



硅谷课堂第七天-点播管理模块(一)

硅谷课堂第七天-点播管理模块(一)

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一、后台管理系统-点播管理模块

1、点播管理模块需求

添加点播课程,包含课程基本信息,课程章节,课程小结和最终发布

发布新课程

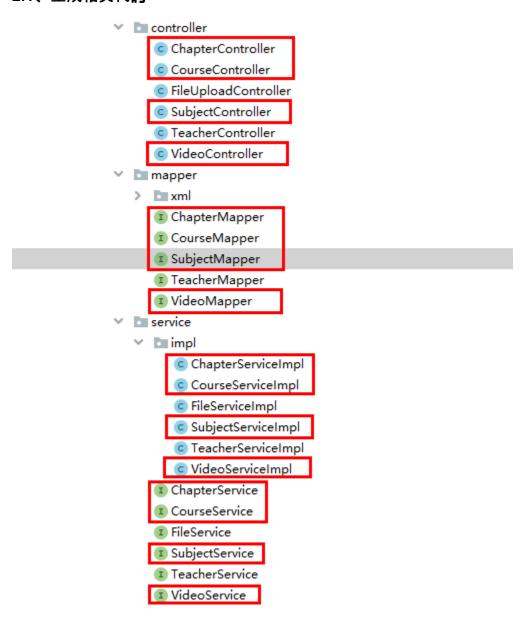
〇 填写课程基本信息	〇 创建课程大纲	>	〇 发布课程

1.1、创建课程相关表



2、环境搭建

2.1、生成相关代码



3、功能实现-课程列表

实现分**页**条件**查询**点播**课**程功能



3.1、开发课程列表接口

编写 CourseController

```
@Api(tags = "课程管理接口")
@RestController
@RequestMapping(value="/admin/vod/course")
public class CourseController {
   @Autowired
    private CourseService courseService;
   @ApiOperation(value = "获取分页列表")
   @GetMapping("{page}/{limit}")
    public Result index
           @ApiParam(name = "page", value = "当前页码", required = true)
           @PathVariable Long page,
           @ApiParam(name = "limit", value = "每页记录数", required = true)
           @PathVariable Long limit,
           @ApiParam(name = "courseVo", value = "查询对象", required = false)
                   CourseQueryVo courseQueryVo) {
       Page<Course> pageParam = new Page<>(page, limit);
       Map<String,Object> map = courseService.findPage(pageParam, courseQueryVo);
       return Result.ok(map);
```

编写 CourseService

编写 CourseServiceImpl

```
@Service
public class CourseServiceImpl extends ServiceImpl<CourseMapper, Course> implements CourseService
   private TeacherService teacherService;
   @Autowired
   private SubjectService;
   @Override
   public Map<String.Object> findPage(Page<Course> pageParam, CourseQueryVo courseQueryVo) {
       String title = courseQueryVo.getTitle();//名称
       Long subjectId = courseQueryVo.getSubjectId();//二级分类
       Long subjectParentId = courseQueryVo.getSubjectParentId();//一级分类
       Long teacherId = courseQueryVo.getTeacherId();//讲师
       QueryWrapper<Course> wrapper = new QueryWrapper<>();
       if(!StringUtils.isEmpty(title)) {
           wrapper.like("title",title);
       if(!StringUtils.isEmpty(subjectId)) {
           wrapper.eq("subject_id",subjectId);
       if(!StringUtils.isEmpty(subjectParentId)) {
           wrapper.eq("subject_parent_id",subjectParentId);
       if(!StringUtils.isEmpty(teacherId)) {
           wrapper.eq("teacher id",teacherId);
       Page < Course > pages = baseMapper.selectPage(pageParam, wrapper);
       long totalCount = pages.getTotal();//总记录数
       long totalPage = pages.getPages();//总页数
       long currentPage = pages.getCurrent();//当前页
       long size = pages.getSize();//每页记录数
```

```
List<Course> records = pages.getRecords();
    records.stream().forEach(item -> {
        this.getTeacherOrSubjectName(item);
   Map<String,Object> map = new HashMap<>();
   map.put("totalCount", totalCount);
   map.put("totalPage",totalPage);
   map.put("records", records);
   return map;
private Course getTeacherOrSubjectName(Course course) {
    Teacher teacher = teacherService.getById(course.getTeacherId());
    if(teacher != null) {
       course.getParam().put("teacherName",teacher.getName());
    Subject subjectOne = subjectService.getById(course.getSubjectParentId());
    if(subjectOne != null) {
        course.getParam().put("subjectParentTitle",subjectOne.getTitle());
    Subject subjectTwo = subjectService.getById(course.getSubjectId());
    if(subjectTwo != null) {
       course.getParam().put("subjectTitle",subjectTwo.getTitle());
   return course;
```

