



暨南大學
JINAN UNIVERSITY

Course Selection System

Usage Guideline



2024/12/14

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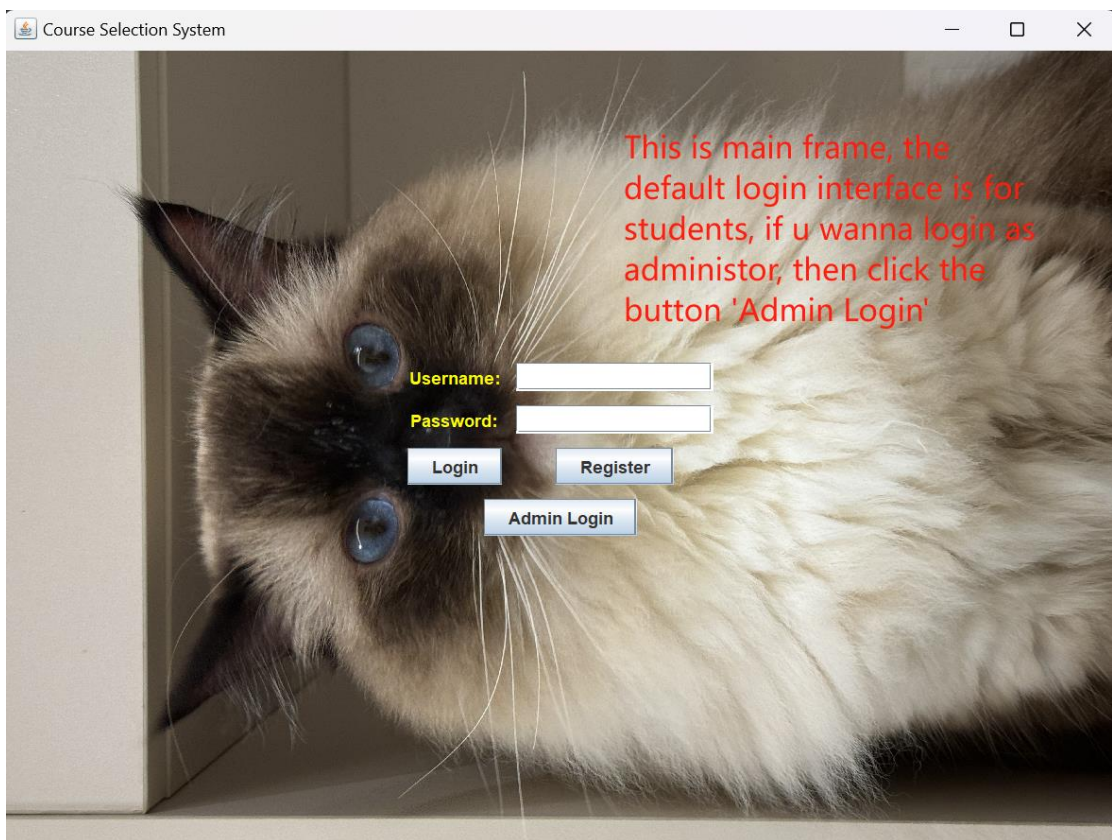
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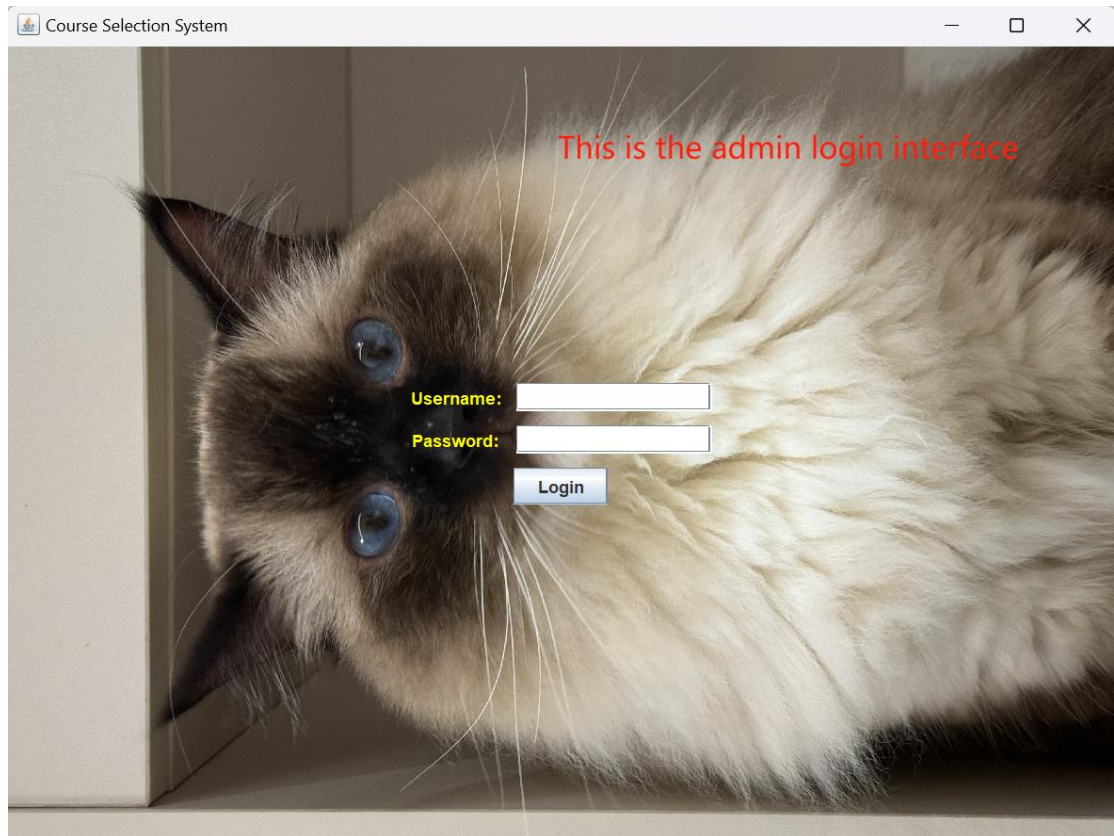
1. Introduction

This system develops a database-driven partial application system for Teaching Administration Management, primarily focusing on Course Enrollment functionalities. It includes essential support features like viewing available and enrolled courses and modifying course selections. The system adheres to key constraints such as prerequisite course requirements, a credit cap (**maximum of 21 credits per semester**), and the avoidance of scheduling conflicts among selected courses. It is built using **Java**, **JDBC**, and the **Swing framework**, providing separate main interfaces for **students** and **administrators**, implementing their respective functionalities.

Student Features: The system offers a comprehensive suite of functionalities tailored to enhance students' academic experiences. Students can securely modify their passwords, ensuring the protection of their personal data. They have access to view their personal information, allowing them to keep track of their academic records and personal details. The system enables students to select courses, providing a streamlined process for course enrollment. Additionally, students can view the courses they have enrolled in, and if necessary, they have the option to drop courses, granting them flexibility in managing their academic workload.



