

ISLAMIC UNIVERSITY OF TECHNOLOGY
Undergraduate Project

ONLINE BOOK STORE



Authors:

Arif Haidari (144303)
Ahmad Ahadi (144304)

Supervisor:

Md. Hamjajul Ashmafee
Lecturer

Department of Computer Science and Engineering (CSE).
A project submitted to the Department of CSE in fulfilment of the requirements
For the Degree of Higher Diploma in CSE.
Academic Year: 2016-2017.

November, 2017

Declaration of Authorship

We hereby declare that the work which is being presented in the project entitled “ONLINE BOOK STORE” in fulfillment of the requirements for the award of the degree of Higher Diploma submitted in the Department of Computer Science & Engineering, Islamic University of Technology is an authentic record of our own work carried out during the period from August, 2017 to November, 2017 under the supervision and guidance of Sir “Md. Hamjajul Ashmafee”, Lecturer, Islamic University of Technology.

The matter embodied in this project work has not been submitted for the award of any other degree.

Authors

Supervisor

Arif Haidary

Student ID: 144303

Md. Hamjajul Ashmafee

Lecturer

Ahmad Ahadi

Student ID: 144304

Acknowledgements

In completing this minor project we have been fortunate to have help, support and encouragement from many people. we would like to acknowledge them for their cooperation.

First, We would like to thank Sir Md. Hamjajul Ashmafee, our project supervisor, for guiding us through each and every step of the process with knowledge and support. Thank you for your advice, guidance and assistance. We would also like to thank Prof. Dr. Md. Mahbub Alam, Head of Computer Science and Engineering department of Islamic University of Technology who always shows immense patience and understanding throughout the submission of thesis for whole department. Finally, we would like to dedicate this project to our Teachers and our parents, for their love, encouragement and help throughout the whole life.

With Regards,

Arif Haidary (144303)

Ahmad Ahadi (144304)

Abstract

The main objective of the project is to create an online book store that allows users to search and purchase a book online based on title, author and subject.

The users can order their books online through credit card payment. Using this Website the user can purchase a book online instead of going out to a book store and wasting time. There are many online book stores like Powell's, Amazon which were designed using Html.

We developed a similar website using PHP, HTML, JavaScript, JQuery and MySQL. Online Book store is an online web application where the customer can purchase books online. Through a web browser the customers can search for a book by its title or author, later can add to the shopping cart and finally purchase using credit card transaction. The user can login using his/her account details or new customers can set up an account very quickly. They should give the details of their name, contact number. The books are divided into many categories based on subject like Engineering, Scientific, Medical, History and Novel etc. The Online Book Store Website provides customers with online shopping through a web browser. A customer can, create, sign in to his/her account, place items into a shopping cart and purchase using his/her credit card details. The Administrator will have additional functionalities when compared to the common user. He can add, delete and update the book details, book categories, member information and also confirm a placed order.

Contents

| | |
|---|----|
| Chapter 1 | 8 |
| 1. Introduction..... | 8 |
| Chapter 2 | 9 |
| 2. Literature Review..... | 9 |
| Chapter 3 | 11 |
| 3. Implementation Technologies..... | 11 |
| 3.1 Introduction..... | 11 |
| 3.2 JSP Architecture..... | 11 |
| 3.3 JSP Access Models..... | 13 |
| 3.4 MySQL Database..... | 15 |
| 4. Web Page Programming Options..... | 16 |
| 5. Functionalities..... | 17 |
| 5.1 A Home page with product catalog..... | 17 |
| 5.1.1 Search..... | 17 |
| 5.1.2 Books..... | 17 |
| 5.1.3 Shopping Cart..... | 17 |
| 5.1.4 Managing user accounts..... | 17 |
| 5.1.5 Administration:..... | 17 |
| 6. The Shopping Cart Application..... | 18 |
| 7. Project Design..... | 19 |
| 7.1 Data Model..... | 19 |
| 7.2 Process Model..... | 19 |
| Chapter 4 | 20 |
| 8. Requirements..... | 20 |
| 9. Use Cases..... | 20 |
| 9.1 Browse catalog..... | 20 |

| | |
|-------------------------------------|-----------|
| 9.2 Search for a book | 20 |
| 9.2.1 Purpose: | 20 |
| 9.2.2 Actor: | 20 |
| 9.2.3 Input: | 20 |
| 9.2.4 Output: | 20 |
| 10. Maintain Account | 20 |
| 10.1 Register | 20 |
| 10.1.1 Actor: | 20 |
| 10.1.2 Input: | 20 |
| 10.1.3 Output: | 20 |
| 10.2 Login | 21 |
| 10.2.1 Purpose: | 21 |
| 10.2.2 Actor: | 21 |
| 10.2.3 Input: | 21 |
| 10.2.4 Output: | 21 |
| 10.3 Logout | 21 |
| 10.3.1 Purpose: | 21 |
| 10.3.2 Actor: | 21 |
| 10.3.3 Input: | 21 |
| 10.3.4 Output: | 21 |
| 11. Shopping Cart | 21 |
| 11.1 Purpose: | 21 |
| 12. View Shopping Cart | 21 |
| 12.1 Purpose: | 21 |
| 12.2 Actor: | 21 |
| 12.3 Input: | 21 |
| 12.4 Output: | 21 |
| 13. Administrator | 22 |
| 13.1 Login | 22 |
| 13.1.1 Purpose: | 22 |
| 13.1.2 Actor: | 22 |