3.2、开发课程列表前端

(1) src 目录下 index.js 文件添加路由

```
path: '/vod',
component: Layout,
redirect: '/vod/course/list',
name: 'Vod',
meta: {
 title: '点播管理',
 icon: 'el-icon-bank-card'
alwaysShow: true,
children: [
    path: 'course/list',
    name: 'CourseList',
    component: () => import('@/views/vod/course/list'),
    meta: { title: '课程列表' }
    path: 'course/info',
    name: 'CourseInfo',
    component: () => import('@/views/vod/course/form'),
    meta: { title: '发布课程' },
    hidden: true
    path: 'course/info/:id',
    name: 'CourseInfoEdit',
    component: () => import('@/views/vod/course/form'),
    meta: { title: '编辑课程' },
    hidden: true
    path: 'course/chapter/:id',
    name: 'CourseChapterEdit',
    component: () => import('@/views/vod/course/form'),
    meta: { title: '编辑大纲' },
```

```
hidden: true
},
{
    path: 'course/chart/:id',
    name: 'CourseChart',
    component: () => import('@/views/vod/course/chart'),
    meta: { title: '课程统计' },
    hidden: true
}
]
},
```

(2) 创建 vue 页面



(3) 在 api 目录创建 course.js 文件

```
import request from "@/utils/request";

const api_name = "/admin/vod/course";

export default {
    //课程列表
    getPageList(page, limit, searchObj) {
        return request({
          url: `${api_name}/${page}/${limit}`,
          method: "get",
        params: searchObj,
        });
    },
};
```

(4) 在 api 目录 teacher.js 文件定义接口

```
import request from "@/utils/request";

const api_name = "/admin/vod/teacher";

export default {
    //所有讲师
    list() {
        return request({
            url: `${api_name}/findAll`,
            method: `get`,
        });
    },
};
```