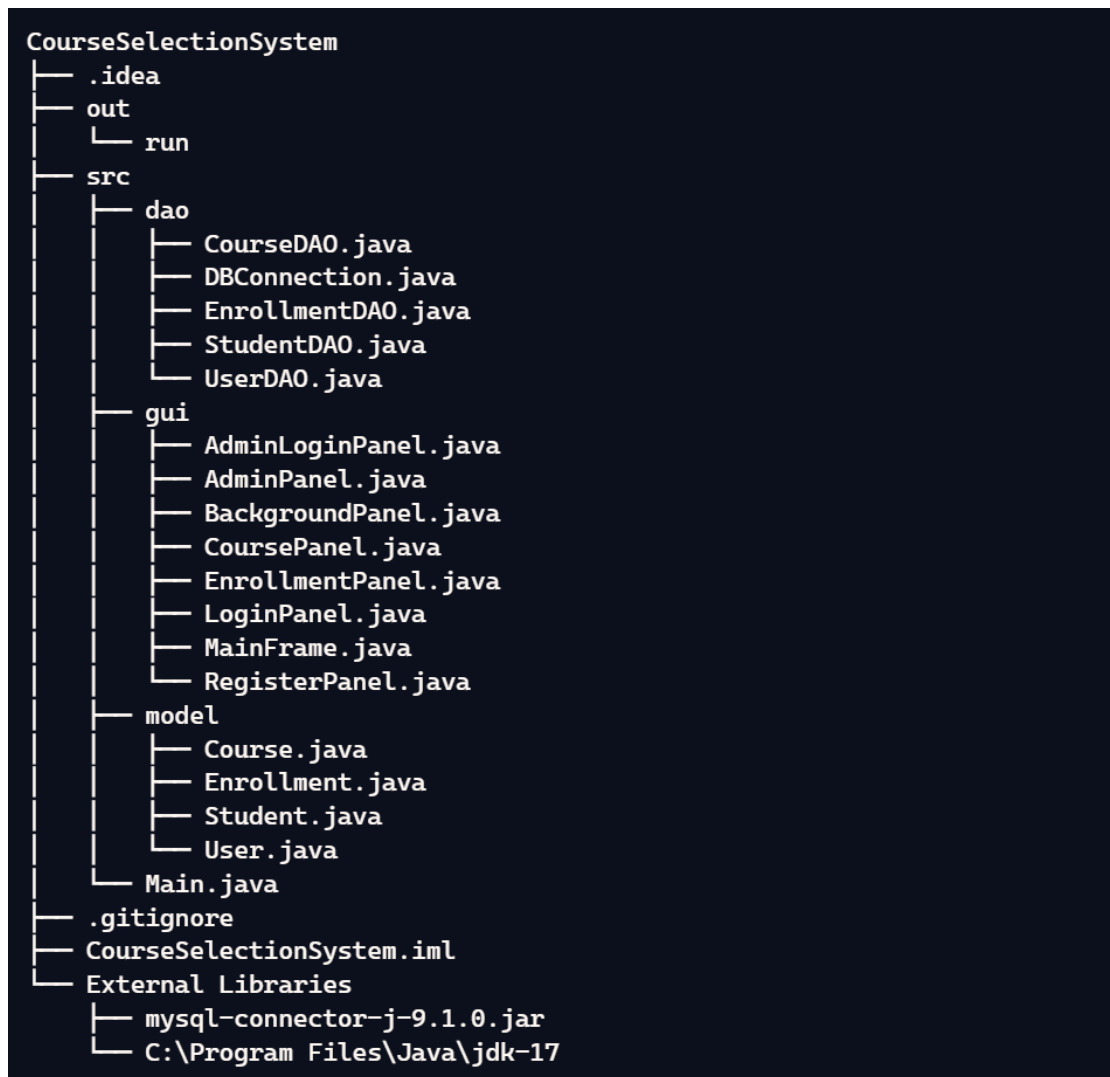
Administrator Features: The system provides administrators with tools to manage courses and view student information, aiding in the digitalization of teaching administration.



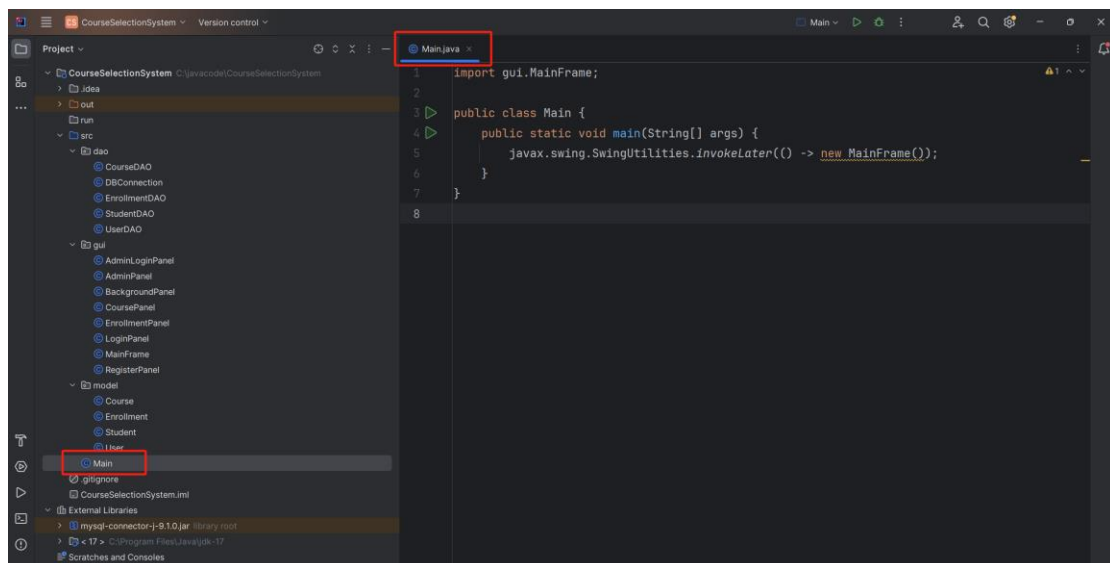
2. System Requirements

- Operating System: Windows, macOS, Linux
- Java Runtime Environment: JDK 8 or higher
- Database: MySQL 5.7 or higher

In this system, the doc folder stores usage guideline, the lib folder stores MySQL-connector, the res folder stores resource images and database backup files, the compiled executable Java class files are stored in the run folder, and finally the src folder saves the source code, which is classified into different software packages. The system file structure is shown as follows:



You can execute this system simply run the Main.java to run the whole system.

