~\*~\*~\*controllers\*~\*~\*\*~

package com.codingdojo.grouplanguages.controllers;

import javax.validation.Valid;

import org.springframework.stereotype.Controller;

import org.springframework.ui.Model;

import org.springframework.validation.BindingResult;

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

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

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

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

import com.codingdojo.grouplanguages.models.Language;

import com.codingdojo.grouplanguages.services.LanguageService;

@Controller

public class Languages {

private final LanguageService languageService;

public Languages(LanguageService languageService) {

this.languageService = languageService;

}

@RequestMapping("/")

public String index(@ModelAttribute("language") Language language, Model model) {

model.addAttribute("languages", languageService.getLanguages());

return "languages/index.jsp";

}

@PostMapping("/languages")

public String createLanguages(@Valid @ModelAttribute("language") Language language, BindingResult result, Model model) {

if (result.hasErrors()) {

model.addAttribute("languages", languageService.getLanguages());

return "languages/index.jsp";

}else{

languageService.addLanguage(language);

return "redirect:/";

}

}

@RequestMapping("/languages/{id}")

public String showLanguage(Model model, @PathVariable("id") Long id) {

Language lang = languageService.getLanguage(id);

model.addAttribute("id", id);

model.addAttribute("language", lang);

return "languages/show.jsp";

}

@RequestMapping("/languages/edit/{id}")

public String editLanguage(Model model, @PathVariable("id") Long id) {

Language lang = languageService.getLanguage(id);

model.addAttribute("id", id);

model.addAttribute("language", lang);

return "languages/edit.jsp";

}

@PostMapping("/languages/update/{id}")

public String updateLanguage(@Valid @ModelAttribute("language") Language language, BindingResult result, @PathVariable("id") int id) {

if (result.hasErrors()) {

return "languages/edit.jsp";

}else{

languageService.updateLanguage(language);

return "redirect:/";

}

}

@RequestMapping("/languages/delete/{id}")

public String deleteLanguage(@PathVariable("id") Long id) {

languageService.deleteLanguage(id);

return "redirect:/";

}

}

~\*~\*~\*~\*

Models

package com.codingdojo.grouplanguages.models;

import java.util.Date;

import javax.persistence.Column;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue;

import javax.persistence.Id;

import javax.persistence.PrePersist;

import javax.persistence.PreUpdate;

import javax.persistence.Table;

import javax.validation.constraints.Size;

@Entity

@Table(name="languages")

public class Language {

@Id

@GeneratedValue

private Long id;

@Size(min = 2, max = 20, message="Name must be between 2 and 20 character")

private String name;

@Size(min = 2, max = 20, message="Creator must be between 2 and 20 character")

private String creator;

@Size(min = 1, message="Version cannot be empty")

private String version;

@Column(updatable = false)

private Date createdAt;

private Date updatedAt;

public Language() {

}

public Long getId() {

return id;

}

public void setId(Long id) {

this.id = id;

}

public String getName() {

return name;

}

public void setName(String name) {

this.name = name;

}

public String getCreator() {

return creator;

}

public void setCreator(String creator) {

this.creator = creator;

}

public String getVersion() {

return version;

}

public void setVersion(String version) {

this.version = version;

}

public Date getCreatedAt() {

return createdAt;

}

public void setCreatedAt(Date createdAt) {

this.createdAt = createdAt;

}

public Date getUpdatedAt() {

return updatedAt;

}

public void setUpdatedAt(Date updatedAt) {

this.updatedAt = updatedAt;

}

@PrePersist

void createdAt() {

this.createdAt = new Date();

}

@PreUpdate

void updatedAt() {

this.updatedAt = new Date();

}

}

~\*~\*Repository\*~\*~\*~

package com.codingdojo.grouplanguages.repositories;

import java.util.List;

import org.springframework.data.repository.CrudRepository;

import org.springframework.stereotype.Repository;

import com.codingdojo.grouplanguages.models.Language;

@Repository

public interface LanguageRepository extends CrudRepository<Language, Long>{

List<Language> findAll();

}

~\*~\*~\*services\*~\*~\*

package com.codingdojo.grouplanguages.services;

import java.util.List;

import org.springframework.stereotype.Service;

import com.codingdojo.grouplanguages.models.Language;

import com.codingdojo.grouplanguages.repositories.LanguageRepository;

@Service

public class LanguageService {

private LanguageRepository languageRepo;

public LanguageService(LanguageRepository languageRepo) {

this.languageRepo = languageRepo;

}

public List<Language> getLanguages() {

return languageRepo.findAll();

}

public void addLanguage(Language lang) {

languageRepo.save(lang);