| | |
|-------------------------------|-----------|
| 13.1.3 Input: | 22 |
| 13.1.4 Output:..... | 22 |
| 13.2 Add or Delete Books..... | 22 |
| 13.2.1 Purpose: | 22 |
| 13.2.2 Actor:..... | 22 |
| 13.2.3 Input: | 22 |
| 13.2.4 Output:..... | 22 |
| 13.2.5 Purpose: | 22 |
| 13.2.6 Actor:..... | 22 |
| 13.2.7 Input: | 22 |
| 13.2.8 Output:..... | 23 |
| 13.3 Check Order..... | 23 |
| 13.3.1 Purpose: | 23 |
| 13.3.2 Actor:..... | 23 |
| 13.3.2 Input: | 23 |
| Chapter 5..... | 24 |
| 14. Use Case Diagram | 24 |
| 15. Class Diagram..... | 25 |
| 16. E-R Diagram..... | 26 |
| Chapter 6..... | 27 |
| 17. User Manual..... | 27 |
| 17.1 Home page | 27 |
| 17.2 Sign up page..... | 28 |
| 17.3 Login page | 29 |
| 17.4 Books | 30 |
| 17.5 Profile page | 31 |
| 17.6 Add To Cart | 33 |
| 17.7 See cart..... | 34 |
| 17.8 Admin Page..... | 35 |
| 17.9 Insert Books | 36 |

| | |
|---|----|
| 17.10 Update and Delete Books | 37 |
| 17.11 See Selected Books | 38 |
| 17.12 Add User | 39 |
| 17.13 Delete User | 40 |
| 18. Limitations and Future Development..... | 41 |
| 19. Conclusion | 42 |

Chapter 1

1. Introduction

In the world of software development there lots of improvement in the area of Architectural design and principles. The philosophies and implementation details are changing as the people guiding the development of the application. In this fantastic and yet sometimes complex world of software development there are some tried and true architecture patterns and software development guidelines employed by most architects. Also your design must have an ability to turn towards innovation instead of lending itself to common practices. Web services are one such area where architects must lean on their creative side and hope that their solutions are still successful. In this report we will explain an exciting voyage down the road of Web services application. From requirements to use cases, to database design, to component frameworks, to user interfaces, we will cover each and every aspect of system design required to build an application with collaborative Web services. The reason why we selected online Bookstore web service is everybody walking down the street has some idea about bookstores. The objective of this project is to develop an e- book store where books can be bought from the comfort of home through the Internet. An online book store is a virtual store on the Internet where customers can browse the catalog and select books of interest. The selected books may be collected in a shopping cart. At checkout time, the items in the shopping cart will be presented as an order. At that time, more information will be needed to complete the transaction. Usually, the customer will be asked to fill or select a billing address, a shipping address, a shipping option, and payment information such as credit card number. An e- mail notification is sent to the customer as soon as the order is placed.

The motivation to create this project has many sources

- Interest to develop a good user friendly website with many online transactions using a Database.
- To increase my knowledge horizon in technologies like PHP, SQL, CSS, and HTML.
- To gain good experience in web before joining in a full time job.
- To gain expertise using Data Grid, Data Set, Data Table, Data Adapter and Data Readers.

Chapter 2

2. Literature Review

Electronic Commerce (e-commerce) applications support the interaction between different parties participating in a commerce transaction via the network, as well as the management of the data involved in the process [2]. The increasing importance of e-commerce is apparent in the study conducted by researchers at the GVI (Graphics, Visualization, and Usability) Center at the Georgia Institute of Technology. In their summary of the findings from the eighth survey, the researchers report that "e-commerce is taking off both in terms of the number of users shopping as well as the total amount people are spending via Internet based transactions".

Over three quarters of the 10,000 respondents report having purchased items online. The most cited reason for using the web for personal shopping was convenience (65%), followed by availability of vendor information (60%), no pressure from sales person (55%) and saving time (53%).

Although the issue of security remains the primary reasons why more people do not purchase items online, the GVA survey also indicates that faith in the security of e-commerce is increasing. As more people gain confidence in current encryption technologies, more and more users can be expected to frequently purchase items online.

