

PHP and MySQL Registration Page Optional - Take Home Midterm

You will be writing a small PHP/SQL application to deal with the following (fictional) problem.

- There are 32 students assigned to a module. In order to organize module demonstrations, the class should be split into four groups with different time slots.
- Each group should consist of 8 students. The module lecturer decided to have a registration webpage to allow students to sign up for one of the demonstrations.
- A student visiting the page should be able to submit her name, student ID, email address, and book a place in one of the time slots. For example, the registration Web page of COMP207 looks like this:

COMP207 - Register here for a practical slot

Register only if you know what you are doing.

- Please enter **all** information and select your desired day. Please enter a correct 'SID' number!
- Please check the number of available seats before submitting.
- Register only to one slot.
- Any problems? Write a message to weberb@csc.liv.ac.uk

Name	Firstname	SID	Email Address
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Select the practical slot:

Monday 15:00-17:00	51 seats remaining
Tuesday 14:00-16:00	1 seats remaining
Thursday 11:00-13:00	12 seats remaining
Friday 10:00-12:00	26 seats remaining

- The submitted data should be stored in a database, which is maintained on a server.
- The webpage and the server should interact with each other at every step of the registration process.
- The page should show how many free places are available in each time slot; announcing and blocking all fully booked time slots.
- After a student makes a data submission, it should check whether the student has been already registered. If not, the data is stored on the server and the student is notified about her registration.

- Otherwise (if already registered), the student should be prompted to ensure that she wants to change her registration to the new section (and removed from the current one she is registered for).
- As a means of checking which students are registered in each section, you should also write a **separate** webpage that will allow the module lecturer to choose a section and, after querying the database, will display the list of students who are registered in that section to a webpage.

Description of the problem

You are to write a registration webpage using HTML, CSS, JavaScript, PHP and MySQL (or MariaDB), as outlined above, in order to allow students to register to demonstration timeslots.

Part 1 (20 points)

The database must fully implement the registration process, maintaining the submitted information. The server and page behavior must meet the requirements listed above. In addition, (basic) help facilities should be provided. A separate page for the lecturer should also be working so that he/she can see the students currently enrolled.

Part 2 (10 points)

The specific look and feel of the pages as well as the database implementation is left intentionally vague, allowing considerable design freedom on your part. However, the page should have a nice look and the code should satisfy common standards. You may also add additional features to your page. For example, you can add JavaScript and/or PHP functions, which can validate the name (for example, that the field isn't empty), SID (that it has only numbers in it), and email fields.

When you submit your files, be sure to include all relevant HTML, CSS, and PHP files. Include an SQL dump of the relevant table(s) that you are using for this project.