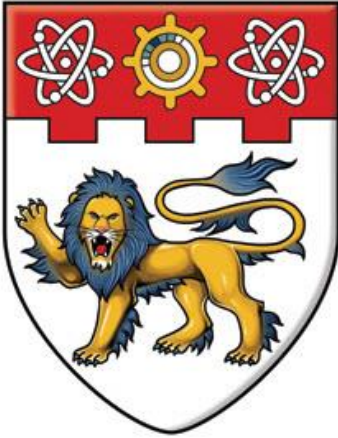


**EXAMPLE CLASS REPORT**  
**CE1002 INTRODUCTION TO COMPUTING SYSTEMS**



**NANYANG**  
**TECHNOLOGICAL**  
**UNIVERSITY**

**LAB GROUP FE2:**

**EDWIN CANDINEGARA / U1320135K**

**HU SIYU / U1321469A**

**JAYAKUMAR SANJANA / U1322888L**

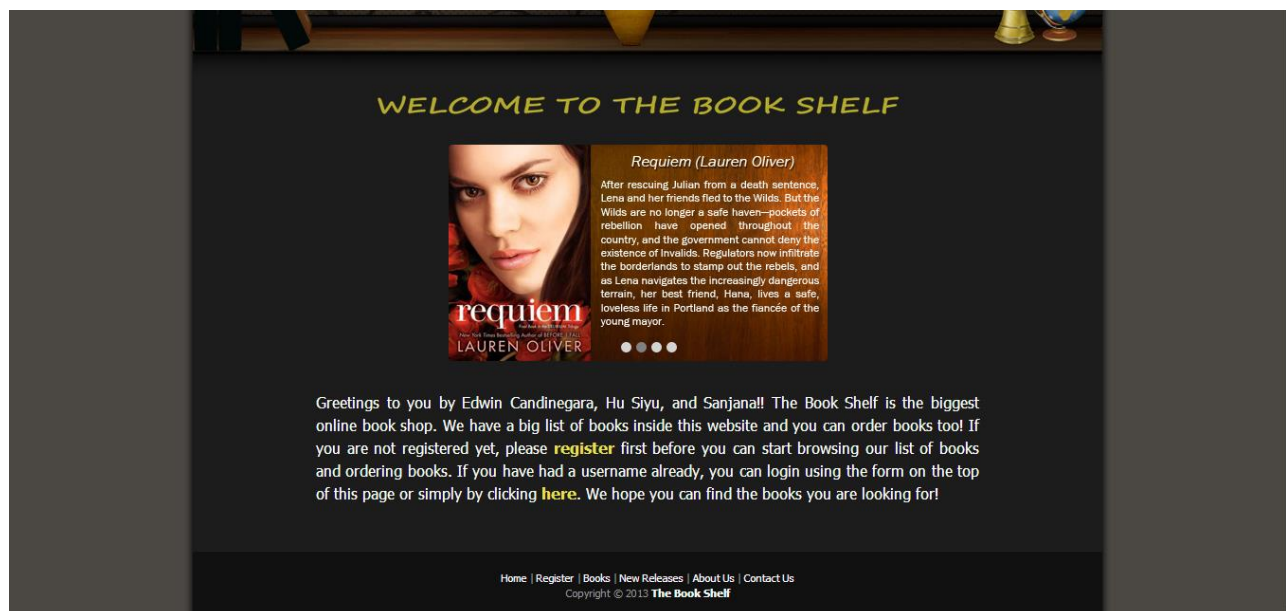
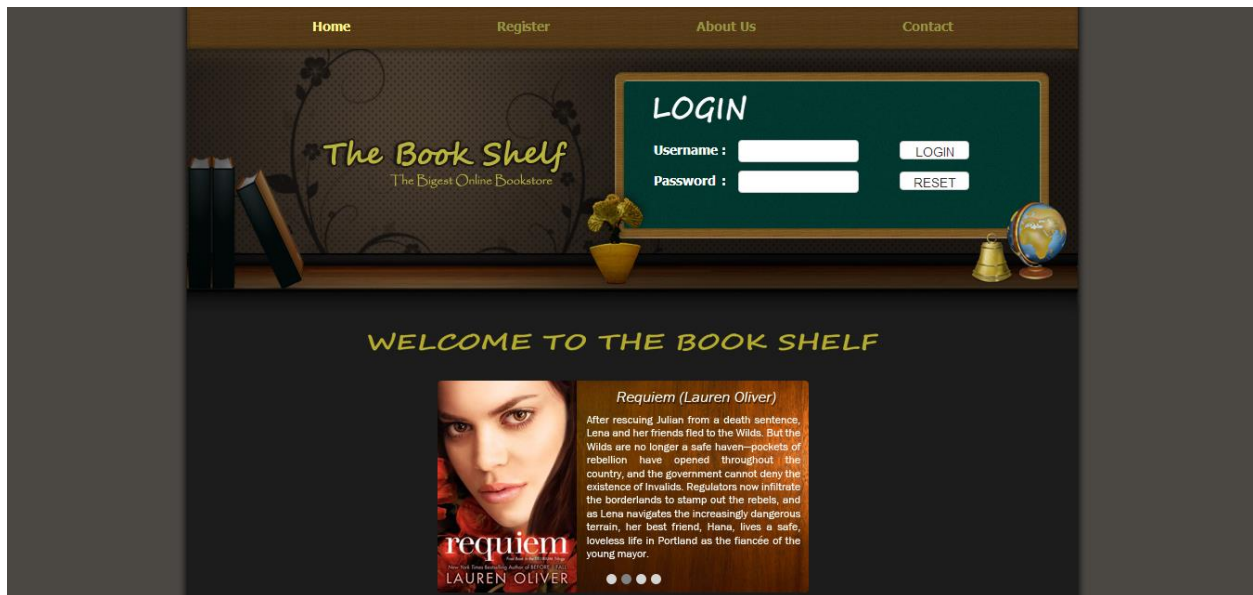
**SEMESTER 1**

**AY 2013/2014**

**SCHOOL OF COMPUTER ENGINEERING**  
**NANYANG TECHNOLOGICAL UNIVERSITY**

## I. Introduction

This website has been created as a part of our project in CE1002 Introduction in Computing Systems in order to enhance our knowledge in HTML, PHP, and database. This website is an online book store called “The Book Shelf”. In this website, we are able to register a new user, log in as user, buy books online, manipulate orders, and other things. Furthermore, we also use JavaScript for simple form validation in this project.



## II. Database

The database “project1” has three tables which are books, userdetails, and userbaskets. We use these three tables to store all information related to the user’s details, user’s orders, and book’s details.

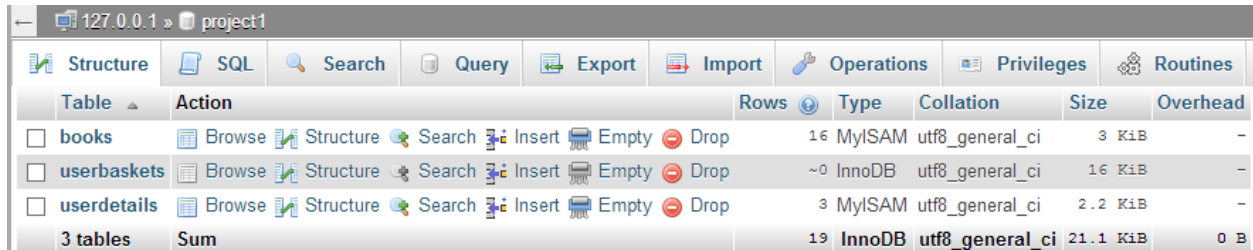


Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> books	Browse  Structure  Search  Insert  Empty  Drop	16	MyISAM	utf8_general_ci	3 KiB	-
<input type="checkbox"/> userbaskets	Browse  Structure  Search  Insert  Empty  Drop	~0	InnoDB	utf8_general_ci	16 KiB	-
<input type="checkbox"/> userdetails	Browse  Structure  Search  Insert  Empty  Drop	3	MyISAM	utf8_general_ci	2.2 KiB	-
3 tables	Sum	19	InnoDB	utf8_general_ci	21.1 KiB	0 B

### 2.1 Books

The books table has six fields. They are bookid, type, bookname, author, quantity, and price. The bookid field is the primary key of this table. Each book has its own book ID. This table stores all information related to the books which are put in the website.



	bookid	type	bookname	author	quantity	price
<input type="checkbox"/> Edit  Copy  Delete	1	Science Fiction	Allegiant( Divergent,#3)	Veronica Roth	100	25
<input type="checkbox"/> Edit  Copy  Delete	2	Science Fiction	Shades of Earth	Beth Revis	100	28
<input type="checkbox"/> Edit  Copy  Delete	3	Fantasy	The House of Hades	Rick Riordan	100	30
<input type="checkbox"/> Edit  Copy  Delete	4	Romance	The Clockwork Princess	Cassandra Clare	100	25
<input type="checkbox"/> Edit  Copy  Delete	5	Science Fiction	Insurgent ( Divergent #2)	Veronica Roth	100	35
<input type="checkbox"/> Edit  Copy  Delete	6	Young Adult	City of Lost Souls	Cassandra Clare	100	42
<input type="checkbox"/> Edit  Copy  Delete	7	Romance	Pandemonium (Delirium #3)	Lauren Oliver	100	24
<input type="checkbox"/> Edit  Copy  Delete	8	Romance	Requiem (Delirium #2)	Lauren Oliver	100	30
<input type="checkbox"/> Edit  Copy  Delete	9	Satire	Pride & Prejudice	Jane Austen	100	22
<input type="checkbox"/> Edit  Copy  Delete	10	Autobiography	The Diary of Anne Frank	Anne Frank	100	32
<input type="checkbox"/> Edit  Copy  Delete	11	Fiction	Wuthering Heights	Emily Bronte	100	30
<input type="checkbox"/> Edit  Copy  Delete	12	Fiction	A Game of Thrones	George Martin	100	25
<input type="checkbox"/> Edit  Copy  Delete	13	Fiction	Kane and Abel	Jeffrey Archer	100	30
<input type="checkbox"/> Edit  Copy  Delete	14	Fiction	Only Time Will Tell	Jeffrey Archer	100	20
<input type="checkbox"/> Edit  Copy  Delete	15	Science Fiction	The Hunger Games	Suzanne Collins	100	23
<input type="checkbox"/> Edit  Copy  Delete	16	Fiction	A Prisoner Of Birth	Jeffrey Archer	100	30

## 2.2 Userbaskets

The userbaskets table consists of eight fields. They are buyid, username, bookid, bookname, author, type, quantity, and totalprice. The buyid and username fields are the primary keys in this table. The username connects this table with userdetails table and the buyid, which increments automatically, is to distinguish between one orders with another. Basically, this table stores every order details.

	buyid	username	bookid	bookname	author	type	quantity	totalprice
<input type="checkbox"/> Edit Copy Delete	1	john001	6	City of Lost Souls	Cassandra Clare	Young Adult	5	210
<input type="checkbox"/> Edit Copy Delete	2	john001	14	Only Time Will Tell	Jeffrey Archer	Fiction	3	60

## 2.3 Userdetails

The third table is the userdetails table. It has nine fields which are username, password, type, firstname, lastname, phone, email, address, and lasttime. The unique field is the username. In addition, the username and password fields are using utf8\_bin collation so that the username and password are case sensitive.

	username	password	type	firstname	lastname	phone	email	address	lasttime
<input type="checkbox"/> Edit Copy Delete	john001	ab123	normal	John	A.	12345678	john@john.com	NTU	06/11/2013 16:55:08
<input type="checkbox"/> Edit Copy Delete	admin	admin	admin	Bill	A	123458960	aaa@a.com	NTU	06/11/2013 16:29:10

### III. WEBSITE

#### 3.1 Login Page

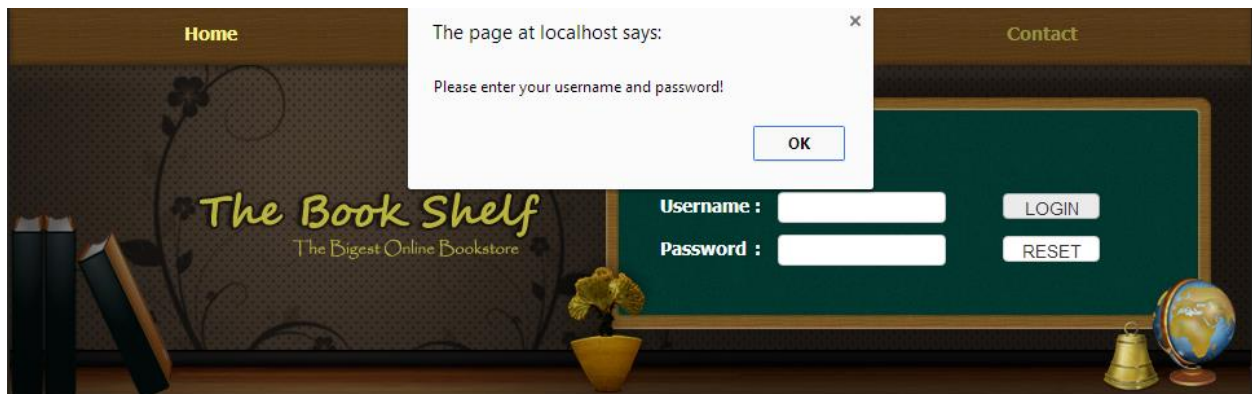


The login form can be found on the homepage. This form is processed by login.php and also validated first by a JavaScript function as in the picture below.

```
<script>
    function validateLogin()
    {
        var user = document.forms["login"]["username"].value;
        var pass = document.forms["login"]["password"].value;

        if ((user == null || user == "") && (pass == null || pass == ""))
        {
            alert("Please enter your username and password!");
            return false;
        }
        else if ((user == null || user == "") && (pass != null || pass != ""))
        {
            alert("Please enter your username!");
            return false;
        }
        else if ((user != null || user != "") && (pass == null || pass == ""))
        {
            alert("Please enter your password!");
            return false;
        }
    }
</script>
```

As long as one of the two textboxes are empty, the JavaScript function will provide an alert message and the form will not be processed by login.php.

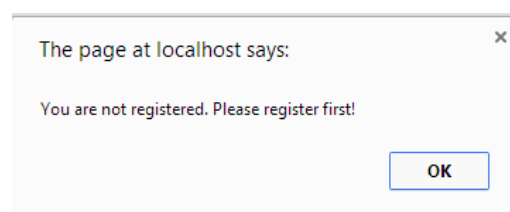


After the textboxes are filled in, login.php will process the data by checking whether the username exists or not and the user's type. If the login process is successful, and its type is normal user, the user will be directed to basket.php. If the user's type is admin, then the admin user will be brought to the adminusers.php page. Moreover, the username and password will be saved as \$\_SESSION variables so that it is reusable in other pages.

```
if ($type['type'] == "admin")
{
    header("refresh:0; url=adminusers.php");
    $_SESSION['username']=$username;
    $_SESSION['password']=$password;
    $_SESSION['lasttime']=$lasttime;
}

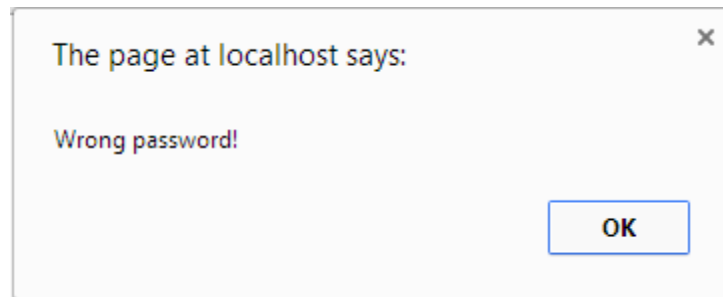
if ($type['type'] == "normal")
{
    header("refresh:0;url=basket.php");
    $_SESSION['username']=$username;
    $_SESSION['password']=$password;
    $_SESSION['lasttime']=$last;
}
```

