

**软**

**件**

**工**

**程**

**课**

**程**

**设**

**计**

**报**

**告**

**班 级： 计卓1701班**

**组 员：范 程（41709310120）后端开发**

**马新航（41709310115）前端页面设计**

**李 宽（41709310114）数据库设计**

**淡 瑞（41709310131）UML及实验报告**

# **目录**

[一、 实验题目 2](#_Toc16835)

[二、 实验要求 2](#_Toc24045)

[三、 实验目的 2](#_Toc52)

[四、 实验方法 2](#_Toc19711)

[五、 系统分析 3](#_Toc17388)

[六、 系统设计 7](#_Toc7848)

[七、 测试分析 10](#_Toc2459)

[八、 心得体会 14](#_Toc27194)

1. 实验题目

**课表编制及查询**

能够编制课程表，对每个用户的课表进行编辑、查询，能够统计出某日有多少人同时在上一个课程。

1. 实验要求
2. 对题目的需求分析：利用UML，进行对题目的用例分析，绘制用例图、活动图或时序图。
3. 对题目进行结构分析：利用UML，绘制题目相关的类图、部署图、数据库ER图。
4. 对题目进行编程开发，实现题目要求内容。
5. 对题目形成的软件系统进行测试。
6. 对题目实验过程书写实验报告。
7. **实验目的**

通过本课程的学习进一步理解面向对象程序设计的思想，掌握高级语言应用开发方法和技术，培养自身解决实际问题的能力。通过实际项目的训练，了解软件开发流程，熟悉开发文档标准，掌握企业主流的软件分析、设计、编码及测试的工具，增强工程实践能力。同时，加强自身的团队合作意识、团队协作能力。

1. **实验方法**

后端：Nodejs；

前端：HTML+CSS+JS+AJAX；

数据库设计：MySQL；

UML：Enterprise Architect。

1. **系统分析**
2. **需求分析**
3. 学生用户

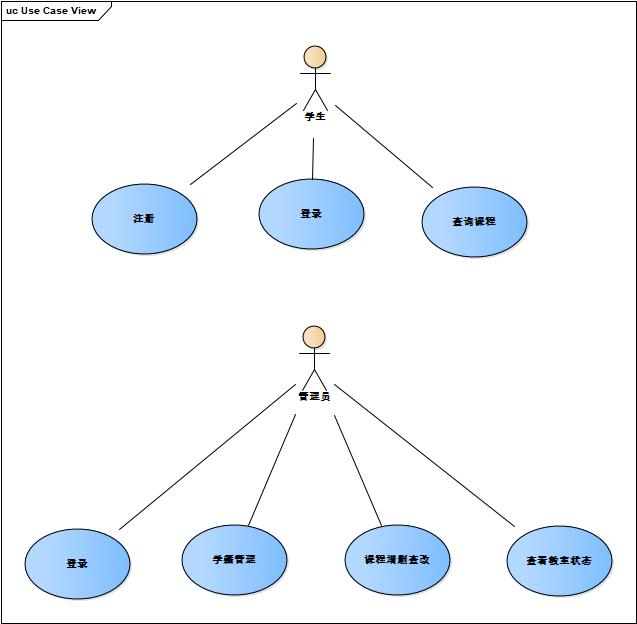
* 注册：正确填写信息之后可以完成注册；
* 登录：正确输入账号密码方可进入课表查询界面；
* 查看本专业课表：在查询界面点击查询即可查看本专业课表安排；

1. 管理员用户

* 登录：正确输入账号密码方可进入管理员界面；
* 学籍管理：学生学籍的查询、修改、删除等操作；
* 课表管理：不同专业课表的查询、修改、删除等操作；
* 教师状态信息查询：在安排课程时可以查询教室的空闲状态再进行课程安排；

1. **系统的UNL分析**
2. 用例图

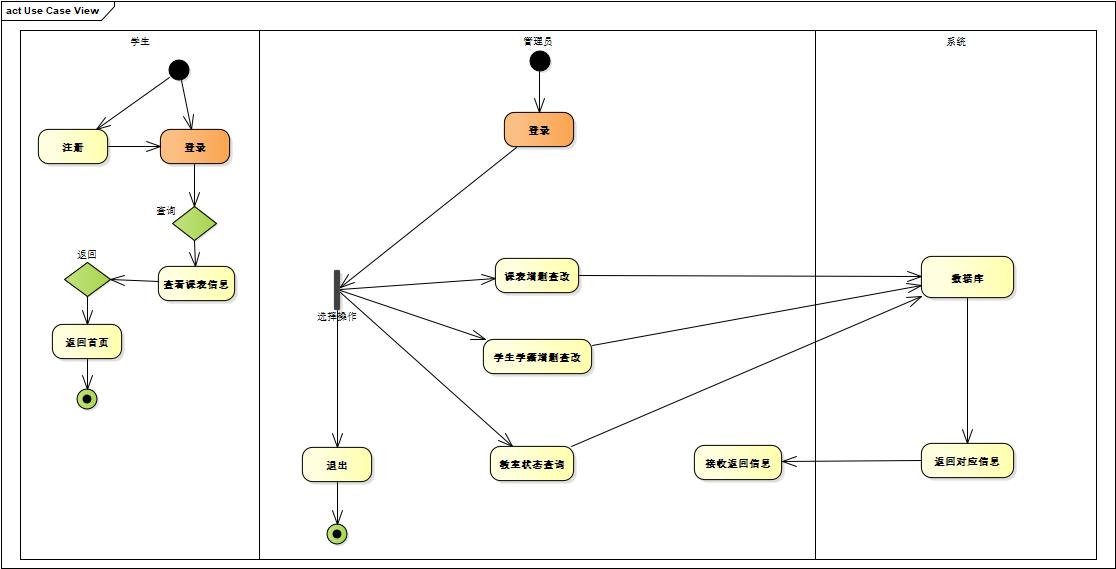
用例图是指由参与者（Actor）、[用例](https://baike.baidu.com/item/%E7%94%A8%E4%BE%8B/163511" \t "https://baike.baidu.com/item/%E7%94%A8%E4%BE%8B%E5%9B%BE/_blank)（Use Case），边界以及它们之间的关系构成的用于描述系统功能的视图。用例图（User Case）是外部用户（被称为参与者）所能观察到的系统功能的模型图。用例图是系统的蓝图。用例图呈现了一些参与者，一些用例，以及它们之间的关系，主要用于对系统、子系统或类的功能行为进行[建模](https://baike.baidu.com/item/%E5%BB%BA%E6%A8%A1/814831" \t "https://baike.baidu.com/item/%E7%94%A8%E4%BE%8B%E5%9B%BE/_blank)。



1. 活动图

是状态图的一种特殊情况，这些状态大都处于活动状态。本质是一种流程图，它描述了活动到活动的控制流。交互图强调的是对象到对象的控制流，而活动图则强调的是从活动到活动的控制流。活动图是一种表述过程基理、业务过程以及工作流的技术。它可以用来对业务过程、工作流建模，也可以对用例实现甚至是程序实现来建模。

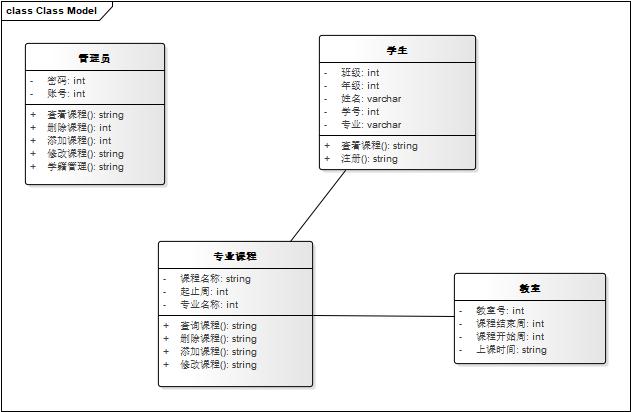
可以使用垂直实线将活动图划分为泳道。每条泳道代表整个工作流程的某个部分的职责，该职责由组织的某个部门来执行。泳道最终可以由组织单元或者业务对象模型中的一组类来实施。泳道之间的排序并不会影响语义。每个活动状态都指派了一条泳道，而转移则可能跨越数条泳道。



1. 类图

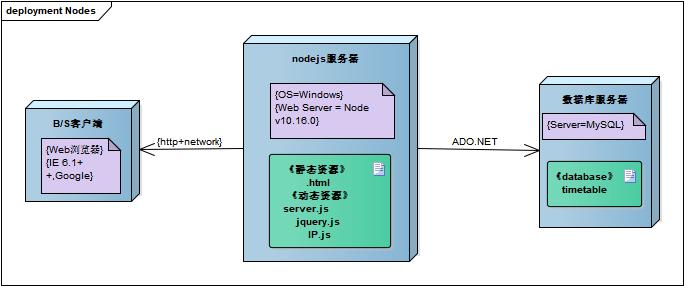
显示了模型的静态结构，特别是模型中存在的类、类的内部结构以及它们与其他类的关系等。类图不显示暂时性的信息。类图是面向对象建模的主要组成部分。它既用于应用程序的系统分类的一般概念建模，也用于详细建模，将模型转换成编程代码。类图也可用于数据建模。

用户根据用例图抽象成类，描述类的内部结构和类与类之间的关系，是一种静态结构图。在UML类图中，常见的有以下几种关系: 泛化（Generalization）,实现（Realization），关联（Association)，聚合（Aggregation），组合(Composition)，依赖(Dependency)。各种关系的强弱顺序：泛化 = 实现 > 组合 > 聚合 > 关联 > 依赖