(5) 编写 list.vue 页面

```
<div class="app-container">
 <el-card class="operate-container" shadow="never">
   <el-form :inline="true" class="demo-form-inline">
     <el-form-item label="课程类别">
         v-model="searchObj.subjectParentId"
         placeholder="请选择"
         @change="subjectLevelOneChanged"
         <el-option
           :key="subject.id"
           :label="subject.title"
           :value="subject.id"
       </el-select>
       <el-select v-model="searchObj.subjectId" placeholder="请选择">
         <el-option
           :key="subject.id"
           :label="subject.title"
           :value="subject.id"
       </el-select>
     </el-form-item>
     <el-form-item label="标题">
       <el-input v-model="searchObj.title" placeholder="课程标题" />
     </el-form-item>
```

```
<el-form-item label="讲师">
     <el-select v-model="searchObj.teacherId" placeholder="请选择讲师">
         v-for="teacher in teacherList"
         :key="teacher.id"
         :label="teacher.name"
         :value="teacher.id"
     </el-select>
   </el-form-item>
   <el-button type="primary" icon="el-icon-search" @click="fetchData()"
     >查询</el-button
   <el-button type="default" @click="resetData()">清空</el-button>
 </el-form>
</el-card>
<el-card class="operate-container" shadow="never">
 <i class="el-icon-tickets" style="margin-top: 5px"></i>
 <span style="margin-top: 5px">数据列表</span>
 <el-button class="btn-add" @click="add()">添加</el-button>
</el-card>
<el-table :data="list" border stripe>
 <el-table-column label="#" width="50">
   <template slot-scope="scope">
     {{ (page - 1) * limit + scope.$index + 1 }}
 </el-table-column>
 <el-table-column label="封面" width="200" align="center">
   <template slot-scope="scope">
     <img :src="scope.row.cover" alt="scope.row.title" width="100%" />
```

```
</el-table-column>
<el-table-column label="课程信息">
 <template slot-scope="scope">
   <a href="">{{ scope.row.title }}</a>
     分类: {{ scope.row.param.subjectParentTitle }} > {{
     scope.row.param.subjectTitle }}
     课时: {{ scope.row.lessonNum }} / 浏览: {{ scope.row.viewCount }} /
     付费学员: {{ scope.row.buyCount }}
   </el-table-column>
<el-table-column label="讲师" width="100" align="center">
 <template slot-scope="scope">
   {{ scope.row.param.teacherName }}
 </template>
</el-table-column>
<el-table-column label="价格(元)" width="100" align="center">
 <template slot-scope="scope">
   <el-tag v-if="Number(scope.row.price) === 0" type="success"</pre>
     >免费</el-tag
   <el-tag v-else>{{ scope.row.price }}</el-tag>
</el-table-column>
```

```
prop="status"
 label="课程状态"
 width="100"
 align="center"
 <template slot-scope="scope">
   <el-tag :type="scope.row.status === 0 ? 'warning' : 'success'"</pre>
     >{{ scope.row.status === 0 ? "未发布" : "已发布" }}</el-tag
</el-table-column>
<el-table-column label="发布时间" width="140" align="center">
 <template slot-scope="scope">
   {{ scope.row.createTime ? scope.row.createTime.substr(0, 16) : "" }}
</el-table-column>
<el-table-column label="操作" width="210" align="center">
 <template slot-scope="scope">
   <router-link :to="'/vodcourse/course/info/' + scope.row.id">
     <el-button type="text" icon="el-icon-edit">修改</el-button>
   </router-link>
   <router-link :to="'/vodcourse/course/chapter/' + scope.row.id">
     <el-button type="text" icon="el-icon-edit">编辑大纲</el-button>
   </router-link>
   <router-link :to="'/vodcourse/course/chart/' + scope.row.id">
     <el-button type="text" icon="el-icon-edit">课程统计</el-button>
   </router-link>
   <el-button
     type="text"
     icon="el-icon-delete"
     @click="removeById(scope.row.id)"
     >删除</el-button
 </template>
</el-table-column>
```

```
</el-table>
 <el-pagination
   :current-page="page"
   :total="total"
   :page-size="limit"
   :page-sizes="[5, 10, 20, 30, 40, 50, 100]"
   style="padding: 30px 0; text-align: center;"
   layout="total, sizes, prev, pager, next, jumper"
   @size-change="changePageSize"
   @current-change="changeCurrentPage"
</div>
import courseApi from "@/api/vod/course";
import teacherApi from "@/api/vod/teacher";
import subjectApi from "@/api/vod/subject";
export default {
 data() {
   return (
     list: [], // 课程列表
     total: 0, // 总记录数
     page: 1, // 页码
     limit: 10, // 每页记录数
     searchObj: {
      subjectId: "", // 解决查询表单无法选中二级类别
     teacherList: [], // 讲师列表
     subjectList: [], // 一级分类列表
     subjectLevelTwoList: [], // 二级分类列表,
```

```
created() {
  this.fetchData();
  this.initSubjectList();
  this.initTeacherList();
methods: {
  fetchData() {
      .getPageList(this.page, this.limit, this.searchObj)
      .then((response) => {
        this.list = response.data.records;
        console.log(this.list);
        this.total = response.data.totalCount;
  initTeacherList() {
    teacherApi.list().then((response) => {
      this.teacherList = response.data;
  initSubjectList() {
    subjectApi.getChildList(0).then((response) => {
      this.subjectList = response.data;
  subjectLevelOneChanged(value) {
    subjectApi.getChildList(value).then((response) => {
      this.subjectLevelTwoList = response.data;
      this.searchObj.subjectId = "";
```

```
add() {
 this.$router.push({ path: "/vod/course/info" });
changePageSize(size) {
this.limit = size;
this.fetchData();
changeCurrentPage(page) {
this.page = page;
this.fetchData();
resetData() {
this.searchObj = {};
 this.subjectLevelTwoList = []; // 二级分类列表
 this.fetchData();
```

