PHP / SQL Intermediate practical evaluation Time allowed : 4h00

Marking

At the end of the allotted time, you must deliver all of your files, and a score out of 20 will be given based on to the following scale:

- **Exercice 1 : 2 points**
- **Exercice 2 : 4 points**
- **Exercice 3 : 6 points**
- **Exercice 4 : 8 points**

Exercice 1 (2 points) : Setting up the project

Create a new project on git. To submit your work at the end of the evaluation, you will have to upload your sources to a GitHub repository.

Exercice 2 (4 points)

```
$countries = array(
    "France" => ["capital" => "Paris", "population" => 65687541],
    "Italy" => ["capital" => "Rome", "population" => 9879055],
    "Luxembourg" => ["capital" => "Luxembourg", "population" => 300],
    "Belgium" => ["capital" => "Brussels", "population" => 9849849],
    "Denmark" => ["capital" => "Copenhagen", "population" => 8789797],
    "Finland" => ["capital" => "Helsinki", "population" => 2989897],
    "Slovakia" => ["capital" => "Bratislava", "population" => 3879879],
    "Slovenia" => ["capital" => "Ljubljana", "population" => 64988],
    "Germany" => ["capital" => "Berlin", "population" => 3965987],
    "Greece" => ["capital" => "Athens", "population" => 4897987],
    "Ireland" => ["capital" => "Dublin", "population" => 1987497],
    "Netherlands" => ["capital" => "Amsterdam", "population" => 6897987],
    "Portugal" => ["capital" => "Lisbon", "population" => 7997978],
    "Spain" => ["capital" => "Madrid", "population" => 13277854],
    "Sweden" => ["capital" => "Stockholm", "population" => 897982],
);
```

Based on this array, write a PHP script that displays the country AND the capital on each line, as well as the number of inhabitants. This list should be displayed in ascending alphabetical order.

Example :
The capital of France is Paris. Number of inhabitants: 89797998
The capital City of Italy is Rome. Number of inhabitants: 788798
The capital of Luxembourg is Luxembourg. Number of inhabitants: 3213416

BONUS : Display the most populous country.

Exercice 3 (6 points)

From 2 arrays of the same length, write a PHP function that will create a new array.
This new array will be the sum of the elements of the two starting arrays.

Example :
   Inputs :
   $tab1 = array(9, 20, 10, 3, 25, 2, 4);
   $tab2 = array(2, 5, 13, 3, 1, 11, 7);

   Output :
   $resultat = array(11, 25, 23, 6, 26, 13, 11);

This function has 2 arguments:
● The first array (array type)
● The second array (array type)

You have to perform the necessary verifications in order to validate the arguments.

Exercice 4 (8 points)

4.1 PART 1

Create a database and name it "music_shop". Inside it, you must create a table that you will
call "instruments" with the following fields:

   Table : instruments
   Fields :
      id (int)
      name (varchar)
      brand name (varchar)
      price (double)
      photo (varchar)
      type (enum: guitar, drum or bass)
      description (varchar)

You will have to include the SQL file in your project folder.

4.2 PART 2

Create a page 'add-instrument.php'. Inside it, there should be a form to add instruments in the table 'instruments'.

Prerequisites:
- The field name, brand_name, price, type are required.
- The field 'type' will be a drop-down menu (mandatory).
- The price must contain numbers only.
- Error messages will be displayed in red

Once you submit the form, the instrument must be added to the created database.
A success message will be displayed.

4.3 PART 3

Create a page 'instruments.php'.
This page will display all the instruments with their respective information.

You have to display the instruments in a HTML table.
If the description is more than 30 characters long, seperate the text by adding "...".

For each instrument, you will also add a column which contains a "see more" link.

BONUS : Let the admin upload photos !

Create an "upload" button on the form. When the instrument is saved, you should also save the image on the server and the path in the DB.

4.4 PART 4

Create a page which will dynamically display the detailed content of an instrument. You have to display all the information and the full description.

If the instrument doesn't exist, an error message must be displayed.