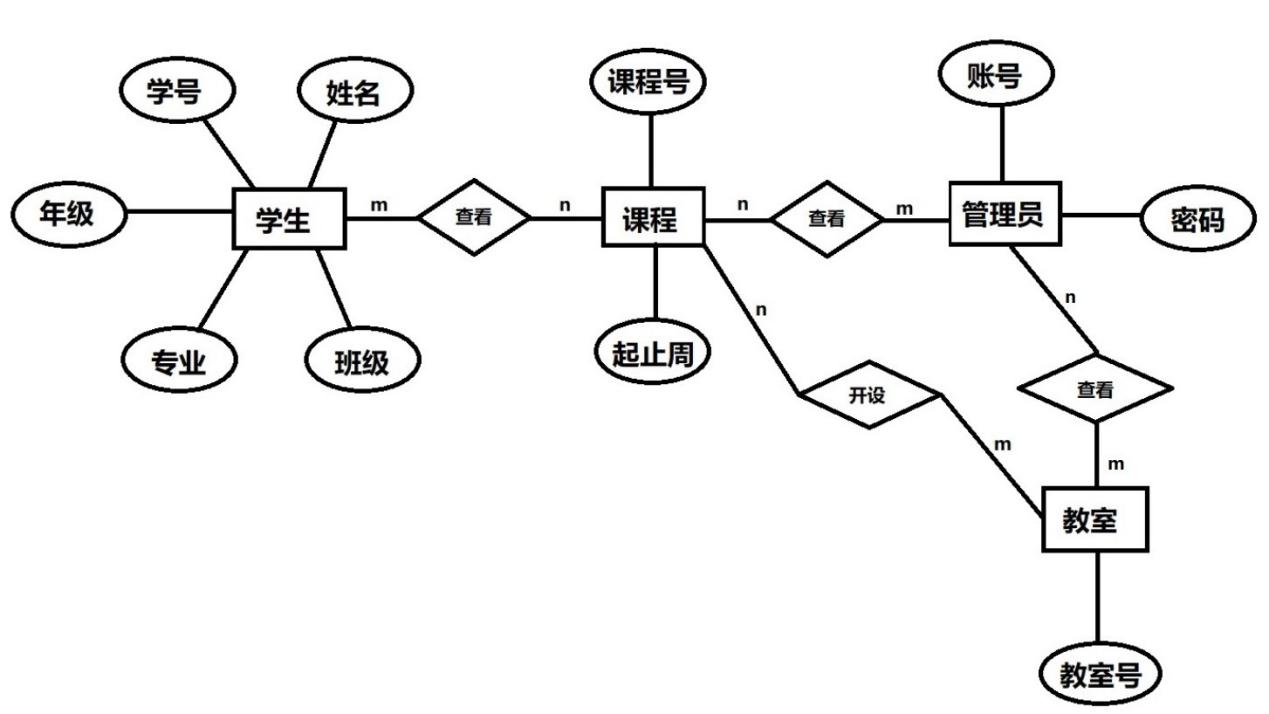
1. 部署图

描述了系统运行时进行处理的结点以及在结点上活动的构件的配置。强调了物理设备以及之间的连接关系。用来显示系统中软件和硬件的物理架构。从部署图中，您可以了解到软件和硬件组件之间的物理关系以及处理节点的组件分布情况。使用部署图可以显示运行时系统的结构，同时还传达构成应用程序的硬件和软件元素的配置和部署方式。



1. E-R图
2. R图也称实体-联系图(Entity Relationship Diagram)，提供了表示实体类型、属性和联系的方法，用来描述现实世界的[概念模型](https://baike.baidu.com/item/%E6%A6%82%E5%BF%B5%E6%A8%A1%E5%9E%8B/3187025" \t "https://baike.baidu.com/item/E-R%E5%9B%BE/_blank)。它是描述现实世界关系概念模型的有效方法。是表示概念关系模型的一种方式。

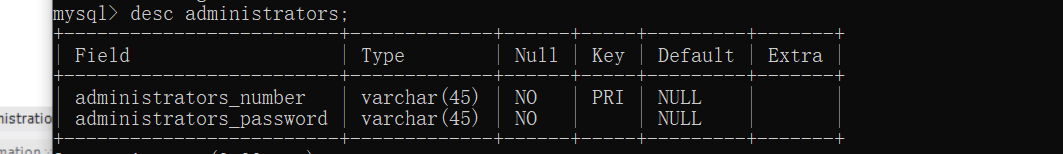
用“矩形框”表示实体型，矩形框内写明实体名称；用“椭圆图框”或圆角矩形表示实体的属性，并用“实心线段”将其与相应关系的“实体型”连接起来；用”菱形框“表示实体型之间的联系成因，在[菱形](https://baike.baidu.com/item/%E8%8F%B1%E5%BD%A2" \t "https://baike.baidu.com/item/E-R%E5%9B%BE/_blank)框内写明联系名，并用”实心线段“分别与有关实体型连接起来，同时在”实心线段“旁标上联系的类型（1:1,1:n或m:n）。



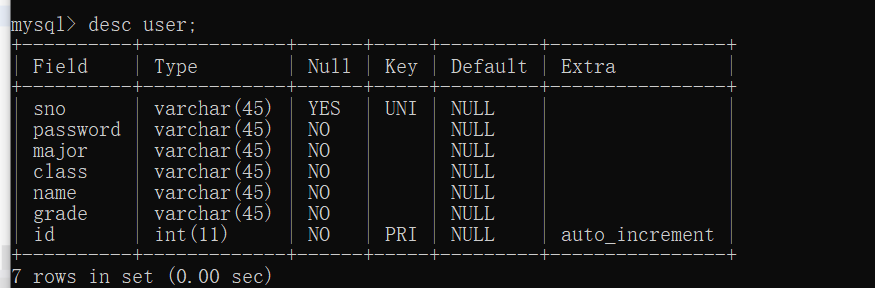
1. **系统设计**
2. 数据库设计

利用UML进行数据库设计；

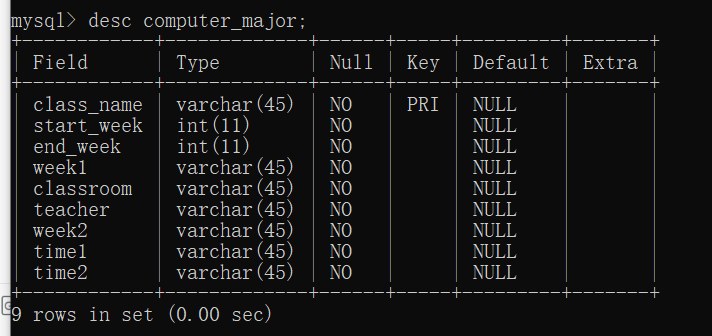
管理员表：

****

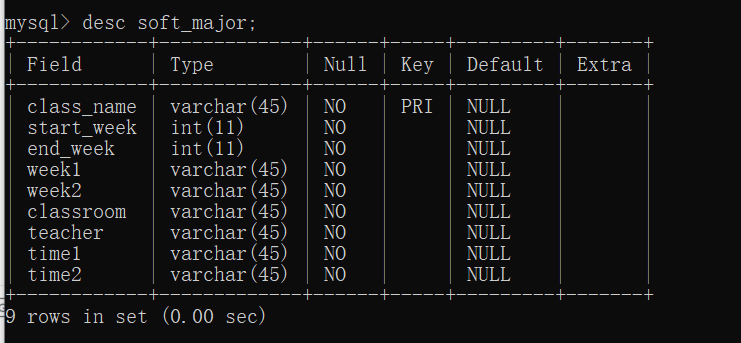
学生表：



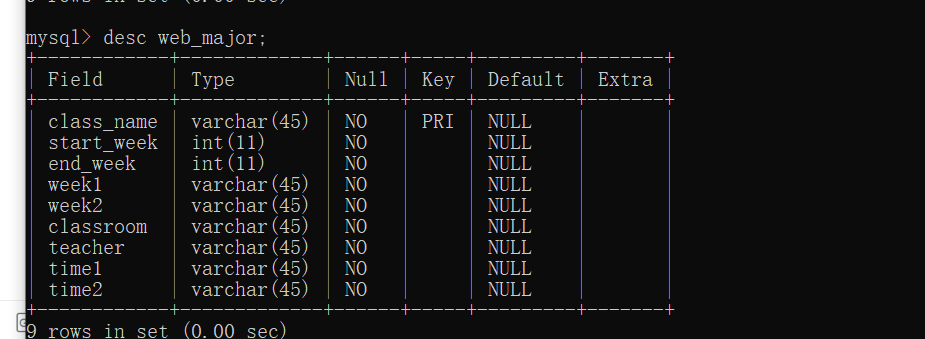
计科专业课表：



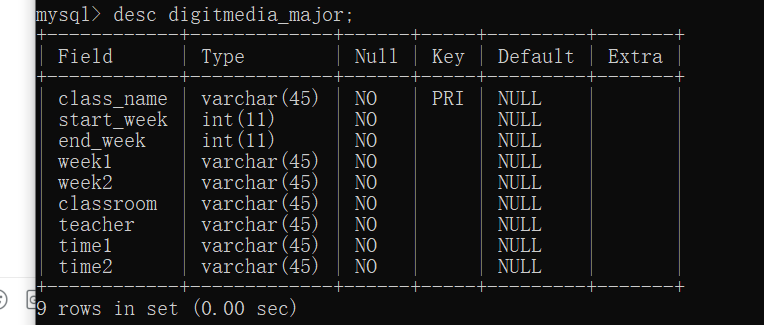
软件专业课表：



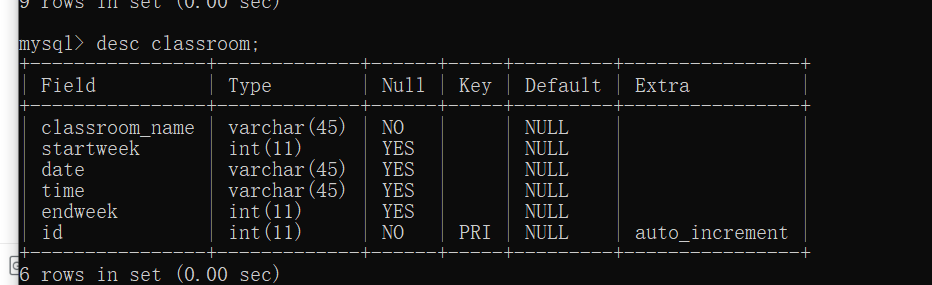
网络专业课表：



数媒专业课表：



教室状态图：



1. **后端开发（NodeJS）**

const http = require('http')

const mysql = require('mysql');

const url = require('url');

const fs = require('fs');

const querystring = require('querystring');

const express = require('express');

