**Rapport du TP7 :**

* Classe Patient :

package com.example.tp6.Entities;  
  
  
import lombok.AllArgsConstructor;  
import lombok.Data;  
import lombok.NoArgsConstructor;  
import org.springframework.format.annotation.DateTimeFormat;  
  
import javax.persistence.\*;  
import javax.validation.constraints.DecimalMin;  
import javax.validation.constraints.NotEmpty;  
import javax.validation.constraints.Size;  
import java.util.Date;  
  
@Entity  
@Data @NoArgsConstructor @AllArgsConstructor  
public class Patient {  
 @Id  
 @GeneratedValue(strategy = GenerationType.*IDENTITY*)  
 private Long id;  
 @NotEmpty @Size(min= 4 ,max= 30)  
 private String nom;  
 @Temporal(TemporalType.*DATE*)  
 @DateTimeFormat(pattern = "yyyy-MM-dd")  
 private Date datenaissance;  
 private boolean malade;  
 @DecimalMin("100") // le score doit obligatoirement etre superieur a 100  
 private int score;  
}

* Patient Repository :

package com.example.tp6.Repositories;  
  
  
  
import com.example.tp6.Entities.Patient;  
import org.springframework.data.domain.Page;  
import org.springframework.data.domain.Pageable;  
import org.springframework.data.jpa.repository.JpaRepository;  
  
  
public interface PatientRepository extends JpaRepository<Patient,Long> {  
 Page<Patient> findByNomContains(String kw, Pageable pageable);  
}

* Security Configuration :

package com.example.tp6.security;  
  
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.crypto.bcrypt.BCryptPasswordEncoder;  
import org.springframework.security.crypto.password.PasswordEncoder;  
  
@Configuration  
@EnableWebSecurity  
public class securityConfig extends WebSecurityConfigurerAdapter {  
  
 @Override  
 protected void configure(AuthenticationManagerBuilder auth) throws Exception {  
 PasswordEncoder passwordEncoder=passwordEncoder();  
 String encodedPWD=passwordEncoder.encode("1234");  
 //stocker en mémoire les utilisateurs qui ont acces à l'application  
 auth.inMemoryAuthentication().withUser("user").password(encodedPWD).roles("USER");  
 auth.inMemoryAuthentication().withUser("admin").password(passwordEncoder.encode("5678")).roles("USER","ADMIN");  
 }  
  
 @Override  
 protected void configure(HttpSecurity http) throws Exception {  
 //damander à spring d'utiliser un formulaire d'authentification  
 http.formLogin();  
 // cette page ne nécessite pas une permission  
 http.authorizeRequests().antMatchers("/").permitAll();  
 //ces paths sont accessibles juste pour les utilisateurs qui ont role ADMIN  
 http.authorizeRequests().antMatchers("/admin/\*\*").hasRole("ADMIN");  
 //ces paths sont accessibles juste pour les utilisateurs qui ont role USER  
 http.authorizeRequests().antMatchers("/user/\*\*").hasRole("USER");  
 //toute requete http nécessite une authentification  
 http.authorizeRequests().anyRequest().authenticated();  
 http.exceptionHandling().accessDeniedPage("/403");  
  
 }  
  
 @Bean // au demarrage crée un objet de type PasswordEncoder  
 PasswordEncoder passwordEncoder(){  
 return new BCryptPasswordEncoder();  
 }  
}

* Security Controller :

package com.example.tp6.security;  
  
import org.springframework.stereotype.Controller;  
import org.springframework.web.bind.annotation.GetMapping;  
  
@Controller  
public class securityController {  
  
 @GetMapping("/403")  
 public String notAuthorized(){  
 return "403";  
 }  
}

* Patient Controller:

package com.example.tp6.Web;  
  
import com.example.tp6.Entities.Patient;  
import com.example.tp6.Repositories.PatientRepository;  
import lombok.AllArgsConstructor;  
import org.springframework.data.domain.Page;  
import org.springframework.data.domain.PageRequest;  
import org.springframework.stereotype.Controller;  
import org.springframework.ui.Model;  
import org.springframework.validation.BindingResult;  
import org.springframework.web.bind.annotation.GetMapping;  
import org.springframework.web.bind.annotation.PostMapping;  
import org.springframework.web.bind.annotation.RequestParam;  
import org.springframework.web.bind.annotation.ResponseBody;  
  
import javax.validation.Valid;  
import java.util.List;  
  
