МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ

федеральное государственное автономное образовательное учреждение высшего образования

«САНКТ-ПЕТЕРБУРГСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ АЭРОКОСМИЧЕСКОГО ПРИБОРОСТРОЕНИЯ»

ИНСТИТУТ ВЫЧИСЛИТЕЛЬНЫХ СИСТЕМ И ПРОГРАММИРОВАНИЯ

КАФЕДРА компьютерных технологий и программной инженерии

ОТЧЕТ

ЗАЩИЩЕН С ОЦЕНКОЙ ПРЕПОДАВАТЕЛЬ

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| --- |
| ОТЧЕТ О ЛАБОРАТОРНОЙ РАБОТЕ №6 |
| «Разработка AJAX приложения с использованием  Hibernate» |
| по курсу: Технологии разработки серверных информационных систем |

РАБОТУ ВЫПОЛНИЛ

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| --- | --- | --- | --- | --- | --- |
| СТУДЕНТ ГР. № | 4932 |  | 06.12.2021 |  | С.И. Коваленко |
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Санкт-Петербург 2021

# Цель работы

Познакомится с основами взаимодей свия приложения с базой данных посредством Hibernate.

# Задание:

1. Добавьте базу данных, модель данных, JPA репозитории и сервисы.
2. Реализуй те операции чтения/записи из одной из предыдущих лабораторных работ (3 или 5) с помощью JPA

Вариант: 9. Складской учет.

# Описание разрабатываемого продукта:

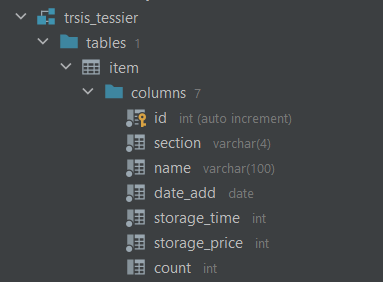
## application.yaml

spring:  
 jpa:  
 hibernate:  
 ddl-auto: update  
 show-sql: true  
 datasource:  
 url: jdbc:mysql://localhost:3306/trsis\_tessier *#TODO: добавить свои данные для авторизации в БД* username: root *#TODO: добавить свои данные для авторизации в БД* password: root *#TODO: добавить свои данные для авторизации в БД*

## ItemEntity

package suai.trsis2021.labs.entity;  
  
import lombok.\*;  
  
import javax.persistence.\*;  
import java.time.LocalDate;  
  
@Table(schema = "trsis\_tessier")  
@Entity(name = "item")  
public class ItemEntity {  
 @Id  
 @GeneratedValue(strategy = GenerationType.*IDENTITY*)  
 @Getter @Setter private Long id;  
 @Getter @Setter private String section;  
 @Getter @Setter private String name;  
 @Getter @Setter private Integer count;  
  
 @Column(name = "date\_add")  
 @Getter @Setter private LocalDate dateAdd;  
 @Column(name = "storage\_time")  
 @Getter @Setter private Integer storageTime;  
 @Column(name = "storage\_price")  
 @Getter @Setter private Integer storagePrice;  
  
 public ItemEntity() {  
 count = 1;  
 }  
  
 public void countUp(){  
 count += 1;  
 }  
  
 public void countDown(){  
 count -= 1;  
 }  
}

## table



## ItemRepository

package suai.trsis2021.labs.repository;  
  
import org.springframework.data.jpa.repository.JpaRepository;  
import org.springframework.data.jpa.repository.Modifying;  
import org.springframework.data.jpa.repository.Query;  
import org.springframework.stereotype.Repository;  
import suai.trsis2021.labs.entity.ItemEntity;  
  
import java.time.LocalDate;  
import java.util.List;  
import java.util.Optional;  
  
@Repository  
public interface ItemRepository extends JpaRepository<ItemEntity, Long> {  
  
 @Modifying  
 @Query("update item i " +  
 "set i.section = ?1, " +  
 " i.name = ?2," +  
 " i.dateAdd = ?3," +  
 " i.storageTime = ?4," +  
 " i.storagePrice = ?5," +  
 " i.count = ?6 " +  
 "where i.id = ?7")  
 void updateCostById(  
 String section,  
 String name,  
 LocalDate dateAdd,  
 Integer storageTime,  
 Integer storagePrice,  
 Integer count,  
 Long id  
 );  
  