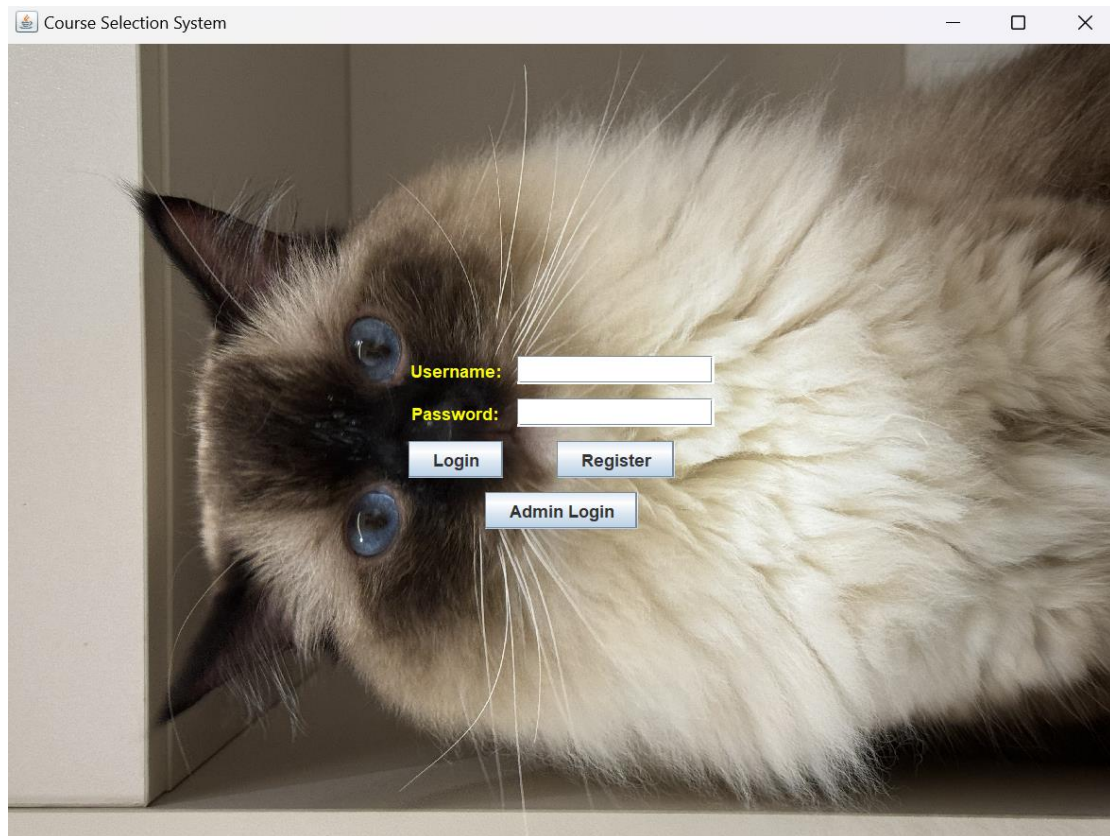


3. Installation and Startup

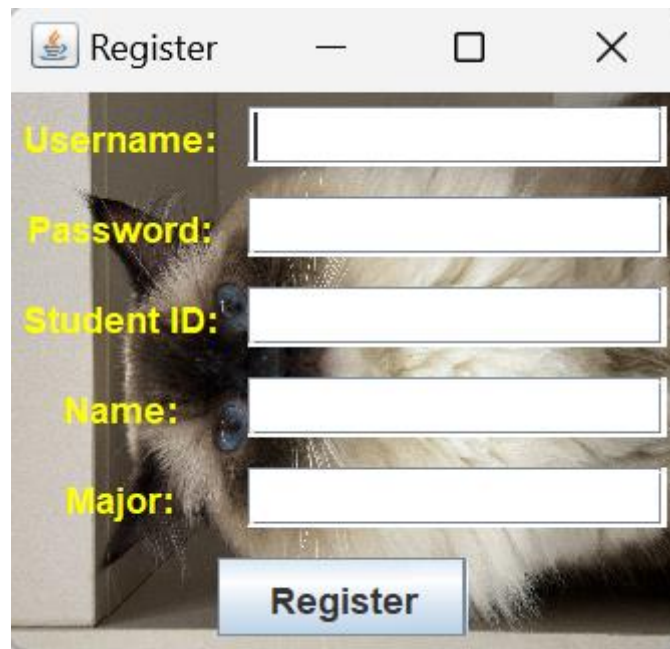
1. Ensure Java Runtime Environment and MySQL database are installed.
2. Download and unzip the project source code.
3. Open the project in an IDE (such as IntelliJ IDEA).
4. Configure the database connection information.
5. Run the Main.java file to start the system.

4. User Registration and Login

1. Open the system login interface.

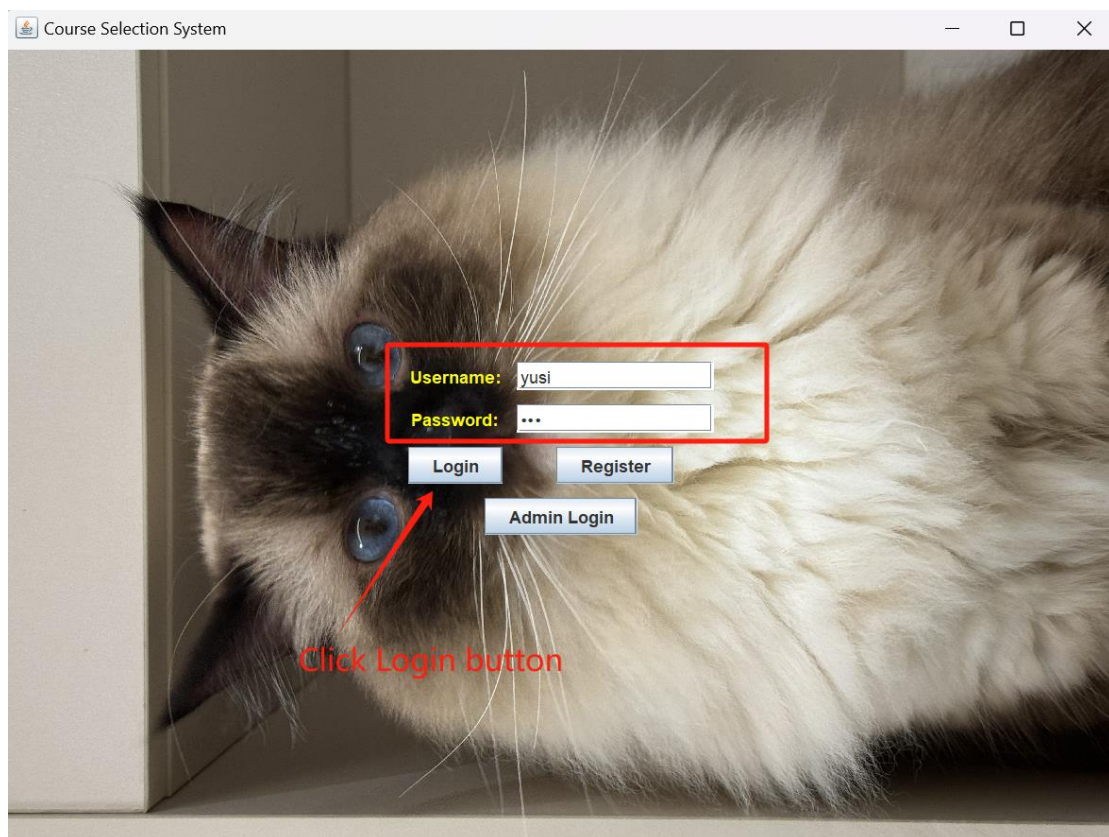


2. Click the "Register" button, fill in the username, password, student ID, name, and major, then click "Register" to complete registration.



A screenshot of a web application window titled "Register". The window has a standard Windows-style title bar with minimize, maximize, and close buttons. The background of the window is a close-up image of a Siamese cat's face. The form contains five input fields, each with a yellow label to its left: "Username:", "Password:", "Student ID:", "Name:", and "Major:". Below these fields is a blue button with the text "Register" in white.

3. Log in to the system using the registered username and password.



A screenshot of a web application window titled "Course Selection System". The window has a standard Windows-style title bar. The background is a close-up image of a Siamese cat's face. The form contains three input fields, each with a yellow label to its left: "Username:" (containing the text "yusi"), "Password:" (containing three dots "..."), and "Admin Login:". Below these fields are three buttons: "Login", "Register", and "Admin Login". A red rectangle highlights the "Username:" and "Password:" fields. A red arrow points from the text "Click Login button" to the "Login" button.

5. Student Features

5.1 Course Enrollment

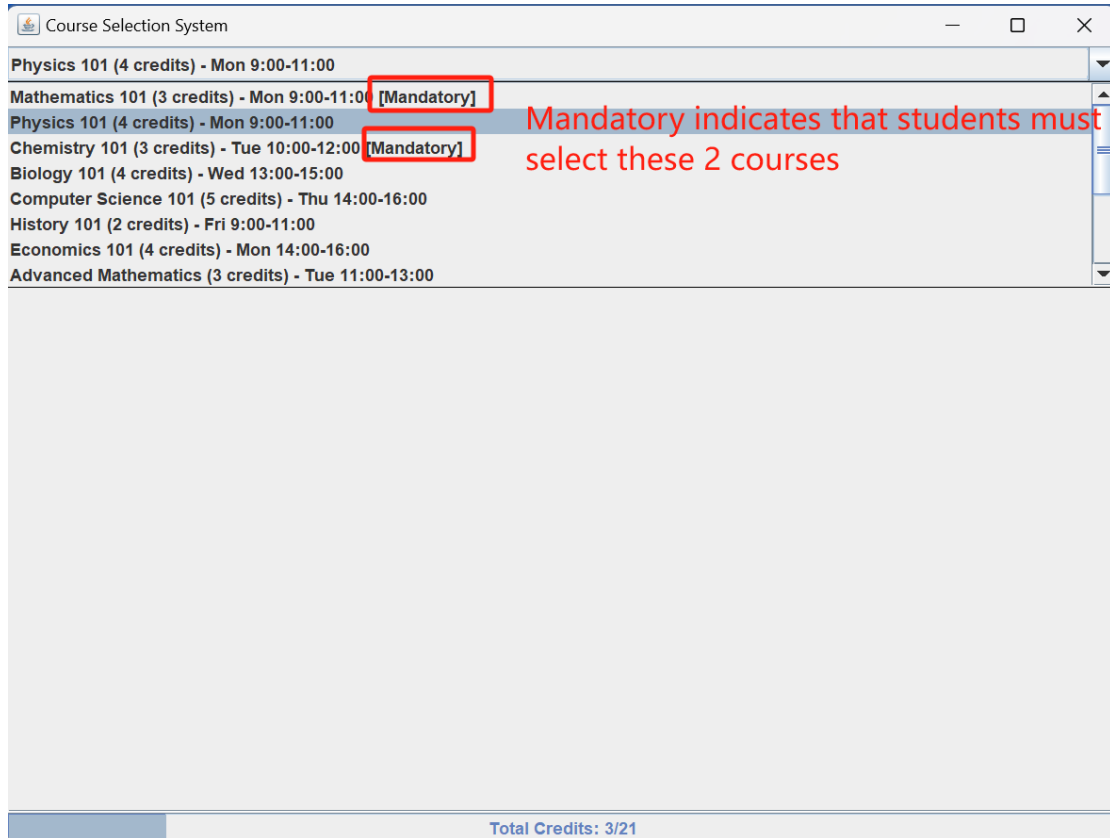
1. After logging in, go to the course enrollment interface.

The screenshot shows a web application window titled "Course Selection System". At the top, a dropdown menu displays "Mathematics 101 (3 credits) - Mon 9:00-11:00 [Mandatory]". Below this, there are two buttons: "Enroll" and "Drop". Red arrows point from the text "Enroll button" to the "Enroll" button and from "Drop button" to the "Drop" button. Below the buttons is a table with three columns: "Course Name", "Credits", and "Schedule". A red arrow points from the text "Course list" to the "Course Name" column. Another red arrow points from the text "Enrolled course list" to the "Schedule" column. At the bottom of the interface, a status bar shows "Total Credits: 0/21". A red arrow points from the text "Total credits (show the current credits and the limit 21)" to this status bar.

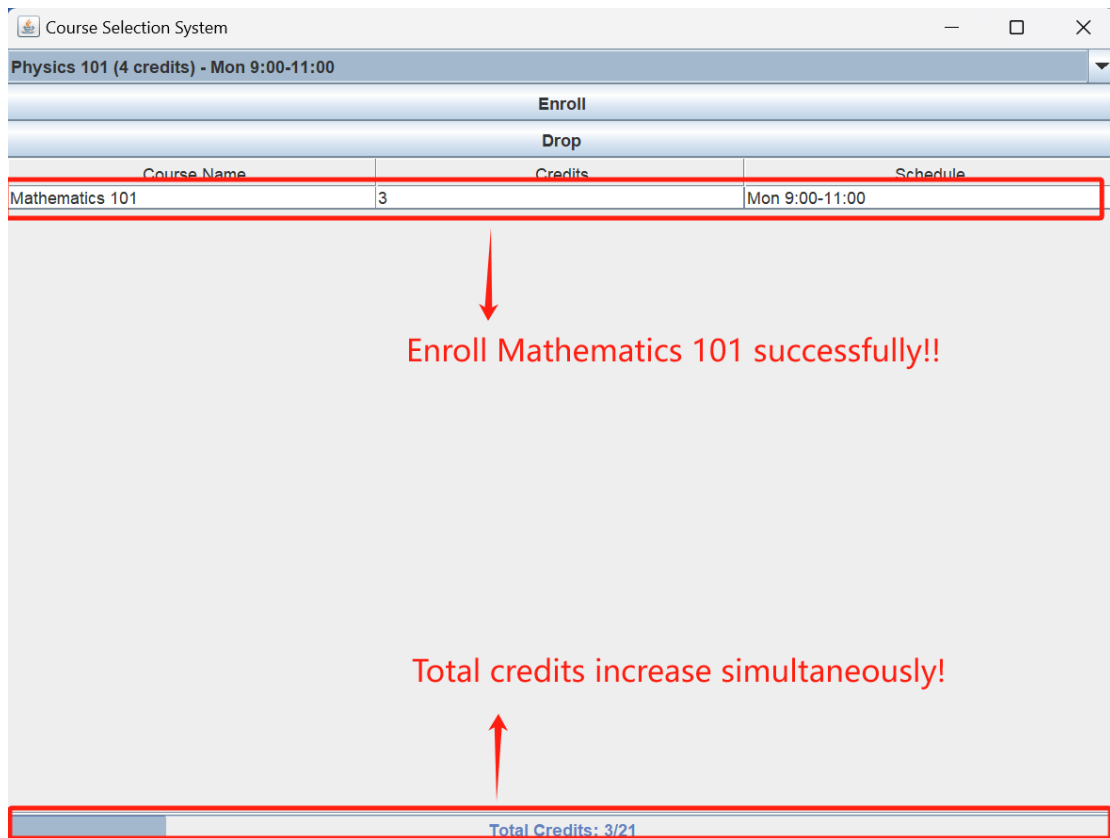
Course Name	Credits	Schedule
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Total Credits: 0/21

2. Select the desired course from the dropdown list. Mandatory courses will be marked with "[Mandatory]".



3. Click the "Enroll" button to enroll in the course. The system will check for credit and schedule conflicts.



5.2 Dropping Courses

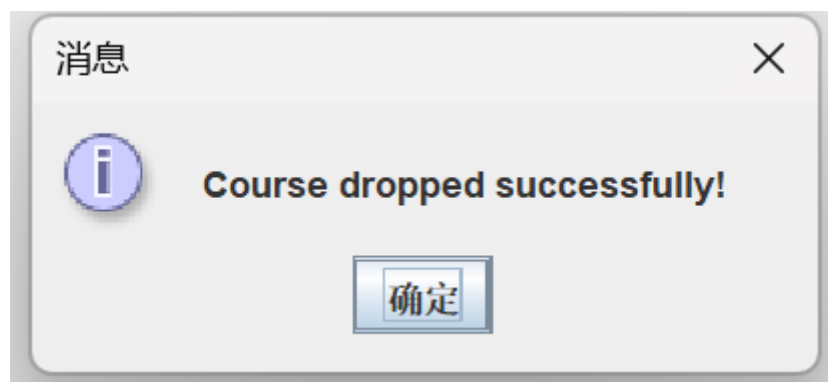
1. In the course enrollment interface, select a course from the list of enrolled courses.
2. Click the "Drop" button to drop the selected course.

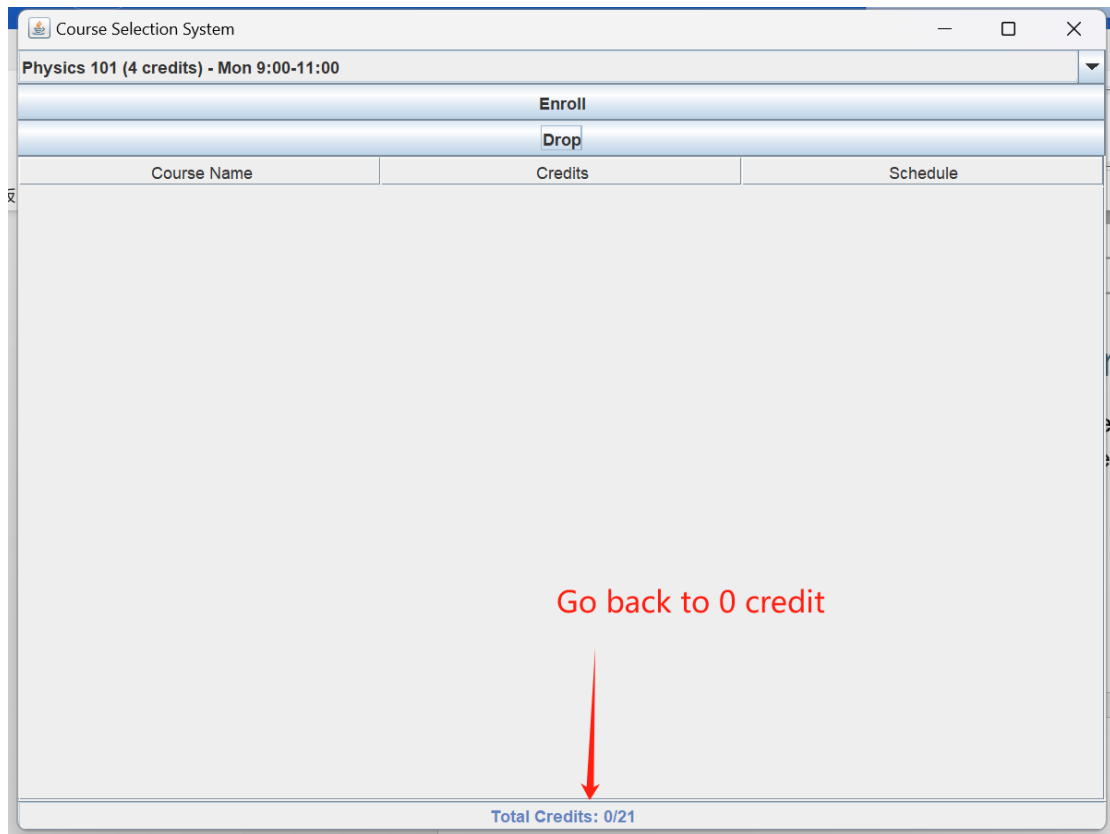
The screenshot shows a web application window titled "Course Selection System". At the top, there is a dropdown menu currently displaying "Physics 101 (4 credits) - Mon 9:00-11:00". Below this, there are two buttons: "Enroll" and "Drop". The "Drop" button is highlighted. Underneath the buttons is a table with three columns: "Course Name", "Credits", and "Schedule". The table contains one row: "Mathematics 101", "3", and "Mon 9:00-11:00". Below the table, there is a large text area with the following red text: "Drop operation:", "Step1: Select the enrolled course", "Step2: Click the Drop button", and "DONE". At the bottom of the window, there is a status bar that reads "Total Credits: 3/21".

Course Name	Credits	Schedule
Mathematics 101	3	Mon 9:00-11:00

Drop operation:
Step1: Select the enrolled course
Step2: Click the Drop button
DONE

Total Credits: 3/21





5.3 Viewing Enrolled Courses

1. In the course enrollment interface, you can view the list of currently enrolled courses and the total credit progress bar.

Course Selection System

Economics 101 (4 credits) - Mon 14:00-16:00

Enroll

Drop

Course Name	Credits	Schedule
Mathematics 101	3	Mon 9:00-11:00
Chemistry 101	3	Tue 10:00-12:00
Biology 101	4	Wed 13:00-15:00
Computer Science 101	5	Thu 14:00-16:00
History 101	2	Fri 9:00-11:00
Economics 101	4	Mon 14:00-16:00

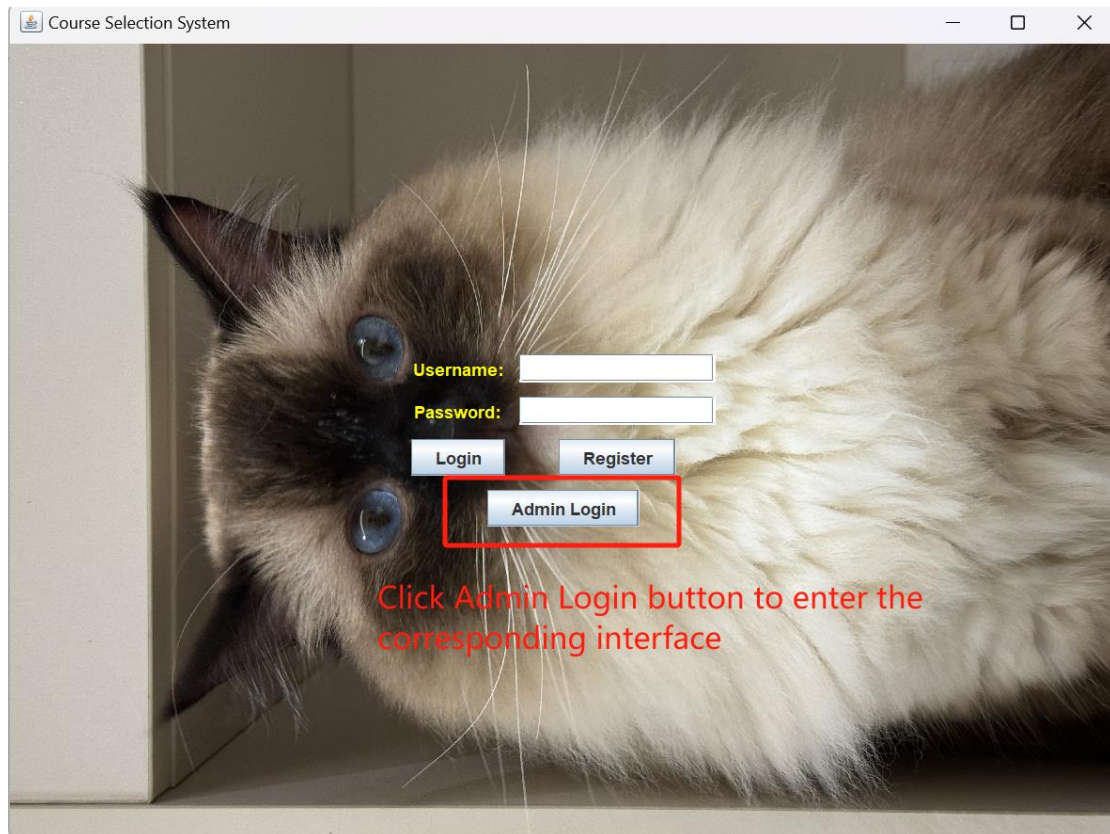
This chart can show students that the enrolled courses till now!