On the other hand, if it does not exist, the PHP file will run a script alerting the user and redirect the user to the registration page.





In addition, if the username exists, but the user inserts a wrong password, the PHP file will tell the user that his/her password is wrong.



### 3.2 Registration Page

**REGISTRATION FORM :**

**Please fill in the form :**

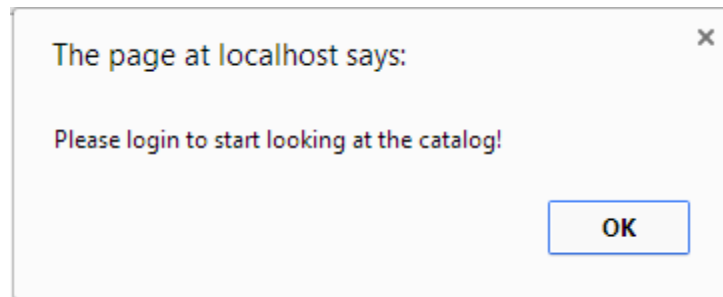
First Name	:	<input type="text"/>	
Last Name	:	<input type="text"/>	
Username	:	<input type="text"/>	*must be alphabet or numeric only, at least 5 but not more than 20 characters
Password	:	<input type="text"/>	*at least 8 characters and must be alphabet or numeric only
Confirm Password	:	<input type="text"/>	
Address	:	<input type="text"/>	
Phone Number	:	+ <input type="text"/> - <input type="text"/>	
E-Mail	:	<input type="text"/>	

Basically, this page provides form used for registering a new user. As in login form, this form is also validated using JavaScript first. An alert box is popped if a condition is not fulfilled. For example, a textbox is blank, the first name and last name contain a number, and other validations.

Once the submit button is pressed, the data is processed by registration.php. It checks whether the username has existed before. If the username does not exist, the PHP file will

update userdetails table with the data. Otherwise, the PHP file will bring you back to the registration page.

When the registration process is successful, the PHP will pop an alert message telling the new user to login first and redirect him/her to the home page.



### 3.3 Logging In

#### Normal User:

When you log in as a normal user, you will be directed to the basket.php page where you can see your book orders. After you log in, you will be able to see your status such as how many orders you have, your last login time, and also it provides a link which brings you to a page where you can change your password.



#### “Your Basket” Page:

In basket.php, user can alter their book orders. They can change the quantity of the books and delete their orders by using their buy ID specified in the order's table. Inside the basket.php, we use PHP while loops to show the content of the order's table. Further, deleting



order is done by the deletebook.php and changing quantity is done by using changeqty.php file.

To delete book orders:

What do you want to do?  
☐ Delete ☒ Change Quantity

Buy ID :

Use while loop in PHP

Buy ID	Book Name	Author	Type	Quantity	Total Price
1	City of Lost Souls	Cassandra Clare	Young Adult	5	210
2	Only Time Will Tell	Jeffrey Archer	Fiction	3	60
Total :					270

To change the quantity of books ordered:

What do you want to do?  
☒ Delete ☐ Change Quantity

Buy ID :  Quantity :

Buy ID	Book Name	Author	Type	Quantity	Total Price
1	City of Lost Souls	Cassandra Clare	Young Adult	5	210
2	Only Time Will Tell	Jeffrey Archer	Fiction	3	60
Total :					270

### Admin user:

If you are an admin, you will be directed to adminusers.php page after logging in successfully. Admin has the power to delete users, and orders, and to see the full details of each books available.

