



**Unit:  
Dynamic Websites**

**Assignment title:  
Home Library System**

**December 2015 – Sample Assignment**

**Marking Scheme**

Markers are advised that, unless a task specifies that an answer be provided in a particular form, then an answer that is correct (factually or in practical terms) **must** be given the available marks. If there is doubt as to the correctness of an answer, the relevant NCC Education materials should be the first authority.

This marking scheme has been prepared as a **guide only** to markers and there will frequently be many alternative responses which will provide a valid answer.

Each candidate's script must be fully annotated with the marker's comments (where applicable) and the marks allocated for each part of the tasks.

**Throughout the marking, please credit any valid alternative point.**

**Where markers award half marks in any part of a task, they should ensure that the total mark recorded for the task is rounded up to a whole mark.**

<b>Task</b>	<b>Guide</b>	<b>Maximum Marks</b>
<b>1</b>	<p><b>Setup Page for Database</b></p> <p>The set up page should create a table of users (2 marks) and books (2 marks). It should ensure that auto-incrementing primary keys are set on the appropriate fields (2 marks). It should make use of appropriate data types (2 marks) and a timestamp field (2 marks)</p>	<b>10</b>
<b>2</b>	<p><b>Login and Registration</b></p> <p>The login and registration should include the following:</p> <ul style="list-style-type: none"> <li>• A prompt to register if a login fails (3 marks)</li> <li>• Code to handle attempting to register an existing username (3 marks)</li> <li>• Code to check the provided password against the stored password (3 marks)</li> <li>• Code to create a new user when a registration is attempted (3 marks)</li> </ul> <p>Additional marks are available for making the login system more robust as discussed in the module book (3 marks):</p> <ul style="list-style-type: none"> <li>• Limit number of attempts</li> <li>• Reset of attempts after a set period of time</li> </ul>	<b>15</b>
<b>3</b>	<p><b>Adding books</b></p> <p>Adding books is relatively complex, and requires the following:</p> <ul style="list-style-type: none"> <li>• Pulling information from an HTML front-end (5 marks)</li> <li>• Sending information to a PHP backend via GET or POST (5 marks)</li> <li>• Accessing a web service to identify ISBN (5 marks)</li> <li>• Updating the front-end as elements are added (5 marks)</li> </ul>	<b>20</b>
<b>4</b>	<p><b>Searching for books</b></p> <p>Ensure that users can search for a book by use of the fields: author (4 marks), title (4 marks), year of publication (4 marks) and current location (4 marks).</p> <p>An additional 4 marks are available for making the keyword search facility for title as comprehensive as possible (i.e. allow flexibility in choice(s) of keyword(s))</p>	<b>20</b>
<b>5</b>	<p><b>Deletion of books / modification of records</b></p> <ul style="list-style-type: none"> <li>• Displaying a list of all a user's books along with options for deleting or modifying (3 marks)</li> <li>• Allowing the facility to delete a book (3 marks)</li> <li>• Allowing the record for a book to be modified (4 marks)</li> </ul>	<b>10</b>
<b>6</b>	<p><b>Use of Sessions or Cookies</b></p> <p>Marks should be awarded for the use of sessions or cookies, for example:</p> <ul style="list-style-type: none"> <li>• Storing username on login</li> <li>• Using cookie or session information for database queries</li> </ul>	<b>5</b>
<b>7</b>	<p><b>Ease of use, Evaluation and Accessibility</b></p> <ul style="list-style-type: none"> <li>• Ease of use and accessibility (5 marks)</li> <li>• Evidence showing how the student has tested and evaluated the system (5 marks)</li> </ul>	<b>10</b>

Task	Guide	Maximum Marks
8	<p><b>Reflection</b></p> <p>A 500 word reflection on the activity.            What has been learnt?            How could the system be improved or further developed?            Award marks for a well written, honest reflective account</p>	<b>10</b>

### Learning Outcomes matrix

Task	Learning Outcomes assessed	Marker can differentiate between varying levels of achievement
1	1, 2, 3	Yes
2	1, 2, 3	Yes
3	1, 2, 3, 4, 5	Yes
4	1, 2, 3	Yes
5	1, 2, 3	Yes
6	1, 2, 3	Yes
7	1, 2, 3	Yes
8	1, 2, 3, 4, 5	Yes

### Grade descriptors

Learning Outcome	Pass	Merit	Distinction
Understand the various tools and techniques used for Web Application development	Demonstrate adequate understanding of tools and techniques	Demonstrate robust understanding of tools and techniques	Demonstrate highly comprehensive understanding of tools and techniques
Be able to develop data-driven websites	Show adequate development	Show sound and appropriate development	Show innovative and highly appropriate development
Be able to apply the various tools and techniques used to build data-driven websites	Demonstrate adequate and appropriate application of tools and techniques	Demonstrate sound and consistently appropriate application of tools and techniques	Demonstrate detailed and highly appropriate application of tools and techniques
Understand the functions of web services	Demonstrate adequate level of understanding	Demonstrate robust level of understanding	Demonstrate highly comprehensive level of understanding
Be able to create and deploy web services	Demonstrate ability to perform the task	Demonstrate ability to perform the task consistently well	Demonstrate ability to perform the task to the highest standard