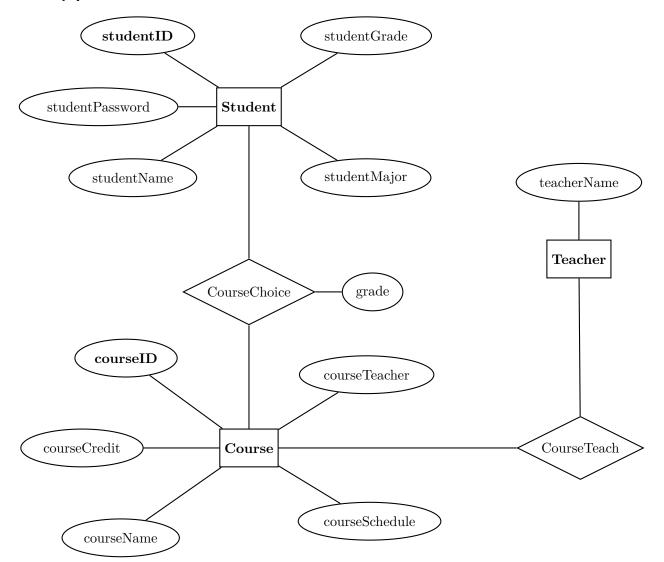
# 学生选课系统

5组

2024 - 12 - 07

## 1 ER 图



### 2 组员及贡献

学号	姓名	代码	文档写作
1210604006	胡一凡	23%	22%
1221005172	李浩然	18%	22%
1221005174	刘宸宇	18%	22%
1221005176	汤皓清	23%	17%
1221005177	王勃	18%	17%

表 1: 分工表

1210604006 胡一凡 代码: 23% 写作: 22% 1221005172 李浩然 代码: 18% 写作: 22% 1221005174 刘宸宇 代码: 18% 写作: 22% 1221005176 汤皓清 代码: 23% 写作: 17% 1221005177 王勃 代码: 18% 写作: 17%

**GitHub** Ohttps://github.com/AlionFan/StudentSelectCourse

### 3 工具、平台以及参考资料

在本项目中, 我们使用以下编程环境和技术栈:

• 数据库: MySQL 9.0

• **后端:** Python 3.12

• 前端: PySide6

文档撰写: LaTeX

• 参考资料: 数据库系统原理及 MySQL 应用教程(第二版)实验指导书

#### 摘要

通过 MySQL 与 python 结合,在主菜单输入学号和密码登录选课界面,进行选课。系统通过简洁直观的图形化界面,实现了学生学号和密码验证登录,以及通过拖拽上下表格选择操作完成选课的功能。最精彩之处在于系统的表格选择选课功能,它不仅提高了用户体验,而且通过前后端的高效协同,实现了实时的选课状态更新,展现了一种新颖的交互设计思路。

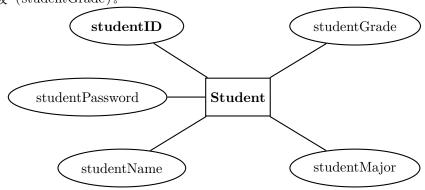
### 需求分析

- 1. 为了保证系统的安全性, 学生需要输入学号与密码登录系统。
- 2. 为了保证选课系统较高的可读性,选课系统采用菜单栏的方式进行操作,保证学生对系统操作的顺利。
- 3. 系统需要能够检查课程时间冲突,避免学生选择时间冲突的课程。
- 4. 检查是否选课,避免重复选择同一门课。
- 5. 设置最大选课人数,并实时统计每门课程选择人数,当选课人数达到最大人数,不允许选课。

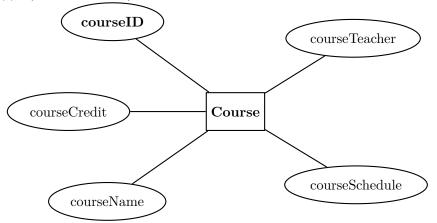
### 概念结构设计

我们定义了以下实体和属性:

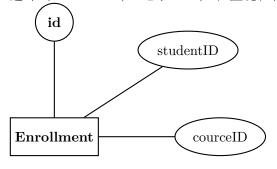
学生 (Student): 学号 (studentID, 主键)、姓名 (studentName)、密码 (studentPassword)、专业 (studentMajor)、年级 (studentGrade)。



课程 (Course): 课程 ID (courseID, 主键)、课程名称 (courseName)、学分 (courseCredit)、教师 (courseTeacher)、时间表 (courseSchedule)。