## Admin Page

Which table do you want to see?

☐ User Details ☒ User Baskets ☐ Books Details

Username :

Username	Password	Type	First Name	Last Name	Phone	Email	Address
john001	abcd1234	normal	John	A.	12345678	john@john.com	NTU
admin	admin	admin	Bill	A	123458960	admin@admin.com	NTU

## Admin Page

Which table do you want to see?

☒ User Details ☐ User Baskets ☐ Books Details

Buy ID :

Buy ID	Username	Book ID	Book Name	Author	Type	Quantity	Total Price
1	john001	13	Kane and Abel	Jeffrey Archer	Fiction	8	240
2	john001	16	A Prisoner Of Birth	Jeffrey Archer	Fiction	3	90

Which table do you want to see?

☒ User Details ☐ User Baskets ☐ Books Details

Book ID	Type	Book Name	Author	Quantity	Price
1	Science Fiction	Allegiant ( Divergent, #3)	Veronica Roth	100	25
2	Science Fiction	Shades of Earth	Beth Revis	100	28
3	Fantasy	The House of Hades	Rick Riordan	100	30
4	Romance	The Clockwork Princess	Cassandra Clare	100	25
5	Science Fiction	Insurgent ( Divergent #2)	Veronica Roth	100	35
6	Young Adult	City of Lost Souls	Cassandra Clare	95	42
7	Romance	Pandemonium (Delirium #3)	Lauren Oliver	100	24
8	Romance	Requiem (Delirium #2)	Lauren Oliver	100	30
9	Satire	Pride & Prejudice	Jane Austen	100	22
10	Autobiography	The Diary of Anne Frank	Anne Frank	100	32
11	Fiction	Wuthering Heights	Emily Bronte	100	30
12	Fiction	A Game of Thrones	George Martin	100	25
13	Fiction	Kane and Abel	Jeffrey Archer	100	30
14	Fiction	Only Time Will Tell	Jeffrey Archer	97	20
15	Science Fiction	The Hunger Games	Suzanne Collins	100	23
16	Fiction	A Prisoner Of Birth	Jeffrey Archer	100	30

The deleting username process is done by the deleteuser.php file while the deleting orders process is done by the deletebookadmin.php.

### 3.4 Logging Out:

User can easily log out from the system by clicking the “Logout” button which is in the status board on the top of the page. When a user logs out, the logout.php file will destroy the session, unset all session variables, and also delete session cookies.

```
<?php
// Initialize the session.
// If you are using session_name("something"), don't forget it now!
session_start();

// Unset all of the session variables.
$_SESSION = array();

// If it's desired to kill the session, also delete the session cookie.
// Note: This will destroy the session, and not just the session data!
if (ini_get("session.use_cookies")) {
    $params = session_get_cookie_params();
    setcookie(session_name(), '', time() - 42000,
        $params["path"], $params["domain"],
        $params["secure"], $params["httponly"]
    );
}

// Finally, destroy the session.
session_destroy();
header("refresh:0;url=home.php");
?>
```

### 3.6 Changing Password

User is able to change their password after the user is logged in. Changing password can be done by clicking the link found in the status board. It will bring the user to change\_pass.php where a form to change password can be found. This form will be processed using changepassword.php. It will update the user's password in the userdetails table inside the database.

## CHANGE YOUR PASSWORD

Old Password :

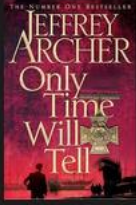
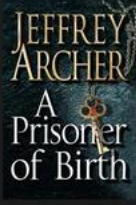
New Password :  \*at least 8 characters and must be alphabet or numeric only

Confirm New Password :