 List<ItemEntity> findByName(String name);  
 Optional<ItemEntity> findById(Long id);  
}

## ItemService

package suai.trsis2021.labs.service;  
  
import org.springframework.beans.factory.annotation.Autowired;  
import org.springframework.stereotype.Service;  
import org.springframework.transaction.annotation.Transactional;  
import suai.trsis2021.labs.entity.ItemEntity;  
import suai.trsis2021.labs.exceptions.ItemNotFoundException;  
import suai.trsis2021.labs.model.Item;  
import suai.trsis2021.labs.repository.ItemRepository;  
  
import java.util.LinkedList;  
import java.util.List;  
import java.util.Optional;  
  
@Service  
@Transactional  
public class ItemService {  
  
 @Autowired  
 private ItemRepository itemRepository;  
  
 public boolean addItem(ItemEntity item){  
 if(isEmptyItem(item)) {  
 return false;  
 }  
  
 try {  
 ItemEntity c = findItemEntity(item);  
 if(c == null){  
 itemRepository.save(item);  
 }  
 else{  
 c.countUp();  
 updateItemById(c);  
 }  
 return true;  
 }  
 catch (Exception e){  
 e.printStackTrace();  
 return false;  
 }  
 }  
  
 public boolean deleteItem(Long id){  
 try {  
 Optional<ItemEntity> c = itemRepository.findById(id);  
 if(c.isEmpty()){  
 return false;  
 }  
  
 ItemEntity item = c.get();  
 if(item.getCount() > 1){  
 item.countDown();  
 updateItemById(item);  
 }  
 else{  
 itemRepository.deleteById(id);  
 }  
 return true;  
  
 }catch (Exception e){  
 return false;  
 }  
 }  
  
 public boolean putItem(ItemEntity item){  
 if(isEmptyItem(item)) {  
 return false;  
 }  
  
 Optional<ItemEntity> c = itemRepository.findById(item.getId());  
 if(c.isEmpty()){  
 return false;  
 }  
  
 ItemEntity itemEntity = c.get();  
 itemEntity.setSection(item.getSection());  
 itemEntity.setName(item.getName());  
 itemEntity.setDateAdd(item.getDateAdd());  
 itemEntity.setStorageTime(item.getStorageTime());  
 itemEntity.setStoragePrice(item.getStoragePrice());  
 updateItemById(itemEntity);  
 return true;  
 }  
  
 public List<Item> getItems(){  
 List<Item> items = new LinkedList<>();  
 itemRepository.findAll().forEach(e -> items.add(Item.*toModel*(e)));  
 return items;  
 }  
  
 public Item getItem(Long id) throws ItemNotFoundException {  
 var item = itemRepository.findById(id);  
 if(item.isEmpty()){  
 throw new ItemNotFoundException("Item don't found");  
 }  
 return Item.*toModel*(item.get());  
 }  
  
 public ItemEntity findItemEntity(ItemEntity item) {  
 for (var c : itemRepository.findByName(item.getName())) {  
 if (equalItems(c, item)) {  
 return c;  
 }  
 }  
 return null;  
 }  
  
 private void updateItemById(ItemEntity item){  
 itemRepository.updateCostById(  
 item.getSection(),  
 item.getName(),  
 item.getDateAdd(),  
 item.getStorageTime(),  
 item.getStoragePrice(),  
 item.getCount(),  
 item.getId()  
 );  
 }  
  
 private boolean equalItems(ItemEntity e1, ItemEntity e2){  
 return e1.getSection().equals(e2.getSection())  
 && e1.getName().equals(e2.getName())  
 && e1.getDateAdd().equals(e2.getDateAdd())  
 && e1.getStorageTime().equals(e2.getStorageTime())  
 && e1.getStoragePrice().equals(e2.getStoragePrice());  
 }  
  
 private boolean isEmptyItem(ItemEntity item){  
 return item.getSection() == null  
 || item.getName() == null  
 || item.getDateAdd() == null  
 || item.getStorageTime() == null  
 || item.getStoragePrice() == null;  
 }  
}

# Выводы

* В результате выполнения данной лабораторной работы проект был подключен к базе данных mysql.