选课 (Enrollment): 记录 ID (id, 主键, 自增)、学生 ID (studentID)、课程 ID (courseID)。



### 4 逻辑结构设计

#### 4.1 关系模式设计

#### 1. 学生表 (students)

studentID(INT): 学生的唯一标识符,作为主键。 studentName(VARCHAR): 学生的姓名。 studentPassword(VARCHAR): 学生的密码。 studentMajor(VARCHAR): 学生的专业。 studentGrade(VARCHAR): 学生的年级。

#### 2. 课程表 (courses)

courseID(INT): 课程的唯一标识符, 作为主键。

courseName(VARCHAR): 课程的名称。

courseCredit(INT): 课程的学分。

courseTeacher(VARCHAR): 教授该课程的教师。 courseSchedule(VARCHAR): 课程的时间表。

#### 3. 选课表 (enrollments)

id(INT): 选课记录的唯一标识符,作为主键,自增。 studentID(INT): 选课学生的学号,外键关联学生表。 courseID(INT): 所选课程的课程 ID, 外键关联课程表。

学生选课视图:结合 students、courses 和 enrollments 表,提供一个包含学生信息和他们所选课程信息的视图,方便查询学生选课情况。

课程冲突视图:查询学生已选课程的时间表,与新选课程的时间表进行比较,检查是否存在时间冲突。

优化:

索引:为 studentID (选课表)、courseID (选课表)等外键字段创建索引,提高查询效率。

约束:确保数据完整性,如使用外键约束、唯一约束等。

查询优化:通过分析查询模式,优化 SQL 查询语句,减少全表扫描,提高查询性能。

数据库设计:

students 表:存储学生信息。 courses 表:存储课程信息。

enrollments 表:存储学生的选课信息,通过外键与学生表和课程表关联。

图形化界面设计:

图形化界面设计包括一个登录界面和主界面。登录界面包含学号和密码输入框以及登录按钮,主界面包含课程列表、已选课程列表以及选课和退课按钮。界面简洁直观,易于操作。

### 5 结论

本文总结了学生选课系统的设计与实现过程,强调了系统的表格选择选课功能在提升用户体验和操作效率方面的重要性。一个优秀的系统设计不仅需要满足功能需求,更应该注重用户体验和操作的便捷性。

参考文献、书籍、网络内容:数据库系统原理及 MySQL 应用教程(第二版)实验指导书。

## 6 附录

### 6.1 展示

### 6.1.1 登录界面



图 1: 学生登录界面



图 2: 放大



图 3: 密码正确

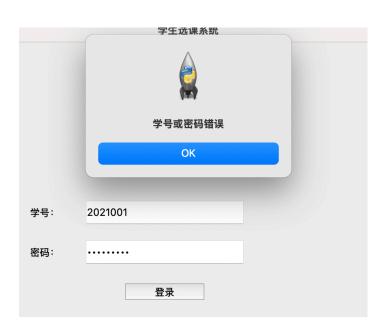


图 4: 密码错误

为了便于操作和展示,默认设置之前有过选课记录。

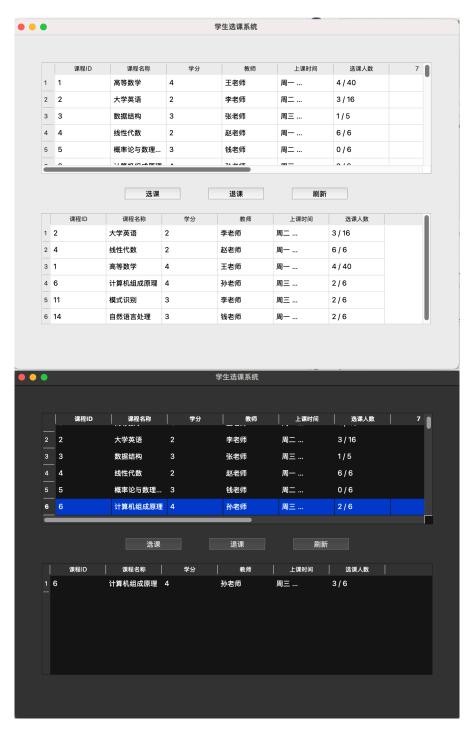


图 5: 学生 1(上), 学生 2(下) 登录后界面



(a) 选课



(c) 重复选课



(e) 满课



(b) 退课



(d) 课程时间冲突

图 6: 操作示例

### 7 实验亮点

```
    学生通过账号密码登录,具有密码校验功能
    可以进行选课,退课操作
    选课检查选课时间是否冲突
    避免重复选课
    实时刷新选课人数
    选课人数达到上限禁止选课
    有 UI 界面
```