A good e-commerce site should present the following factors to the customers for better usability:

- Knowing when an item was saved or not saved in the shopping cart.
- Returning to different parts of the site after adding an item to the shopping cart.
- Easy scanning and selecting items in a list.
- Effective categorical organization of products.
- Simple navigation from home page to information and order links for specific products.
- Obvious shopping links or buttons.
- Minimal and effective security notifications or messages.
- Consistent layout of product information.

Another important factor in the design of an e-commerce site is feedback [4]. The interactive cycle between a user and a web site is not complete until the web site responds to a command entered by the user. According to Norman [5], "feedback--sending back to the user information about what action has actually been done, what result has been accomplished--is a well-known concept in the science of control and information theory. Imagine trying to talk to someone when you cannot even hear

Your own voice, or trying to draw a picture with a pencil that leaves no mark: there would be no feedback". Web site feedback often consists of a change in the visual or verbal information presented to the user. Simple examples include highlighting a selection made by the user or filling a field on a form based on a user's selection from a pull down list. Another example is using the sound of a cash register to confirm that a product has been added to an electronic shopping cart. Completed orders should be acknowledged quickly. This may be done with an acknowledgment or fulfillment page. The amount of time it takes to generate and download this page, however, is a source of irritation for many e-commerce users. Users are quick to attribute meaning to events. A blank page, or what a user perceives to be "a long time" to receive an acknowledgment, may be interpreted as "there must be something wrong with the order." If generating an acknowledgment may take longer than what may be reasonably expected by the user, then the design should include intermediate feedback to the user indicating the progress being made toward acknowledgment or fulfillment. Finally, feedback should not distract the user. Actions and reactions made by the web site should be meaningful. Feedback should not draw the user's attention away from the important tasks of gathering information, selecting products, and placing orders.

Chapter 3

3. Implementation Technologies

3.1 Introduction

While there are numerous technologies for building web applications that serve dynamic content, the one that has really caught the attention of the development community is Java Server Pages (JSP). And not without ample reason either. JSP not only enjoys cross-platform and cross-Web-server support, but effectively melds the power of server-side Java technology with the WYSIWYG features of static HTML pages.

JSP pages typically comprise of: Static HTML/XML components. Special JSP tags

Optionally, snippets of code written in the Java programming language called "script lets." Consequently, you can create and maintain JSP pages by conventional HTML/XML tools. It is important to note that the JSP specification is a standard extension defined on top of the Servlet API. Thus, it leverages all of your experience with servlets. There are significant differences between JSP and servlet technology. Unlike servlets, which is a programmatic technology requiring significant developer expertise, JSP appeals to a much wider audience. It can be used not only by developers, but also by page designers, who can now play a more direct role in the development life cycle. Another advantage of JSP is the inherent separation of presentation from content facilitated by the technology, due its reliance upon reusable component technologies like the JavaBeans component architecture and Enterprise JavaBeans technology. This course provides you with an in-depth introduction to this versatile technology, and uses the Tomcat JSP 1.1 Reference Implementation from the Apache group for running the example programs.

3.2 JSP Architecture

The purpose of JSP is to provide a declarative, presentation-centric method of developing servlets. As noted before, the JSP specification itself is defined as a standard extension on top the Servlet API. Consequently, it should not be too surprisingly that under the covers, servlets and JSP pages have a lot in common. Typically, JSP pages are subject to a translation phase and a request processing phase. The translation phase is carried out only once, unless the JSP page changes, in which case it is repeated. Assuming there were no syntax errors within the page, the result is a JSP page implementation class file that implements the Servlet interface, as shown below.

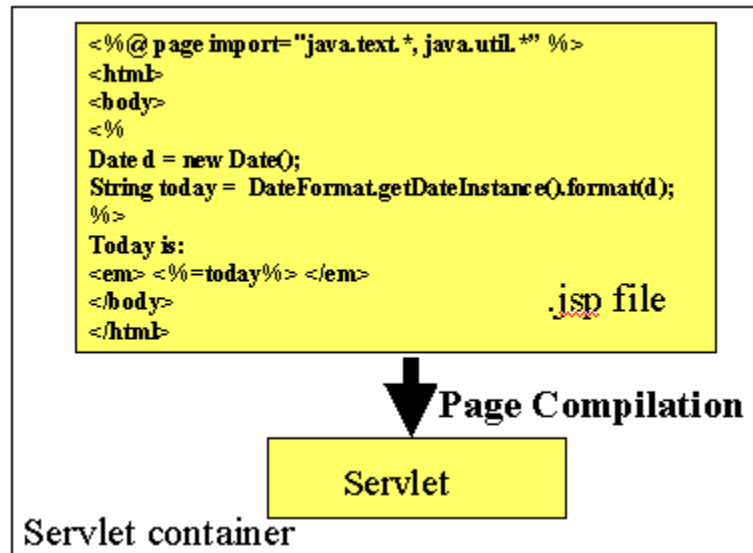


Figure 3.2: Servlet Container

The translation phase is typically carried out by the JSP engine itself, when it receives an incoming request for the JSP page for the first time. Note that the JSP 1.1 specification also allows for JSP pages to be precompiled into class files. Recompile may be especially useful in removing the start-up lag that occurs when a JSP page delivered in source form receives the first request from a client. Many details of the translation phase, like the location where the source and class files are stored are implementation dependent.

The JSP page implementation class file extends `HttpJspBase`, which in turn implements the `Servlet` interface. Observe how the service method of this class, `_jspService ()`, essentially inlines the contents of the JSP page. Although `_jspService ()` cannot be overridden, the developer can describe initialization and destroy events by providing implementations for the `jspInit ()` and `jspDestroy ()` methods within their JSP pages. Once this class file is loaded within the servlet container, the `_jspService ()` method is responsible for replying to a client's request. By default, the `_jspService ()` method is dispatched on a separate thread by the servlet container in processing concurrent client requests, as shown below:

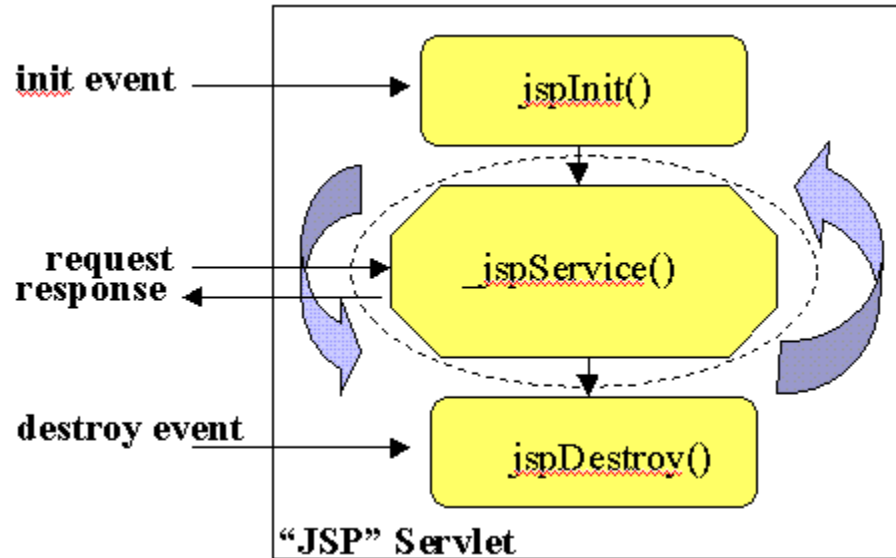


Figure 3.2: JSP Servlet

3.3 JSP Access Models

The early JSP specifications advocated two philosophical approaches, popularly known as Model 1 and Model 2 architectures, for applying JSP technology. These approaches differ essentially in the location at which the bulk of the request processing was performed, and offer a useful paradigm for building applications using JSP technology.

Consider the Model 1 architecture, shown below:

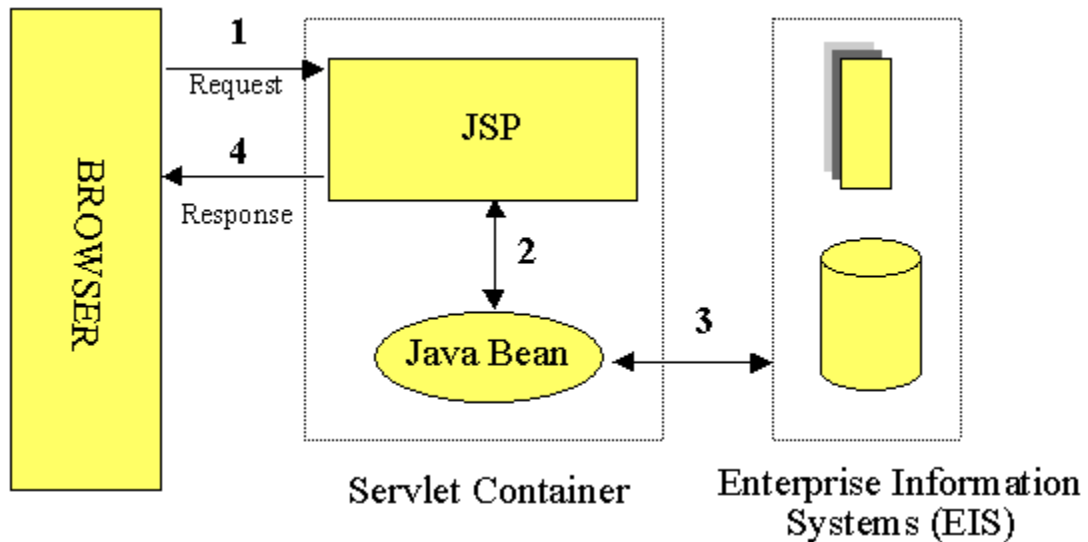


Figure 3.3: JSP Access Model

In the Model 1 architecture, the incoming request from a web browser is sent directly To the JSP page, which is responsible for processing it and replying back to the client. There is still separation of presentation from content, because all data access is Performed using beans.

Although the Model 1 architecture is suitable for simple applications, it may not be Desirable for complex implementations. Indiscriminate usage of this architecture Usually leads to a significant amount of script lets or Java code embedded within the JSP page, especially if there is a significant amount of request processing to be Performed. While this may not seem to be much of a problem for Java developers, it Is certainly an issue if your JSP pages are created and maintained by designers--which Is usually the norm on large projects? Another downside of this architecture is that Each of the JSP pages must be individually responsible for managing application state And verifying authentication and security.

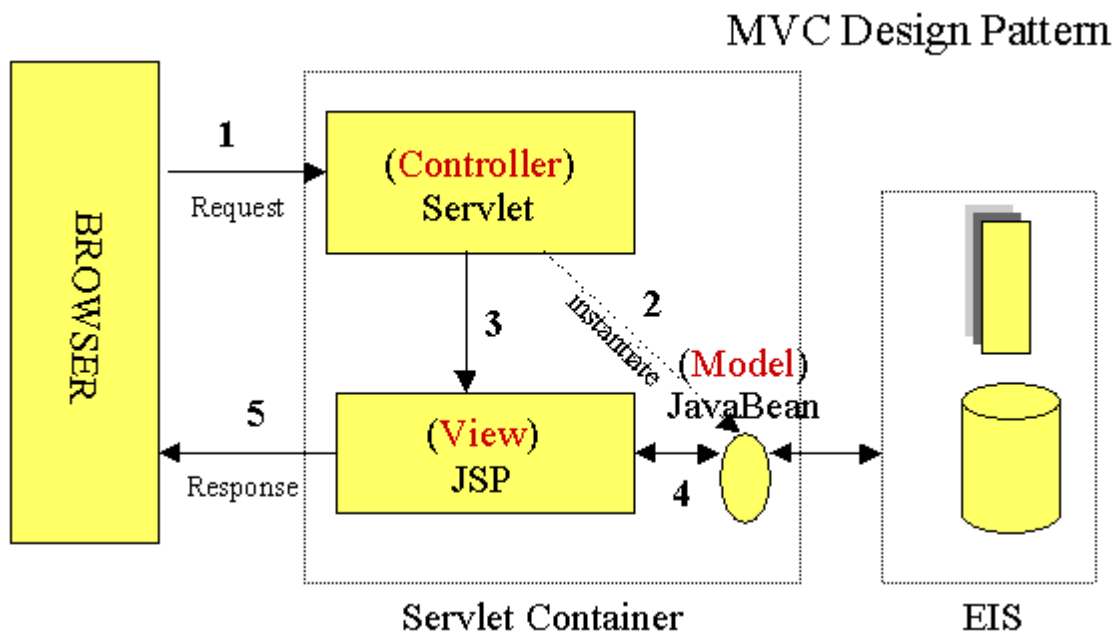


Figure 3.3: MVC Design Pattern

The Model 2 architecture, shown above, is a server-side implementation of the Popular Model/View/Controller design pattern. Here, the processing is divided Between presentation and front components. Presentation components are JSP pages That generate the HTML/XML response that determines the user interface when Rendered by the browser. Front components (also known as controllers) do not handle

Any presentation issues, but rather, process all the HTTP requests. Here, they are Responsible for creating any beans or objects used by the presentation components, as Well as deciding, depending on the user's actions, which presentation component to Forward the request to. Front components can be implemented as either a servlet or JSP page.

The advantage of this architecture is that there is no processing logic within the Presentation component itself; it is simply responsible for retrieving any objects or Beans that may have been previously created by the controller, and extracting the Dynamic content within for insertion within its static templates. Consequently, this Clean separation of presentation from content leads to a clear delineation of the roles And responsibilities of the developers and page designers on the programming team. Another benefit of this approach is that the front components present a single point of Entry into the application, thus making the management of application state, security, And presentation uniform and easier to maintain.

3.4 MySQL Database

In this project, MySQL is used as the backend database. MySQL is an open source Database management system. The features of MySQL are given below:

- MySQL is a relational database management system. A relational database stores information in different tables, rather than in one giant table. These tables can be referenced to each other, to access and maintain data easily.
- MySQL is open source database system. The database software can be used and modify by anyone according to their needs.
- It is fast, reliable and easy to use. To improve the performance, MySQL is multithreaded database engine. A multithreaded application performs many tasks at the same time as if multiple instances of that application were running simultaneously.

In being multithreaded MySQL has many advantages. A separate thread handles each incoming connection with an extra thread that is always running to manage the connections. Multiple clients can perform read operations simultaneously, but while writing, only hold up another client that needs access to the data being updated. Even though the threads share the same process space, they execute individually and because of this separation, multiprocessor machines can spread the thread across many CPUs as long as the host operating system supports multiple CPUs. Multithreading is the key feature to support MySQL's performance design goals. It is the core feature around which MySQL is built. MySQL database is connected to JSP using an ODBC driver. Open Database Connectivity (ODBC) is a widely accepted application-programming interface (API) for database access. The ODBC driver is a library that implements the functions supported by ODBC API. It processes ODBC function calls, submits SQL requests to MySQL server, and returns results back to the application. If necessary, the driver modifies an application's request so that the request conforms to syntax supported by MySQL.

4. Web Page Programming Options

An e-commerce organization can create data-based Web pages by using server side and client-side processing technologies or a hybrid of the two. With server-side processing, the Web server receives the dynamic Web page request, performs all processing necessary to create the page, and then sends it to the client for display in the client's browser. Client-side processing is done on the client workstation by having the client browser execute a program that interacts directly with the database.

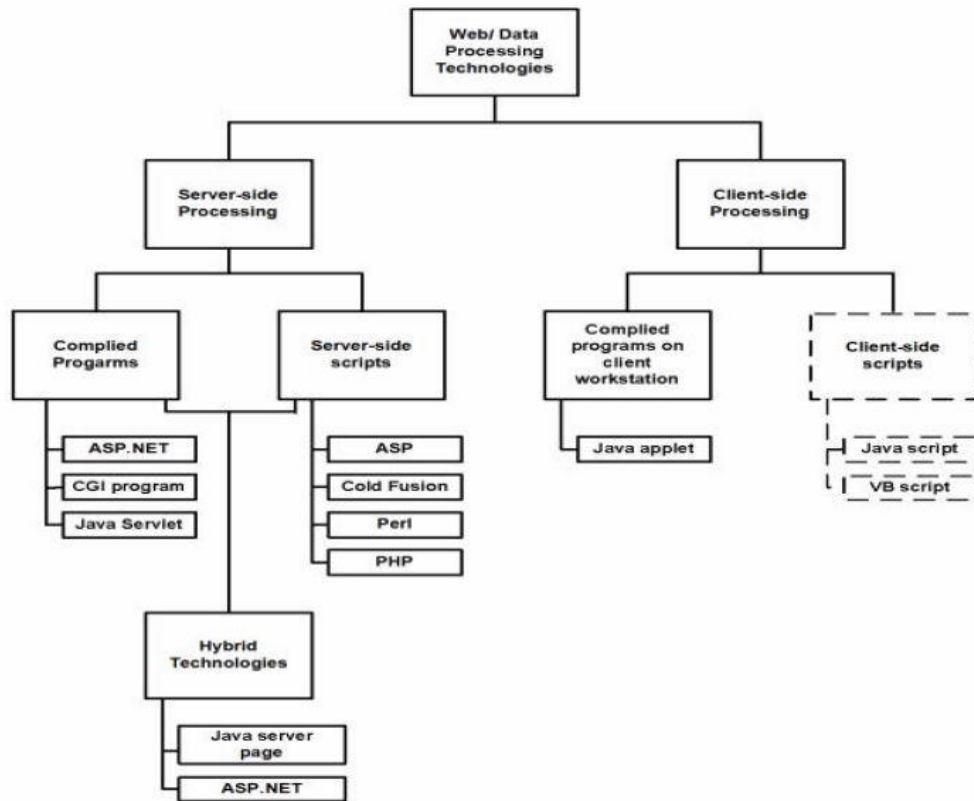


Figure 4: Web Page Programming Options

Figure 22 (reproduced from [3]) outlines commonly used server-side, client-side, and hybrid Web and data processing technologies; client-side scripts are in dashed lines to indicate they are unable to interact directly with a database or file but are used to validate user input on the client, then send the validated inputs to the server for further processing.

5. Functionalities

5.1 A Home page with product catalog

When user is browsing for this website first he/she will be navigated to this page it will display all the book categories and will have a search keyword option to search for the required book.

5.1.1 Search

A search by keyword option is provided to the user using a textbox .The keyword to be entered should be either Book's category or title.

5.1.2 Books

After successful log in user can navigate to this section to search for the books and then can add to cart. This page is restricted for not logged in user mean user can't navigate to this page without log in to his/her account.

5.1.3 Shopping Cart

The shopping cart contain selected books by the customer with the descriptions like book Name, category, Author, Edition, price.

Later on user can pay by credit card or Master card and after paying he/she can download the book.

5.1.4 Managing user accounts

Each user should have an account to access all the functionalities of website. User can login using login page and logout using the logout page. All the user sessions will be saved in the database.

5.1.5 Administration:

The Administrator will be provided with special functionalities like

- Add Books or its descriptions to the database.
- Edit Books or its descriptions to the database
- delete books or its descriptions to the database.
- check the books which been ordered.

