• The aim of this assignment is to develop a book reservation web site using PHP and MySQL database. The application will allow users to search for and reserve library books. Specifically, the application will enable the following:

- Library functionality- the users should be allowed to:

· Search for a book

· Reserve a book

· View all the books that they have reserved

- *Login* – The user must identify themselves to the system in order to use the system and throughout the whole site. If they have not previously used the system, they must register their details.
- *Registration* - This allows a user to enter their details on the system. The registration process should validate that all details are entered. Mobile phone numbers should be numeric and 10 characters in length. Password should be six characters and have a password confirmation function. The system should ensure that each user can be identified using a unique username.
- *Search for a book*: The system should allow the user to search in a number of ways:
  - by book title and/or author (including partial search on both)
  - by book category description in a dropdown menu (book category should retrieved from database)
- The results of the search should display as a list from which the user can then reserve a book if available. If the book is already reserved, the user should not be allowed to reserve the book.
- *Reserve a book* – The system should allow a user to reserve a book provided that no-one else has reserved the book yet. The reservation functionality should capture the date on which the reservation was made.
- *View reserved books* – the system should allow the user to see a list of the book(s) currently reserved by that user. User should be able to remove the reservation as well.

Notes:

Apart from HTML, you should try to use other client side technologies like cascading style sheets to make pages neat and tidy. All validation should be server-side.

Do not allow for more than 5 rows of data per page, where search results are being displayed. Include functionality to display lists across more than one page.

The screens should be neat, simple design and usable. They do not need to be overly elaborate in presentation as you will not get extra marks for this.
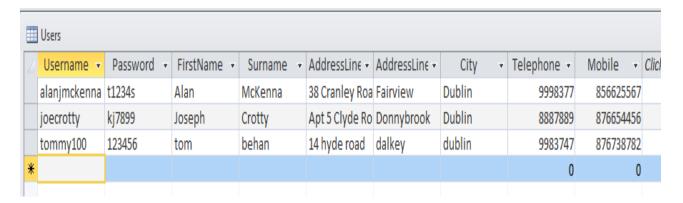
Other requirements

- You must create/duplicate the database given in this document. You can add more data as you need to the tables.
- Use a common header and footer for your pages throughout the application
- Avoid hard-coding in your programs
- Include error checking as appropriate

Database

The book database contains four tables:

1. Users table - to hold user registration and password details. Each user is uniquely identified by a user name.
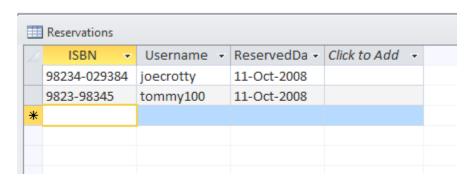
Users

Username ▾	Password ▾	FirstName ▾	Surname ▾	AddressLine ▾	AddressLine ▾	City ▾	Telephone ▾	Mobile ▾	Click
alanjmckenna	t1234s	Alan	McKenna	38 Cranley Roa	Fairview	Dublin	9998377	856625567	
joecrotty	kj7899	Joseph	Crotty	Apt 5 Clyde Ro	Donnybrook	Dublin	8887889	876654456	
tommy100	123456	tom	behan	14 hyde road	dalkey	dublin	9983747	876738782	
*							0	0	

2. Books table - holding all book details, indexed by ISBN number

ISBN ▾	BookTitle ▾	Author ▾	Editi ▾	Year ▾	Categ ▾	Rese ▾	Click to Ad
093-403992	Computers in Business	Alicia Oneill	3	1997	003	N	
23472-8729	Exploring Peru	Stephanie Birchi	4	2005	005	N	
237-34823	Business Strategy	Joe Peppard	2	2002	002	N	
23u8-923849	A guide to nutrition	John Thorpe	2	1997	001	N	
2983-3494	Cooking for children	Anabelle Sharpe	1	2003	007	N	
82n8-308	computers for idiots	Susan O'Neill	5	1998	004	N	
9823-23984	My life in picture	Kevin Graham	8	2004	001	N	
9823-2403-0	DaVinci Code	Dan Brown	1	2003	008	N	
98234-029384	My ranch in Texas	George Bush	1	2005	001	Y	
9823-98345	How to cook Italian food	Jamie Oliver	2	2005	007	Y	
9823-98487	Optimising your business	Cleo Blair	1	2001	002	N	
988745-234	Tara Road	Maeve Binchy	4	2002	008	N	
993-004-00	My life in bits	John Smith	1	2001	001	N	
9987-0039882	Shooting History	Jon Snow	1	2003	001	N	
*				0			

3. Category table – indicating the list of book categories (fiction, business etc). It is linked to the Books table by category code

4. Reserved Books table - holding a list of books reserved by the user (identified by username). It is linked to the books table by ISBN number and the Users table by username.

Marking

- The assignment carries a total of 70 marks, which is 70% of your continuous assessment mark in Web Development.
- All code must be fully tested. The examiner will not attempt to debug code which does not compile or run code which is does not function as required. Marks will be awarded as follows:

Completeness of functionality - 30%
Documentation - 10%
Coding style/readability - 10%
Technical implementation - 20%

- **Deadline:** 8th **of December at 1pm. Demo start from 1pm.**

Submission of Assignment

You are required to submit **electronically** your assignment on or before the due date. The details of each are below.
Please note the penalties of the assessment regulations for late submission.

*Electronic submission (**through** Brightspace)*

A pdf file that:

- lists the PHP pages used in your application – including a textual description of each page stating what the page does and how it interacts with other pages
- contains a copy listing of your source code (.php , .html) .
- contains a copy sample of each screen as it appears in your application
- design document

You will be required to demonstrate your program in lab.

- **Assignment Regulation:**

This assignment is not group projects; students are expected to complete an assignment individually. Please note penalty below.

Penalties (except in exceptional circumstances)

1. Failure to submit an assignment will result in no marks for that element of the assessment.

2. Submission of an assignment after the due date but within one working week will result in a 50% reduction of the marks.

3. Submission of an assignment more than one working week after the due date will result in no marks.

4. Assessment components that are plagiarised will result in zero marks for all parties involved.