#### 8 Code

#### 8.1 StudentSelectClassSystem.sql

```
CREATE DATABASE IF NOT EXISTS StudentCourseSystem;
USE StudentCourseSystem;
-- 学生表
CREATE TABLE IF NOT EXISTS students (
    studentID
                                 INT UNIQUE PRIMARY KEY,
    studentName
                                 VARCHAR (50) NOT NULL,
    studentPassword
                        VARCHAR (100) NOT NULL,
    studentMajor
                                 VARCHAR (50),
    studentGrade
                                 YEAR
);
-- 课程表
CREATE TABLE IF NOT EXISTS courses (
    courseID
                                 INT UNIQUE PRIMARY KEY,
                                 VARCHAR (100) NOT NULL,
    courseName
                                 INT NOT NULL,
    courseNumber
    courseCredit
                                 INT,
    courseTeacher
                                 VARCHAR (50),
    courseSchedule
                                 VARCHAR (100)
);
-- 教师表
-- CREATE TABLE IF NOT EXISTS teachers (
                                                                   PRIMARY KEY,
          teacherID
      teacherName
                                         VARCHAR (50) NOT NULL,
      teacherPassword
                                 VARCHAR (100) NOT NULL,
```

```
-- teacherEmail
                           VARCHAR (100)
-- );
-- 选课表
CREATE TABLE IF NOT EXISTS enrollments (
   ID INT PRIMARY KEY AUTO_INCREMENT,
   studentID INT,
   courseID INT,
   FOREIGN KEY (studentID) REFERENCES students(studentID),
   FOREIGN KEY (courseID) REFERENCES courses(courseID)
);
-- 插入示例课程数据
INSERT INTO courses (courseID, courseName, courseNumber, courseCredit, courseTeacher,
  courseschedule) VALUES
(1, '高等数学', 40, 4, '王老师', '周一山8:00-10:00'),
(2, '大学英语', 16, 2, '李老师', '周二山10:00-12:00'),
(3, '数据结构', 5, 3, '张老师', '周三山14:00-16:00'),
(4, '线性代数', 6, 2, '赵老师', '周一山10:00-12:00'),
(5, '概率论与数理统计', 6, 3, '钱老师', '周二山8:00-10:00'),
(6, '计算机组成原理', 6, 4, '孙老师', '周三□8:00-10:00'),
(7, '操作系统',6, 3, '周老师', '周四□10:00-12:00'),
(8, '数据库原理',6, 2, '吴老师', '周五□14:00-16:00'),
(9, '人工智能导论', 6, 2, '郑老师', '周一」14:00-16:00'),
(10, '机器学习', 6,4, '王老师', '周二山14:00-16:00'),
(11, '模式识别', 6,3, '李老师', '周三山10:00-12:00'),
(12, '深度学习', 6,2, '张老师', '周四山8:00-10:00'),
(13, '计算机视觉', 6,3, '赵老师', '周五山8:00-10:00'),
(14, '自然语言处理', 6,3, '钱老师', '周一山16:00-18:00'),
(15, '算法分析与设计',6,3,'孙老师','周二□16:00-18:00'),
(16, '离散数学', 6,3, '周老师', '周三_{11}16:00-18:00'),
(17, '计算机网络',6,3,'吴老师','周四,14:00-16:00'),
(18, '软件工程', 6,2, '郑老师', '周五山10:00-12:00'),
(19, '编译原理', 6,3, '王老师', '周一山10:00-12:00'),
(20, '计算机图形学',6,3,'李老师','周二山8:00-10:00'),
(21, '高等数学',6, 4, '张老师', '周三□8:00-10:00'),
(22, '线性代数',6,3,'赵老师', '周四□10:00-12:00'),
(23, '概率论与数理统计',6,3,'钱老师','周五山14:00-16:00'),
(24, '计算机组成原理',6,2,'孙老师','周一,14:00-16:00'),
(25, '操作系统', 6, 3, '周老师', '周二, 14:00-16:00'),
(26, '数据库原理',6,3,'吴老师','周三□10:00-12:00'),
(27, '人工智能导论', 6,2, '郑老师', '周四□8:00-10:00'),
(28, '机器学习',6,4,'王老师','周五_8:00-10:00'),
(29, '模式识别',6,3,'李老师','周一□16:00-18:00'),
```

```
(30, '深度学习',6, 2, '张老师', '周二山16:00-18:00'),
   (31, '计算机视觉',6,3,'赵老师','周三□16:00-18:00'),
   (32, '自然语言处理',6,3,'钱老师','周四山14:00-16:00'),
   (33、'算法分析与设计',6,3,'孙老师','周五山10:00-12:00'),
   (34, '离散数学',6,3, '周老师', '周一山10:00-12:00'),
   (35, '计算机网络', 6,2, '吴老师', '周二山8:00-10:00'),
   (36, '软件工程', 6,3, '郑老师', '周三□8:00-10:00'),
   (37, '编译原理', 6,2, '王老师', '周四山10:00-12:00'),
   (38, '计算机图形学', 6,3, '李老师', '周五□14:00-16:00'),
   (39, '高等数学', 6,4, '张老师', '周一」14:00-16:00'),
   (40, '线性代数', 6,3, '刘老师', '周五山14:00-16:00');
  INSERT INTO students (studentID, studentName, studentPassword, studentMajor,
     studentGrade) VALUES
   (2022001,'张三','passwd001','计算机科学',2022),
   (2022002, '李四', 'passwd002', '电子工程', 2022),
   (2021001, '赵瑾瑜', 'passwd001', '计算机科学', 2021),
   (2021002, '钱浩然', 'passwd002', '电子工程', 2021),
   (2021003, '孙思远', 'passwd003', '人工智能', 2021),
   (2021004, '李晓蕾', 'passwd004', '软件工程', 2021),
   (2021005, '周芷若', 'passwd005', '计算机科学', 2021),
   (2021006, '吴文轩', 'passwd006', '电子工程', 2021),
   (2021007, '郑雅婷', 'passwd007', '人工智能', 2021),
   (2021008, '王梓轩', 'passwd008', '软件工程', 2021),
   (2021009, '冯嘉熙', 'passwd009', '计算机科学', 2021),
   (2021010, '陈思敏', 'passwd010', '电子工程', 2021),
   (2021011, '褚子涵', 'passwd011', '人工智能', 2021),
   (2021012, '卫子夫', 'passwd012', '软件工程', 2021),
   (2021013, '蒋梦婕', 'passwd013', '计算机科学', 2021),
   (2021014, '沈涛', 'passwd014', '电子工程', 2021),
   (2021015, '韩雪', 'passwd015', '人工智能', 2021),
   (2021016, '杨洋', 'passwd016', '软件工程', 2021),
   (2021017, '朱一龙', 'passwd017', '计算机科学', 2021),
   (2021018, '秦岚', 'passwd018', '电子工程', 2021),
   (2021019, '尤靖茹', 'passwd019', '人工智能', 2021),
   (2021020, '许凯', 'passwd020', '软件工程', 2021),
108
   (2021021, '罗云熙', 'passwd021', '计算机科学', 2021),
   (2021022, '邓紫棋', 'passwd022', '电子工程', 2021),
   (2021023, '韩孝周', 'passwd023', '人工智能', 2021),
   (2021024, '谢霆锋', 'passwd024', '软件工程', 2021),
   (2021025, '冯绍峰', 'passwd025', '计算机科学', 2021),
   (2021026, '沈腾', 'passwd026', '电子工程', 2021),
   (2021027, '汪峰', 'passwd027', '人工智能', 2021),
  (2021028, '程瑶瑶', 'passwd028', '软件工程', 2021),
```

```
(2021029, '曹曦文', 'passwd029', '计算机科学', 2021),
   (2021030, '严宽', 'passwd030', '电子工程', 2021),
   (2021031, '金瀚', 'passwd031', '人工智能', 2021),
119
   (2021032, '魏晨', 'passwd032', '软件工程', 2021),
   (2021033, '陶虹', 'passwd033', '计算机科学', 2021),
   (2021034, '姜潮', 'passwd034', '电子工程', 2021),
   (2021035, '戚薇', 'passwd035', '人工智能', 2021),
   (2021036, '谢楠', 'passwd036', '软件工程', 2021),
   (2021037, '邹市明', 'passwd037', '计算机科学', 2021),
   (2021038, '喻恩泰', 'passwd038', '电子工程', 2021),
   (2021039, '柏雪', 'passwd039', '人工智能', 2021),
   (2021040, '水原希子', 'passwd040', '软件工程', 2021),
128
   (2021041, '窦骁', 'passwd041', '计算机科学', 2021),
   (2021042, '章子怡', 'passwd042', '电子工程', 2021),
   (2021043, '云朵', 'passwd043', '人工智能', 2021),
   (2021044, '苏醒', 'passwd044', '软件工程', 2021);
```

#### 8.2 db\_operations.py

```
import pymysql
   connection = pymysql.connect(
       host='localhost',
       user='root',
       # password='ADthq123',
       password="!1004R00Tpasswd",
       database='StudentCourseSystem',
       charset='utf8mb4',
       cursorclass=pymysql.cursors.DictCursor
   # 用户验证
   def verify user(studentID, studentPassword):
       with connection.cursor() as cursor:
           sql = "SELECT" * FROM students WHERE studentID = % AND studentPassword = % s"
           cursor.execute(sql, (studentID, studentPassword))
           result = cursor.fetchone()
           return result is not None
   # 获取课程列表
   def get_courses():
       with connection.cursor() as cursor:
           sql = "SELECT_{\square} *_{\square} FROM_{\square} courses"
25
           cursor.execute(sql)
```

```
return cursor.fetchall()
# 获取当前选课人数
def get_number(courseID):
   with connection.cursor() as cursor:
       # SQL 查询语句
       sql = """
       SELECT COUNT(*) AS enrollment_count
       FROM enrollments
       WHERE courseID = %s
       # 执行查询
       cursor.execute(sql, (courseID,))
       result = cursor.fetchone()
       # 返回结果
       return result['enrollment_count'] if result and result['enrollment_count'] else
          0
# 选课
def enroll_course(studentID, courseID):
   with connection.cursor() as cursor:
       # 检查是否已选该课程
       sql = "SELECT_* FROM enrollments WHERE studentID = s_AND courseID = s"
       cursor.execute(sql, (studentID, courseID))
       if cursor.fetchone():
           return "您已选过该课程!"
       # 检查课程时间是否冲突
       sql = """
           SELECT c.courseSchedule FROM courses c
           JOIN enrollments e ON c.courseID = e.courseID
           WHERE e.studentID=%s
       0.00
       cursor.execute(sql, (studentID,))
       existing_schedules = [row['courseSchedule'] for row in cursor.fetchall()]
       # 获取新课程的时间
       sql = "SELECT_courseSchedule_FROM_courses_WHERE_courseID=%s"
       cursor.execute(sql, (courseID,))
       new_schedule = cursor.fetchone()['courseSchedule']
       if new_schedule in existing_schedules:
           return "课程时间冲突, 无法选课!"
```