# Приложение:

// @filename \src\main\java\suai\trsis2021\labs\Lab4Application.java

package suai.trsis2021.labs;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication

public class Lab4Application {

public static void main(String[] args) {

SpringApplication.run(Lab4Application.class, args);

}

}

// @filename \src\main\java\suai\trsis2021\labs\controller\RestApiController.java

package suai.trsis2021.labs.controller;

import com.google.gson.Gson;

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

import org.springframework.http.HttpStatus;

import org.springframework.http.ResponseEntity;

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

import suai.trsis2021.labs.entity.ItemEntity;

import suai.trsis2021.labs.exceptions.ItemNotFoundException;

import suai.trsis2021.labs.service.ItemService;

import java.util.Arrays;

@RestController

@RequestMapping("/items")

public class RestApiController {

@Autowired

private ItemService itemService;

private static final Gson gson = new Gson();

@PostMapping("add")

public ResponseEntity<String> addCost(@RequestBody ItemEntity cost){

try {

if(itemService.addItem(cost)) {

return ResponseEntity.status(HttpStatus.CREATED).body(gson.toJson("Item added successfully"));

}

throw new ItemNotFoundException(gson.toJson("Item don't found"));

} catch (ItemNotFoundException e){

return ResponseEntity.status(HttpStatus.NOT\_FOUND).body(gson.toJson(e.getMessage()));

} catch (Exception e){

e.printStackTrace();

return ResponseEntity.status(HttpStatus.INTERNAL\_SERVER\_ERROR).body("RestApiController error -> " + e.getMessage() +

"\n\n" + Arrays.toString(e.getStackTrace()));

}

}

@DeleteMapping("delete/{id}")

public ResponseEntity<String> deleteCost(@PathVariable Long id){

try {

if (itemService.deleteItem(id)){

return ResponseEntity.status(HttpStatus.OK).body(gson.toJson("Item delete successfully"));

}

throw new ItemNotFoundException("Item don't found");

} catch (ItemNotFoundException e){

return ResponseEntity.status(HttpStatus.NOT\_FOUND).body(gson.toJson(e.getMessage()));

}catch (Exception e){

return ResponseEntity.status(HttpStatus.INTERNAL\_SERVER\_ERROR).body(gson.toJson("RestApiController error"));

}

}

@PutMapping("put/{id}")

public ResponseEntity<String> putCost(@RequestBody ItemEntity cost){

try {

if(itemService.putItem(cost)) {

return ResponseEntity.status(HttpStatus.ACCEPTED).body(gson.toJson("Item updated successfully"));

}

throw new ItemNotFoundException(gson.toJson("Item don't found"));

} catch (ItemNotFoundException e){

return ResponseEntity.status(HttpStatus.NOT\_FOUND).body(gson.toJson(e.getMessage()));

}catch (Exception e){

return ResponseEntity.status(HttpStatus.INTERNAL\_SERVER\_ERROR).body(gson.toJson("RestApiController error"));

}

}

@GetMapping("get/all")

public ResponseEntity<Object> getCostList(){

try {

return ResponseEntity.status(HttpStatus.OK).body(itemService.getItems());

}catch (Exception e){

return ResponseEntity.status(HttpStatus.INTERNAL\_SERVER\_ERROR).body(gson.toJson("RestApiController error"));

}

}

@GetMapping("get/{id}")

public ResponseEntity<String> getCost(@PathVariable Long id){

try {

return ResponseEntity.status(HttpStatus.FOUND).body(gson.toJson(itemService.getItem(id)));

}catch (ItemNotFoundException e){

return ResponseEntity.status(HttpStatus.NOT\_FOUND).body(gson.toJson(e.getMessage()));

}catch (Exception e){

return ResponseEntity.status(HttpStatus.INTERNAL\_SERVER\_ERROR).body("RestApiController error");

}

}

}

// @filename \src\main\java\suai\trsis2021\labs\controller\WebController.java

package suai.trsis2021.labs.controller;

import org.springframework.stereotype.Controller;

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

import org.springframework.web.bind.annotation.RequestMapping;

import org.springframework.web.servlet.view.RedirectView;

@Controller

public class WebController {

@GetMapping("")

public RedirectView redirect(){

return new RedirectView("/home");

}

@RequestMapping("/login")

public String login(){

return "LoginPage";

}

@GetMapping("/home")

public String homePage() {

return "HomePage";