@Controller  
@AllArgsConstructor  
public class PatientController {  
 private PatientRepository patientRepository;  
  
 @GetMapping(path = "/user/index")  
 public String patients(Model model,  
 @RequestParam(name = "page", defaultValue = "0") int page,  
 @RequestParam(name = "size", defaultValue = "5") int size,  
 @RequestParam(name = "keyword", defaultValue = "") String keyword ){  
 Page<Patient> pagePatients=patientRepository.findByNomContains(keyword, PageRequest.*of*(page, size));  
 model.addAttribute("listPatients",pagePatients.getContent());  
 model.addAttribute("pages", new int[pagePatients.getTotalPages()]);  
 model.addAttribute("currentPage", page);  
 model.addAttribute("keyword", keyword);  
 return "patients";  
 }  
  
 @GetMapping("/admin/delete")  
 public String delete(Long id, String keyword, int page) {  
 patientRepository.deleteById(id);  
 return "redirect:/user/index?page="+page+"&keyword="+keyword;  
 }  
  
 @GetMapping("/")  
 public String home() {  
 return "home";  
 }  
  
 @GetMapping("/user/patients")  
 @ResponseBody  
 public List<Patient> listPatients(){  
 return patientRepository.findAll();  
 }  
  
  
  
 @GetMapping("/admin/formPatient")  
 public String formPatient(Model model) {  
 model.addAttribute("patient",new Patient());  
 return "formPatient";  
 }  
  
 @PostMapping(path = "/admin/save")  
 public String save(Model model, @Valid Patient patient, BindingResult bindingResult,  
 @RequestParam(name = "page", defaultValue = "0")int page,  
 @RequestParam(name = "keyword", defaultValue = "")String keyword ) {  
 if(bindingResult.hasErrors()) return "formPatient";  
 patientRepository.save(patient);  
 return "redirect:/user/index?page="+page+"&keyword="+keyword;  
 }  
  
 @GetMapping( "/admin/edit")  
 public String editpatient(Model model, Long id, int page,String keyword ) {  
 Patient patient=patientRepository.findById(id).orElse(null);  
 if(patient==null) throw new RuntimeException("patient introuvable");  
 model.addAttribute("patient",patient);  
 model.addAttribute("page",page);  
 model.addAttribute("keyword",keyword);  
 return "editPatient";  
 }  
}

* Application properties:
* spring.datasource.url = jdbc:mysql://localhost:3309/patients?createDatabaseIfNotExist=true  
  spring.datasource.username = root  
  spring.datasource.password =  
  server.port=8085  
  spring.jpa.hibernate.ddl-auto = update  
  spring.jpa.properties.hibernate.dialect = org.hibernate.dialect.MariaDBDialect  
  spring.jpa.show-sql=true
* Templates:
  + 403.html

<!DOCTYPE html>  
<html lang="en" xmlns:th="http://www.thymeleaf.org"  
 xmlns:layout="http://www.ultraq.net.nz/thymeleaf/layout"  
 layout:decorate="template1"  
 xmlns:sec="http://www.thymeleaf.org/extras/spring-security" >  
<head>  
 <meta charset="UTF-8">  
 <title>Accueil</title>  
</head>  
<body>  
<div layout:fragment="content1">  
 <div class="container">  
 <h2 class="text-danger">vous n'etes pas autorisés à accéder à cette page</h2>  
 </div>  
</div>  
</body>  
</html>

* + Edit Patient:

<!DOCTYPE html>  
<html lang="en" xmlns:th="http://www.thymeleaf.org"  
 xmlns:layout="http://www.ultraq.net.nz/thymeleaf/layout"  
 layout:decorate="template1">  
<head>  
 <meta charset="UTF-8">  
 <title>Nouveau patient</title>  
</head>  
<body>  
 <div layout:fragment="content1">  
 <div class="col-md-6 offset-3">  
 <form method="post" th:action="@{ /admin/save(page=${page},keyword=${keyword}) }">  
 <div class="mb-3">  
 <label for="exampleId" class="form-label">ID</label>  
 <input type="text" class="form-control" id="exampleId" name="id" th:value="${patient.id}">  
 </div>  
 <div class="mb-3">  
 <label for="exampleNom" class="form-label">Nom</label>  
 <input type="text" class="form-control" id="exampleNom" name="nom" th:value="${patient.nom}">  
 <span th:errors="${patient.nom}"></span>  
 </div>  
 <div class="mb-3">  
 <label for="exampleDate" class="form-label">Date de naissance</label>  
 <input type="date" class="form-control" id="exampleDate" name="datenaissance" th:value="${patient.datenaissance}">  
 <span th:errors="${patient.datenaissance}"></span>  
 </div>  
 <div class="mb-3 form-check">  
 <input type="checkbox" class="form-check-input" id="exampleCheck1" name="malade"th:checked="${patient.malade}">  
 <label class="form-check-label" for="exampleCheck1">Malade</label>  
 <span th:errors="${patient.malade}"></span>  
 </div>  
 <div class="mb-3">  
 <label for="exampleScore" class="form-label">Score</label>  
 <input type="text" class="form-control" id="exampleScore" name="score"th:value="${patient.score}">  
 <span th:errors="${patient.score}"></span>  
 </div>  
 <button type="submit" class="btn btn-primary">Submit</button>  
 </form>  
 </div>  
 </div>  
</body>  
</html>

* + Form Patient:

<!DOCTYPE html>  
<html lang="en" xmlns:th="http://www.thymeleaf.org"  
 xmlns:layout="http://www.ultraq.net.nz/thymeleaf/layout"  
 layout:decorate="template1">  
<head>  
 <meta charset="UTF-8">  
 <title>Nouveau patient</title>  
</head>  
<body>  
 <div layout:fragment="content1">  
 <div class="col-md-6 offset-3">  
 <form method="post" th:action="@{/admin/save}">  
 <div class="mb-3">  
 <label for="exampleNom" class="form-label">Nom</label>  
 <input type="text" class="form-control" id="exampleNom" name="nom" th:value="${patient.nom}">  
 <span th:errors="${patient.nom}"></span>  
 </div>  
 <div class="mb-3">  
 <label for="exampleDate" class="form-label">Date de naissance</label>  
 <input type="date" class="form-control" id="exampleDate" name="datenaissance" th:value="${patient.datenaissance}">  
 <span th:errors="${patient.datenaissance}"></span>  
 </div>  
 <div class="mb-3 form-check">  
 <input type="checkbox" class="form-check-input" id="exampleCheck1" name="malade"th:checked="${patient.malade}">  
 <label class="form-check-label" for="exampleCheck1">Malade</label>  
 <span th:errors="${patient.malade}"></span>  
 </div>  
 <div class="mb-3">  
 <label for="exampleScore" class="form-label">Score</label>  
 <input type="text" class="form-control" id="exampleScore" name="score"th:value="${patient.score}">  
 <span th:errors="${patient.score}"></span>  
 </div>  
 <button type="submit" class="btn btn-primary">Submit</button>  
 </form>  
 </div>  
 </div>  
</body>  
</html>

* + Home:

<!DOCTYPE html>  
<html lang="en" xmlns:th="http://www.thymeleaf.org"  
 xmlns:layout="http://www.ultraq.net.nz/thymeleaf/layout"  
 layout:decorate="template1">  
  
<head>  
 <meta charset="UTF-8">  
 <title>Home</title>  
</head>  
<body>  
 <div layout:fragment="content1"></div>  
</body>  
</html>

* + Patients:

<!DOCTYPE html>  
<html lang="en" xmlns:th="http://www.thymeleaf.org"  
 xmlns:layout="http://www.ultraq.net.nz/thymeleaf/layout"  
 layout:decorate="template1"  
 xmlns:sec="http://www.thymeleaf.org/extras/spring-security" >  
<head>  
 <meta charset="UTF-8">  
 <title>Accueil</title>  
</head>  
<body>  
<div layout:fragment="content1">  
<div class="container mt-2">  
 <div class="card">  
 <div class="card-header">Liste des Patients</div>  
 <div class="card-body">  
 <form method="get" th:action="@{/user/index}">  
 <label>Key Word</label>  
 <input type="text" name="keyword" th:value="${keyword}">  
 <button type="submit" class="btn btn-primary">Chercher</button>  
 </form>  
 <table class="table">  
 <thead>  
 <tr>  
 <th>ID</th>  
 <th>Nom</th>  
 <th>DateNaissance</th>  
 <th>Malade</th>  
 <th>Score</th>  
 </tr>  
 </thead>  
 <tbody>  
 <tr th:each="p:${listPatients}">  
 <td th:text="${p.id}"></td>  
 <td th:text="${p.nom}"></td>  
 <td th:text="${p.datenaissance}"></td>  
 <td th:text="${p.malade}"></td>  
 <td th:text="${p.score}"></td>  
 <td sec:authorize="hasRole('ADMIN')">  
 <a onclick="return confirm('etes vous sure?')" class="btn btn-danger" th:href="@{/admin/delete(id=${p.id}, keyword=${keyword}, page=${currentPage} )}">  
 Delete  
 </a>  
 </td>  
 <td sec:authorize="hasRole('ADMIN')">  
 <a class="btn btn-success" th:href="@{/admin/edit(id=${p.id} , keyword=${keyword}, page=${currentPage} )}">  
 Edit  
 </a>  
 </td>  
 </tr>  
 </tbody>  
 </table>  
 <ul class="nav nav-pills">  
 <li th:each="page,status:${pages}">  
 <a th:class="${status.index==currentPage?'btn btn-info ms-1' : 'btn btn-outline-info ms-1'}"  
 th:text="${status.index}"  
 th:href="@{/user/index(page=${status.index}, keyword=${keyword})}"  
 > </a>  
 </li>  
 </ul>  
 </div>  
 </div>  
</div>  
</div>  
</body>  
</html>

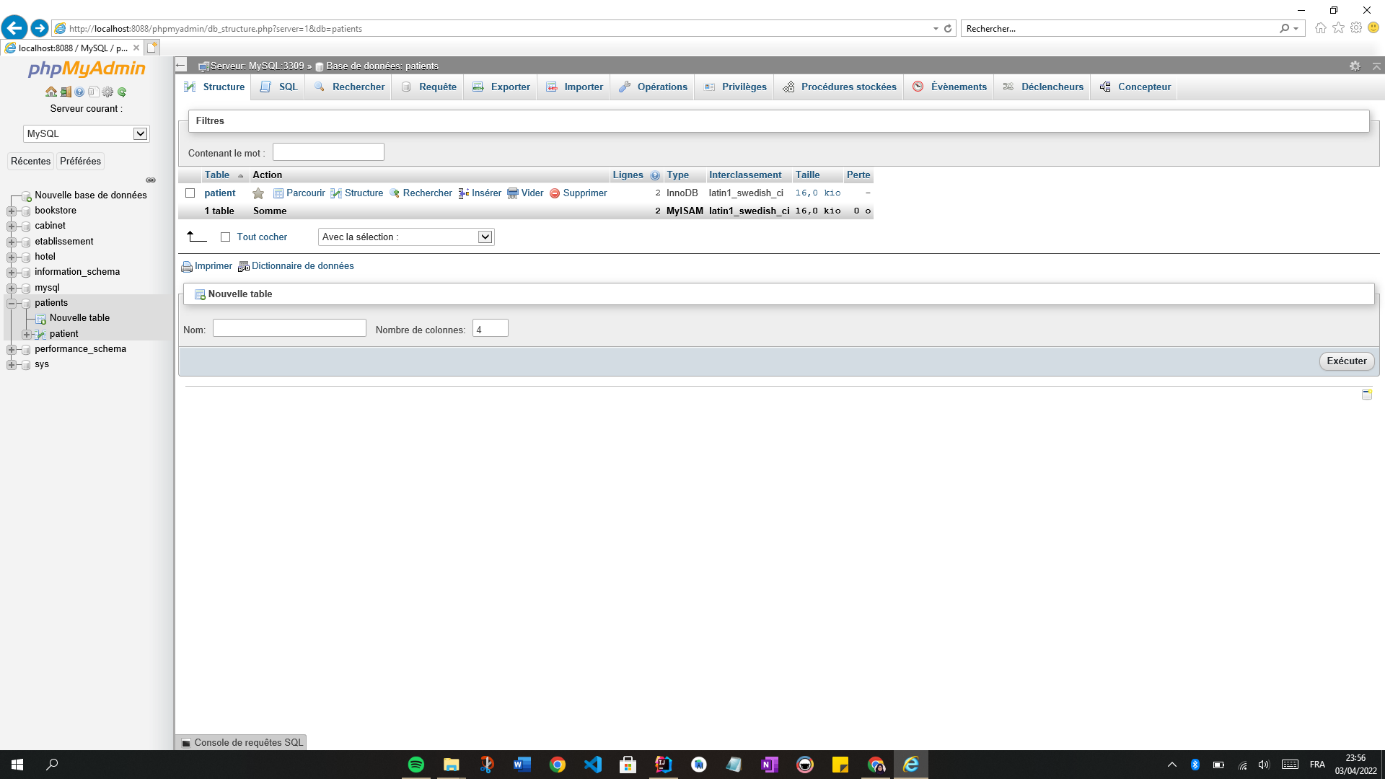
* + Template1:

<!DOCTYPE html>  
<html lang="en" xmlns:th="http://www.thymeleaf.org"  
 xmlns:layout="http://www.ultraq.net.nz/thymeleaf/layout"  
 xmlns:sec="http://www.thymeleaf.org/extras/spring-security">  
<head>  
 <meta charset="UTF-8">  
 <title>Title</title>  
 <link rel="stylesheet" type="text/css" href="/webjars/bootstrap/5.1.3/css/bootstrap.min.css">  
 <script src="/webjars/bootstrap/5.1.3/js/bootstrap.bundle.min.js"></script>  
</head>  
 <body>  
 <nav class="navbar navbar-expand-sm bg-dark navbar-dark">  
 <div class="container-fluid">  
 <ul class="navbar-nav">  
 <li class="nav-item">  
 <a class="nav-link active" th:href="@{/user/index}">Home</a>  
 </li>  
 <li class="nav-item">  
 <a class="nav-link" href="#">Link</a>  
 </li>  
 <li class="nav-item dropdown">  
 <a class="nav-link dropdown-toggle" href="#" role="button" data-bs-toggle="dropdown">  
 Patients  
 </a>  
 <ul class="dropdown-menu">  
 <li sec:authorize="hasRole('ADMIN')"><a class="dropdown-item" th:href="@{/admin/formPatient}">Nouveau</a></li>  
 <li><a class="dropdown-item" th:href="@{/user/index}">Chercher</a></li>  
 </ul>  
 </li>  
 </ul>  
 <ul class="navbar-nav" >  
 <li class="nav-item dropdown" sec:authorize="isAuthenticated()">  
 <a class="nav-link dropdown-toggle" href="#" role="button" data-bs-toggle="dropdown">  
 <span sec:authentication="name"></span>  
 </a>  
 <ul class="dropdown-menu">  
 <li><a class="dropdown-item" th:href="@{/logout}">Logout</a></li>  
 </ul>  
 </li>  
 <li class="nav-item" >  
 <a class="nav-link active" sec:authorize="!isAuthenticated()" th:href="@{/login}">Login</a>  
 </li>  
 </ul>  
 </div>  
 </nav>  
 <section layout:fragment="content1">  
  
 </section>  
</body>  
</html>

* Application:

package com.example.tp6;  
  
  
import com.example.tp6.Entities.Patient;  
import com.example.tp6.Repositories.PatientRepository;  
import org.springframework.boot.CommandLineRunner;  
import org.springframework.boot.SpringApplication;  
import org.springframework.boot.autoconfigure.SpringBootApplication;  
import org.springframework.context.annotation.Bean;  
  
import java.util.Date;  
  
@SpringBootApplication  
public class Tp6Application {  
  
 public static void main(String[] args) {  
 SpringApplication.*run*(Tp6Application.class, args);  
 }  
  
 @Bean  
 CommandLineRunner commandLineRunner(PatientRepository patientRepository){  
 return args -> {  
 patientRepository.save(  
 new Patient(null, "soukaina", new Date(), false, 120)  
 );  
 patientRepository.save(  
 new Patient(null, "salma", new Date(), false, 120)  
 );  
 patientRepository.findAll().forEach(p ->{  
 System.*out*.println(p.getNom());  
 });  
 };  
 }  
}

* Exécution:
  + En base de données:



* + En Web:

