SCHOOL OF COMPUTER SCIENCE

PRIFYSGOL BANGOR UNIVERSITY

ICP 3046
Web Based Applications

Labs 3 and 4: Page templates and forms

Introduction

During the lecture slot you had an opportunity to decide on a theme for your e-commerce store and you sketched some ideas of screens for the features listed below. This lab will give you the opportunity to create html templates for these pages and then to develop a basic working login form. **This is assessed, and forms 20% of the overall mark for the module.**

You have two lab sessions plus your own time to complete the work.

You must use the file structure that you created during lab 1, and save resources in appropriate directories. For example product images should be stores in the /images/products/ directory.

You must avoid code repetition by using the *require* and *includes* functions of PHP to include a common header and footer on each page.

Feature list

Note that you are not expected to get all features working during this lab! Look at the lab exercise section to see what is required during the lab.

Product listing page (homepage)

On the homepage of your e-commerce store you will show a site header, that will be on each page of your site. You will then show a list of all the products that are available to purchase. It would be advisable to include a small image of each product, along with its title and price. Your page will end with a standard footer that will show on each page.

Product details page

The product details page will usually include more information about the product. It may include a large image (or a number of images), the product title, a textual description of the product, and its price. It is also normal to have some way of adding the product to the shopping basket, and specifying the quantity to add.

Basket page

This usually allows the customer (sometimes referred to as the user) to see what they are going to buy, change quantities and remove items.

Registration page

This will allow a user to create an account on your site. They will usually need to supply an email address and password as a minimum. The email address may be used as the username, or there could be a separate username field.

Login page

This will allow a user to login to your site once they have registered. Once logged in they may be able to see details of their past orders, change their password etc.

Checkout process

This will need to gather information such as the billing and shipping addresses. It will also allow the user to choose how they wish to pay, and confirm they agree to terms and conditions. This may be split over a number of pages, or it may be on one page. In this course it is split over a number of pages.

Success page

Once a customer has paid they will usually be shown a page telling them what happens next, and showing their unique order number.

Lab Exercise

In this lab you must perform the following tasks:

1) Write html and CSS to produce page templates for all the items listed above. [30%]

2) Use dummy data to show how the final page will look when it is eventually populated using your database. For example, on the product details page you could show the product price, a brief description, an image, a quantity box, and an add to basket button. [10%]

3) Modify your login page so when the form is submitted it submits to login.php (i.e. login.php is a self-processing page). [5%]

4) Define a static username and password in includes/configure.php which must be supplied in order to log in successfully. At present these may be plain text. [5%]

5) Create a *function* to check whether the login information is valid or invalid. [20%]

6) If the form is submitted with a valid username and password, a success message must be shown, and the login form must not be re-displayed. [15%]

7) If the form is submitted with an invalid username and password, an error message must be shown, and the login form re-displayed below the error message. [15%]

Submission

Use **Blackboard** to submit your PHP source code files as a zip archive. Each file must:

- Contain a program header
- Include an appropriate level of comments
- Follow a consistent style of indentation
- Follow consistent naming conventions

The deadline for submission is announced on the Blackboard system. Late submissions will be penalised in line with School policy.

As well as the requirements above, marks for this laboratory exercise are awarded for:

- Valid html and css
- Use of good programming practices, such as code-reuse and appropriate input validation
- Comments, layout and code structure
- Conceptual understanding

When submitting work it is your responsibility to ensure that all work submitted is:

- Consistent with stated requirements
- Entirely your own work
- Submitted on time.

Please note that there are **severe penalties** for submitting work which is not your own. *If you have used code which you have found on the Internet* or *from any other source* then you **must** signal that fact with appropriate program comments.

To obtain a mark you **must** attend a laboratory session and be prepared to demonstrate your program and to answer questions about the coding. Non-attendance at labs will result in your work not being marked.