Total Credits: 21/21

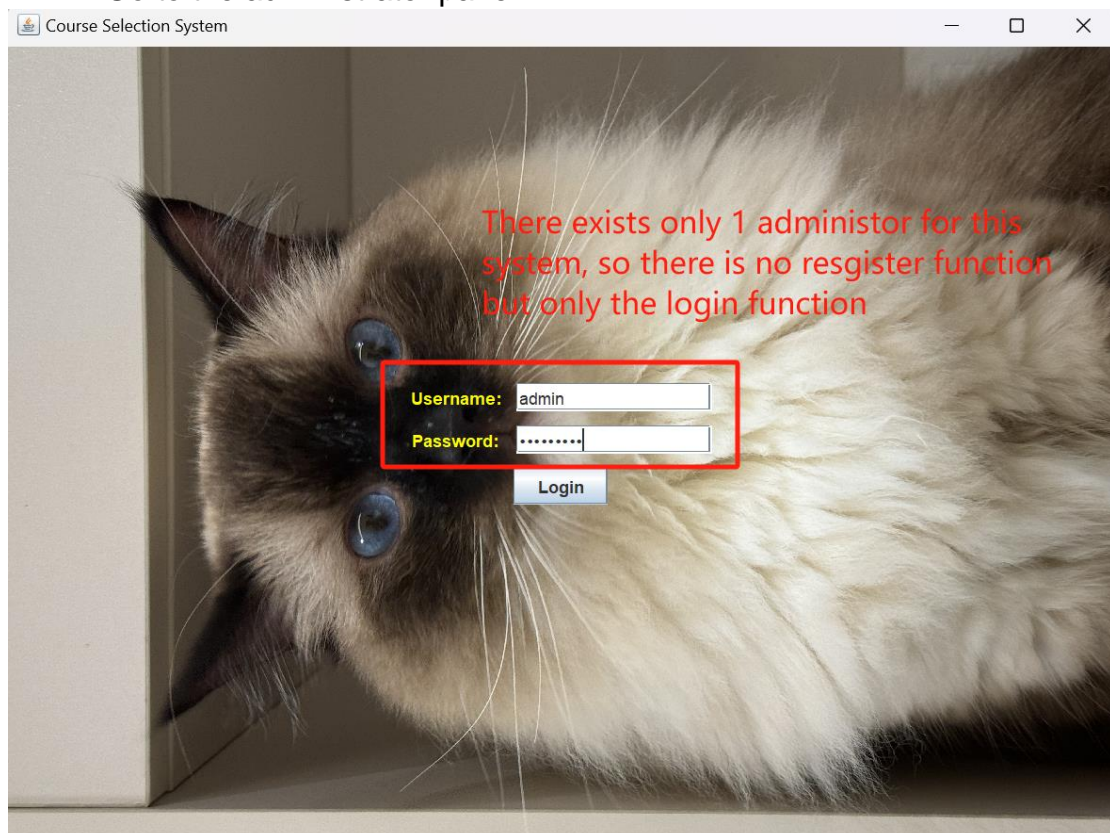
6. Administrator Features

6.1 Adding Courses

1. Log in with an administrator account.

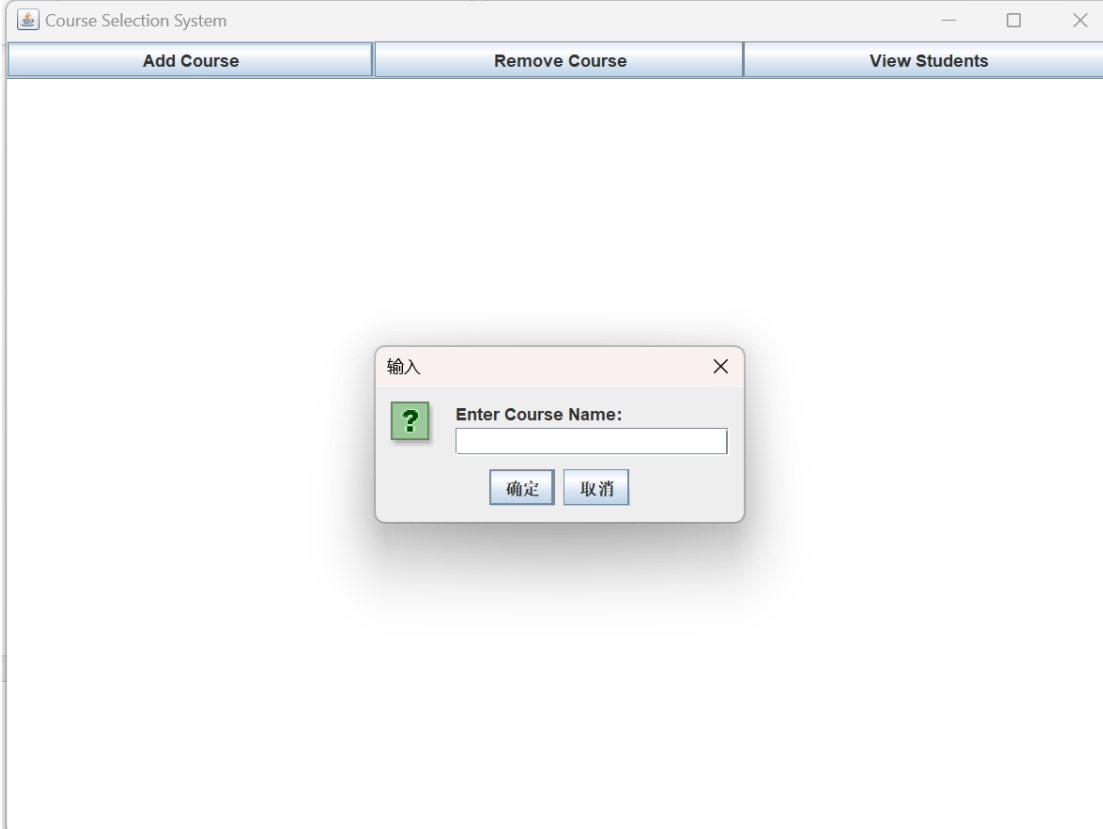


2. Go to the administrator panel.

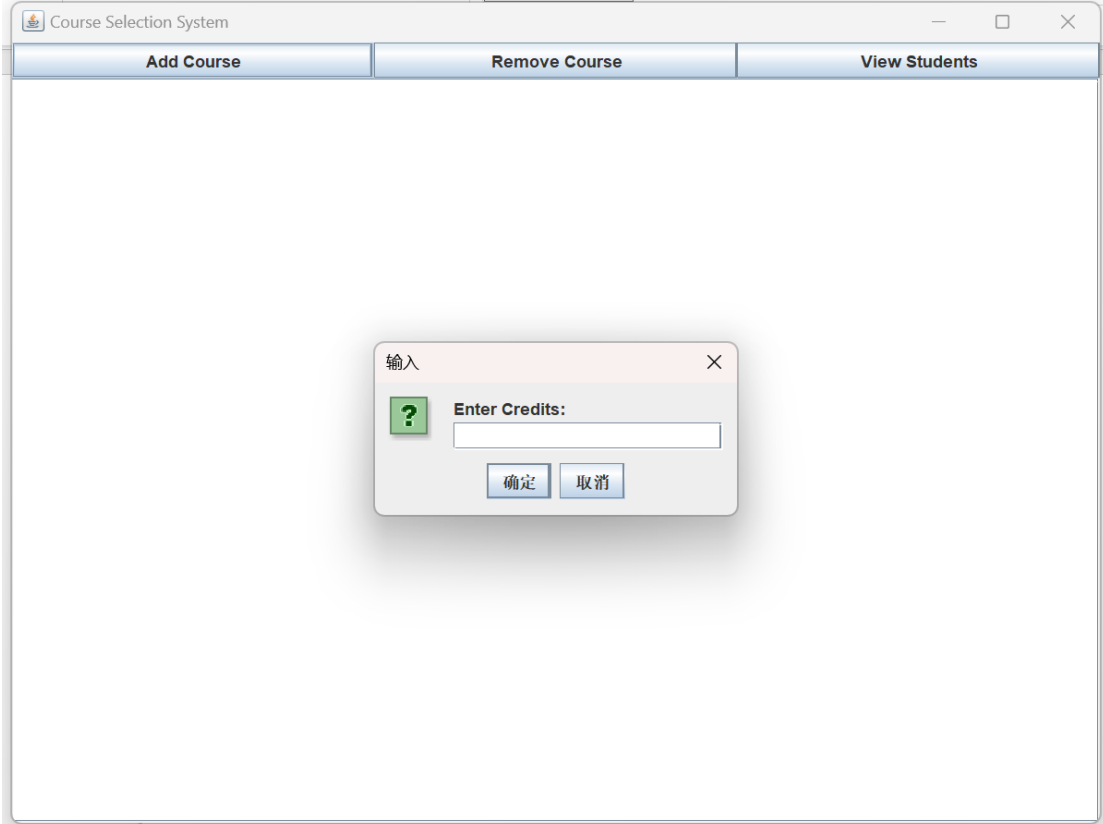


3. Click the "Add Course" button, enter the course name, credits, and

schedule, then click to confirm adding the course.



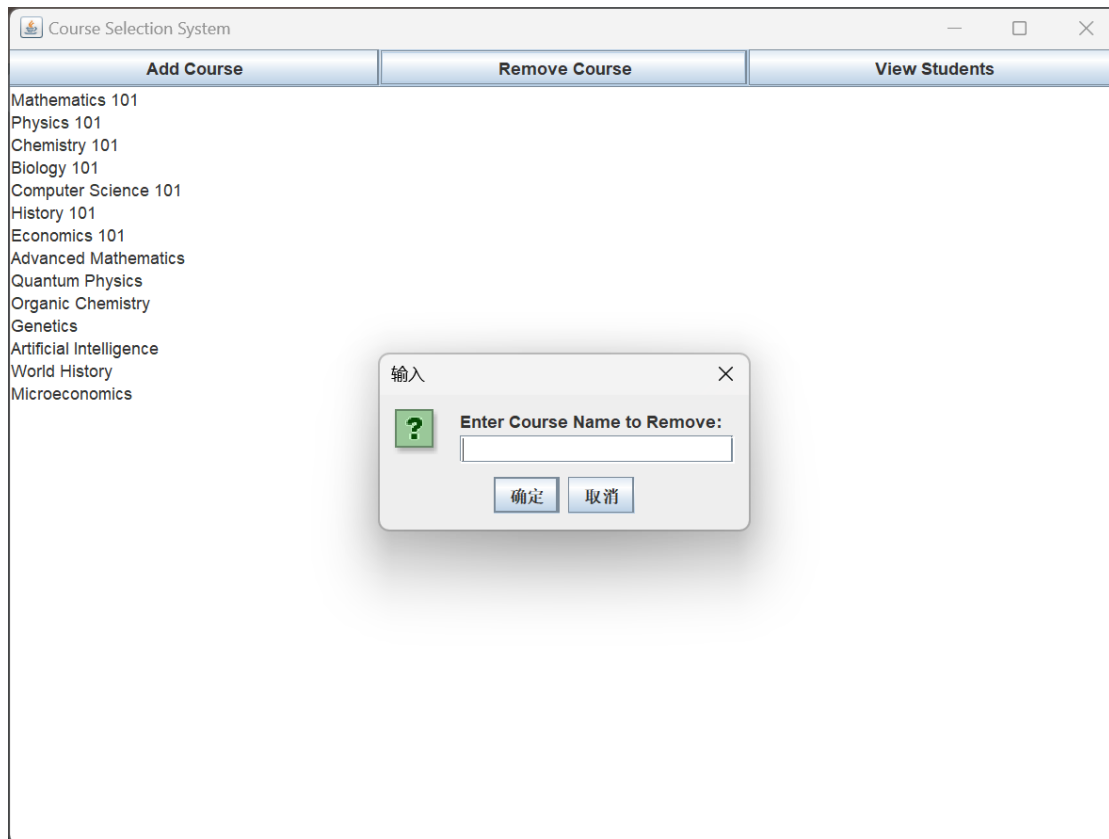
The image shows a window titled "Course Selection System" with three buttons: "Add Course", "Remove Course", and "View Students". The "Add Course" button is highlighted. A dialog box titled "输入" (Input) is open, prompting the user to "Enter Course Name:". The dialog box contains a green square icon with a white question mark, a text input field, and two buttons: "确定" (Confirm) and "取消" (Cancel).