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```
# 获取课程最大容量
       sq1 = "SELECT_courseNumber_FROM_courses_WHERE_courseID=%s"
       cursor.execute(sql, (courseID,))
       course_info = cursor.fetchone()
       if not course_info:
           return "课程不存在!"
       max_capacity = course_info['courseNumber']
       # 判断选课人数是否达到上限
       current_count = get_number(courseID)
       if current_count >= max_capacity:
           return "选课人数已达上限,无法选课!"
       # 插入新记录
       sql = "INSERT_INTO_enrollments_(studentID,_courseID)_VALUES_(%s,_%s)"
       cursor.execute(sql, (studentID, courseID))
       connection.commit()
       return "选课成功!"
# 退课
def drop_course(studentID, courseID):
   with connection.cursor() as cursor:
       # 检查是否已选该课程
       sql = "SELECT_* FROM enrollments WHERE studentID = s_AND courseID = s"
       cursor.execute(sql, (studentID, courseID))
       if not cursor.fetchone():
           return "您未选该课程!"
       # 删除记录
       sql = "DELETE_FROM_enrollments_WHERE_studentID=%s_AND_courseID=%s"
       cursor.execute(sql, (studentID, courseID))
       connection.commit()
       return "退课成功!"
# 获取已选课程
def get_enrolled_courses(studentID):
   with connection.cursor() as cursor:
       sql = """
           SELECT c.* FROM courses c
           JOIN enrollments e ON c.courseID = e.courseID
           WHERE e.studentID=%s
       cursor.execute(sql, (studentID,))
       return cursor.fetchall()
```

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#### 8.3 main.py

```
import sys
from PySide6 import QtWidgets
from PySide6.QtWidgets import QMessageBox
from new_ui import Ui_MainWindow # 导入生成的UI类
import db_operations
import db_create
class MainWindow(QtWidgets.QMainWindow, Ui_MainWindow):
   def __init__(self):
       super(MainWindow, self).__init__()
       self.setupUi(self)
       self.studentID = None # 初始化学生ID
       self.bind_events()
       self.stackedWidget.setCurrentIndex(0) #显示登录界面
   def bind_events(self):
       # 登录界面按钮事件
       self.loginButton.clicked.connect(self.login)
       # 选课界面按钮事件
       self.enrollButton.clicked.connect(self.enroll_course)
       self.dropButton.clicked.connect(self.drop_course)
       self.refreshButton.clicked.connect(self.load_courses)
   def login(self):
       studentID = self.studentIdLineEdit.text()
        studentPassword = self.passwordLineEdit.text()
       if db_operations.verify_user(studentID, studentPassword):
           QMessageBox.information(self, "成功", "登录成功")
           self.studentID = studentID # 保存学生ID
           self.load_courses()
                                        # 加载课程列表
           self.load_enrolled_courses() # 加载已选课程列表
           self.stackedWidget.setCurrentIndex(1) # 切换到主界面
       else:
           QMessageBox.warning(self, "错误", "学号或密码错误")
   def load_courses(self):
       courses = db_operations.get_courses()
       self.courseTableWidget.setRowCount(len(courses))
       for row_num, course in enumerate(courses):
           num = db_operations.get_number(course["courseID"])
           self.courseTableWidget.setItem(row_num, 0, QtWidgets.QTableWidgetItem(str(
              course['courseID'])))
           self.courseTableWidget.setItem(row_num, 1, QtWidgets.QTableWidgetItem(course
              ['courseName']))
```