**//连接数据库服务器**

var db = mysql.createPool({

connectionLimit: 10,

host: 'localhost', user: 'root', password: '459659281', database: 'timetable' **//连接池**

});

http.createServer(function (req, res) {

res.setHeader('Access-Control-Allow-Origin', '\*');

var pathname = url.parse(req.url).pathname;

var query = url.parse(req.url).query;//解析用户请求路径

**//注册功能**

if (pathname == '/reg') {

var postdata = "";

req.on("data", function (postDataChunk) {

postdata += postDataChunk;

});

req.on("end", function () {

var params = querystring.parse(postdata);//GET & POST ////解释表单数据部分

var name = params.name

var password = params.password

var major = params.major

var class1 = params.class

var grade = params.grade

var sno="4"

sno+=grade

if(major=="计算机科学与技术"){

sno+="01"

}else if(major=="软件工程"){

sno+="02"

}else if(major=="网络工程"){

sno+="03"

}else if(major=="数字媒体技术"){

sno+="04"

}

sno+=class1

db.query

db.query(`insert into user(name,password,major,class,grade) values('${name}','${password}','${major}','${class1}','${grade}')`, function (err, data) {

console.log(err)

db.query(`select id from user where name='${name}'`, function (err, data1) {

sno+=data1[0].id

db.query(`update user set sno='${sno}'where id='${data1[0].id}'`, function (err, data) {

})

res.end(JSON.stringify({ status: "1", msg: "注册成功", sno: sno }))

})

})

})

}

**//登录功能**

if (pathname == '/login') {

var postdata = "";

req.on("data", function (postDataChunk) {

postdata += postDataChunk;

});

req.on("end", function () {

var params = querystring.parse(postdata);

var sno = params.sno

var password = params.password

db.query(`select sno,password,name,major from user where sno='${sno}'and password='${password}'`, function (err, data) {

if (data == "") {

res.end(JSON.stringify({ status: "-1" }))

} else {

res.end(JSON.stringify({ name: data[0].name, status: "1", major: data[0].major }))

}

})

})

}

**//管理员登录**

if (pathname == '/amlogin') {

var postdata = "";

req.on("data", function (postDataChunk) {

postdata += postDataChunk;

});

req.on("end", function () {

var params = querystring.parse(postdata);

var administrators\_number = params.administrators\_number

var administrators\_password = params.administrators\_password

db.query(`select administrators\_number,administrators\_password from administrators where administrators\_number='${administrators\_number}'and administrators\_password='${administrators\_password}'`, function (err, data) {

if (data == "") {

res.end(JSON.stringify({ status: "-1" }))

} else {

res.end(JSON.stringify({ status: "1" }))

}

})

})

}

**//添加课程**

if (pathname == '/class\_insert') {

var postdata = "";

req.on("data", function (postDataChunk) {

postdata += postDataChunk;

});

req.on("end", function () {

var params = querystring.parse(postdata);

var name = params.name

var startweek = params.startweek

var endweek = params.endweek

var major = params.major

var classroom = params.classroom

var teacher = params.teacher

var week = params.week

var time = params.time

if (major == "计算机科学与技术") {

db.query(`select week1,week2,time1,time2 from computer\_major where start\_week<='${startweek}' and'${startweek}'<end\_week and end\_week>='${endweek}'and '${endweek}'>start\_week and(week1='${week}'||week2='${week}')&& (time1='${time}'||time2='${time}')`, function (err, data) {

console.log(err)

if (data == "") {

db.query(`select week1,week2,time1,time2 from computer\_major where class\_name='${name}'`, function (err, data1) {

if ((data1 == "")) {

db.query(`insert into computer\_major(class\_name,start\_week,end\_week,week1,week2,classroom,teacher,time1,time2)values('${name}','${startweek}','${endweek}','${week}',' ','${classroom}','${teacher}','${time}',' ')`, function (err, data2) {

db.query(`insert into classroom(classroom\_name,startweek,endweek,date,time)values('${classroom}','${startweek}','${endweek}','${week}','${time}')`, function (err, data4) {

})

res.end(JSON.stringify({ status: "1", msg: "课程添加成功" }))

})

}

else if ((data1[0].week2 == " ") && ((data1[0].week1 != week && data1[0].time1 == time) || (data1[0].week1 == week && data1[0].time1 != time))) {

db.query(`update computer\_major set week2='${week}',time2='${time}'`, function (err, data2) {

res.end(JSON.stringify({ status: "1", msg: "课程添加成功" }))

db.query(`insert into classroom(classroom\_name,startweek,endweek,date,time)values('${classroom}','${startweek}','${endweek}','${week}','${time}')`, function (err, data4) {

})

})

} else {

res.end(JSON.stringify({ status: "-1", msg: "课程添加失败,该时间已有课程或已超过该课程最大数量" }))

}

})

} else {

res.end(JSON.stringify({ status: "-1", msg: "课程添加失败,该时间已有课程或已超过该课程最大数量" }))

}

})

}

if (major == "软件工程") {

db.query(`select week1,week2,time1,time2 from soft\_major where start\_week<'${startweek}' and'${startweek}'<end\_week and end\_week>'${endweek}'and '${endweek}'>start\_week and(week1='${week}'||week2='${week}')&& (time1='${time}'||time2='${time}')`, function (err, data) {

console.log(data)

if (data == "") {

db.query(`select week1,week2,time1,time2 from soft\_major where class\_name='${name}'`, function (err, data1) {

if ((data1 == "")) {

db.query(`insert into soft\_major(class\_name,start\_week,end\_week,week1,week2,classroom,teacher,time1,time2)values('${name}','${startweek}','${endweek}','${week}',' ','${classroom}','${teacher}','${time}',' ')`, function (err, data2) {

db.query(`insert into classroom(classroom\_name,startweek,endweek,date,time)values('${classroom}','${startweek}','${endweek}','${week}','${time}')`, function (err, data4) {

console.log(data4)

console.log(err)

})

res.end(JSON.stringify({ status: "1", msg: "课程添加成功" }))

})

}

else if ((data1[0].week2 == " ") || (data1[0].week1 != week && data1[0].time1 == time) || (data1[0].week1 == week && data1[0].time1 != time)) {

db.query(`update soft\_major set week2='${week}',time2='${time}'`, function (err, data2) {

res.end(JSON.stringify({ status: "1", msg: "课程添加成功" }))

db.query(`insert into classroom(classroom\_name,startweek,endweek,date,time)values('${classroom}','${startweek}','${endweek}','${week}','${time}')`, function (err, data4) {

console.log(data4)

console.log(err)

})

})

} else {

res.end(JSON.stringify({ status: "-1", msg: "课程添加失败,该时间已有课程或已超过该课程最大数量" }))

}

})

} else {

res.end(JSON.stringify({ status: "-1", msg: "课程添加失败,该时间已有课程或已超过该课程最大数量" }))

}

})

}

if (major == "网络工程") {

db.query(`select week1,week2,time1,time2 from web\_major where start\_week<'${startweek}' and'${startweek}'<end\_week and end\_week>'${endweek}'and '${endweek}'>start\_week and(week1='${week}'||week2='${week}')&& (time1='${time}'||time2='${time}')`, function (err, data) {

console.log(data)

if (data == "") {

db.query(`select week1,week2,time1,time2 from web\_major where class\_name='${name}'`, function (err, data1) {

if ((data1 == "")) {

db.query(`insert into web\_major(class\_name,start\_week,end\_week,week1,week2,classroom,teacher,time1,time2)values('${name}','${startweek}','${endweek}','${week}',' ','${classroom}','${teacher}','${time}',' ')`, function (err, data2) {

db.query(`insert into classroom(classroom\_name,startweek,endweek,date,time)values('${classroom}','${startweek}','${endweek}','${week}','${time}')`, function (err, data4) {

console.log(data4)

console.log(err)

})

res.end(JSON.stringify({ status: "1", msg: "课程添加成功" }))

})

}

else if ((data1[0].week2 == " ") || (data1[0].week1 != week && data1[0].time1 == time) || (data1[0].week1 == week && data1[0].time1 != time)) {

db.query(`update web\_major set week2='${week}',time2='${time}'`, function (err, data2) {

res.end(JSON.stringify({ status: "1", msg: "课程添加成功" }))

db.query(`insert into classroom(classroom\_name,startweek,endweek,date,time)values('${classroom}','${startweek}','${endweek}','${week}','${time}')`, function (err, data4) {

console.log(data4)

console.log(err)

})

})

} else {

res.end(JSON.stringify({ status: "-1", msg: "课程添加失败,该时间已有课程或已超过该课程最大数量" }))

}

})

} else {

res.end(JSON.stringify({ status: "-1", msg: "课程添加失败,该时间已有课程或已超过该课程最大数量" }))

}

})

