Université de Strasbourg

Web Programming 2 : Back End

PW 3 : PHP mysqli procedural Functions

Topic of the practical work: PHP working with a Database. mysqli function, procedural approach

We propose to display the students' timetable with the classes concerned, the subjects and professors, as well as the date and time of each course.

As a first step, we focus on MySQL queries to extract data from the database. As a second objective, later, we will display data in a HTML table, and, third objective, improve the user experience (UX) to display the timetable, using jQuery.

Objective N1: PHP mysqli queries

Database connection

- Activate errors tracking in your script using the *ini_set()* function.
- Connect your MySQL server and select the student timetable database. First work on your localhost web server. Proceed with a simple check of the successful connection. In case of an error, *exit()* the script.
- Set the **utf8** encoding for sending or reading data from your database.

Student timetable query

- Extract the whole courses from the *courses* table including, in particular, the full student class name, the subject, the professor first name and last name. Write first the query, test it with PHP MyAdmin. Your query must take into account the relationships between the table. Can you easily identify the relationship by looking on the structure of each table?
- As a control step, display the number of return rows from your query. Does it match the number of rows in the *courses* table?

Objective N2: HTML displayed results

HTML table to display the results.

- Add a main title for your web page : Student Timetable.
- Write the HTML code to display the results in a table, with al least 7 columns, for the date of course, the starting and ending time, the course duration, the full class name, the subject and the professor name.

Objective N3: UX improvement (User eXperience)

Datatable jQuery Widget.

This jQuery widget allows advanced interaction controls to your HTML table. An example can be seen on the URL : . Have a look on the source code, particularly for needed of external files (Javascript jQuery, jQuery UI, widget,… and CSS available from a CDN, Content Delivery Network), the widget instantiation, and added options to include filters on each column.

Expected results & skill assessments:

Show your teachers the steps you have completed gradually, not just at the end of the PW session. In addition, you must be able to explain your PHP code.

PHP scripts must be uploaded to the remote web server Alwaysdata and Moodle in the homework section. Also, indicate the Alwaysdata URL.