```
self.courseTableWidget.setItem(row_num, 2, QtWidgets.QTableWidgetItem(str(
           course['courseCredit'])))
        self.courseTableWidget.setItem(row_num, 3, QtWidgets.QTableWidgetItem(course
           ['courseTeacher']))
        self.courseTableWidget.setItem(row_num, 4, QtWidgets.QTableWidgetItem(course
           ['courseSchedule']))
        self.courseTableWidget.setItem(row_num, 5, QtWidgets.QTableWidgetItem(str(
           num) + "u/u" + str(course['courseNumber'])))
def load_enrolled_courses(self):
    courses = db_operations.get_enrolled_courses(self.studentID)
    self.enrolledCourseTableWidget.setRowCount(len(courses))
    for row_num, course in enumerate(courses):
       num = db_operations.get_number(course["courseID"])
        self.enrolledCourseTableWidget.setItem(row_num, 0, QtWidgets.
           QTableWidgetItem(str(course['courseID'])))
        self.enrolledCourseTableWidget.setItem(row_num, 1, QtWidgets.
           QTableWidgetItem(course['courseName']))
        self.enrolledCourseTableWidget.setItem(row_num, 2, QtWidgets.
           QTableWidgetItem(str(course['courseCredit'])))
        self.enrolledCourseTableWidget.setItem(row_num, 3, QtWidgets.
           QTableWidgetItem(course['courseTeacher']))
        self.enrolledCourseTableWidget.setItem(row_num, 4, QtWidgets.
           QTableWidgetItem(course['courseSchedule']))
        self.enrolledCourseTableWidget.setItem(row_num, 5, QtWidgets.
           QTableWidgetItem(str(num) + "u/u" + str(course['courseNumber'])))
def enroll_course(self):
    selected_items = self.courseTableWidget.selectedItems()
    if not selected_items:
        QMessageBox.warning(self,"提示","请先选择一门课程!")
       return
    courseID = selected_items[0].text() # 假设课程ID在第0列
    result = db_operations.enroll_course(self.studentID, courseID)
    QMessageBox.information(self, "选课结果", result)
    self.load_enrolled_courses() # 更新已选课程列表
def drop_course(self):
    selected_items = self.enrolledCourseTableWidget.selectedItems()
    if not selected items:
        QMessageBox.warning(self,"提示","请先选择一门课程!")
       return
    courseID = selected_items[0].text()
    result = db_operations.drop_course(self.studentID, courseID)
    QMessageBox.information(self, "退课结果", result)
```

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```
self.load_enrolled_courses() # 更新已选课程列表

if __name__ == "__main__":
    # db_create.new_create(0)
    app = QtWidgets.QApplication(sys.argv)
    window = MainWindow()
    window.show()
    sys.exit(app.exec())
```