}

if (major == "数字媒体技术") {

db.query(`select week1,week2,time1,time2 from digitmedia\_major where start\_week<'${startweek}' and'${startweek}'<end\_week and end\_week>'${endweek}'and '${endweek}'>start\_week and(week1='${week}'||week2='${week}')&& (time1='${time}'||time2='${time}')`, function (err, data) {

console.log(data)

if (data == "") {

db.query(`select week1,week2,time1,time2 from digitmedia\_major where class\_name='${name}'`, function (err, data1) {

if ((data1 == "")) {

db.query(`insert into digitmedia\_major(class\_name,start\_week,end\_week,week1,week2,classroom,teacher,time1,time2)values('${name}','${startweek}','${endweek}','${week}',' ','${classroom}','${teacher}','${time}',' ')`, function (err, data2) {

db.query(`insert into classroom(classroom\_name,startweek,endweek,date,time)values('${classroom}','${startweek}','${endweek}','${week}','${time}')`, function (err, data4) {

console.log(data4)

console.log(err)

})

res.end(JSON.stringify({ status: "1", msg: "课程添加成功" }))

})

}

else if ((data1[0].week2 == " ") || (data1[0].week1 != week && data1[0].time1 == time) || (data1[0].week1 == week && data1[0].time1 != time)) {

db.query(`update digitmedia\_major set week2='${week}',time2='${time}'`, function (err, data2) {

res.end(JSON.stringify({ status: "1", msg: "课程添加成功" }))

db.query(`insert into classroom(classroom\_name,startweek,endweek,date,time)values('${classroom}','${startweek}','${endweek}','${week}','${time}')`, function (err, data4) {

console.log(data4)

console.log(err)

})

})

} else {

res.end(JSON.stringify({ status: "-1", msg: "课程添加失败,该时间已有课程或已超过该课程最大数量" }))

}

})

} else {

res.end(JSON.stringify({ status: "-1", msg: "课程添加失败,该时间已有课程或已超过该课程最大数量" }))

}

})

}

})

}

**//删除课程**

if (pathname == '/class\_delete') {

var postdata = "";

req.on("data", function (postDataChunk) {

postdata += postDataChunk;

});

req.on("end", function () {

var params = querystring.parse(postdata);

var name = params.name

var major = params.major

if (major == "计算机科学与技术") {

db.query(`select class\_name from computer\_major where class\_name='${name}'`, function (err, data) {

if (data == "") {

res.end(JSON.stringify({ status: "-1", msg: "没有该课程,请核对后重试" }))

} else {

db.query(`select classroom,start\_week,end\_week from computer\_major where class\_name='${name}'`, function (err, data1) {

console.log(data1)

var startweek = data1[0].start\_week

var endweek = data1[0].end\_week

var classroom = data1[0].classroom

db.query(`delete from computer\_major where class\_name='${name}'`, function (err, data) {

db.query(`delete from classroom where classroom\_name='${classroom}'and startweek='${startweek}'and endweek='${endweek}'`, function (err, data) {

res.end(JSON.stringify({ status: "1", msg: "删除成功" }))

})

})

})

}

})

}

if (major == "软件工程") {

db.query(`select class\_name from soft\_major where class\_name='${name}'`, function (err, data) {

if (data == "") {

res.end(JSON.stringify({ status: "-1", msg: "没有该课程,请核对后重试" }))

} else {

db.query(`delete from soft\_major where class\_name='${name}'`, function (err, data) {

res.end(JSON.stringify({ status: "1", msg: "删除成功" }))

})

}

})

}

if (major == "网络工程") {

db.query(`select class\_name from web\_major where class\_name='${name}'`, function (err, data) {

if (data == "") {

res.end(JSON.stringify({ status: "-1", msg: "没有该课程,请核对后重试" }))

} else {

db.query(`delete from web\_major where class\_name='${name}'`, function (err, data) {

res.end(JSON.stringify({ status: "1", msg: "删除成功" }))

})

}

})

}

if (major == "数字媒体技术") {

db.query(`select class\_name from digitmedia\_major where class\_name='${name}'`, function (err, data) {

if (data == "") {

res.end(JSON.stringify({ status: "-1", msg: "没有该课程,请核对后重试" }))

} else {

db.query(`delete from digitmedia\_major where class\_name='${name}'`, function (err, data) {

res.end(JSON.stringify({ status: "1", msg: "删除成功" }))

})

}

})

}

})

}

**//管理员查询课程&&学生课程查询**

if (pathname == '/class\_query') {

var postdata = "";

req.on("data", function (postDataChunk) {

postdata += postDataChunk;

});

req.on("end", function () {

var params = querystring.parse(postdata);

var name = params.name

var major = params.major

if (major == "计算机科学与技术") {

db.query(`select \* from computer\_major`, function (err, data) {

db.query(`select count(\*) as num from user`,function(err,data1){

console.log(data1[0].num)

res.end(JSON.stringify({count:data1[0].num,data}))

})

})

}

if (major == "软件工程") {

db.query(`select \* from soft\_major`, function (err, data) {

var x = JSON.stringify(data)

res.end(x)

})

}

if (major == "网络工程") {

db.query(`select \* from web\_major`, function (err, data) {

var x = JSON.stringify(data)

res.end(x)

})

}

if (major == "数字媒体技术") {

db.query(`select \* from digitmedia\_major`, function (err, data) {

var x = JSON.stringify(data)

res.end(x)

})

}

})

}

**//修改的信息检查**

if (pathname == '/changecheck') {

var postdata = "";

req.on("data", function (postDataChunk) {

postdata += postDataChunk;

});

req.on("end", function () {

var params = querystring.parse(postdata);

var sno = params.sno

var name = params.name

db.query(`select sno from user where sno='${sno}'and name='${name}'`, function (err, data) {

if (data == "") {

res.end(JSON.stringify({ status: "-1", msg: "没有此学生的信息,请核对后再试" }))

} else {

res.end(JSON.stringify({ status: "1", sno: sno }))

}

})

}

)

}

**//修改学生信息**

if (pathname == '/change') {

var postdata = "";

req.on("data", function (postDataChunk) {

postdata += postDataChunk;

});

req.on("end", function () {

var params = querystring.parse(postdata);

var name = params.name

var grade = params.grade

var class1 = params.class

var sno = params.sno

var major = params.major

db.query(`update user set name='${name}',grade='${grade}',class='${class1}',major='${major}'where sno='${sno}' `, function (err, data) {

if (data) {

res.end(JSON.stringify({ status: "1", msg: "修改成功" }))

}

})

}

)

}

**//查询学生信息**

if (pathname == '/query') {

var postdata = "";

req.on("data", function (postDataChunk) {

postdata += postDataChunk;

});

req.on("end", function () {

var params = querystring.parse(postdata);

var sno = params.sno

console.log(sno)

db.query(`select \* from user where sno='${sno}'`, function (err, data) {

if (data == "") {

res.end(JSON.stringify({ status: "-1", msg: "没有此学生信息,请核对后重试" }))

} else {

res.end(JSON.stringify(data))

}

})

}

)

}

**//删除学生信息**

if (pathname == '/delete') {

var postdata = "";

req.on("data", function (postDataChunk) {

postdata += postDataChunk;

});

req.on("end", function () {

var params = querystring.parse(postdata);

var sno = params.sno

var name = params.name

db.query(`select \* from user where sno='${sno}'and name='${name}'`, function (err, data) {

if (data != "") {

db.query(`delete from user where sno='${sno}'and name='${name}'`, function (err, data1) {

res.end(JSON.stringify({ status: "1", msg: "删除成功" }))

})

} else {

res.end(JSON.stringify({ status: "-1", msg: "没有此学生信息,请核对后重试" }))

}

})

}

)

}

**//教室状态查询**

if (pathname == '/classroom\_query') {

var postdata = "";

req.on("data", function (postDataChunk) {

postdata += postDataChunk;

});

req.on("end", function () {

var params = querystring.parse(postdata);

var week = params.week

var time = params.time

var date = params.date

db.query(`select classroom\_name from classroom where '${week}'>=startweek and endweek>='${week}'and date='${date}'and time='${time}'`, function (err, data) {

if (data == "") {

db.query(`select classroom\_name from classroom where id<12`, function (err, data1) {

var x=

res.end(JSON.stringify({ data: data1, msg: "空闲" }))

})

} else {

db.query(`select classroom\_name from classroom where id<12`, function (err, data1) {

res.end(JSON.stringify({ data: data, msg: "占用",data1:data1,msg1:"空闲"}))

})

}

})

}

)

}

}).listen(8082)

1. 页面设计（存放于github）

**https://github.com/fc459659281/CourseSystem**

**管理员界面：**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<meta http-equiv="X-UA-Compatible" content="ie=edge">

<title>Document</title>

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

</head>

<body>

<div class="header">

<p>欢迎来到管理员页面</p>

<a href="login.html">退出</a>

</div>

<div class="content">

<div class="left\_content">

<div class="man">

<p style="margin-bottom: 35px;font-size: 30px;">管理员操作</p>

<div>

<div class="item">

<div id='i1' class="header" onclick="ChangeMenu('i1'); style">学生信息管理</div>

<div class="content">

<div><p><a href="changecheck.html">更改学生信息</a></p></div>

<div> <p><a href="delete.html">删除学生信息</a></p></div>

<div> <p><a href="query.html">查询学生信息</a></p></div>

</div>

</div>

<div class="item">

<div id='i2' class="header" onclick="ChangeMenu('i2');">课程信息管理</div>

<div class="content hide">

<div> <p><a href="amquery.html">查询专业课表</a></p></div>

<div><p><a href="class\_insert.html">添加专业课程</a></p></div>

<div><p><a href="class\_delete.html">删除课程信息</a></p></div>

</div>

</div>

<div class="item">

<div id='i3' class="header" onclick="ChangeMenu('i3');">教室信息管理</div>

<div class="content hide">

<div><p><a href="classroomquery.html">教室状态查询</a></p></div>

</div>

</div>

</div>

</div>

</div>

<div class="right\_content">

<img src="img/timg.jpg" style="width:900px;height: 500px;">

</div>

</div>

<script>

function ChangeMenu(nid) {

var current\_header = document.getElementById(nid);

var item\_list = current\_header.parentElement.parentElement.children;

for(var i = 0;i < item\_list.length;i++)

