Database engineering with PHP week 1

1.1   Assignment 1

Given is the following multidimensional array with distances between cities in kilometers.

```php
$distances = array(
    "Berlin" => array(
        "Berlin" => 0,
        "Moscow" => 1607.99,
        "Paris" => 876.96,
        "Prague" => 280.34,
        "Rome" => 1181.67
    ),
    "Moscow" => array(
        "Berlin" => 1607.99,
        "Moscow" => 0,
        "Paris" => 2484.92,
        "Prague" => 1664.04,
        "Rome" => 2374.26
    ),
    "Paris" => array(
        "Berlin" => 876.96,
        "Moscow" => 641.31,
        "Paris" => 0,
        "Prague" => 885.38,
        "Rome" => 1105.76
    ),
    "Prague" => array(
        "Berlin" => 280.34,
        "Moscow" => 1664.04,
        "Paris" => 885.38,
        "Prague" => 0,
        "Rome" => 922
    ),
    "Rome" => array(
        "Berlin" => 1181.67,
        "Moscow" => 2374.26,
        "Paris" => 1105.76,
        "Prague" => 922,
        "Rome" => 0
    )
);
```

1.1.1

Create a form in which you can select cities that appear in the given array with two dropdown (select) boxes. These dropdown boxes are dynamically populated with the contents of the array. So if a city is added to the array, it is also automatically added to the dropdown boxes.

1.1.2

When the form is sent, the distance between the two chosen cities must be displayed. You should display this in a sentence in which the selected cities and the distance are stated. For example:

"The distance between Berlin and Rome is 1181,67 kilometers"

You also need to apply checks if no values are sent.

1.2   Assignment 2

You have been asked to write a comment module for a web application. This module consists of two components; a form and a confirmation screen.

The form consists of the following fields and requirements:
- Name;
  - Mandatory, at least two characters;
- Email;
  - Mandatory, must be correct;
- Choice between Student or Teacher;
  - A choice must be made;
- Comment;
  - Mandatory, at least five words;
- Option to send an email to all users of the application;

If the input does not meet the requirements, an error message should be displayed. All errors must be displayed at once. So if the email address is not correct and the comment is not filled in, you need to display both messages at the same time.

If all the entered data is correct, the form may be sent. A response must be given that the form has been sent. This response consists out of the entered values in the form and has to look like this:

> Dear {{ Name }},
> You will post comments as {{ Student or Teacher }} with the following e-mail address: {{ Email }}.
> The comment is as follows: {{ Comment }}.
> All users will be notified of this / All users will not be notified.