#### 8.4 new\_ui.py

```
-*- coding: utf-8 -*-
  ## Form generated from reading UI file 'new_ui.ui'
  ##
  ## Created by: Qt User Interface Compiler version 6.8.0
  ## WARNING! All changes made in this file will be lost when recompiling UI file!
  from PySide6.QtCore import (QCoreApplication, QDate, QDateTime, QLocale,
      QMetaObject, QObject, QPoint, QRect,
      QSize, QTime, QUrl, Qt)
  from PySide6.QtGui import (QBrush, QColor, QConicalGradient, QCursor,
      QFont, QFontDatabase, QGradient, QIcon,
      QImage, QKeySequence, QLinearGradient, QPainter,
      QPalette, QPixmap, QRadialGradient, QTransform)
  from PySide6.QtWidgets import (QApplication, QHeaderView, QLabel, QLineEdit,
      QMainWindow, QPushButton, QSizePolicy, QStackedWidget,
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      QTableWidget, QTableWidgetItem, QWidget)
  class Ui_MainWindow(object):
      def setupUi(self, MainWindow):
         if not MainWindow.objectName():
             MainWindow.setObjectName(u"MainWindow")
         MainWindow.resize(800, 600)
         self.centralwidget = QWidget(MainWindow)
         self.centralwidget.setObjectName(u"centralwidget")
         self.stackedWidget = QStackedWidget(self.centralwidget)
         self.stackedWidget.setObjectName(u"stackedWidget")
         self.stackedWidget.setGeometry(QRect(0, 0, 800, 600))
         self.loginPage = QWidget()
         self.loginPage.setObjectName(u"loginPage")
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         self.labelStudentId = QLabel(self.loginPage)
```

```
self.labelStudentId.setObjectName(u"labelStudentId")
self.labelStudentId.setGeometry(QRect(200, 200, 60, 30))
self.studentIdLineEdit = QLineEdit(self.loginPage)
self.studentIdLineEdit.setObjectName(u"studentIdLineEdit")
self.studentIdLineEdit.setGeometry(QRect(270, 200, 200, 30))
self.labelPassword = QLabel(self.loginPage)
self.labelPassword.setObjectName(u"labelPassword")
self.labelPassword.setGeometry(QRect(200, 250, 60, 30))
self.passwordLineEdit = QLineEdit(self.loginPage)
self.passwordLineEdit.setObjectName(u"passwordLineEdit")
self.passwordLineEdit.setGeometry(QRect(270, 250, 200, 30))
self.passwordLineEdit.setEchoMode(QLineEdit.EchoMode.Password)
self.loginButton = QPushButton(self.loginPage)
self.loginButton.setObjectName(u"loginButton")
self.loginButton.setGeometry(QRect(320, 300, 100, 30))
self.stackedWidget.addWidget(self.loginPage)
self.mainPage = QWidget()
self.mainPage.setObjectName(u"mainPage")
self.courseTableWidget = QTableWidget(self.mainPage)
if (self.courseTableWidget.columnCount() < 12):</pre>
    self.courseTableWidget.setColumnCount(12)
__qtablewidgetitem = QTableWidgetItem()
self.courseTableWidget.setHorizontalHeaderItem(0, __qtablewidgetitem)
__qtablewidgetitem1 = QTableWidgetItem()
self.courseTableWidget.setHorizontalHeaderItem(1, __qtablewidgetitem1)
__qtablewidgetitem2 = QTableWidgetItem()
self.courseTableWidget.setHorizontalHeaderItem(2, __qtablewidgetitem2)
__qtablewidgetitem3 = QTableWidgetItem()
self.courseTableWidget.setHorizontalHeaderItem(3, __qtablewidgetitem3)
__qtablewidgetitem4 = QTableWidgetItem()
self.courseTableWidget.setHorizontalHeaderItem(4, __qtablewidgetitem4)
__qtablewidgetitem5 = QTableWidgetItem()
self.courseTableWidget.setHorizontalHeaderItem(5, __qtablewidgetitem5)
self.courseTableWidget.setObjectName(u"courseTableWidget")
self.courseTableWidget.setGeometry(QRect(50, 50, 701, 200))
self.courseTableWidget.setColumnCount(12)
self.enrollButton = QPushButton(self.mainPage)
self.enrollButton.setObjectName(u"enrollButton")
self.enrollButton.setGeometry(QRect(200, 270, 100, 30))
self.dropButton = QPushButton(self.mainPage)
self.dropButton.setObjectName(u"dropButton")
self.dropButton.setGeometry(QRect(350, 270, 100, 30))
self.refreshButton = QPushButton(self.mainPage)
self.refreshButton.setObjectName(u"refreshButton")
self.refreshButton.setGeometry(QRect(500, 270, 100, 30))
```

```
self.enrolledCourseTableWidget = QTableWidget(self.mainPage)
    if (self.enrolledCourseTableWidget.columnCount() < 6):</pre>
        self.enrolledCourseTableWidget.setColumnCount(6)
    __qtablewidgetitem6 = QTableWidgetItem()
    self.enrolledCourseTableWidget.setHorizontalHeaderItem(0, __qtablewidgetitem6)
    __qtablewidgetitem7 = QTableWidgetItem()
    self.enrolledCourseTableWidget.setHorizontalHeaderItem(1, __qtablewidgetitem7)
    __qtablewidgetitem8 = QTableWidgetItem()
    self.enrolledCourseTableWidget.setHorizontalHeaderItem(2, __qtablewidgetitem8)
    __qtablewidgetitem9 = QTableWidgetItem()
    self.enrolledCourseTableWidget.setHorizontalHeaderItem(3, __qtablewidgetitem9)
    __qtablewidgetitem10 = QTableWidgetItem()
    self.enrolledCourseTableWidget.setHorizontalHeaderItem(4, __qtablewidgetitem10)
    __qtablewidgetitem11 = QTableWidgetItem()
    self.enrolledCourseTableWidget.setHorizontalHeaderItem(5, __qtablewidgetitem11)
    self.enrolledCourseTableWidget.setObjectName(u"enrolledCourseTableWidget")
    self.enrolledCourseTableWidget.setGeometry(QRect(50, 320, 700, 200))
    self.enrolledCourseTableWidget.setColumnCount(6)
    self.stackedWidget.addWidget(self.mainPage)
    MainWindow.setCentralWidget(self.centralwidget)
    self.retranslateUi(MainWindow)
    self.stackedWidget.setCurrentIndex(1)
    QMetaObject.connectSlotsByName(MainWindow)
# setupUi
def retranslateUi(self, MainWindow):
    MainWindow.setWindowTitle(QCoreApplication.translate("MainWindow", u"\u5b66\
       u751f \u9009 \u8bfe \u7cfb \u7edf", None))
    self.labelStudentId.setText(QCoreApplication.translate("MainWindow", u"\u5b66\
       u53f7\uff1a", None))
    self.labelPassword.setText(QCoreApplication.translate("MainWindow", u"\u5bc6\
       u7801\uff1a", None))
    self.loginButton.setText(QCoreApplication.translate("MainWindow", u"\u767b\u5f55
       ", None))
    ___qtablewidgetitem = self.courseTableWidget.horizontalHeaderItem(0)
    ___qtablewidgetitem.setText(QCoreApplication.translate("MainWindow", u"\u8bfe\
       u7a0bID", None));
    ___qtablewidgetitem1 = self.courseTableWidget.horizontalHeaderItem(1)
    ___qtablewidgetitem1.setText(QCoreApplication.translate("MainWindow", u"\u8bfe\
       u7a0b\u540d\u79f0", None));
    ___qtablewidgetitem2 = self.courseTableWidget.horizontalHeaderItem(2)
```