{

var current\_item = item\_list[i];

current\_item.children[1].classList.add('hide');

}

current\_header.nextElementSibling.classList.remove('hide');

}

</script>

</body>

</html>

**管理员登录界面：**

<!doctype html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>管理员登录界面</title>

<script src="js/jquery.js"></script>

<script src="js/IP.js"></script>

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

</head>

<body class="text-center">

<div class="header" type="none">

<a href="#" class="a\_1">管理员登录&nbsp&nbsp</a>

</div>

<center class="c\_1">

<div style="padding-top: 100px">

<form>

<input class="t\_1" type="text" id="administrators\_num" placeholder="请输入您的管理员账号">

<br>

<br>

<br>

<input class="t\_1" type="password" id="administrators\_pass" placeholder="请输入您的密码">

<br>

<br>

<br>

<input class="b\_1" type="button" id="administratorslogin" value="登录"></input>

</form>

</div>

</center>

</body>

<script>

$("#administratorslogin").click(async function (e) {

console.log($('#administrators\_num').val())

if ($('#administrators\_num').val()=="" && $('#administrators\_pass').val()=="") {

alert("管理员账号或密码不能为空");

}else{

var data={}

data['administrators\_number']=$('#administrators\_num').val()

data['administrators\_password']=$('#administrators\_pass').val()

$.ajax({

type:"post",

url:IP+'amlogin',

dataType:"text",

data:data,

success:function(result){

var json=JSON.parse(result)

if(json.status==-1){

alert("账号或者密码错误")

}else{

alert("登陆成功")

window.location.href ="manager.html";

}

},

error:function(){

console.log(123)

}

})

}

})

</script>

</html>

**课表查询界面：**

<!DOCTYPE html>

<html>

<head>

<meta charset="utf-8">

<title>课表</title>

<script src="js/jquery.js"></script>

<script src="js/IP.js"></script>

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

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

<link href="https://cdn.bootcss.com/font-awesome/5.11.2/css/all.css" rel="stylesheet">

</head>

<body>

<div class="header" type="none">

<div>课表</div>

</div>

<div class="d\_1">

</div>

<div>学期<select id="term" style="margin-left:50px;">

<option>2019-2020第一学期</option>

<option>2019-2020第二学期</option>

</select>&nbsp&nbsp&nbsp&nbsp

<div style="margin-left: 600px;">专业<select id="major" style="margin-left:50px;">

<option>计算机科学与技术</option>

<option>软件工程</option>

<option>网络工程</option>

<option>数字媒体技术</option>

</select>&nbsp&nbsp&nbsp&nbsp

</div>

<br>

<br>

<table class="table\_one" border="1">

<tr>

<th>课程名称</th>

<th>课程时间</th>

<th>课程起始周</th>

<th>课程结束周</th>

<th>授课教师</th>

<th>教室</th>

<th>上课人数</th>

</tr>

<tr>

<td><a id="class\_name1">暂无课程</a></td>

<td><a id="time1"> </a></td>

<td><a id="startweek1"> </a></td>

<td><a id="endweek1"> </a></td>

<td><a id="teacher1"> </a></td>

<td><a id="classroom1"> </a></td>

<td><a id="people1"> </a></td>

</tr>

<tr>

<td><a id="class\_name2">暂无课程</a></td>

<td><a id="time2"></a> </td>

<td><a id="startweek2"> </a></td>

<td><a id="endweek2"> </a></td>

<td><a id="teacher2"> </a></td>

<td><a id="classroom2"> </a></td>

<td><a id="people2"> </a></td>

</tr>

<tr>

<td><a id="class\_name3">暂无课程</td>

<td><a id="time3"></a></td>

<td><a id="startweek3"></a></td>

<td><a id="endweek3"></a></td>

<td><a id="teacher3"></a></td>

<td><a id="classroom3"></a></td>

<td><a id="people3"> </a></td>

</tr>

<tr>

<td><a id="class\_name4">暂无课程</td>

<td><a id="time4"></a></td>

<td><a id="startweek4"></a></td>

<td><a id="endweek4"></a></td>

<td><a id="teacher4"></a></td>

<td><a id="classroom4"></a></td>

<td><a id="people4"> </a></td>

</tr>

<tr>

<td><a id="class\_name5">暂无课程</a></td>

<td><a id="time5"></a></td>

<td><a id="startweek5"></a></td>

<td><a id="endweek5"></a></td>

<td><a id="teacher5"></a></td>

<td><a id="classroom5"></a></td>

<td><a id="people5"> </a></td>

</tr>

<tr>

<td><a id="class\_name6">暂无课程</a></td>

<td><a id="time6"></a></td>

<td><a id="startweek6"></a></td>

<td><a id="endweek6"></a></td>

<td><a id="teacher6"></a></td>

<td><a id="classroom6"></a></td>

<td><a id="people6"> </a></td>

</tr>

<tr>

<td><a id="class\_name7">暂无课程</a></td>

<td><a id="time7"></a></td>

<td><a id="startweek7"></a></td>

<td><a id="endweek7"></a></td>

<td><a id="teacher7"></a></td>

<td><a id="classroom7"></a></td>

<td><a id="people7"> </a></td>

</tr>

</table>

<div align="center">

<br>

<br>

<input class="b\_1" type="button" id="query" value="查询"></input>

<input class="b\_1" type="button" id="back" value="返回"></input>

</div>

</body>

<script>

$('#back').click(function(){

window.location.href ="manager.html";

})

$('#query').click(function () {

var data = {}

data['major'] =$('#major').val()

data['term']=$('#term').val()

$.ajax({

type: "post",

url: IP + 'class\_query',

dataType: "text",

data: data,

success: function (result) {

var x = JSON.parse(result)

if(x==""){

alert("该专业当前没有课程,请添加后重试")

window.location.href="amquery.html"

}else{

query(x.data)

query1(x)

}

},

error: function () {

console.log()

}

})

}

)

function query1(x){

var arr1=["1","2","3","4","5","6","7"]

var people="people"

for(var j=0;j<arr1.length;j++){

if(x.data[j]==undefined){

j=0;

break

}

var p = document.getElementById(people+arr1[j]);

p.innerHTML = x.count

}

}

function query(x){

var i=0

var arr=["1","2","3","4","5","6","7"]

var classname="class\_name"

var time="time"

var startweek="startweek"

var endweek="endweek"

var teacher="teacher"

var classroom="classroom"

for(;i<arr.length;i++){

if(x[i]==undefined){

i=0;

break;

}

var p = document.getElementById(classname+arr[i]);

p.innerHTML = x[i].class\_name

}

for(;i<arr.length;i++){

if(x[i]==undefined){

i=0;

break;

}

var p = document.getElementById(time+arr[i]);

if(x[i].week2==" "){

p.innerHTML = x[i].week1+":"+x[i].time1

}else{

p.innerHTML = x[i].week1+":"+x[i].time1+"——"+x[i].week2+":"+x[i].time2

}

}

for(;i<arr.length;i++){

if(x[i]==undefined){

i=0;

break;

}

var p = document.getElementById(startweek+arr[i]);

p.innerHTML = x[i].start\_week

}

for(;i<arr.length;i++){

if(x[i]==undefined){

i=0;

break;

}

var p = document.getElementById(endweek+arr[i]);

p.innerHTML = x[i].end\_week

}

for(;i<arr.length;i++){

if(x[i]==undefined){

i=0;

break;

}

var p = document.getElementById(classroom+arr[i]);

p.innerHTML = x[i].classroom

}

for(;i<arr.length;i++){

if(x[i]==undefined){

i=0;

break;

}

var p = document.getElementById(teacher+arr[i]);

p.innerHTML = x[i].teacher

}

}

</script>

</html>

**修改学生信息：**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>修改学生信息</title>

<script src="js/jquery.js"></script>

<script src="js/IP.js"></script>

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

</head>

<body>

<div class="header" type="none">

<a class="a\_1" >学生信息修改</a>

</div>

<div align="center">

<form>

<br/>

姓名：<input type="text" name="name" id="name"/>

<br/>

<br/>

专业：<select id="major">

<option>计算机科学与技术</option>

<option>软件工程</option>

<option>数字媒体技术</option>

<option>网络工程</option>

</select>&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp

<br/>

<br/>

年级：<select id="grade">

<option>15</option>

<option>16</option>

<option>17</option>

<option>18</option>

</select>&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp

<br>

<br>

班级：<select id="class">

<option>1</option>

<option>2</option>

<option>3</option>

</select>&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp

<br>

<br>

</form>

<input type="button" value="确定" id="alert1"/>&nbsp&nbsp

<input type="reset" value="重置" />

<br>

<br>

<button type="button" class="btn btn-primary"style="margin-left:0px"id="home">返回主页</button>

</div>

</body>

<script>

$('#home').click(function(){

window.location.href ="manager.html";

})

$("#alert1").click(async function (e) {

if($('#name').val()!=""){

var data={}

data['major']=$('#major').val()

data['name']=$('#name').val()

data['class']=$('#class').val()

data['grade']=$('#grade').val()

data['sno']=localStorage.getItem('sno')

console.log(data)

$.ajax({

type:"post",

url:IP+'change',

dataType:"text",

data:data,

success:function(result){

var x=JSON.parse(result)

console.log(x)

alert(x.msg)

},

error:function(){

console.log(123)

}

})

}else{

alert("请确保信息填写完整")

}

})

</script>

</html>

**进入学生信息修改的界面：**

<!doctype html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>修改学生信息</title>

<script src="js/jquery.js"></script>

<script src="js/IP.js"></script>

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

</head>

<body class="text-center">

<div class="header" type="none">

<a href="manager.html" class="a\_1" >返回管理员主页</a>

</a>

</div>

<div align="center">

<form>

<br />

<br />

请输入要修改的学号：<input type="text" name="alsno" id="sno" />

<br />

<br />

请输入要修改的姓名：<input type="text" name="alname" id="name" />

<br />

<br />

</form>

<input type="button" value="确定" id="alert"/>&nbsp&nbsp&nbsp&nbsp

<input type="reset" value="取消" />

</div>

</body>

<script>

$("#alert").click(async function (e) {

if(!$('#alsno')||!$('#alname')){

alert("学号或姓名不能为空")

}else{

var data={}

data['sno']=$('#sno').val()

data['name']=$('#name').val()

$.ajax({

type:"post",

url:IP+'changecheck',

dataType:"text",

data:data,

success:function(result){

var x=JSON.parse(result)

if(x.status==-1){

alert(x.msg)

}else{

window.location.href ="change.html";

localStorage.setItem("sno",x.sno)

}

},

error:function(){

console.log(123)

}

})

} })

</script>

</html>

**删除课程信息界面：**

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<title>修改课程</title>

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

<script src="js/jquery.js"></script>

<script src="js/IP.js"></script>

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

<link href="https://cdn.bootcss.com/font-awesome/5.11.2/css/all.css" rel="stylesheet">

<style>

.main\_boby {

padding-top: 100px;

background-color: white;

}

.div\_1 {

width: 400px;

height: 500px;

background-color: white;

}

.text\_1 {

border-radius: 15px;

width: 250px;

height: 50px;

background-color: aliceblue;

}

.b\_1 {

width: 100px;

height: 40px;

}

</style>

</head>

<body class="baby">

<div class="header">

<p font="size:12px">修改课程</p>

</div>

<center>

<div align="center">

<form>

<br />

您要为哪个专业修改课程<select id="major">

<option>计算机科学与技术</option>

<option>软件工程</option>

<option>数字媒体技术</option>

<option>网络工程</option>

</select>&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp

<br>

<br>

</select>&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp

课程名<input type="text" name="name" id="name" />

<input type="button" value="确定" id="determine" />

<input type="reset" value="重置" />

<br>

<br>

<br>

<button type="button" class="btn btn-primary" style="margin-left:0px" id="home">返回管理员界面</button>

</div>

</center>

</body>

<script>

$('#home').click(function () {

window.location.href = "manager.html";

})

$('#determine').click(function () {

if ($('#name').val() != "") {

var data = {}

data['name'] = $('#name').val()

data['major'] = $('#major').val()

$.ajax({

type: "post",

url: IP + 'class\_delete',

dataType: "text",

data: data,

success: function (result) {

var x = JSON.parse(result)

alert(x.msg)

window.location.href = "class\_delete.html";

},

error: function () {

console.log(123)

}

})

} else {

alert("请确保信息填写完整")

}

})

</script>

</html>

**添加课程信息界面：**

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<title>添加课程</title>

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

<script src="js/jquery.js"></script>

<script src="js/IP.js"></script>

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

<link href="https://cdn.bootcss.com/font-awesome/5.11.2/css/all.css" rel="stylesheet">

<style>

.main\_boby {

padding-top: 100px;

background-color: white;

}

.div\_1 {

width: 400px;

height: 500px;

background-color: white;

}

.text\_1 {

border-radius: 15px;

width: 250px;

height: 50px;

background-color: aliceblue;

}

.b\_1 {

width: 100px;

height: 40px;

}

</style>

</head>

<body class="baby">

<div class="header">

<p font="size:12px">添加课程信息</p>

</div>

<center>

<div align="center">

<form>

<br />

您要为哪个专业添加课程<select id="major">

<option>计算机科学与技术</option>

<option>软件工程</option>

<option>数字媒体技术</option>

<option>网络工程</option>

</select>&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp

<br>

<br>

</select>&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp

课程名<input type="text" name="name" id="name"/>

<br />

<br />

<div>学期<select id="term" style="margin-left:50px;">

<option>2019-2020第一学期</option>

<option>2019-2020第二学期</option>

</select>&nbsp&nbsp&nbsp&nbsp

起始周<select id="startweek">

<option>1</option>

<option>2</option>

<option>3</option>

<option>4</option>

<option>5</option>

<option>6</option>

<option>7</option>

<option>8</option>

<option>9</option>

<option>10</option>

<option>11</option>

<option>12</option>

<option>13</option>

<option>14</option>

<option>15</option>

<option>16</option>

<option>17</option>

<option>18</option>

<option>19</option>

<option>20</option>

</select>&nbsp&nbsp&nbsp&nbsp

<br />

结束周<select id="endweek">

<option>1</option>

<option>2</option>

<option>3</option>

<option>4</option>

<option>5</option>

<option>6</option>

<option>7</option>

<option>8</option>

<option>9</option>

<option>10</option>

<option>11</option>

<option>12</option>

<option>13</option>

<option>14</option>

<option>15</option>

<option>16</option>

<option>17</option>

<option>18</option>

<option>19</option>

<option>20</option>

</select>&nbsp&nbsp&nbsp&nbsp

<br />

星期：<select id="week">

<option>星期一</option>

<option>星期二</option>

<option>星期三</option>

<option>星期四</option>

<option>星期五</option>

</select>&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp

<br />

时间：<select id="time">

<option>8:00-10:00</option>

<option>10:00-12:00</option>

<option>14:00-16:00</option>

<option>16:00-18:00</option>

</select>&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp

<br />

教室号<select id="classroom">

<option>A110</option>

<option>A111</option>

<option>A112</option>

<option>A113</option>

<option>A114</option>

<option>A115</option>

<option>A116</option>

</select>&nbsp&nbsp&nbsp&nbsp

<br />

授课教师：<input type="text" name="teacher"id="teacher" />

<br>

<input type="button" value="确定" id="determine"/>

<input type="reset" value="重置" />

<br>

<br>

<br>

<button type="button" class="btn btn-primary"style="margin-left:0px"id="home">返回管理员界面</button>

</div>

</center>

</body>

<script>

$('#home').click(function(){

window.location.href ="manager.html";

})

$('#determine').click(function(){

var x=parseInt($('#startweek').val())

var y=parseInt($('#endweek').val())

console.log(typeof ($('#startweek').val()))

if($('#name').val()!=""&& $('#classroom').val()!="" && $('#teacher').val()!=""&& x<=y){

var data={}

data['name']=$('#name').val()

data['startweek']=$('#startweek').val()

data['endweek']=$('#endweek').val()

data['classroom']=$('#classroom').val()

data['teacher']=$('#teacher').val()

data['time']=$('#time').val()

data['major']=$('#major').val()

data['week']=$('#week').val()

data['term']=$('#term').val()

console.log(data)

$.ajax({

type:"post",

url:IP+'class\_insert',

dataType:"text",

data:data,

success:function(result){

var x=JSON.parse(result)

alert(x.msg)

},

error:function(){

console.log(123)

}

})

}else{

alert("请确保信息填写完整，或起始周数据有误")

}

})

</script>

</html>

**教室状态查询界面：**

<!DOCTYPE html>

<html>

<head>

<meta charset="utf-8">

<title>教室</title>

<script src="js/jquery.js"></script>

<script src="js/IP.js"></script>

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

</head>

<body>

<div class="header" type="none">

<a href="manager.html">返回首页</a>

</div>

<div class="d\_1">

<div class="d\_2">

<p>教室状态查询</p>

</div>

</div>

周数<select id="week">

<option>1</option>

<option>2</option>

<option>3</option>

<option>4</option>

<option>5</option>

<option>6</option>

<option>7</option>

<option>8</option>

<option>9</option>

<option>10</option>

<option>11</option>

<option>12</option>

<option>13</option>

<option>14</option>

<option>15</option>

<option>16</option>

<option>17</option>

<option>18</option>

<option>19</option>

<option>20</option>

</select>&nbsp&nbsp&nbsp&nbsp

星期：<select id="date">

<option>星期一</option>

<option>星期二</option>

<option>星期三</option>

<option>星期四</option>

<option>星期五</option>

</select>&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp

时间：<select id="time">

<option>8:00-10:00</option>

<option>10:00-12:00</option>

<option>14:00-16:00</option>

<option>16:00-18:00</option>

</select>&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp

<br />

</div>

<br>

<br>

<table class="table\_one" border="1">

<tr>

<th>教室名称</th>

<th> 状态</th>

</tr>

<tr>

<td><a id="class\_name1">暂无课程</a></td>

<td><a id="time1"> </a></td>

</tr>

<tr>

<td><a id="class\_name2">暂无课程</a></td>

<td><a id="time2"></a> </td>

</tr>

<tr>

<td><a id="class\_name3">暂无课程</td>

<td><a id="time3"></a></td>

</tr>

<tr>

<td><a id="class\_name4">暂无课程</td>

<td><a id="time4"></a></td>

</tr>

<tr>

<td><a id="class\_name5">暂无课程</a></td>

<td><a id="time5"></a></td>

</tr>

<tr>

<td><a id="class\_name6">暂无课程</a></td>

<td><a id="time6"> </a></td>

</tr>

<tr>

<td><a id="class\_name7">暂无课程</a></td>

<td><a id="time7"> </a></td>

</tr>

<tr>

</tr>

</table>

<div align="center">

<input class="b\_1" type="button" id="query" value="查询"></input>

</div>

</body>

<script>

$('#query').click(function () {

var data = {}

data['week'] = $('#week').val()

data['date'] = $('#date').val()

data['time'] = $('#time').val()

$.ajax({

type: "post",

url: IP + 'classroom\_query',

dataType: "text",

data: data,

success: function (result) {

var x = JSON.parse(result)

console.log(x)

query(x)

},

error: function () {

console.log(1)

}

})

}

)

function query(x) {

var classname = "class\_name"

var time = "time"

var arr = ["1", "2", "3", "4", "5", "6", "7"]

var classroom=[]

var msg1=[]

if (x.data1 == undefined) {

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

var p1 = document.getElementById("class\_name" + arr[i]);

p1.innerHTML = x.data[i].classroom\_name

var p2 = document.getElementById("time" + arr[i]);

p2.innerHTML = x.msg

}

} else {

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

for (var j = 0; j < x.data1.length; j++) {

if (x.data[i].classroom\_name == x.data1[j].classroom\_name) {

classroom[j] = x.data[i].classroom\_name

msg1[j] = x.msg

} else {

if (classroom[j] != undefined) {

continue

}

classroom[j] = x.data1[j].classroom\_name

msg1[j] = x.msg1

}

}

}

}

for (var w = 0; w < classroom.length; w++) {

var p1 = document.getElementById("class\_name" + arr[w]);

p1.innerHTML = classroom[w]

var p2 = document.getElementById("time" + arr[w]);

p2.innerHTML = msg1[w]

}

}

</script>

</html>

**删除学生学籍界面：**

<!doctype html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>删除学生信息</title>

<script src="js/jquery.js"></script>

<script src="js/IP.js"></script>

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

</head>

<body class="text-center">

<div class="header" type="none">

<a href="manager.html" class="a\_1" >返回管理员主页</a>

</a>

</div>

<div align="center">

<form>

<br />

<br />

请输入要删除的学号：<input type="text" name="sno" id="sno" />

<br />

<br />

请输入要删除的姓名：<input type="text" name="name" id="name"/>

<br />

<br />

<input type="button" value="删除" id="delete"/>&nbsp&nbsp&nbsp&nbsp

<input type="reset" value="取消" />

</form>

</div>

</body>

<script>

$("#delete").click(async function (e) {

if(!$('#desno')||!$('#dename')){

alert("学号或姓名不能为空")

}else{

var data={}

data['sno']=$('#sno').val()

data['name']=$('#name').val()

$.ajax({

type:"post",

url:IP+'delete',

dataType:"text",

data:data,

success:function(result){

var x=JSON.parse(result)

console.log(x)

alert(x.msg)

},

error:function(){

console.log(123)

}

})

}

})

</script>

</html>

**首页：**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>学生课表查询系统</title>

<script src="js/jquery.js"></script>

<script src="js/IP.js"></script>

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

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

<link href="https://cdn.bootcss.com/font-awesome/5.11.2/css/all.css" rel="stylesheet">

</head>

<body class="text-center">

<div class="header" type="none">

</div>

<center class="c\_1">

<div style="padding-top: 50px">

<form>

<img src="img/hui.jpg" alt="" width="122px" height="92px">

<h2 class="h\_1">学生课表查询系统</h2>

<input class="t\_1" type="text" id="sno" placeholder="您的学生号">

<br>

<br>

<input class="t\_1" type="password" id="pass" placeholder="请输入您的密码">

<br>

<br>

<br>

<input class="b\_1" type="button" id="login" value="登录"></input>

</form>

<div class="c\_2">

<a href="reg.html">点击注册</a>

<a href="amlogin.html">管理员登录</a>

</div>

</div>

</center>

</body>

<script>

$("#login").click(async function (e) {

if ($('#user').val()!=undefined && $('#pass').val()!=undefined) {

alert("学号或密码不能为空");

} else {

var data={}

data['sno']=$('#sno').val()

data['password']=$('#pass').val()

$.ajax({

type:"post",

url:IP+'login',

dataType:"text",

data:data,

success:function(result){

var json=JSON.parse(result)

if(json.status==-1){

alert("账号或者密码错误")

}else{

alert("登陆成功,欢迎你"+json.name+"同学")

localStorage.setItem("major",json.major)

window.location.href ="studentquery.html";

}

},

error:function(){

console.log(123)

}

})

}})

</script>

</html>

**显示查询学生信息界面：**

<!doctype html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>查询学生信息</title>

<script src="js/jquery.js"></script>

<script src="js/IP.js"></script>

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

</head>

<body class="text-center" align="center">

<div class="header" type="none">

<a href="manager.html" class="a\_1">返回管理员首页</a>

</div>

<table border="1" width=100%>

<tr>

<th>姓名</th>

<th>学号</th>

<th>专业</th>

<th>班级</th>

<th>年级</th>

</tr>

<tr>

<td>

<p id="name"></p>

</td>

<td>

<p id="sno"></p>

</td>

<td>

<p id="major"></p>

</td>

<td>

<p id="class"></p>

</td>

<td>

<p id="grade"></p>

</td>

</tr>

</table>

<div class="foot">

<br />

<br />

<input type="button" value="查询" id="x" />

</div>

</body>

<script>

var a;

$('#x').click(function () {

var sno = prompt("请输入你要查询的学生学号:", "");

var data = {}

data['sno'] = sno

console.log(data)

$.ajax({

type: "post",

url: IP + 'query',

dataType: "text",

data: data,

success: function (result) {

var x = JSON.parse(result)

console.log(x)

if(x.status==-1){

alert(x.msg)

window.location.href="query.html"

}else{

var p = document.getElementById('name');

p.innerHTML = x[0].name

var p1 = document.getElementById('sno');

p1.innerHTML = x[0].sno

var p2 = document.getElementById('major');

p2.innerHTML = x[0].major

var p3 = document.getElementById('class');

p3.innerHTML = x[0].class

var p4 = document.getElementById('grade');

p4.innerHTML = x[0].grade

}

},

error: function () {

console.log(1)

}

})

})

</script>

</html>

**注册界面：**

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<title>点击注册</title>

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

<script src="js/jquery.js"></script>

<script src="js/IP.js"></script>

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

<link href="https://cdn.bootcss.com/font-awesome/5.11.2/css/all.css" rel="stylesheet">

<style>

.main\_boby {

padding-top: 100px;

background-color: white;

}

.div\_1 {

width: 400px;

height: 500px;

background-color: white;

}

.text\_1 {

border-radius: 15px;

width: 250px;

height: 50px;

background-color: aliceblue;

}

.b\_1 {

width: 100px;

height: 40px;

}

</style>

</head>

<body class="baby">

<div class="header">

<p font="size:12px">注 册</p>

</div>

<center>

<div align="center">

<form>

<br />

姓名：<input type="text" name="name" id="name"/>

<br />

<br />

密码：<input type="password" name="password"id="pass" />

<br />

<br />

专业：<select id="major">

<option>计算机科学与技术</option>

<option>软件工程</option>

<option>数字媒体技术</option>

<option>网络工程</option>

</select>&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp

<br />

年级：<select id="grade">

<option>15</option>

<option>16</option>

<option>17</option>

<option>18</option>

</select>&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp

<br />

班级：<select id="class">

<option>1</option>

<option>2</option>

<option>3</option>

</select>&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp

<br />

<br>

<br>

<input type="button" value="确定" id="determine"/>

<input type="reset" value="重置" />

<br>

<br>

<br>

<button type="button" class="btn btn-primary"style="margin-left:0px"id="home">返回首页</button>

</div>

</center>

</body>

<script>

$('#home').click(function(){

window.location.href ="login.html";

})

$('#determine').click(function(){

if($('#name').val()!=""&& $('#pass').val()!=""){

var data={}

data['major']=$('#major').val()

data['name']=$('#name').val()

data['password']=$('#pass').val()

data['class']=$('#class').val()

data['grade']=$('#grade').val()

$.ajax({

type:"post",

url:IP+'reg',

dataType:"text",

data:data,

success:function(result){

var x=JSON.parse(result)

alert(x.msg+"!你的学号为"+x.sno)

window.location.href ="login.html";

},

error:function(){

console.log(123)

}

})

}else{

alert("请确保信息填写完整")

}

})

</script>

</html>

**课表信息界面：**

<!DOCTYPE html>

<html>

<head>

<meta charset="utf-8">

<title>课表</title>

<script src="js/jquery.js"></script>

<script src="js/IP.js"></script>

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

</head>

<body>

<div class="header" type="none">

<a>课表</a>

</div>

<div class="d\_1">

<div class="d\_2">

<p>课表</p>

</div>

</div>

</div>

<div>学期<select id="term" style="margin-left:50px;">

<option>2019-2020第一学期</option>

<option>2019-2020第二学期</option>

</select>&nbsp&nbsp&nbsp&nbsp

<br>

<br>

<table class="table\_one" border="1">

<tr>

<th>课程名称</th>

<th>课程时间</th>

<th>课程起始周</th>

<th>课程结束周</th>

<th>授课教师</th>

<th>教室</th>

<th>上课人数</th>

</tr>

<tr>

<td><a id="class\_name1">暂无课程</a></td>

<td><a id="time1"> </a></td>

<td><a id="startweek1"> </a></td>

<td><a id="endweek1"> </a></td>

<td><a id="teacher1"> </a></td>

<td><a id="classroom1"> </a></td>

<td><a id="person1"></a></td>

</tr>

<tr>

<td><a id="class\_name2">暂无课程</a></td>

<td><a id="time2"></a> </td>

<td><a id="startweek2"> </a></td>

<td><a id="endweek2"> </a></td>

<td><a id="teacher2"> </a></td>

<td><a id="classroom2"> </a></td>

<td><a id="person2"></a></td>

</tr>

<tr>

<td><a id="class\_name3">暂无课程</td>

<td><a id="time3"></a></td>

<td><a id="startweek3"></a></td>

<td><a id="endweek3"></a></td>

<td><a id="teacher3"></a></td>

<td><a id="classroom3"></a></td>

<td><a id="person3"></a></td>

</tr>

<tr>

<td><a id="class\_name4">暂无课程</td>

<td><a id="time4"></a></td>

<td><a id="startweek4"></a></td>

<td><a id="endweek4"></a></td>

<td><a id="teacher4"></a></td>

<td><a id="classroom4"></a></td>

<td><a id="person4"></a></td>

</tr>

<tr>

<td><a id="class\_name5">暂无课程</a></td>

<td><a id="time5"></a></td>

<td><a id="startweek5"></a></td>

<td><a id="endweek5"></a></td>

<td><a id="teacher5"></a></td>

<td><a id="classroom5"></a></td>

<td><a id="person5"></a></td>

</tr>

</table>

<div align="center">

<input class="b\_1" type="button" id="query" value="查询"></input>

<a href="login.html" style="margin-left: 20px;"><input class="b\_1" type="button" value="退出"></input></a>

