**SOURCE CODE:**

**SPRING SECURITY WITH AUTHENTICATION**

**Src/main/java**

**Create package com.project.SpringSecurity**

**Create MvcConfig.java**

package com.project.SpringSecurity;

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 MvcConfig implements WebMvcConfigurer{

public void addViewControllers(ViewControllerRegistry registry) { registry.addViewController("/index").setViewName("index"); registry.addViewController("/").setViewName("index"); registry.addViewController("/login").setViewName("login"); registry.addViewController("/welcome").setViewName("welcome");

}

}

# Create SpringSecurityApplication.java

package com.project.SpringSecurity;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication; import org.springframework.data.jpa.repository.config.EnableJpaRepositories; import com.project.SpringSecurity.repositories.UsersRepository; @SpringBootApplication

@EnableJpaRepositories(basePackageClasses = UsersRepository.class) public class SpringSecurityApplication {

public static void main(String[] args) {

SpringApplication.run(SpringSecurityApplication.class, args);

}

}

**Create WebSecurityConfig.java** package com.project.SpringSecurity; import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

import org.springframework.beans.factory.annotation.Autowired; import org.springframework.context.annotation.Bean;

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;

import org.springframework.security.core.userdetails.UserDetailsService; import org.springframework.security.crypto.password.NoOpPasswordEncoder; import org.springframework.security.crypto.password.PasswordEncoder; @SuppressWarnings("deprecation")

@Configuration @EnableWebSecurity

public class WebSecurityConfig extends WebSecurityConfigurerAdapter { Logger logger = LoggerFactory.getLogger(WebSecurityConfig.class); @Autowired

UserDetailsServiceuserDetailsService; @Bean

public PasswordEncodergetPasswordEncoder() { return NoOpPasswordEncoder.getInstance();

}

@Autowired

public void configureGlobal(AuthenticationManagerBuilder auth) throws Exception { auth.userDetailsService(userDetailsService);

}

@Override

protected void configure(HttpSecurity http) throws Exception { http.authorizeRequests()

.antMatchers("/", "/index").permitAll()

.anyRequest().authenticated()

.and()

.formLogin()

.loginPage("/login")

.defaultSuccessUrl("/welcome")

.failureUrl("/login?error=true")

.permitAll()

.and()

.logout()

.logoutSuccessUrl("/login?logout=true")

.invalidateHttpSession(true)

.permitAll()

.and()

.csrf()

.disable();

}

}

# Create package com.project.SpringSecurity.entities Create MyUserDetails.java

package com.project.SpringSecurity.entities; import java.util.Collection;

import org.springframework.security.core.GrantedAuthority; import org.springframework.security.core.userdetails.UserDetails; public class MyUserDetails implements UserDetails{

private static final long serialVersionUID = 1L; private String userName;

private String password; public MyUserDetails() {

}

public MyUserDetails(User user) { this.userName = user.getName(); this.password = user.getPassword();

}

@Override

public Collection<? extends GrantedAuthority>getAuthorities() { return null;

}

@Override

public String getPassword() {

return password;

}

@Override

public String getUsername() {

return userName;

}

@Override

public booleanisAccountNonExpired() { return true;

}

@Override

public booleanisAccountNonLocked() { return true;

}

@Override

public booleanisCredentialsNonExpired() { return true;

}

@Override

public booleanisEnabled() { return true;

}

}

# Create User.java

package com.project.SpringSecurity.entities;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue; import javax.persistence.GenerationType; import javax.persistence.Id;

import javax.persistence.Table; @Entity

@Table(name="user") public class User { @Id

@GeneratedValue(strategy=GenerationType.AUTO) private Integer id;

private String name; private String password; public User() {

super();

}

public User(String name, String password) { super();

this.name = name; this.password = password;

}

public String getName() {

return name;

}

public void setName(String name) { this.name = name;

}

public String getPassword() {

return password;

}

public void setPassword(String password) { this.password = password;

}

}

# Create package com.project.SpringSecurity.repositories Create UsersRepository.java

**package**com.project.SpringSecurity.repositories;

**import**java.util.Optional; **import**org.springframework.data.repository.CrudRepository; **import**org.springframework.stereotype.Repository; **import**com.project.SpringSecurity.entities.User;