}

@GetMapping("/crud-pane")

public String getAdminPage(){

return "CrudPane";

}

@GetMapping("/read-pane")

public String getReadPage() {

return "ReadPane";

}

@GetMapping("/forbidden-page")

public String getForbiddenPage() {

return "ForbiddenPage";

}

}

// @filename \src\main\java\suai\trsis2021\labs\entity\ItemEntity.java

package suai.trsis2021.labs.entity;

import lombok.\*;

import javax.persistence.\*;

import java.time.LocalDate;

@Table(schema = "trsis\_tessier")

@Entity(name = "item")

public class ItemEntity {

@Id

@GeneratedValue(strategy = GenerationType.IDENTITY)

@Getter @Setter private Long id;

@Getter @Setter private String section;

@Getter @Setter private String name;

@Getter @Setter private Integer count;

@Column(name = "date\_add")

@Getter @Setter private LocalDate dateAdd;

@Column(name = "storage\_time")

@Getter @Setter private Integer storageTime;

@Column(name = "storage\_price")

@Getter @Setter private Integer storagePrice;

public ItemEntity() {

count = 1;

}

public void countUp(){

count += 1;

}

public void countDown(){

count -= 1;

}

}

// @filename \src\main\java\suai\trsis2021\labs\exceptions\ItemNotFoundException.java

package suai.trsis2021.labs.exceptions;

public class ItemNotFoundException extends Exception{

public ItemNotFoundException(String message) {

super(message);

}

}

// @filename \src\main\java\suai\trsis2021\labs\model\Item.java

package suai.trsis2021.labs.model;

import lombok.\*;

import suai.trsis2021.labs.entity.ItemEntity;

import java.time.LocalDate;

public class Item {

public static Item toModel(ItemEntity entity){

Item item = new Item();

item.setId(entity.getId());

item.setSection(entity.getSection());

item.setName(entity.getName());

item.setDateAdd(entity.getDateAdd());

item.setStorageTime(entity.getStorageTime());

item.setStoragePrice(entity.getStoragePrice());

item.setCount(entity.getCount());

return item;

}

@Getter @Setter private Long id;

@Getter @Setter private String section;

@Getter @Setter private String name;

@Getter @Setter private LocalDate dateAdd;

@Getter @Setter private Integer storageTime;

@Getter @Setter private Integer storagePrice;

@Getter @Setter private Integer count;

public Item() {

count = 1;

}

public void countUp(){

count += 1;

}

public void countDown(){

count -= 1;

}

}

// @filename \src\main\java\suai\trsis2021\labs\repository\ItemRepository.java

package suai.trsis2021.labs.repository;

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

import org.springframework.data.jpa.repository.Modifying;

import org.springframework.data.jpa.repository.Query;

import org.springframework.stereotype.Repository;

import suai.trsis2021.labs.entity.ItemEntity;

import java.time.LocalDate;

import java.util.List;

import java.util.Optional;

@Repository

public interface ItemRepository extends JpaRepository<ItemEntity, Long> {

@Modifying

@Query("update item i " +

"set i.section = ?1, " +

" i.name = ?2," +

" i.dateAdd = ?3," +

" i.storageTime = ?4," +

" i.storagePrice = ?5," +

" i.count = ?6 " +

"where i.id = ?7")

void updateCostById(

String section,

String name,

LocalDate dateAdd,

Integer storageTime,

Integer storagePrice,

Integer count,

Long id

);

List<ItemEntity> findByName(String name);

Optional<ItemEntity> findById(Long id);

}

// @filename \src\main\java\suai\trsis2021\labs\service\ItemService.java

package suai.trsis2021.labs.service;

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

import org.springframework.stereotype.Service;

import org.springframework.transaction.annotation.Transactional;

import suai.trsis2021.labs.entity.ItemEntity;

import suai.trsis2021.labs.exceptions.ItemNotFoundException;

import suai.trsis2021.labs.model.Item;

import suai.trsis2021.labs.repository.ItemRepository;

import java.util.LinkedList;

import java.util.List;

import java.util.Optional;

@Service

@Transactional

public class ItemService {

@Autowired

private ItemRepository itemRepository;

public boolean addItem(ItemEntity item){

if(isEmptyItem(item)) {

return false;

