**Interactive Book Club Assignment**

Introduction

The aim of this assignment was to design and develop an Interactive Book Club using Ajax, PHP and MySQL. The Book Club was required to be automated, user-friendly and personalised. The main language to be used was PHP, containing HTML elements within, as the structure of the site would require much communication with MySQL.

Requirements

The Book Club needed to include the following:

1. A user login in page.
2. Pages to display each book.
3. A way of enabling users to leave book reviews, and to be able to read reviews left by others.

PHP requirements:

1. A way of maintain state between pages- ie. Keeping the user logged in.
2. Retrieve and Submit book reviews
3. User Log in.

Register.PHP/RegisterNewUser.PHP

This is the register page. This is similar to the home.php page, but has another form added. This allows the user to Register. When the submit button is clicked, a javascript function invoked the RegisterNewUser.PHP script. This adds the data entered into the form by the user into the database.

Home.PHP

This is the home page. It displays books, a login and a link to the register page. Users can only access the books on this page if they are registered and logged into the site. This is explained further in the new few sections. The login form on this page was created using the POST method, with username and password fields. These fields were both given ID’s to ensure their values could be easily manipulated. When the submit button is clicked, a javascript function invokes the checkUser.PHP script. The design of the page was used as the initial template for the rest of the site, consisting of a background image of a library shelf and a logo. This logo was created in Photoshop. The layout consists of a central column, with a navigation bar on the right-hand side of the page. These aspects remain constant throughout the site to make sure navigation is smooth. The styling of the pages is held in an external .css file so that editing can be done easily.

checkUser.PHP

This searches the database for the user login details entered in the form. If the details are already in the database the login is successful and the session variable is set to the userID. If not an error is sent.

top.PHP

This page is used to check that the user is logged in. It checks to see if the session variable is set to a userID, and returns this userID if it is. If it isn’t it returns ‘Please Log in’. This is used in the Home.PHP and Register.PHP pages. However as the books and their reviews are not to be seen by un-registered users, another script had to be created.

top2.PHP

This script is the same as top.PHP, apart from redirecting the user back to the Registration.PHP page if the session variable is empty.

Book1.PHP-Book6.PHP

These pages contain the books and reviews. They each have an image displaying the cover of the book, a description of the book, buttons to navigate back and forth between books, a form to enter a new review and a button to display the existing reviews.

When the submit button is clicked adding a new review, a javascript function invokes the reviewbook1.PHP script. This function takes the username and review entered (deliberately not the session variable as some users may wish to remain anonymous when reviewing) and inserts them into the relevant database table. If successful the user sees ‘Review Accepted’. If not an error is thrown.

When the ‘Show Reviews’ button is clicked a javascript function invokes the checkreview1.PHP script. This creates a query and uses the book ID to fetch the correct set of results. The only values returned are the userID and Review fields, as anything else would not be useful for the user. A table is dynamically created and filled with the results.

Logout.PHP

This logs the user out by destroying the session variable value.

Conclusion

This assignment was enjoyable to complete, even though it was a struggle at first. Once the way of writing and reading the code has been understood, the language is fairly easy to grasp. I now feel I have a good base of programming languages, not only in one area but across a few.