二、发布课程-填写课程基本信息

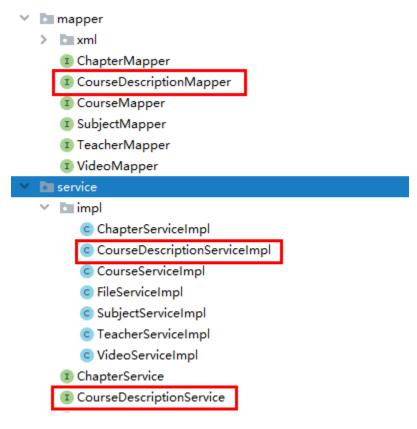
1、界面效果

发布新课程

〇 填写	课程基本信息	> 0	创建课程大纲	>	〇 发布课程
课程标题	示例: 机器学习项目课: 从基	础到搭建项目视频课程。专	业名称注意大小写		
课程讲师	请选择				
课程类别	请选择	请选择	~		
总课时	0 ^				
课程简介					

2、添加课程基本信息接口

2.1、创建课程描述的 service 和 mapper



2.2、创建添加课程基本信息接口

(1) controller

```
//添加课程基本信息
@ApiOperation(value = "新增")
@PostMapping("save")
public Result save(@RequestBody CourseFormVo courseFormVo) {
    Long courseId = courseService.saveCourseInfo(courseFormVo);
    return Result.ok(courseId);
}
```

(2) service

```
//实现方法
//添加课程基本信息
@Override
public Long saveCourseInfo(CourseFormVo courseFormVo) {
    //保存课程基本信息
    Course course = new Course();
    BeanUtils.copyProperties(courseFormVo, course);
    baseMapper.insert(course);

    //保存课程详情信息
    CourseDescription courseDescription = new CourseDescription();
    courseDescription.setDescription(courseFormVo.getDescription());
    courseDescription.setCourseId(course.getId());
    descriptionService.save(courseDescription);

    //返回课程id
    return course.getId();
}
```

3、添加课程基本信息前端

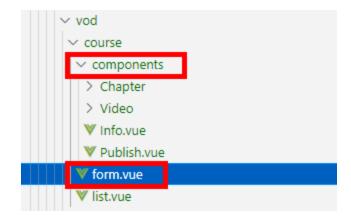
3.1、课程列表 list.vue 添加方法

```
add() {
    this.$router.push({ path: '/vod/course/info' })
},
```

3.2、course.js 定义接口

```
//添加课程基本信息
saveCourseInfo(courseInfo) {
  return request({
    url: `${api_name}/save`,
    method: 'post',
    data: courseInfo
  })
},
```

3.3、创建课程基本信息添加页面



(1) form.vue

```
<div class="app-container">
  <h2 style="text-align: center;">发布新课程</h2>
    :active="active"
    finish-status="success"
    simple
    style="margin-bottom: 40px"
    <el-step title="填写课程基本信息" />
    <el-step title="创建课程大纲" />
   <el-step title="发布课程" />
  <info v-if="active === 0" />
  <chapter v-if="active === 1" />
</div>
import Info from "@/views/vod/course/components/Info";
import Chapter from "@/views/vod/course/components/Chapter";
import Publish from "@/views/vod/course/components/Publish";
  components: { Info, Chapter, Publish }, // 注册子组件
  data() {
   return
     active: 0,
     courseId: null,
  },
  created() {
```

```
// 获取路由id
if (this.$route.params.id) {
    this.courseId = this.$route.params.id;
}
if (this.$route.name === "CourseInfoEdit") {
    this.active = 0;
}
if (this.$route.name === "CourseChapterEdit") {
    this.active = 1;
}
};
</script>
```