### 3.6 Books

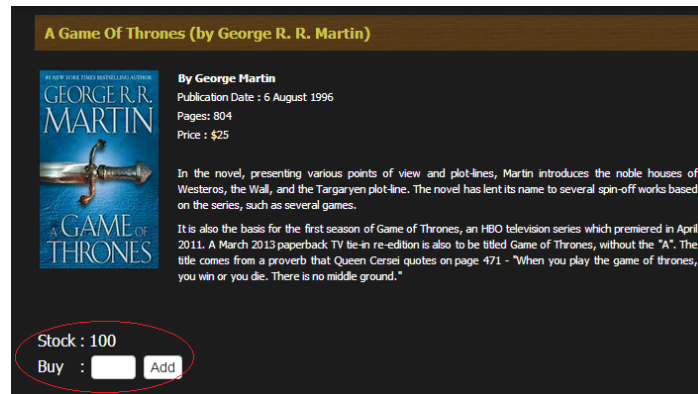
In this page, the user can view books of different genres and their prices. Further, user can read the full description of a book by simply clicking the “Read more...” button. Clicking the button will bring the user to a particular book page where user can also find a form used for adding an order.

## BOOKS

<p><b>A Game of Thrones</b> (by George Martin)</p>  <p>In the novel, presenting various points of view and plot-lines, Martin introduces the noble houses of Westeros...</p> <p><b>\$25</b></p> <p><a href="#">Read more...</a></p>	<p><b>Kane and Abel</b> (by Jeffrey Archer)</p>  <p>Kane and Abel is a 1979 novel by British author Jeffrey Archer. The title and story is a play on the Biblical brothers, Cain and Abel...</p> <p><b>\$30</b></p> <p><a href="#">Read More...</a></p>
<p><b>Only Time Will Tell</b> (by Jeffrey Archer)</p>  <p>The plot revolves around the main protagonist Harry Clifton, spanning the time between 1920 and the beginning of the...</p> <p><b>\$20</b></p> <p><a href="#">Read More...</a></p>	<p><b>A Prisoner Of Birth</b> (by Jeffrey Archer)</p>  <p>A Prisoner of Birth is a mystery novel by English author Jeffrey Archer, first published on 6 March 2008 by Macmillan...</p> <p><b>\$30</b></p> <p><a href="#">Read More...</a></p>

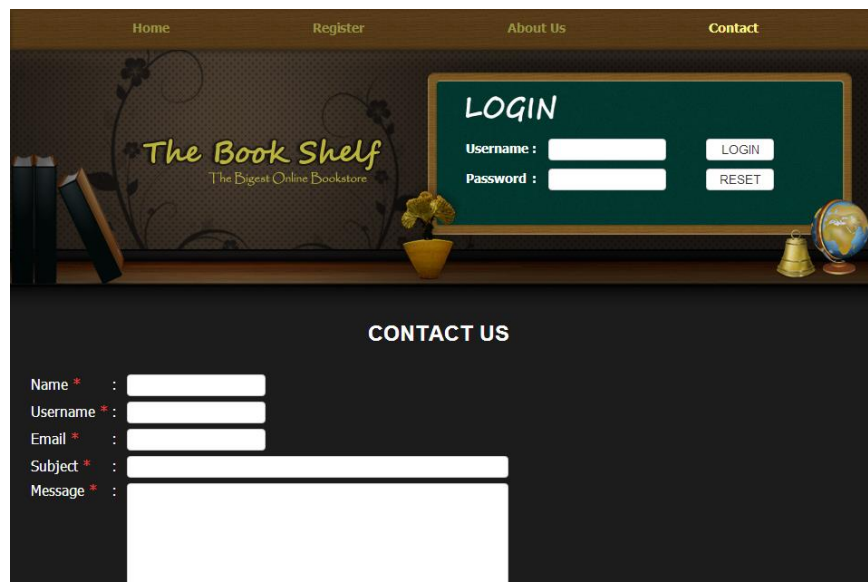
### 3.7 Ordering a book:

There are 16 book's description pages. Each pages has a synopsis or a short description of the book, a form which is used by user to add a book order, and also it shows the number of books available in the store. Once a user adds an order, the table inside the database will be updated. This process is be done by bookadd.php.



