COMP30680 Web Application Development

Assignment 3: PHP and Databases

This assignment focuses on the use of PHP to manipulate data from MySQL databases.

To begin you will need to download the assignment 3 database from Moodle and install it on your localhost. Practical 7, parts (a) and (b), provide information on how to install XAMP, our server side development environment, and then install a database. Once you have imported the database successfully you will have a database called classicmodels, which you will use in this assignment.

You are required to create a website that uses PHP, HTML, CSS and JavaScript to display information from the classicmodels database in a clear and consistent way.

Requirements:

Create a website with three pages: index.php, customers.php and orders.php. The overall site navigation and footer for each page should also be defined in separate PHP files and included on all pages in the site.

The specific requirements for each page are as follows.

1. Index.php

   This page should show the major product lines available from the Classic Models company and the text description of each product line. When the user chooses a specific product line the full listing for that product line should be displayed in tabular format. Only one product line should be shown at any time.

2. Customers.php

   This page should list all the customers in the database, grouped by country, e.g. customers from France, customers from Norway. Only the following information should be shown for each customer: customer name, country, city and phone number.

3. Orders.php

   This page should display three tables with the following information:

   Table 1 - all orders currently "In process".

   Table 2 – all cancelled orders.

   Table 3 – the 20 most recent orders.

   By default, the following information should be shown for each order: order number, order date, and status. When the user clicks on the order number for any order the full information for this order should be displayed, including the product code, product line, product name, and any comments included with the specific order.

Error handling

Your website should include appropriate error handling. For example, it should be able to recover and respond appropriately when a database connection fails or when a query fails and causes an error. Informative error messages should be displayed on your webpages so that a person using your website understands where the problem has occurred.

Marking

There are a total of 40 marks available for this assignment, corresponding to 40% of the total module mark. The marks will be broken down as follows:

a) **8 marks**: for correctly implementing the page index.php.

b) **6 marks:** for correctly implementing the page customers.php.

c) **12 marks:** for correctly implementing the page orders.php.

d) **6 marks:** for implementing appropriate and effective error handling.

e) **4 marks:** for creating a navigation bar and footer in separate files and including them in all pages.

f) **4 marks:** for making good use of HTML and CSS to create a clean and consistent overall design.

Submitting

Submit a single zip file using Moodle. You do not need to submit the database itself, just the new files you have written to display the data on a website. The machine on which your assignment is marked will already have a copy of the database installed on it.

Please name your zip file using the following format: "Firstname_Lastname_A3_COMP30680.zip".

The deadline for submission is listed on BrightSpace.

Code validation:

Your webpages should be consistent with the HTML 5 standard.

Code reuse

The webpages must be your own work. Any code snippets that are not directly written by you (e.g. used from a tutorial) must be referenced as such within your code. You must directly comment the code to explain its source. Failure to reference code that is not yours will be treated as plagiarism.