}

public Language getLanguage(Long id) {

return languageRepo.findOne(id);

}

public void updateLanguage(Language lang) {

languageRepo.save(lang);

}

public void deleteLanguage(Long id) {

languageRepo.delete(id);

}

}

~\*~\*~resources application.properties

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

spring.datasource.username=root

spring.datasource.password=root

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

spring.jpa.hibernate.ddl-auto=update

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

~\*~\*~static CSS\*~\*~~\*

.container {

padding-top: 50px;

width: 80%;

margin: 0 auto;

}

table {

width: 100%;

border-collapse: collapse;

}

th, td {

border: 1px solid black;

padding: 5px;

}

thead > tr {

background-color: #808080;

}

tr {

text-align: center;

}

tbody > tr:nth-child(even) {

background-color: #DCDCDC;

}

.form-container {

width: 50%;

margin: 0 auto;

}

.float {

float: right;

clear: both;

}

.input-size {

width: 25%;

}

input[type=submit] {

width: 20%;

}

.error {

color: red

}

.left-auto {

display: table;

margin-left: auto;

margin-right: 20%;

}

.left-auto > a {

margin-right: 15px;

}

~\*~\*~\*JSP\*~\*~\*~\*~\*

==index.jsp==

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

pageEncoding="ISO-8859-1"%>

<%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>

<%@ taglib prefix="form" uri="http://www.springframework.org/tags/form"%>

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">

<title>Languages</title>

<link rel="stylesheet" href="/css/style.css" />

</head>

<body>

<div class="container">

<table>

<thead>

<tr>

<th>Name</th>

<th>Creator</th>

<th>Version</th>

<th>Action</th>

</tr>

</thead>

<tbody>

<c:forEach var="lang" items="${languages}">

<tr>

<td>

<a href="/languages/${lang.id}"><c:out value="${lang.name}"/></a>

</td>

<td><c:out value="${lang.creator}"/></td>

<td><c:out value="${lang.version}"/></td>

<td>

<a href="/languages/edit/${lang.id}">Edit</a> |

<a href="/languages/delete/${lang.id}">Delete</a>

</td>

</tr>

</c:forEach>

</tbody>

</table>

<p class='error'><form:errors path="language.\*"/></p>

<div class="form-container">

<form:form action="/languages" method="POST" modelAttribute="language">

<p>

<form:label path="name" for="name">Name</form:label>

<form:input path="name" class="input-size float" type="text" name="name"/>

</p>

<p>

<form:label path="creator" for="creator">Creator</form:label>

<form:input path="creator" class="input-size float" type="text" name="creator"/>

</p>

<p>

<form:label path="version" for="version">Version</form:label>

<form:input path="version" class="input-size float" type="text" name="version"/>

</p>

<input class="float" type="submit" value="Submit" />

</form:form>

</div>

</div>

</body>

</html>

==edit.jsp==

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

pageEncoding="ISO-8859-1"%>

<%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>

<%@ taglib prefix="form" uri="http://www.springframework.org/tags/form"%>

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">

<title>Languages</title>

<link rel="stylesheet" href="/css/style.css" />

</head>

<body>

<div class="container">

<div class="left-auto">

<a href="/languages/delete/${id}">Delete</a>

<a href="/">Dashboard</a>

</div>

<p class='error'><form:errors path="language.\*"/></p>

<div class="form-container">

<form:form action="/languages/update/${id}" method="POST" modelAttribute="language">

<p>

<form:label path="name" for="name">Name</form:label>

<form:input path="name" class="input-size float" type="text" name="name"/>

</p>

<p>

<form:label path="creator" for="creator">Creator</form:label>

<form:input path="creator" class="input-size float" type="text" name="creator"/>

</p>

<p>

<form:label path="version" for="version">Version</form:label>

<form:input path="version" class="input-size float" type="text" name="version"/>

</p>

<input class="float" type="submit" value="Update" />

</form:form>

</div>

</div>

</body>

</html>

==show.jsp==

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

pageEncoding="ISO-8859-1"%>

<%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>

<%@ taglib prefix="form" uri="http://www.springframework.org/tags/form"%>

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">

<title>Languages</title>

<link rel="stylesheet" href="/css/style.css" />

</head>

<body>

<div class="container">

<p class="float"><a href="/">Dashboard</a></p><br />

<p><c:out value="${language.name}"/></p>

<p><c:out value="${language.creator}"/></p>

<p><c:out value="${language.version}"/></p>

<p><c:out value="${language.creator}"/></p>

<p><a href="/languages/edit/${id}">Edit</a></p>

<p><a href="/languages/delete/${id}">Delete</a></p>

</div>

</body>

</html>