### 3.8 Contact Us

In fact, there are two Contact Us page in this website. The first one, “contact1.php”, is used by any person in general, who enters the website, can leave an enquiry on this page. It does not contain attributes like Categories or Bestseller, and contains tabs like Home, Register, About Us and Contact on the top of the page. This contact form will then be processed by emailsend1.php.



## CONTACT US

Name \* :

Username \* :

Email \* :


Subject \* :

Message \* :

[Home](#) | [Register](#) | [Books](#) | [New Releases](#) | [About Us](#) | [Contact Us](#)  
 Copyright © 2013 **The Book Shelf**

The other Contact Us page, which is “contact2.php”, is created for users to make any enquiries and is explicitly made for users. It differs in the layout – It contains tabs such as, Books, New releases, Your Basket, About Us and Contact on the top, and the categories and bestsellers in the left. This contact form will then be processed by emailsend2.php.

[Books](#)
[New Releases](#)
[Your Basket](#)
[About Us](#)
[Contact](#)



**The Book Shelf**  
The Biggest Online Bookstore

Welcome **john001!!**

- Your last session : 07/11/2013 19:43:11
- You do not have any order in your basket
- Do you want to **change password?**

**Categories**

- Autobiography
- Fantasy
- Fiction
- Romance
- Satire
- Science Fiction
- Young Adult

**Bestsellers**

- City of Lost Souls (The Mortal Instruments #5)
- Kane and Abel
- Rendemonium (Delirium #3)
- Only Time Will Tell
- The Hunger Games
- Shades of Earth

## CONTACT US

Name \* :

Username \* :

Email \* :

Subject \* :

Message \* :

Actually, these two pages have the same function, which is to send an enquiry to the website admin. Those book tab and new book tab can only be seen by a logged in user. Thus, the difference is an unregistered visitor will not be able to access the book and new book pages so that they will have to register and login first before they can start ordering. If an unlogged in user tries to enter the book.php or any other pages which can only be accessible by a logged in user, the PHP file will reject the unlogged in user and direct him/her to the home page.

### 3.9 About Us

The “About Us” button is on the navigation links which can be found on the top of the website. When a user clicks on it, it will direct him/her to the About Us page. Similar to the Contact Us page, there are two About Us pages. One is for users who have logged in and the other one is for any visitor visiting the website. The differences between these two pages are the same as the differences between the two Contact Us pages, e.g. about1.php does not have a list of category and bestselling books on the left side while about2.php has those lists.

#### ABOUT US

The Book Shelf is the biggest online book store. We have a lot of books from different categories, like Science Fiction, Fantasy, Romance, Young Adult, and the others.

**Why do we use online bookstore instead of building an offline store?**

It is because we want to make our services available to those who are not in the same country. They will be able to buy books from our store and those books will be sent to their country.

**Why should you buy books from The Book Shelf?**

We offer some services other online bookstores do not offer. All books purchased from us will be delivered to the customer's home without any additional cost and it will be sent within 3 days after we receive the payment. In addition, we are willing to give a registered user a few preview pages of the book you want to buy so that you do not buy a wrong book.

This website is made by Edwin Candinegara, Hu Siyu, and Jayakumar Sanjana. We are three students from Nanyang Technological University Singapore. This website is made for a CE1002 Introduction to Computing Systems assignment.



### Categories

Autobiography  
Fantasy  
Fiction  
Romance  
Satire  
Science Fiction  
Young Adult

### Bestsellers

City of Lost Souls (The Mortal  
Instruments #5)  
Kane and Abel  
Pandemonium (Delirium #3)  
Only Time Will Tell  
The Hunger Games  
Shades of Earth

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## **IV. CONCLUSION**

By doing this project, now we are able to implement what we have learned in the lectures and additional lectures. We understand how to make a simple website and how to integrate a website with a database using PHP code. Furthermore, this project pushes us to be more creative since we have to think what kind of features we should put inside the website and also helps us in developing our self-study skills since we still have to look for some syntaxes which are not covered in the lectures or in the additional lectures.