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```
___qtablewidgetitem2.setText(QCoreApplication.translate("MainWindow", u"\u5b66\
       u5206", None));
    ___qtablewidgetitem3 = self.courseTableWidget.horizontalHeaderItem(3)
    _{-}qtablewidgetitem3.setText(QCoreApplication.translate("MainWindow", u"\u6559\
       u5e08", None));
    ___qtablewidgetitem4 = self.courseTableWidget.horizontalHeaderItem(4)
    ___qtablewidgetitem4.setText(QCoreApplication.translate("MainWindow", u"\u4e0a\
       u8bfe\u65f6\u95f4", None));
    ___qtablewidgetitem5 = self.courseTableWidget.horizontalHeaderItem(5)
    ___qtablewidgetitem5.setText(QCoreApplication.translate("MainWindow", u"\u9009\
       u8bfe\u4eba\u6570", None));
    self.enrollButton.setText(QCoreApplication.translate("MainWindow", u"\u9009\
       u8bfe", None))
    self.dropButton.setText(QCoreApplication.translate("MainWindow", u"\u9000\u8bfe"
       , None))
    self.refreshButton.setText(QCoreApplication.translate("MainWindow", u"\u5237\
       u65b0", None))
    ___qtablewidgetitem6 = self.enrolledCourseTableWidget.horizontalHeaderItem(0)
    ___qtablewidgetitem6.setText(QCoreApplication.translate("MainWindow", u"\u8bfe\
       u7a0bID", None));
    ___qtablewidgetitem7 = self.enrolledCourseTableWidget.horizontalHeaderItem(1)
    ___qtablewidgetitem7.setText(QCoreApplication.translate("<mark>MainWindow", u"\u8bfe\</mark>
       u7a0b\u540d\u79f0", None));
    ___qtablewidgetitem8 = self.enrolledCourseTableWidget.horizontalHeaderItem(2)
    \_\_\_qtablewidgetitem8.setText(QCoreApplication.translate("MainWindow", u"\u5b66\
       u5206", None));
    ___qtablewidgetitem9 = self.enrolledCourseTableWidget.horizontalHeaderItem(3)
    ___qtablewidgetitem9.setText(QCoreApplication.translate("MainWindow", u"\u6559\
       u5e08", None));
    ___qtablewidgetitem10 = self.enrolledCourseTableWidget.horizontalHeaderItem(4)
    ___qtablewidgetitem10.setText(QCoreApplication.translate("MainWindow", u"\u4e0a\
       u8bfe\u65f6\u95f4", None));
    ___qtablewidgetitem11 = self.enrolledCourseTableWidget.horizontalHeaderItem(5)
    ___qtablewidgetitem11.setText(QCoreApplication.translate("MainWindow", u"\u9009\
       u8bfe\u4eba\u6570", None));
# retranslateUi
```

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