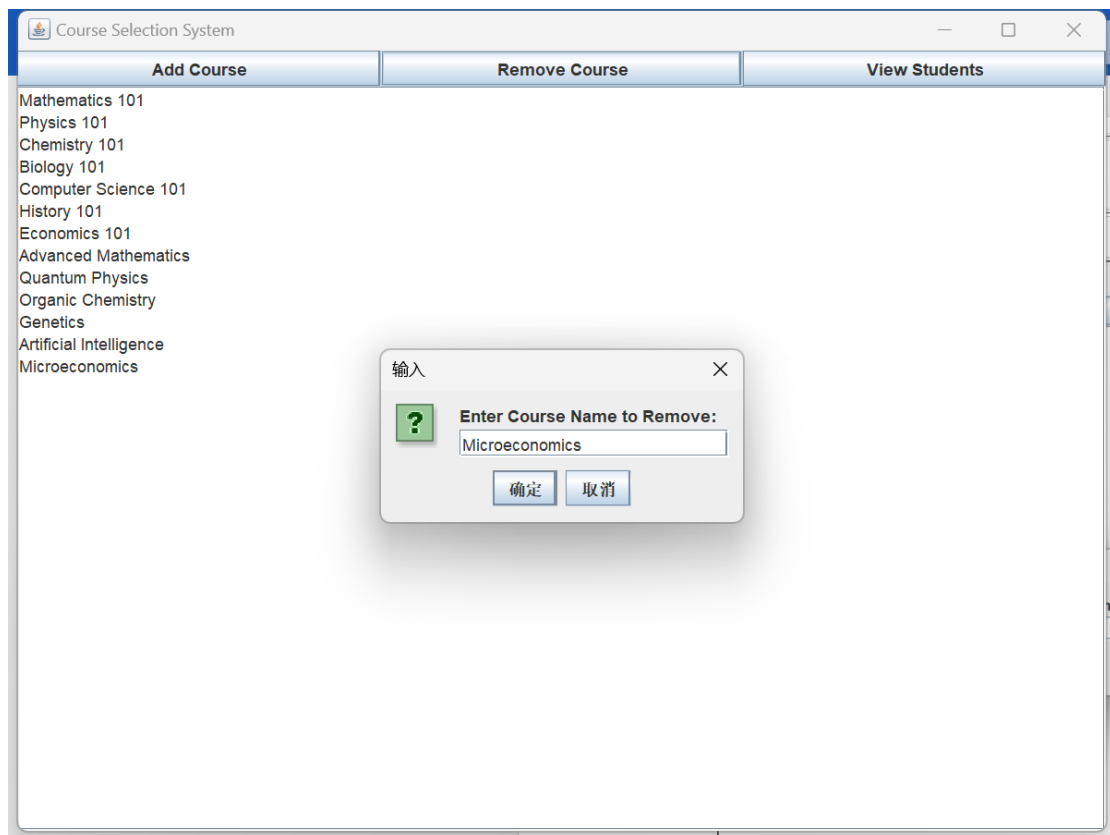
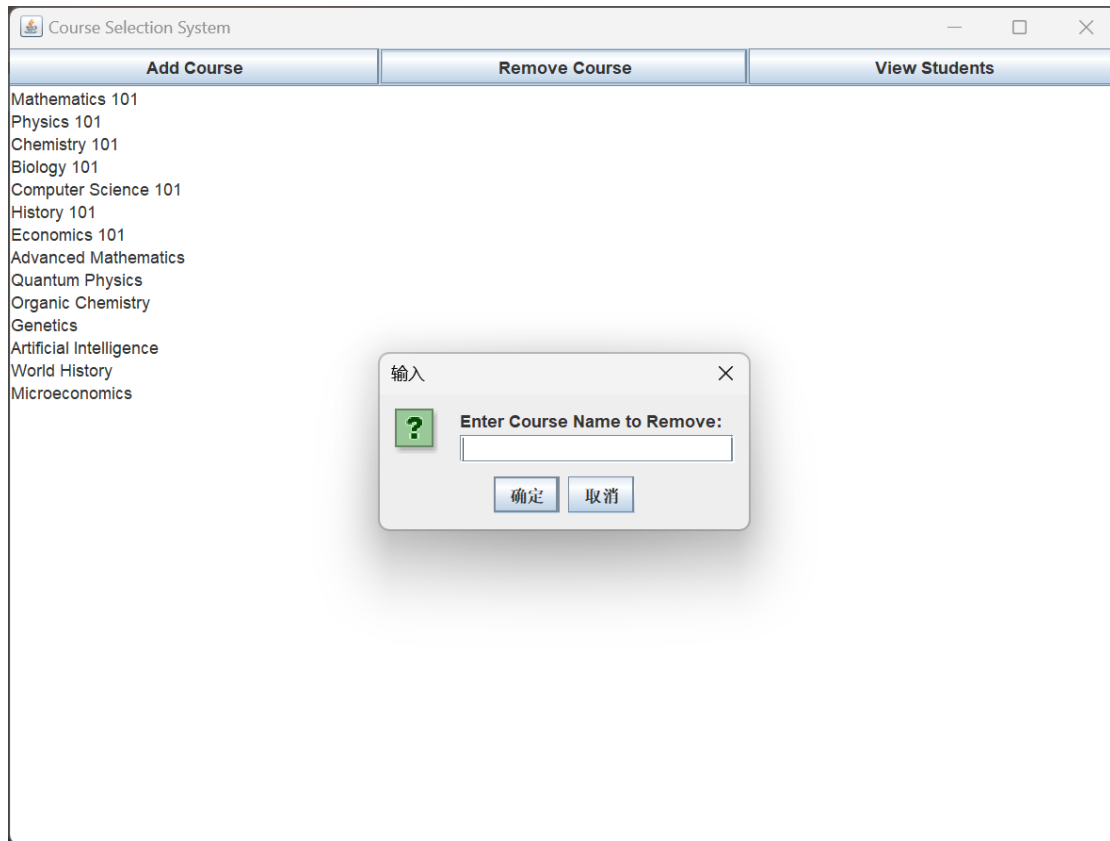
The image shows the same "Course Selection System" window. The "Add Course" button is still highlighted. A dialog box titled "输入" (Input) is open, prompting the user to "Enter Credits:". The dialog box contains a green square icon with a white question mark, a text input field, and two buttons: "确定" (Confirm) and "取消" (Cancel).

6.2 Removing Courses

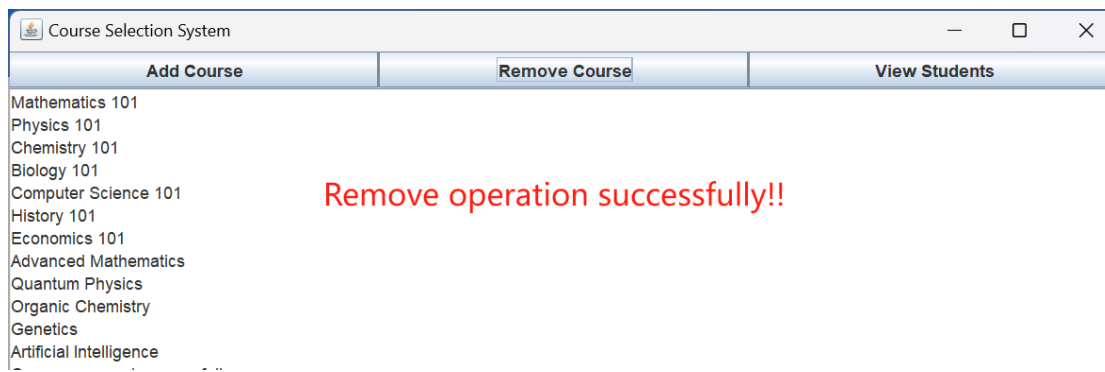
1. In the administrator panel, click the "Remove Course" button.



2. In the pop-up dialog, enter the name of the course to be removed and click to confirm deletion.

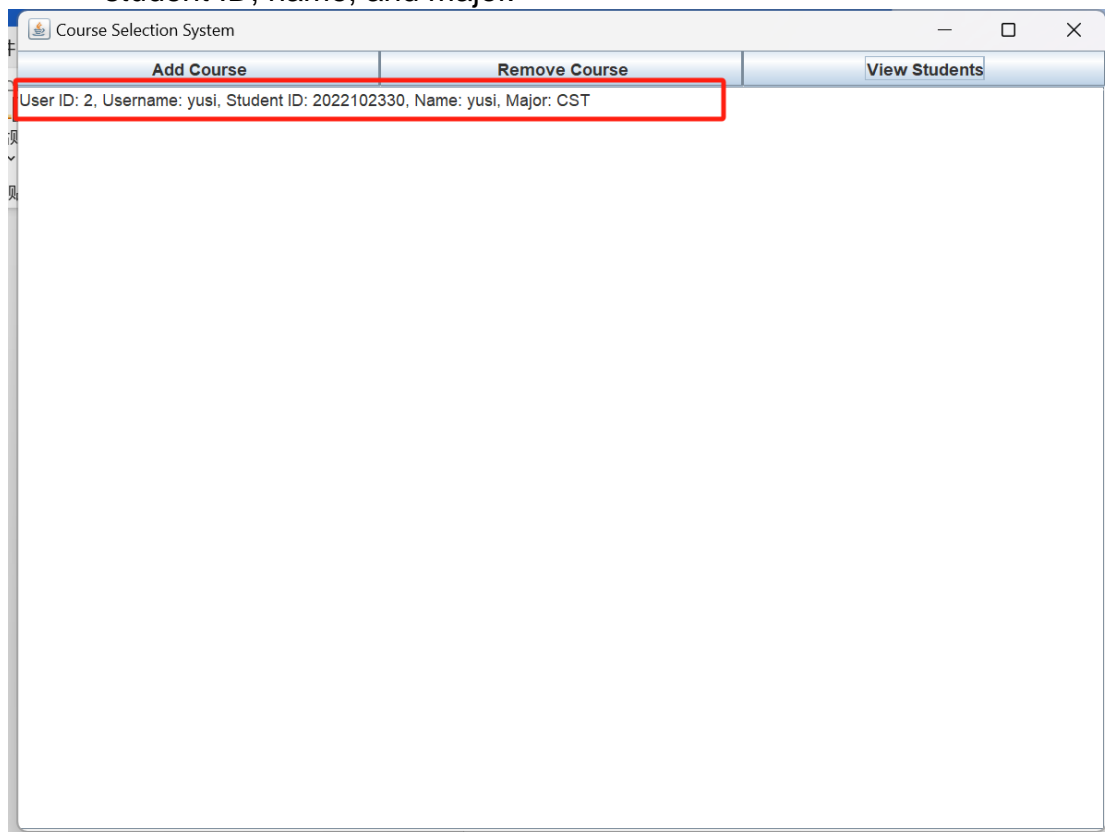


Course removed successfully.



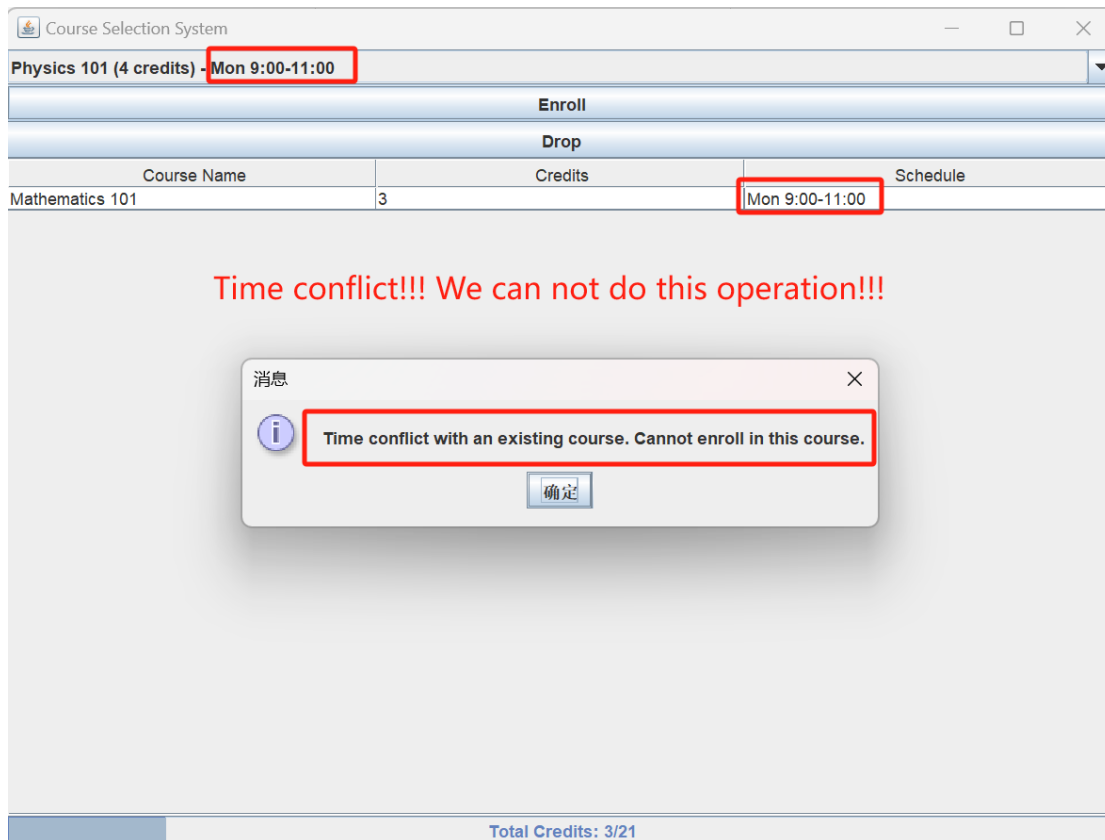
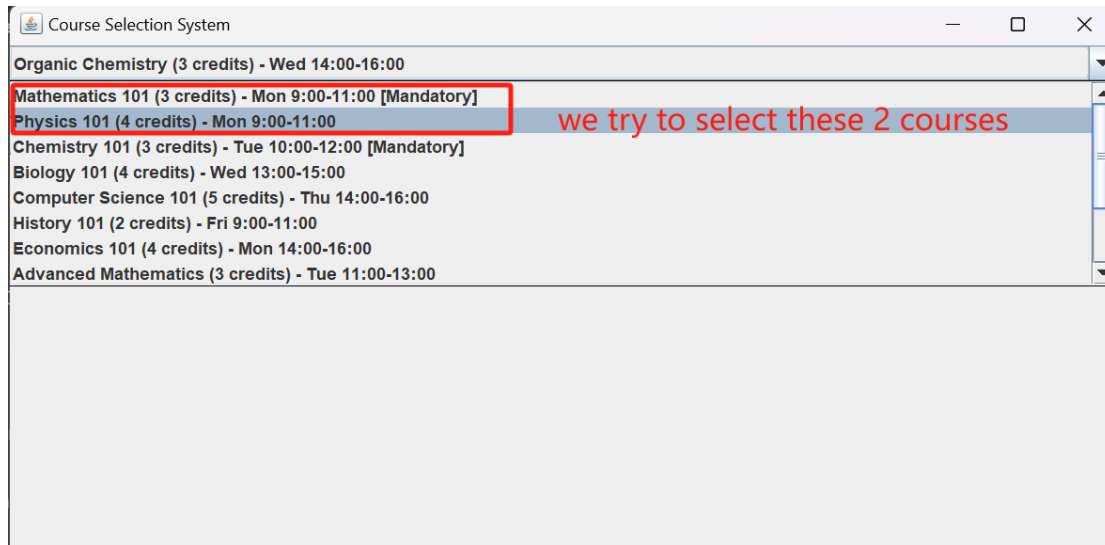
6.3 Viewing Student Information

1. In the administrator panel, click the "View Students" button.
2. The system will display all student information, including username, student ID, name, and major.



7. Some restricts and FAQs

- Can not choose courses that conflict with your schedule



- The total credit limit per student is 21.

Course Selection System


Organic Chemistry (3 credits) - Wed 14:00-16:00

Enroll

Drop

Course Name	Credits	Schedule
Mathematics 101	3	Mon 9:00-11:00
Chemistry 101	3	Tue 10:00-12:00
Biology 101	4	Wed 13:00-15:00
Computer Science 101	5	Thu 14:00-16:00
History 101	2	Fri 9:00-11:00
Economics 101	4	Mon 14:00-16:00

消息

 Credit limit exceeded. Cannot enroll in this course.

确定

Reach the limited credits, we can not select more courses

Total Credits: 21/21

- Mandatory courses are marked with "[Mandatory]" and must be enrolled by students.
- If you encounter any issues, please contact the system administrator.