**Practice project**

Implement Spring Security with Authentication

Code:

CustomAuthentication.java

**package** com.authentication;

**import** java.util.Collections;

**import** org.springframework.security.authentication.AuthenticationProvider;

**import** org.springframework.security.authentication.BadCredentialsException;

**import** org.springframework.security.authentication.UsernamePasswordAuthenticationToken;

**import** org.springframework.security.core.Authentication;

**import** org.springframework.security.core.AuthenticationException;

**public** **class** CustomAuthentication **implements** AuthenticationProvider{

@Override

**public** Authentication authenticate(Authentication authentication) **throws** AuthenticationException {

String user = authentication.getName();

String password = authentication.getCredentials().toString();

**if** (user.equalsIgnoreCase("user") && password.equals("mypassword")) { **return** **new** UsernamePasswordAuthenticationToken

(user, password, Collections.*emptyList*());

} **else** {

**throw** **new** BadCredentialsException("External system authentication failed");

}

}

@Override

**public** **boolean** supports(Class<?> authentication) {

**return** **true**;

}

}

SecurityConfiguration.java

**package** com.authentication;

**import** org.springframework.beans.factory.annotation.Autowired;

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

**import** org.springframework.security.config.annotation.authentication.builders.AuthenticationManagerBuilder;

**import** org.springframework.security.config.annotation.web.builders.HttpSecurity;

**import** org.springframework.security.config.annotation.web.configuration.EnableWebSecurity;

**import** org.springframework.security.config.annotation.web.configuration.WebSecurityConfigurerAdapter;

@Configuration

@EnableWebSecurity

**public** **class** SecurityConfiguration **extends** WebSecurityConfigurerAdapter {

@Autowired **public** **void** configureGlobal(AuthenticationManagerBuilder auth) **throws** Exception {

auth.inMemoryAuthentication()

.withUser("user").password("mypassword").roles("USER")

.and()

.withUser("admin").password("mypassword").roles("ADMIN");

}

@Override

**protected** **void** configure(HttpSecurity http) **throws** Exception {

http.csrf().disable()

.authorizeRequests().antMatchers("/loginFailed").permitAll()

.and()

.authorizeRequests().antMatchers("/\*\*").authenticated()

.and()

.formLogin()

.loginPage("/login").successForwardUrl("/welcome")

.permitAll().and().authenticationProvider(**new** CustomAuthentication());

}

}

SpringBootConfig.java

**package** com.authentication;

**import** org.springframework.boot.SpringApplication;

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

**import** org.springframework.context.annotation.ComponentScan;

@SpringBootApplication

@ComponentScan

**public** **class** SpringBootConfig {

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

SpringApplication.*run*(SpringBootConfig.**class**, args);

}

}

application.properties

spring.mvc.view.prefix:/webapp/WEB-INF/jsp/

spring.mvc.view.suffix:.jsp

login.jsp

<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Spring Security Authentication</title>

</head>

<body>

<h1>spring security custom authentication provider</h1>

<form name=*'f'* action=*'/login'* method=*'POST'*>

User: <input type=*'text'* name=*'username'* value=*''*>

Password: <input type=*'password'* name=*'password'*/>

<input type=*"hidden"*

name=*"*${\_csrf.parameterName}*"*

value=*"*${\_csrf.token}*"*/>

<input name=*"submit"* type=*"submit"* value=*"Login"*/>

</form>

</body>

</html>

loginFailed.jsp

<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Insert title here</title>

</head>

<body>

Login Failed

</body>

</html>

welcome.jsp

<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Insert title here</title>

</head>

<body>

<h1>User is login using spring boot custom authentication provider</h1></body>

</body>

</html>