}

try {

ItemEntity c = findItemEntity(item);

if(c == null){

itemRepository.save(item);

}

else{

c.countUp();

updateItemById(c);

}

return true;

}

catch (Exception e){

e.printStackTrace();

return false;

}

}

public boolean deleteItem(Long id){

try {

Optional<ItemEntity> c = itemRepository.findById(id);

if(c.isEmpty()){

return false;

}

ItemEntity item = c.get();

if(item.getCount() > 1){

item.countDown();

updateItemById(item);

}

else{

itemRepository.deleteById(id);

}

return true;

}catch (Exception e){

return false;

}

}

public boolean putItem(ItemEntity item){

if(isEmptyItem(item)) {

return false;

}

Optional<ItemEntity> c = itemRepository.findById(item.getId());

if(c.isEmpty()){

return false;

}

ItemEntity itemEntity = c.get();

itemEntity.setSection(item.getSection());

itemEntity.setName(item.getName());

itemEntity.setDateAdd(item.getDateAdd());

itemEntity.setStorageTime(item.getStorageTime());

itemEntity.setStoragePrice(item.getStoragePrice());

updateItemById(itemEntity);

return true;

}

public List<Item> getItems(){

List<Item> items = new LinkedList<>();

itemRepository.findAll().forEach(e -> items.add(Item.toModel(e)));

return items;

}

public Item getItem(Long id) throws ItemNotFoundException {

var item = itemRepository.findById(id);

if(item.isEmpty()){

throw new ItemNotFoundException("Item don't found");

}

return Item.toModel(item.get());

}

public ItemEntity findItemEntity(ItemEntity item) {

for (var c : itemRepository.findByName(item.getName())) {

if (equalItems(c, item)) {

return c;

}

}

return null;

}

private void updateItemById(ItemEntity item){

itemRepository.updateCostById(

item.getSection(),

item.getName(),

item.getDateAdd(),

item.getStorageTime(),

item.getStoragePrice(),

item.getCount(),

item.getId()

);

}

private boolean equalItems(ItemEntity e1, ItemEntity e2){

return e1.getSection().equals(e2.getSection())

&& e1.getName().equals(e2.getName())

&& e1.getDateAdd().equals(e2.getDateAdd())

&& e1.getStorageTime().equals(e2.getStorageTime())

&& e1.getStoragePrice().equals(e2.getStoragePrice());

}

private boolean isEmptyItem(ItemEntity item){

return item.getSection() == null

|| item.getName() == null

|| item.getDateAdd() == null

|| item.getStorageTime() == null

|| item.getStoragePrice() == null;

}

}

// @filename \src\main\java\suai\trsis2021\labs\util\WebSecurityConfig.java

package suai.trsis2021.labs.util;

import org.springframework.context.annotation.Bean;

import org.springframework.context.annotation.Configuration;

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.User;

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

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

import org.springframework.security.provisioning.InMemoryUserDetailsManager;

@Configuration

@EnableWebSecurity

public class WebSecurityConfig extends WebSecurityConfigurerAdapter {

@Override

protected void configure(HttpSecurity http) throws Exception {

http.csrf().disable()

.authorizeRequests()

.antMatchers("/", "/home-page").permitAll()

.antMatchers("/read-pane").hasAnyRole("USER", "ADMIN")

.antMatchers("/crud-pane").hasRole("ADMIN")

.and()

.formLogin()

.loginPage("/login")

.permitAll()

.and()

.logout()

.permitAll()

.and()

.exceptionHandling().accessDeniedPage("/forbidden-page");

}

@Bean

@Override

protected UserDetailsService userDetailsService() {

UserDetails user = User.withDefaultPasswordEncoder()

.username("user")

.password("1")

.roles("USER")

.build();

UserDetails admin = User.withDefaultPasswordEncoder()

.username("admin")

.password("1")

.roles("ADMIN")

.build();

return new InMemoryUserDetailsManager(user, admin);

}

}

// @filename \src\main\resources\templates\CrudPane.html

<!DOCTYPE html>

<html lang="ru">

<head>

<meta charset="UTF-8">

<title>Складской учет</title>

<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"></script>

</head>

<script type="text/javascript">

$(document).ready(function (){

refresh();

})

function refresh(){

draw\_table();