(2) Info.vue

```
<div class="app-container">
 <el-form label-width="120px">
   <el-form-item label="课程标题">
       v-model="courseInfo.title"
       placeholder="示例: 机器学习项目课: 从基础到搭建项目视频课程。专业名称注意大小写"
   </el-form-item>
   <el-form-item label="课程讲师">
     <el-select v-model="courseInfo.teacherId" placeholder="请选择">
       <el-option
         v-for="teacher in teacherList"
         :key="teacher.id"
         :label="teacher.name"
     </el-select>
   </el-form-item>
   <el-form-item label="课程类别">
       v-model="courseInfo.subjectParentId"
       placeholder="请选择"
       @change="subjectChanged"
       <el-option
         :label="subject.title"
         :value="subject.id"
     </el-select>
```

```
<el-select v-model="courseInfo.subjectId" placeholder="请选择">
   <el-option
     v-for="subject in subjectLevelTwoList"
     :key="subject.id"
     :label="subject.title"
     :value="subject.id"
 </el-select>
</el-form-item>
<el-form-item label="总课时">
   :min="0"
   v-model="courseInfo.lessonNum"
   controls-position="right"
   placeholder="请填写课程的总课时数"
</el-form-item>
<el-form-item label="课程简介">
 <el-input v-model="courseInfo.description" type="textarea" rows="5" />
</el-form-item>
<el-form-item label="课程封面">
 <el-upload
   :show-file-list="false"
   :on-success="handleCoverSuccess"
   :before-upload="beforeCoverUpload"
   :on-error="handleCoverError"
   :action="BASE_API + '/admin/vod/file/upload?module=cover'"
   class="cover-uploader"
</el-form-item>
<el-form-item label="课程价格">
```

```
:min="0"
       controls-position="right"
       placeholder="免费课程请设置为0元"
    </el-form-item>
  </el-form>
  <div style="text-align:center">
    <el-button
     :disabled="saveBtnDisabled"
     type="primary"
     @click="saveAndNext()"
     >保存并下一步</el-button
  </div>
import courseApi from "@/api/vod/course";
import teacherApi from "@/api/vod/teacher";
import subjectApi from "@/api/vod/subject";
export default {
 data() {
   return
     BASE_API: "http://localhost:8301",
     saveBtnDisabled: false, // 按钮是否禁用
     courseInfo: {
       price: 0,
       lessonNum: ∅,
       teacherId: "",
       subjectId: "",
       subjectParentId: "",
```

```
cover: "",
     description: "",
   teacherList: [], // 讲师列表
   subjectList: [], // 一级分类列表
   subjectLevelTwoList: [], // 二级分类列表
created() {
  this initSubjectList();
  this.initTeacherList();
methods: {
 initTeacherList() {
   teacherApi.list().then((response) => {
      this.teacherList = response.data;
  initSubjectList() {
   subjectApi.getChildList(0).then((response) => {
     this.subjectList = response.data;
  subjectChanged(value) {
   subjectApi.getChildList(value).then((response) => {
      this.courseInfo.subjectId = "";
      this.subjectLevelTwoList = response.data;
```

```
handleCoverSuccess(res, file) {
 this.courseInfo.cover = res.data;
beforeCoverUpload(file) {
 const isJPG = file.type === "image/jpeg";
  const isLt2M = file.size / 1024 / 1024 < 2;</pre>
  if (!isJPG) {
    this.$message.error("上传头像图片只能是 JPG 格式!");
  if (!isLt2M) {
   this.$message.error("上传头像图片大小不能超过 2MB!");
 return isJPG && isLt2M;
handleCoverError() {
 console.log("error");
 this.$message.error("上传失败2");
saveAndNext() {
 this.saveBtnDisabled = true;
 if (!this.$parent.courseId) {
   this saveData();
 } else {
saveData() {
```

```
courseApi.saveCourseInfo(this.courseInfo).then((response) => {
    this.$message.success(response.message);
    this.$parent.courseId = response.data; // 获取courseId
    this.$parent.active = 1; // 下一步
    });
    },
};
</script>
```

三、发布课程-修改课程基本信息

发布新课程



- 1、修改课程基本信息接口
- 1.1、CourseService 定义方法

```
//根据id获取课程信息
CourseFormVo getCourseFormVoById(Long id);

//根据id修改课程信息
void updateCourseById(CourseFormVo courseFormVo);
```

1.2、CourseServiceImpl 实现方法

```
public CourseFormVo getCourseFormVoById(Long id) {
    Course course = baseMapper.selectById(id);
    if(course == null){
       return null
    CourseDescription courseDescription = descriptionService.getById(id);
    CourseFormVo courseFormVo = new CourseFormVo();
    BeanUtils.copyProperties(course, courseFormVo);
    if(courseDescription != null){
       courseFormVo.setDescription(courseDescription.getDescription());
   return courseFormVo;
public void updateCourseById(CourseFormVo courseFormVo) {
    Course course = new Course();
    BeanUtils.copyProperties(courseFormVo, course);
    baseMapper.updateById(course);
    CourseDescription courseDescription = descriptionService.getById(course.getId());
    courseDescription.setDescription(courseFormVo.getDescription());
   description.setId(course.getId());
   descriptionService.updateById(courseDescription);
```

1.3、CourseController 实现方法

```
@ApiOperation(value = "获取")
@GetMapping("get/{id}")
public Result get(@PathVariable Long id) {
    CourseFormVo course = courseService.getCourseFormVoById(id);
    return Result.ok(course);
}

@ApiOperation(value = "修改")
@PutMapping("update")
public Result updateById(@RequestBody CourseFormVo courseFormVo) {
    courseService.updateCourseById(courseFormVo);
    return Result.ok();
}
```

2、修改课程基本信息前端

2.1、course.js 定义方法

```
//id获取课程信息
getCourseInfoById(id) {
    return request({
        url: `${api_name}/get/${id}`,
        method: 'get'
    })
},
//修改课程信息
updateCourseInfoById(courseInfo) {
    return request({
        url: `${api_name}/update`,
        method: 'put',
        data: courseInfo
    })
},
```

2.2、修改 Info.vue 页面

```
created() {
    if (this.$parent.courseId) { // 回显
      this.fetchCourseInfoById(this.$parent.courseId)
   } else { // 新增
     this initSubjectList()
   this.initTeacherList()
 methods: {
    fetchCourseInfoById(id) {
      courseApi.getCourseInfoById(id).then(response => {
        this.courseInfo = response.data
       subjectApi.getChildList(0).then(response => {
          this.subjectList = response.data
          this.subjectList.forEach(subject => {
            if (subject.id === this.courseInfo.subjectParentId) {
             subjectApi.getChildList(subject.id).then(response => {
               this.subjectLevelTwoList = response.data
    saveAndNext() {
      this.saveBtnDisabled = true
      if (!this.$parent.courseId) {
```

```
this.saveData()
} else {
    this.updateData()
}

},

// 修改
updateData() {
    courseApi.updateCourseInfoById(this.courseInfo).then(response => {
        this.$message.success(response.message)
        this.$parent.courseId = response.data // 获取courseId
        this.$parent.active = 1 // 下一步
    })
},
}
</script>
```

2.3、创建 Chapter-index.vue 页面



```
<div class="app-container">
 <div style="text-align:center">
   <el-button type="primary" @click="prev()">上─歩</el-button>
   <el-button type="primary" @click="next()">下一步</el-button>
 </div>
</div>
export default {
  data() {
  created() {},
 methods: {
   prev() {
    this.$parent.active = 0;
   next() {
    this.$parent.active = 2;
```