



Unit: Dynamic Websites

Assignment title: Home Library System

December 2015 – Sample Assignment

Important notes

- Please refer to the *Assignment Presentation Requirements* for advice on how to set out your assignment. These can be found on the NCC Education website. Click on 'Policies & Advice' on the main menu and then click on 'Student Support'.
- You must read the NCC Education documents *What is Academic Misconduct? Guidance for Candidates* and *Avoiding Plagiarism and Collusion: Guidance for Candidates* and ensure that you acknowledge all the sources that you use in your work. These documents are available on the NCC Education website. Click on 'Policies & Advice' on the main menu and then click on 'Student Support'.
- You **must** complete the *Statement and Confirmation of Own Work*. The form is available on the NCC Education website. Click on 'Policies & Advice' on the main menu and then click on 'Student Support'.
- Please make a note of the recommended word count. You could lose marks if you write 10% more or less than this.
- You must submit a paper copy and digital copy (on disk or similarly acceptable medium). Media containing viruses, or media that cannot be run directly, will result in a fail grade being awarded for this assessment.
- All electronic media will be checked for plagiarism.

Introduction

Sarah is an avid reader and has a large collection of books. She has decided that she needs to catalogue them in some way and has asked for your help. You have been commissioned to produce a web-based application which will enable her to store details of her books. She wants to be able to search for books both logically and physically as she owns many books that are stored in five bookcases.

The library system will allow Sarah to create a record for each book. Each record will consist of the following fields:

- Author
- Title
- Year of publication
- Publisher
- ISBN (international standard book number)
- Current location (Bookcase1, Bookcase2, etc.)

Sarah also wants the ability to create multiple accounts so that her family and friends can use the library system for storing details of their own books. Users will need to create an account and log into the system with their details. When an account has been created, they will be presented with an interface that allows them to:

- Add a new book in the format author, title, year of publication, publisher, ISBN, current location.
- Search for books using author, title (by keywords), year of publication and current location.
- Delete a book or modify the record for a particular book.

You are expected to use a combination of PHP, MySQL and JavaScript to create this application. Your application should also make use of a web service to gather information about the books for the database, such as the ISBN.

Task 1 –10 Marks

Create a setup page and tables for the book database.

Task 2 – 15 Marks

Create the login and registration system. This should include username and password. To gain the highest marks for this task you should make the system as robust as possible.

Task 3 – 20 Marks

Ensure that users can add books to the database. This should involve accessing a web service to find some of the book details (e.g. ISBN).

Task 4 – 20 Marks

Ensure that users can search for a book by use of the fields: author, title (by keywords), year of publication and current location. To gain the highest marks you should make the keyword search facility for the title of a book as comprehensive as possible (i.e. allow flexibility in choice(s) of keyword(s)).

Task 5 – 10 Marks

Ensure that users can delete books or modify the record for a book.

Task 6 – 5 Marks

You will be awarded marks for making use of sessions and/or cookies.

Task 7 – 10 Marks

You will be awarded marks for making the system easy to use and accessible. You should submit evidence showing how you have tested and evaluated your system.

Task 8 – 10 Marks

You are required to write a 500 word reflection on this activity. Ask yourself the following questions:

1. What have you learnt during this assignment?
2. How could the system be improved or further developed?
3. Which parts of the development did you find most difficult?

Submission requirements

- For each task you should present the necessary code and screen dumps in a word-processed document.
- Familiarise yourself with the NCC Education Academic Dishonesty and Plagiarism Policy and ensure that you acknowledge all the sources which you use in your work.
- All references and citations must use the Harvard Style.
- Media containing viruses, or media which cannot be run directly, will result in a FAIL grade being awarded for this module.

Candidate checklist

Please use the following checklist to ensure that your work is ready for submission.

Have you read the NCC Education documents *What is Academic Misconduct? Guidance for Candidates* and *Avoiding Plagiarism and Collusion: Guidance for Candidates* and ensured that you have acknowledged all the sources that you have used in your work?

Have you completed the *Statement and Confirmation of Own Work* form and attached it to your assignment? **You must do this.**

Have you ensured that your work has not gone over or under the recommended word count by more than 10%?

Have you ensured that your work does not contain viruses and can be run directly?