**SourceCodes**

**pom.xml:**

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

<project xmlns=*"http://maven.apache.org/POM/4.0.0"* xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"*

xsi:schemaLocation=*"http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-4.0.0.xsd"*>

<modelVersion>4.0.0</modelVersion>

<parent>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-parent</artifactId>

<version>2.7.3</version>

<relativePath/> <!-- lookup parent from repository -->

</parent>

<groupId>com.abc</groupId>

<artifactId>ImplementSpringSecurityWithAuthentication</artifactId>

<version>0.0.1-SNAPSHOT</version>

<name>ImplementSpringSecurityWithAuthentication</name>

<description>Demo project for Spring Boot</description>

<properties>

<java.version>17</java.version>

</properties>

<dependencies>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-data-jpa</artifactId>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-security</artifactId>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-web</artifactId>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-web-services</artifactId>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-devtools</artifactId>

<scope>runtime</scope>

<optional>true</optional>

</dependency>

<dependency>

<groupId>mysql</groupId>

<artifactId>mysql-connector-java</artifactId>

<scope>runtime</scope>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-configuration-processor</artifactId>

<optional>true</optional>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-test</artifactId>

<scope>test</scope>

</dependency>

<dependency>

<groupId>org.springframework.security</groupId>

<artifactId>spring-security-test</artifactId>

<scope>test</scope>

</dependency>

</dependencies>

<build>

<plugins>

<plugin>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-maven-plugin</artifactId>

</plugin>

</plugins>

</build>

</project>

**ImplementSpringSecurityWithAuthentication.java:**

**package** com.abc;

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

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

@SpringBootApplication

**public** **class** ImplementSpringSecurityWithAuthenticationApplication {

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

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

}

}

**User.java**

**package** com.abc.entities;

**import** javax.persistence.Entity;

**import** javax.persistence.Id;

@Entity

**public** **class** User {

@Id

**private** **int** id;

**private** String username;

**private** String password;

**public** **int** getId() {

**return** id;

}

**public** **void** setId(**int** id) {

**this**.id = id;

}

**public** String getUsername() {

**return** username;

}

**public** **void** setUsername(String username) {

**this**.username = username;

}

**public** String getPassword() {

**return** password;

}

**public** **void** setPassword(String password) {

**this**.password = password;

}

**public** User(**int** id, String username, String password) {

**super**();

**this**.id = id;

**this**.username = username;

**this**.password = password;

}

**public** User() {

**super**();

// **TODO** Auto-generated constructor stub

}

@Override

**public** String toString() {

**return** "User [id=" + id + ", username=" + username + ", password=" + password + "]";

}

}

**UserRepository.java:**

**package** com.abc.repository;

**import** org.springframework.data.jpa.repository.JpaRepository;

**import** com.abc.entities.User;

**public** **interface** UserRepository **extends** JpaRepository<User,Long>{

User findByUsername(String username);

}

**MyUserDetailsService.java:**

**package** com.abc.service;

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

**import** org.springframework.security.core.userdetails.UserDetails;

**import** org.springframework.security.core.userdetails.UserDetailsService;

**import** org.springframework.security.core.userdetails.UsernameNotFoundException;

**import** org.springframework.stereotype.Service;

**import** com.abc.entities.User;

**import** com.abc.entities.UserPrinciple;

**import** com.abc.repository.UserRepository;

@Service

**public** **class** MyUserDetailsService **implements** UserDetailsService {

@Autowired

**private** UserRepository repo;

@Override

**public** UserDetails loadUserByUsername(String username) **throws** UsernameNotFoundException {

// **TODO** Auto-generated method st

User user=repo.findByUsername(username);

**if**(user==**null**) {

**throw** **new** UsernameNotFoundException("not found");

}

**return** **new** UserPrinciple(user);

}

}

**HomeController.java:**

**package** com.abc.controller;

**import** org.springframework.web.bind.annotation.GetMapping;

**import** org.springframework.web.bind.annotation.RestController;

@RestController

**public** **class** HomeController {

@GetMapping("/")

**public** String home() {

**return** "<h1>Welcome to home page</h1>";

}

}

**AuthenticationConfiguration.java:**

**package** com.abc.security;

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

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

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

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

**import** org.springframework.security.authentication.dao.DaoAuthenticationProvider;

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

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

**import** org.springframework.security.core.userdetails.UserDetailsService;

**import** org.springframework.security.crypto.bcrypt.BCryptPasswordEncoder;

**import** org.springframework.security.crypto.password.~~NoOpPasswordEncoder~~;

@Configuration

@EnableWebSecurity

**public** **class** AuthenticationConfiguration **extends** ~~WebSecurityConfigurerAdapter~~{

@Autowired

**private** UserDetailsService userDetailsService;

@Bean

**public** AuthenticationProvider authProvider() {

DaoAuthenticationProvider provider=**new** DaoAuthenticationProvider();

provider.setUserDetailsService(userDetailsService);

//provider.setPasswordEncoder(NoOpPasswordEncoder.getInstance());

provider.setPasswordEncoder(**new** BCryptPasswordEncoder());

**return** provider;

}

}

**UserPrinciple.java:**

**package** com.abc.entities;

**import** java.util.Collection;

**import** java.util.Collections;

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

**import** org.springframework.security.core.authority.SimpleGrantedAuthority;

**import** org.springframework.security.core.userdetails.UserDetails;

**public** **class** UserPrinciple **implements** UserDetails {

**private** User user;

**public** UserPrinciple(User user) {

**super**();

**this**.user = user;

}

@Override

**public** Collection<? **extends** GrantedAuthority> getAuthorities() {

// **TODO** Auto-generated method stub

**return** Collections.*singleton*(**new** SimpleGrantedAuthority("USER"));

}

@Override

**public** String getPassword() {

// **TODO** Auto-generated method stub

**return** user.getPassword();

}

@Override

**public** String getUsername() {

// **TODO** Auto-generated method stub

**return** user.getUsername();

}

@Override

**public** **boolean** isAccountNonExpired() {

// **TODO** Auto-generated method stub

**return** **true**;

}

@Override

**public** **boolean** isAccountNonLocked() {

// **TODO** Auto-generated method stub

**return** **true**;

}

@Override

**public** **boolean** isCredentialsNonExpired() {

// **TODO** Auto-generated method stub

**return** **true**;

}

@Override

**public** **boolean** isEnabled() {

// **TODO** Auto-generated method stub

**return** **true**;

}

}

**application.properties:**

spring.datasource.name=ds

spring.datasource.url=jdbc:mysql://localhost:3306/academy

spring.datasource.username=root

spring.datasource.password=88888888

spring.datasource.driver-class-name=com.mysql.cj.jdbc.Driver

spring.jpa.properties.hibernate.dialect=org.hibernate.dialect.MySQL55Dialect

spring.jpa.hibernate.ddl-auto=update

debug=true