}

function draw\_table(){

$.ajax({

url: "items/get/all",

dataType: "json",

contentType: "application/json",

type: "GET",

async: false,

cache: false,

success: function (data) {

let $items = $('#items\_table')

let table = "<table border='1'>";

table +=

" <tr>\n" +

" <th>id</th>\n" +

" <th>Секция</th>\n" +

" <th>Название товара</th>\n" +

" <th>Дата добавления</th>\n" +

" <th>Срок хранения</th>\n" +

" <th>Стоимость хранения</th>\n" +

" <th>Количество</th>\n" +

" <th></th>\n" +

" <th></th>\n" +

" </tr>";

for(let i=0; i<data.length; i++) {

table +=

"<tr>\n" +

" <td>" + data[i].id + "</td>\n" +

" <td>" + data[i].section + "</td>\n" +

" <td>" + data[i].name + "</td>\n" +

" <td>" + data[i].dateAdd + "</td>\n" +

" <td>" + data[i].storageTime + "</td>\n" +

" <td>" + data[i].storagePrice + "</td>\n" +

" <td>" + data[i].count + "</td>\n" +

" <td>\n" +

" <button onclick='deleteCost(" + data[i].id + ")'>Delete</button>\n" +

" </td>\n" +

" <td>\n" +

// " <br>" +

" <button onclick='editCost(" + data[i].id + ")'>Edit</button>\n" +

" </td>\n" +

"</tr>";

}

table += "</table>";

$items.html(table);

},

error: function (error) {

console.log(error);

}

});

}

function addCost() {

$.ajax({

url: "/items/add/",

dataType: "json",

contentType: "application/json",

type: "POST",

async: false,

cache: false,

data: JSON.stringify({

section: $("#fieldSection").val(),

name: $("#fiendName").val(),

dateAdd: $("#fieldDateAdd").val(),

storageTime: $("#fieldStorageTime").val(),

storagePrice: $("#fieldStoragePrice").val()

}),

success: function () {

refresh();

},

error: function (error) {

console.log(error);

}

});

}

function deleteCost(idCost){

$.ajax({

url:'items/delete/'+ idCost,

type: "DELETE",

async: false,

cache: false,

dataType: "json",

contentType: "application/json; charset=utf-8",

success: function (){

refresh();

},

error: function (error){

console.log(error);

}

})

}

function editCost(idCost){

$.ajax({

url: "/items/put/" + idCost,

dataType: "json",

contentType: "application/json",

type: "PUT",

async: false,

cache: false,

data: JSON.stringify({

id: idCost,

section: $("#fieldSection").val(),

name: $("#fiendName").val(),

dateAdd: $("#fieldDateAdd").val(),

storageTime: $("#fieldStorageTime").val(),

storagePrice: $("#fieldStoragePrice").val()

}),

success: function (){

refresh();

},

error: function (error){

console.log(error);

}

})

}

</script>

<body>

<div th:include="Logout"></div>

<h1>Складской учет</h1>

<div>

<form>

<table border="1" cellpadding="5">

<tr><th>Секция</th> <td>

<input type="text" name="section" id="fieldSection"> </td></tr>

<tr><th>Название товара</th> <td>

<input type="text" name="name" id="fiendName"> </td></tr>

<tr><th>Дата добавления</th> <td>

<input type="date" name="date\_add" id="fieldDateAdd"> </td></tr>

<tr><th>Срок хранения</th> <td>

<input type="number" name="storage\_time" id="fieldStorageTime"> </td> </tr>

<tr><th>Стоимость хранения</th> <td>

<input type="number" name="storage\_price" id="fieldStoragePrice"> </td> </tr>

</table>

</form>

</div>

<button type="button" onclick='addCost()'>Добавить</button>

<br>

<br>

<div id="items\_table"></div>

</body>

</html>

// @filename \src\main\resources\templates\ForbiddenPage.html

<!DOCTYPE html>

<html lang="ru">

<head>

<meta charset="UTF-8">

<title>Складской учет</title>

</head>

<body>

<div style="text-align: center;">

<h2>Доступ запрещен.</h2>

</div>

</body>

// @filename \src\main\resources\templates\HomePage.html

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml"

xmlns:th="https://www.thymeleaf.org"

xmlns:sec="https://www.thymeleaf.org/thymeleaf-extras-springsecurity3"