</div>

</body>

<script src="bin/bootstrap-3.3.7-dist/js/bootstrap.js"></script>

<script>

$('#query').click(function () {

var data = {}

data['major'] =localStorage.getItem('major')

data['term']=$('#term').val()

$.ajax({

type: "post",

url: IP + 'class\_query',

dataType: "text",

data: data,

success: function (result) {

var x = JSON.parse(result)

console.log(x)

query(x.data)

query1(x)

},

error: function () {

console.log(1)

}

})

}

)

function query1(x){

var arr1=["1","2","3","4","5","6","7"]

var people="person"

for(var j=0;j<arr1.length;j++){

if(x.data[j]==undefined){

j=0;

break

}

var p = document.getElementById(people+arr1[j]);

p.innerHTML = x.count

}

}

function query(x){

var i=0

var arr=["1","2","3","4","5","6","7"]

var classname="class\_name"

var time="time"

var startweek="startweek"

var endweek="endweek"

var teacher="teacher"

var classroom="classroom"

for(;i<arr.length;i++){

if(x[i]==undefined){

i=0;

break;

}

var p = document.getElementById(classname+arr[i]);

p.innerHTML = x[i].class\_name

}

for(;i<arr.length;i++){

if(x[i]==undefined){

i=0;

break;

}

var p = document.getElementById(time+arr[i]);

p.innerHTML = x[i].week1+":"+x[i].time1+" "+x[i].week2+":"+x[i].time2

}

for(;i<arr.length;i++){

if(x[i]==undefined){

i=0;

break;

}

var p = document.getElementById(startweek+arr[i]);

p.innerHTML = x[i].start\_week

}

for(;i<arr.length;i++){

if(x[i]==undefined){

i=0;

break;

}

var p = document.getElementById(endweek+arr[i]);

p.innerHTML = x[i].end\_week

}

for(;i<arr.length;i++){

if(x[i]==undefined){

i=0;

break;

}

var p = document.getElementById(classroom+arr[i]);

p.innerHTML = x[i].classroom

}

for(;i<arr.length;i++){

if(x[i]==undefined){

i=0;

break;

}

var p = document.getElementById(teacher+arr[i]);

p.innerHTML = x[i].teacher

}

}

</script>

</html>

1. **测试分析**
2. **测试方案**

测试方案时测试阶段的关键技术问题，为了提高测试效率降低测试成本，本测试方案主要采用黑盒测试方法设计基本的测试方案针对系统实现的功能进行测试。在黑盒测试方案中，采用的方法时等价类划分的方法，把所有可能的输入数据（有效或无效）划分为等价类，然后对每个等价类进行功能测试。

1. **测试项目**

学生注册模块

学生登录模块

管理员登录模块

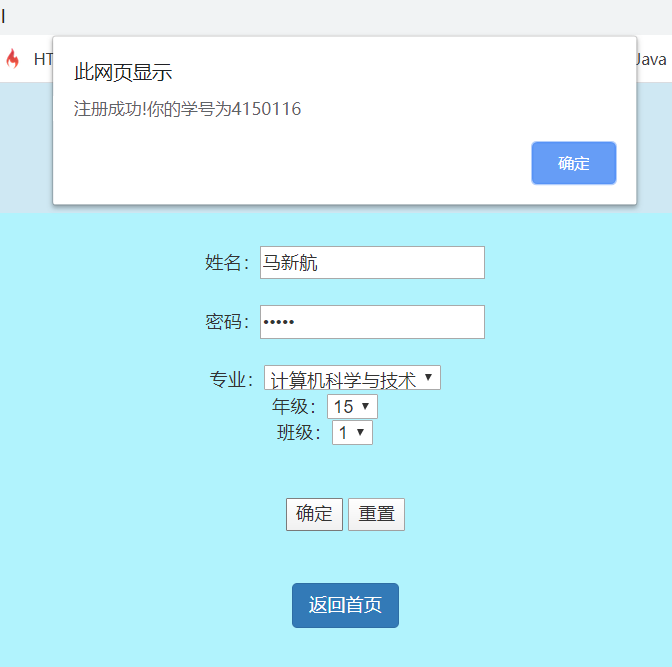
管理员学籍管理模块

管理员课表管理模块

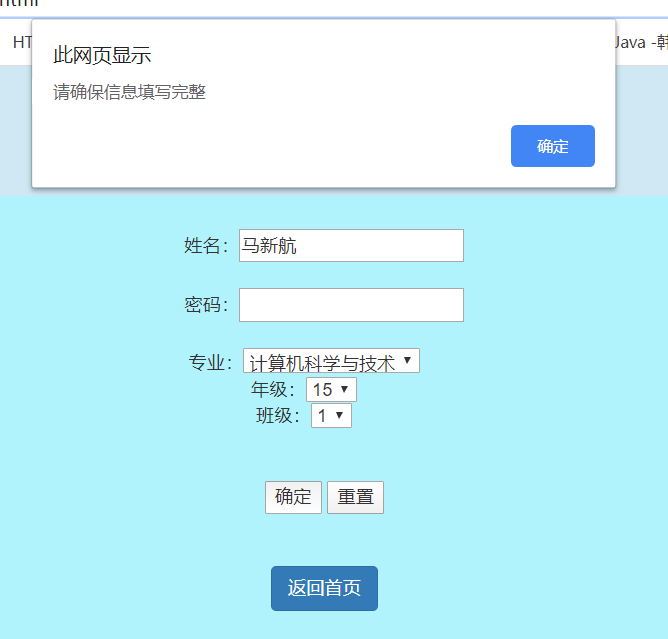
1. **测试过程（附测试结果图）**

* 学生注册模块

有效操作：（姓名：马新航 密码：12345）注册成功



无效操作：（①姓名：马新航 密码：null②姓名：null 密码：12345）注册失败，给出提示



* 学生登录模块

有效操作：（学号：4150116 密码：12345）点击确定可以跳转到课表查询界面



无效操作：（学号：41501189 密码：12345）登录失败，给出提示



* 管理员登录模块

有效操作：（账号：11111 密码：11111）跳转到管理员界面



无效操作：（账号：11111 密码：12453）给出提示



* 管理员学籍管理模块

有效操作：（查看学生信息 输入学号：4150116，输入姓名：马新航）提示成功或者跳转到预期页面

****

无效操作：（查看学生信息 输入学号：4150117，输入姓名：哈哈哈）给出提示

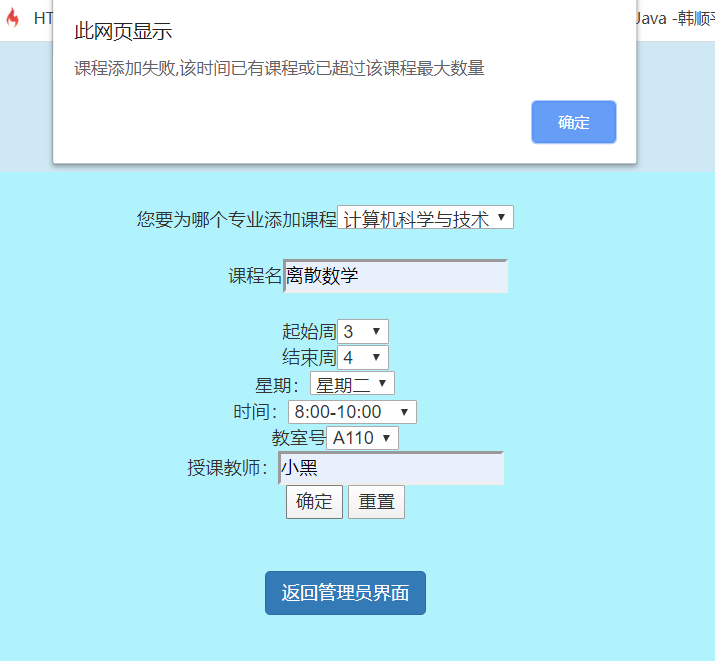


* 管理员课表管理模块

有效操作：（添加课程 用例如图）提示成功



无效操作：（添加课程 用例已添加）在增删查改过程中，无效操作会给出提示



1. **心得体会**

经过本期的软件工程课程设计，发现了学习和实践中的不足。互联网的基础知识知道的太少了，相反需要了解和掌握的还很多，在下学期要开设一门计算机网络课程，现在生活已经不能离开互联网了，不管以后是否从事这方面的工作，这些部分都是需要认真学习的，网络应用程序的开发更是需要认真理解和提升。软件工程中需求分析的不充分，软件开发方法的体会这些都是需要以后继续改进和学习的，软件开发中的各种文档编写能力也还需要进一步提升，在以后学习和实践中认真总结和完善，在参考他人的软件工程项目的基础上，体会优秀软件工程的思想。在做任何事情的时候都要觉得自己是站在巨人身上，热不是重复的生产车轮的思想来完成每一件事情，要对前人的经验教训加以总结，学习、参考和引用别人的先进研究成果，更要重视团队成员之间的协作。

在课程设计期间小组成员能够明确分工，按时按要求的完成课程设计课题；能够在程序设计过程中不断交流沟通，听取每个人的意见，争取将设计做到更好。课程设计的完成离不开小组的每一个成员，每个人都付出了心血和努力，我们也会在本次课程设计中总结归纳软件开发的重要理论知识，继续加强实践能力，保持明确分工和团结协作的优点，改正存在的不足之处，为以后打下更坚实的基础。