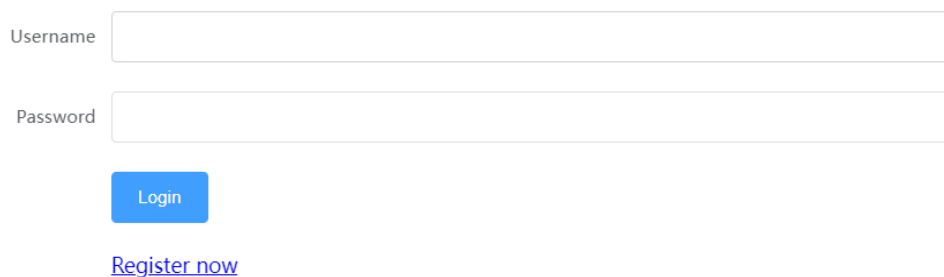


Assignment 2 Back-end (Elective)

You can use any framework, any program language and any kind of database to complete this assignment, but your project must contain **an MVC framework and simple web pages**. They can **interact with the database**. There is no need to design beautiful pages (we won't judge the web pages).

Login Module

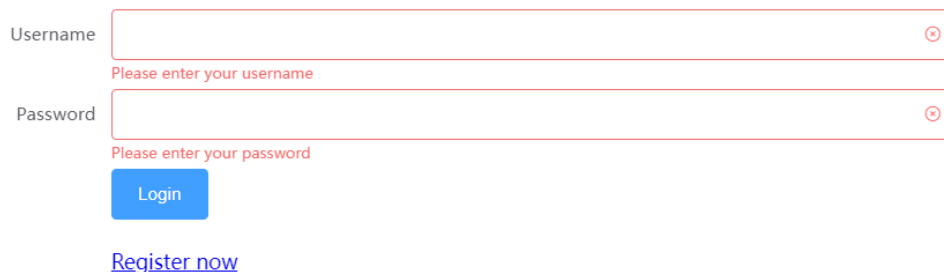
1. Original



A login form with two input fields: 'Username' and 'Password'. Below the 'Password' field is a blue 'Login' button. Below the button is a blue link that says 'Register now'.

2. Null Input Check

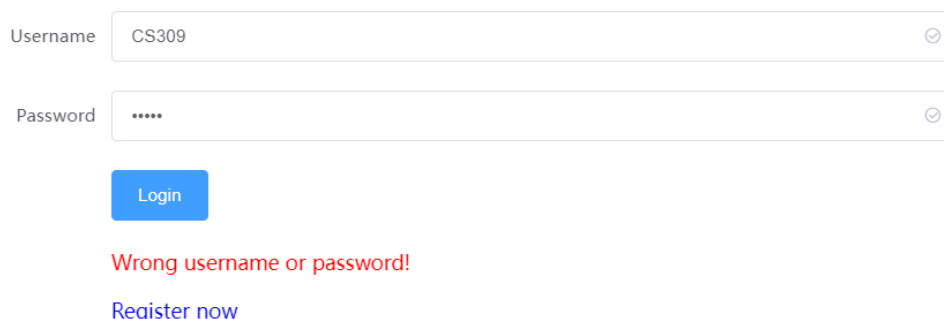
Click login button without input anything:



The login form from the previous section, but with red error messages. Below the 'Username' field is the text 'Please enter your username'. Below the 'Password' field is the text 'Please enter your password'. The 'Login' button and 'Register now' link are still present.

3. Check Username and Password

Click login button with wrong username or password



The login form with the 'Username' field containing 'CS309' and the 'Password' field containing '*****'. Both fields have a checkmark icon on the right. Below the 'Login' button is a red error message: 'Wrong username or password!'. The 'Register now' link is still present.

4. Successfully Verified

Jump to the open courses list page.

Open Courses

Course Name	Course Code	Language	Teacher	Date	Time	Location	Duration	Operation
OOAD	CS309	English	XXX	2022/09/30	19:00	Activity Room	3.0h	<button>Delete</button>
How to Study CS	CS666	Bilingual	XXX	2022/09/29	16:20	Research Building Lecture Hall	2.5h	<button>Delete</button>

Add Class

5. Click Register

Jump to the registration page.

Register Module

1. Original

Username

Password

Confirm Password

Register

[Return to login](#)

2. Check Information

- Username shouldn't be null.

Username

Please enter your username

Password

Confirm Password

Register

[Return to login](#)

- Passwords should be the same.

Username

Password

Confirm Password

The two passwords are different!

[Register](#)

[Return to login](#)

- Username has already been in database.

Username

Duplicate username

Password

Confirm Password

[Register](#)

[Return to login](#)

3. Register Successfully

- Insert a new user into database.
- Jump to the login page and the registered username is automatically filled in the input box.

Username

Password

[Login](#)

[Register now](#)

Course Module

1. Prepare Test Data

Please prepare at least 10 rows in the list of courses in your database.

2. List All

The course list page needs to display all courses fetched from the database.

3. Insert

- Adding an operation “**add**” (a button), by clicking which, a new page (can be a pop-up dialog, a hidden form in current page or another page) for adding course can be opened or jumped into, and you need to fill in the information in the adding page.
- Then click submit button, and a new course should be added into database. After the adding operation, it will return back to course list page with the new record we just added. In

this assignment, you **don't** need to check the validity of the input.

4. Delete

Adding an operation "**delete**" (can be a button or a link) in each row. Please enable the delete operation, which can delete a certain row from database. After the delete operation, it will return back to course list page.

5. Edit

Adding an operation "**edit**" (can be a button or a link) in each row. When click the button or the link, it can pass the old value of current course to the edit page (can be a pop-up dialog, a hidden form in current page or another page) and then update the information of the course in database. After the edit operation, it will return back to course list page.

6. Search

Implement the "**search**" operation. Search for courses by **course code** and **date**. List the course records that match the search criteria only.

How to check this assignment?

Please run it on your computer, and show your result to us **in lab class** before the deadline.

It is also an elective assignment, and we only mark the grade of these elective assignments for once time, and the final grade of elective assignment is the highest of those two.