lang="ru">

<head>

<title>Home</title>

</head>

<div th:include="Logout"></div>

<div>

<h3>Pages</h3>

<ul>

<li>

<a href="login">Авторизация </a></li>

<li sec:authorize="hasRole('ADMIN')">

<a href="crud-pane">Панель администратора</a></li>

<!-- <li sec:authorize="hasRole('USER')">-->

<li sec:authorize="hasAnyRole('USER', 'ADMIN')">

<a href="read-pane">Панель пользователя </a></li>

</ul>

</div>

</html>

// @filename \src\main\resources\templates\LoginPage.html

<!DOCTYPE html>

<html lang="ru"

xmlns="http://www.w3.org/1999/xhtml"

xmlns:th="https://www.thymeleaf.org"

xmlns:sec="https://www.thymeleaf.org/thymeleaf-extras-springsecurity3">

<head>

<meta charset="UTF-8">

<title>Логин</title>

</head>

<style>

div.error{

color: #000000;

background-color: rgba(219, 112, 147, 0.67);

text-align: center;

border-radius: 15px;

}

div.logout{

color: #000000;

background-color: rgba(152, 251, 152, 0.67);

text-align: center;

border-radius: 15px;

}

</style>

<body>

<div th:include="Logout"></div>

<a href="/" >Home</a>

<div style="

position: absolute;

top: 50%;

left: 50%;

margin-right: -50%;

transform: translate(-50%, -50%);

">

<div class="error" th:if="${param.error}">

Неверное имя пользователя или пароль.

</div>

<div class="logout" th:if="${param.logout}">

Вы вышли из учетной записи.

</div>

<form th:action="@{/login}" method="post">

<table border="0" cellpadding="5">

<tr><th align="right"> Имя пользователя :</th> <td>

<input type="text" name="username"> </td></tr>

<tr><th align="right"> Пароль : </th> <td>

<input type="password" name="password"> </td></tr>

<tr><th> </th> <td align="right" >

<input type="submit" value="Войти"/> </td></tr>

</table>

</form>

</div>

</body>

</html>

// @filename \src\main\resources\templates\Logout.html

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml" xmlns:th="https://www.thymeleaf.org"

xmlns:sec="https://www.thymeleaf.org/thymeleaf-extras-springsecurity3">

<body>

<form th:action="@{/logout}" method="post">

<div th:if="${#request.userPrincipal != null}" th:inline="text">

Вы вошли как: [[${#httpServletRequest.remoteUser}]]

<input type="submit" value="Выйти"/>

</div>

</form>

</body>

</html>

// @filename \src\main\resources\templates\ReadPane.html

<!DOCTYPE html>

<html lang="ru">

<head>

<meta charset="UTF-8">

<title>Складской учет</title>

<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"></script>

</head>

<script type="text/javascript">

$(document).ready(function (){

refresh();

})

function refresh(){

draw\_table();

}

function draw\_table(){

$.ajax({

url: "items/get/all",

dataType: "json",

contentType: "application/json",

type: "GET",

async: false,

cache: false,

success: function (data) {

let $items = $('#items\_table')

let table = "<table border='1'>";

table +=

" <tr>\n" +

" <th>id</th>\n" +

" <th>Секция</th>\n" +

" <th>Название товара</th>\n" +

" <th>Дата добавления</th>\n" +

" <th>Срок хранения</th>\n" +

" <th>Стоимость хранения</th>\n" +

" <th>Количество</th>\n" +

" </tr>";

for(let i=0; i<data.length; i++) {

table +=

"<tr>\n" +

" <td>" + data[i].id + "</td>\n" +

" <td>" + data[i].section + "</td>\n" +

" <td>" + data[i].name + "</td>\n" +

" <td>" + data[i].dateAdd + "</td>\n" +

" <td>" + data[i].storageTime + "</td>\n" +

" <td>" + data[i].storagePrice + "</td>\n" +

" <td>" + data[i].count + "</td>\n" +

"</tr>";

}

table += "</table>";

$items.html(table);

},

error: function (error) {

console.log(error);

}

});

}

</script>

<body>

<div th:include="Logout"></div>

<div>

<h1>Складской учет</h1>

<div id='items\_table'></div>

</div>

</body>

</html>