Configuration;
5 import org.springframework.security.config.annotation.web.builders.HttpSecurity;
6 import org.springframework.security.config.annotation.web.configuration.EnableWebSecurity;
7 import org.springframework.security.core.userdetails.User;
8 import org.springframework.security.core.userdetails.UserDetails;
9 import org.springframework.security.core.userdetails.UserDetailsService;
10 import org.springframework.security.provisioning.InMemoryUserDetailsManager;
11 import org.springframework.security.web.SecurityFilterChain;
12
13 @Configuration
14 @EnableWebSecurity
15 public class webSecurity {
16
17     @Bean
18     public SecurityFilterChain securityFilterChain(HttpSecurity http) throws Exception {
19         http
20             .authorizeHttpRequests(requests -> requests
21                 .requestMatchers("/", "/home").permitAll()
22                 .anyRequest().authenticated())
23             .formLogin(form -> form
24                 .loginPage("/login")
25                 .permitAll())
26             .logout(logout -> logout
27                 .permitAll());
28
29         return http.build();
30     }
}
```

```
eclipse-workspace - String_Src/main/java/com/example/demo/webSecurity.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
MyConfig.java *security2Application.java *webSecurity.java
21
22     .requestMatchers("/", "/home").permitAll()
23     .anyRequest().authenticated()
24     .formLogin(form -> form
25         .loginPage("/login")
26         .permitAll())
27     .logout(logout -> logout
28         .permitAll());
29
30     return http.build();
31 }
32
33 @Bean
34 public UserDetailsService userDetailsService() {
35     UserDetails user1 = User.withDefaultPasswordEncoder()
36         .username("user1")
37         .password("password1")
38         .roles("USER")
39         .build();
40
41     UserDetails user2 = User.withDefaultPasswordEncoder()
42         .username("user2")
43         .password("password2")
44         .roles("ADMIN")
45         .build();
46
47     return new InMemoryUserDetailsManager(user1, user2);
48 }
49 }
```

The screenshot shows the Eclipse IDE with the 'Hello.html' file open. The code is as follows:

```
1 <!DOCTYPE html>
2 <html xmlns="http://www.w3.org/1999/xhtml"
3     xmlns:th="http://www.thymeleaf.org"
4     xmlns:sec="http://www.thymeleaf.org/thymeleaf-extras-springsecurity6">
5
6 <head>
7     <title>Hello World!</title>
8 </head>
9
10 <body>
11     <h1 th:inline="text">
12         Hello <span th:remove="tag" sec:authentication="name">thymeleaf</span>!
13     </h1>
14
15     <form th:action="@{/logout}" method="post">
16         <input type="submit" value="Sign Out"/>
17     </form>
18 </body>
19 </html>
20
```



The screenshot shows the Eclipse IDE with the 'Home.html' file open. The code is as follows:

```
1 <!DOCTYPE html>
2 <html xmlns="http://www.w3.org/1999/xhtml"
3     xmlns:th="http://www.thymeleaf.org">
4
5 <head>
6     <title>Spring Security Example</title>
7 </head>
8
9 <body>
10     <h1>Welcome!</h1>
11     <p>Click <a th:href="@{/hello}">here</a> to see a greeting.</p>
12 </body>
13 </html>
14
```

```
eclipse-workspace - String_Src/main/resources/templates/login.html - Eclipse IDE
File Edit Source Navigate Search Project Run Window Help
MyConfig.java Hello.html Home.html login.html x
1 <!DOCTYPE html>
2 <html xmlns="http://www.w3.org/1999/xhtml"
3     xmlns:th="http://www.thymeleaf.org">
4
5 <head>
6     <title>Spring Security Example</title>
7 </head>
8
9 <body>
10
11 <div th:if="${param.error}">
12     Invalid username and password.
13 </div>
14
15 <div th:if="${param.Logout}">
16     You have been logged out.
17 </div>
18
19 <form th:action="@{/Login}" method="post">
20     <div>
21         <label>User Name:
22         <input type="text" name="username" />
23         </label>
24     </div>
25     <div>
26         <label>Password:
27         <input type="password" name="password" />
28         </label>
29     </div>
```

```
eclipse-workspace - String_Src/main/resources/templates/login.html - Eclipse IDE
File Edit Source Navigate Search Project Run Window Help
MyConfig.java Hello.html Home.html login.html x
9 <body>
10
11 <div th:if="${param.error}">
12     Invalid username and password.
13 </div>
14
15 <div th:if="${param.Logout}">
16     You have been logged out.
17 </div>
18
19 <form th:action="@{/Login}" method="post">
20     <div>
21         <label>User Name:
22         <input type="text" name="username" />
23         </label>
24     </div>
25     <div>
26         <label>Password:
27         <input type="password" name="password" />
28         </label>
29     </div>
30     <div>
31         <input type="submit" value="Sign In" />
32     </div>
33 </form>
34
35 </body>
36 </html>
37
```

OUTPUT:-