@Repository

**publicinterface**UsersRepository**extends**CrudRepository<User, Integer>{

**public** Optional<User>findUserByName(String name);

}

# Create package com.project.SpringSecurity.services Create MyUserDetailsService.java

package com.project.SpringSecurity.services; import java.util.Optional;

import org.springframework.beans.factory.annotation.Autowired; import org.springframework.security.core.userdetails.UserDetailsService;

import org.springframework.security.core.userdetails.UsernameNotFoundException; import org.springframework.stereotype.Service;

import com.project.SpringSecurity.entities.MyUserDetails;

import com.project.SpringSecurity.entities.User;

import com.project.SpringSecurity.repositories.UsersRepository; @Service

public class MyUserDetailsService implements UserDetailsService { @Autowired

UsersRepositoryuserRepo;

public User GetUserByName(String name) {

Optional<User> user = userRepo.findUserByName(name);

# Src/main/resources application.properties

spring.jpa.hibernate.ddl-auto=update

spring.jpa.hibernate.naming-strategy=org.hibernate.cfg.ImprovedNamingStrategy spring.jap.properties.hibernate.dialect=org.hibernate.dialect.MySQL5Dialect spring.datasource.url=jdbc:mysql://localhost:3306/mywork spring.datasource.username=root

spring.datasource.password=UPRPBb820@2021logging.level.org.springframework.web: DEBUG spring.thymeleaf.prefix=/WEB-INF/jsp/ spring.thymeleaf.suffix=.jsp

server.port=8080 server.error.whitelabel.enabled=false

# src/main/webapp/WEB-INF/jsp Create index.jsp

<!DOCTYPEhtml>

<htmlxmlns=*"*[*http://www.w3.org/1999/xhtml"*](http://www.w3.org/1999/xhtml)xmlns:th=*"*[*http://www.thymeleaf.org*](http://www.thymeleaf.org/)*"* xmlns:sec=*"*[*http://www.thymeleaf.org/thymeleaf-extras-springsecurity3*](http://www.thymeleaf.org/thymeleaf-extras-springsecurity3)*"* xmlns:layout=*"*[*http://www.ultraq.net.nz/thymeleaf/layout"*](http://www.ultraq.net.nz/thymeleaf/layout)>

<head>

<title>Greetings!</title>

</head>

<body>

<h1>Welcome!</h1>

<p>

</body>

</html>

</p>

Click <ath:href=*"@{/welcome}"*>here</a> to see a greeting.

# Create login.jsp

<!DOCTYPEhtml>

<htmlxmlns=*"*[*http://www.w3.org/1999/xhtml"*](http://www.w3.org/1999/xhtml)xmlns:th=*"https://*[*www.thymeleaf.org*](http://www.thymeleaf.org/)*"* xmlns:sec=*"https:/*[*/w*](http://www.thymeleaf.org/thymeleaf-extras-springsecurity3)*w*[*w.thymeleaf.org/thymeleaf-extras-springsecurity3"*](http://www.thymeleaf.org/thymeleaf-extras-springsecurity3)>

<head>

<title>Login</title>

</head>

<body>

<divth:if=*"*${param.error}*"*>

Invalid username or password.

</div>

<divth:if=*"*${param.logout}*"*> You have been logged out.

</div>

<formth:action=*"@{/login}"*method=*"post"*>

<div><label> User Name :<inputtype=*"text"*name=*"username"*/></label></div>

<div><label> Password: <inputtype=*"password"*name=*"password"*/></label></div>

<div><inputtype=*"submit"*value=*"Sign In"*/></div>

</form>

<ahref=*"/"*>Return to Main Page</a>

</body>

</html>

# Create welcome.jsp

<!DOCTYPEhtml>

<htmlxmlns=*"*[*http://www.w3.org/1999/xhtml"*](http://www.w3.org/1999/xhtml)xmlns:th=*"https://*[*www.thymeleaf.org*](http://www.thymeleaf.org/)*"* xmlns:sec=*"https:/*[*/w*](http://www.thymeleaf.org/thymeleaf-extras-springsecurity3)*w*[*w.thymeleaf.org/thymeleaf-extras-springsecurity3"*](http://www.thymeleaf.org/thymeleaf-extras-springsecurity3)>

<head>

<title>Welcome!</title>

</head>

<body>

<h1th:inline=*"text"*>Hello [[${#httpServletRequest.remoteUser}]]!</h1>

<formth:action=*"@{/logout}"*method=*"post"*>

<inputtype=*"submit"*value=*"Sign Out"*/>

</form>

</body>

</html>