6. The Shopping Cart Application

The objective of this application is to provide the user an online website where they can buy books from the comfort of their home. A shopping cart is used for the purpose. The user can select the desired books, place them in the shopping cart and purchase them using a Credit Card. The user's order will be shipped according to the type of shipping selected at the time of placing the order.

Website consists of the following web pages:

- AdminBooks.jsp
- AdminMenu.jsp
- AdvSearch.jsp
- AdvSearch.jsp
- BookMaint.jsp
- Books.jsp
- CardTypesGrid.jsp
- CardTypesRecord.jsp
- CategoriesGrid.jsp
- CategoriesRecord.jsp
- Common.jsp
- Default.jsp
- dirinfo.cci
- EditorialCatGrid.jsp
- EditorialCatRecord.jsp
- EditorialsGrid.jsp
- EditorialsRecord.jsp
- Footer.jsp
- Header.jsp
- Index.html
- Login.jsp
- MembersGrid.jsp
- MembersInfo.jsp
- MembersRecord.jsp
- MyInfo.jsp
- OrdersGrid.jsp
- OrdersRecord.jsp
- Registration.jsp
- ShoppingCart.jsp
- ShoppingCartRecord.jsp

7. Project Design

In order to design a web site, the relational database must be designed first. Conceptual design can be divided into two parts: The data model and the process model. The data model focuses on what data should be stored in the database while the process model deals with how the data is processed. To put this in the context of the relational database, the data model is used to design the relational tables. The process model is used to design the queries that will access and perform operations on those tables.

7.1 Data Model

A data model is a conceptual representation of the data structures that are required by a database. The first step in designing a database is to develop an Entity-Relation Diagram (ERD). The ERD serves as a blue print from which a relational database maybe deduced. Figure 6.1.1 shows the ERD for the project and later we will show the transformation from ERD to the Relational model.

Entity a match's exactly one record in entity B and every record in B matches exactly one record in A. One to many means that every record in A matches zero or more records in B and every record in B matches exactly one record in A. If there is a one to many relationships between two entities, then these entities are represented as Associative Entities. In the Relational Database model, each of the entities will be transformed into a table. The tables are shown below along with the attributes.

7.2 Process Model

A Process Model tells us about how the data is processed and how the data flows from one table to another to gather the required information. This model consists of the Functional Decomposition Diagram and Data Flow Diagram.

Chapter 4

8. Requirements

The Main Requirements include Macromedia Dreamweaver 8 to develop the web application, MySQL and apache server to design the database and Google chrome as a main web browser to run the website.

9. Use Cases

9.1 Browse catalog

9.2 Search for a book

9.2.1 Purpose:

A user can search for a book of his choice by selecting category and title. Then a select query is used to retrieve data from the database and display the selected information.

9.2.2 Actor: User.

9.2.3 Input: The user will search book by title or category.

9.2.4 Output:

The system will display the books which matches the selected search criteria.

A dataset is created as a result of select query. Later the dataset is binder to the data repeater to display the selected data.

10. Maintain Account

10.1 Register

10.1.1 Actor: User

10.1.2 Input: The user will enter details in the registration form according to fields.

The fields include:

1. Username
2. Password
4. Email

10.1.3 Output: After registration the user will be directed to the main home page.

10.2 Login

10.2.1 Purpose: If the user wants to get access to all the functionalities of Online Book Store he should login using his username and password.

10.2.2 Actor: User

10.2.3 Input: The user will enter his username and password.

10.2.4 Output: If it is a successful login the user will be directed to the main home page. Else it will show an error regarding user name or password.

10.3 Logout

10.3.1 Purpose: If the user wants to end his session and sign out of the website then he can use the logout option.

10.3.2 Actor: User

10.3.3 Input: The user will click the logout button.

10.3.4 Output: The user's account session comes to an end and he should login again.

11. Shopping Cart

11.1 Purpose: when a user going to purchase books at first he should search or select the book and then can add to the cart.

12. View Shopping Cart

12.1 Purpose: to see the selected book and its description the user will see the cart after add to the cart operation.

12.2 Actor: User

12.3 Input: The user will click the add to cart option given alongside with every book

12.4 Output: The user's shopping cart summary will be displayed in the form of a tabular format

With all the books .A total cost of all the items is also displayed at the bottom.

13. Administrator

13.1 Login

13.1.1 Purpose:

If the Administrator wants to get access to all the functionalities of Online Book Store he should login using his username and password.

13.1.2 Actor: Administrator

13.1.3 Input: The Administrator will enter his username and password.

13.1.4 Output:

If it is a successful login the Administrator will be directed to his menu page. Else if the Administrator enters invalid information he will be asked to check the entered information.

13.2 Add or Delete Books

13.2.1 Purpose: If the Administrator wants to add or delete a book category then he can insert or delete a book category using his administration rights and the category table will be updated in the database.

13.2.2 Actor: Administrator

13.2.3 Input: If the Administrator wants to add a book category the he should click the insert link button in the category page else he can delete a particular selected book category.

13.2.4 Output: The updated categories list will be displayed in the main home page. 3) Add or Delete Book

13.2.5 Purpose: If the Administrator wants to add or delete a book then he can insert or delete a book using his administration rights and the book table will be updated in the database.

13.2.6 Actor: Administrator

13.2.7 Input: If the Administrator wants to add a book the he should click the insert link button in the book page and fill the following fields related to the book.

1. Title
2. Author
3. Price
4. Category
5. Notes
6. Product url If he wants to delete a book he can click the delete button to remove it from the database.

13.2.8 Output: The updated books list will be displayed in the main home page under their particular

Category.

13.3 Check Order

13.3.1 Purpose: If the Administrator wants to check the selected and downloaded books he/she will navigate to this part.

13.3.2 Actor: Administrator

13.3.2 Input: by clicking that option Administrator can see all the selected books a longside with the user names

Chapter 5

14. Use Case Diagram

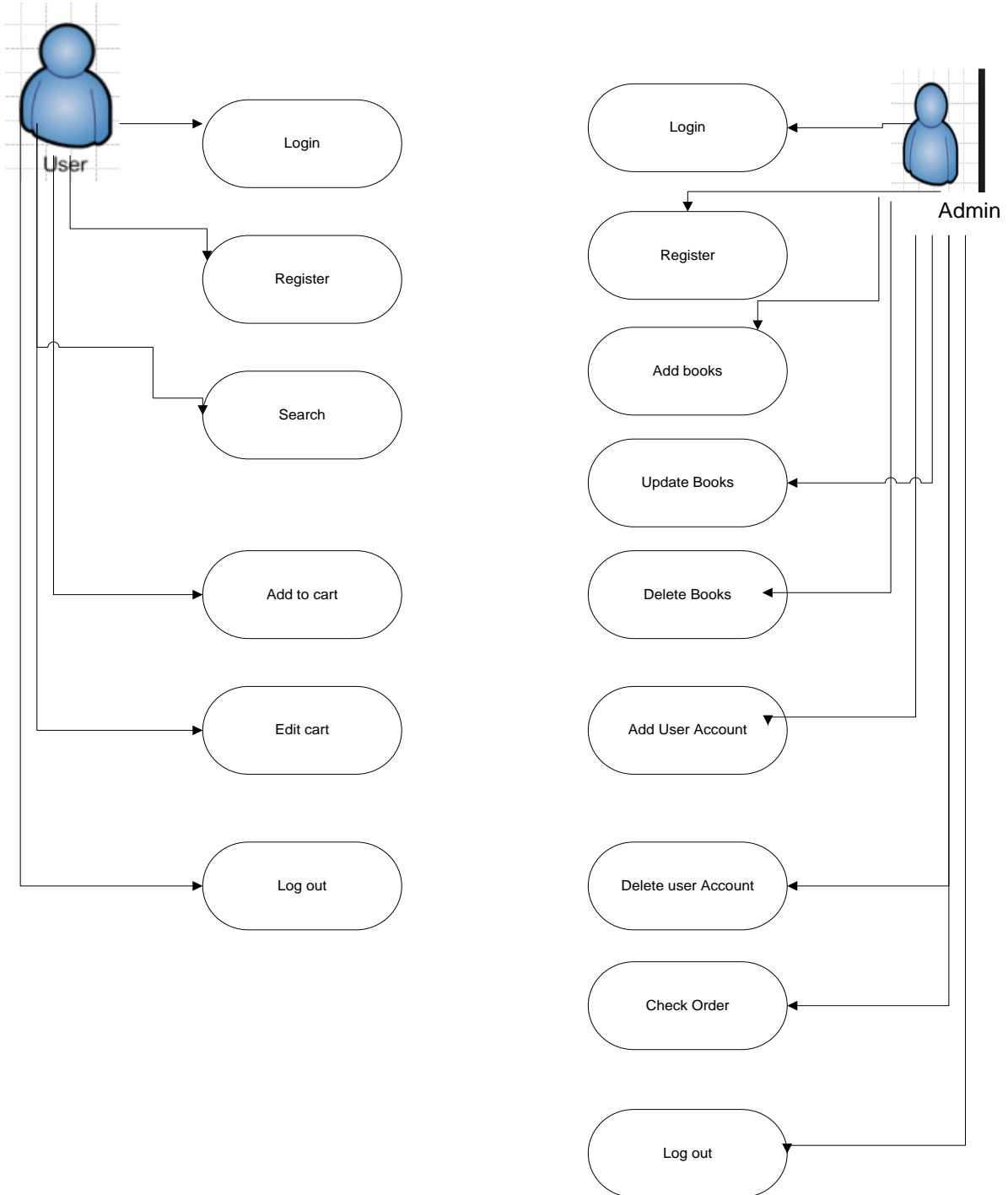


Figure 14: Use Case Diagram

15. Class Diagram

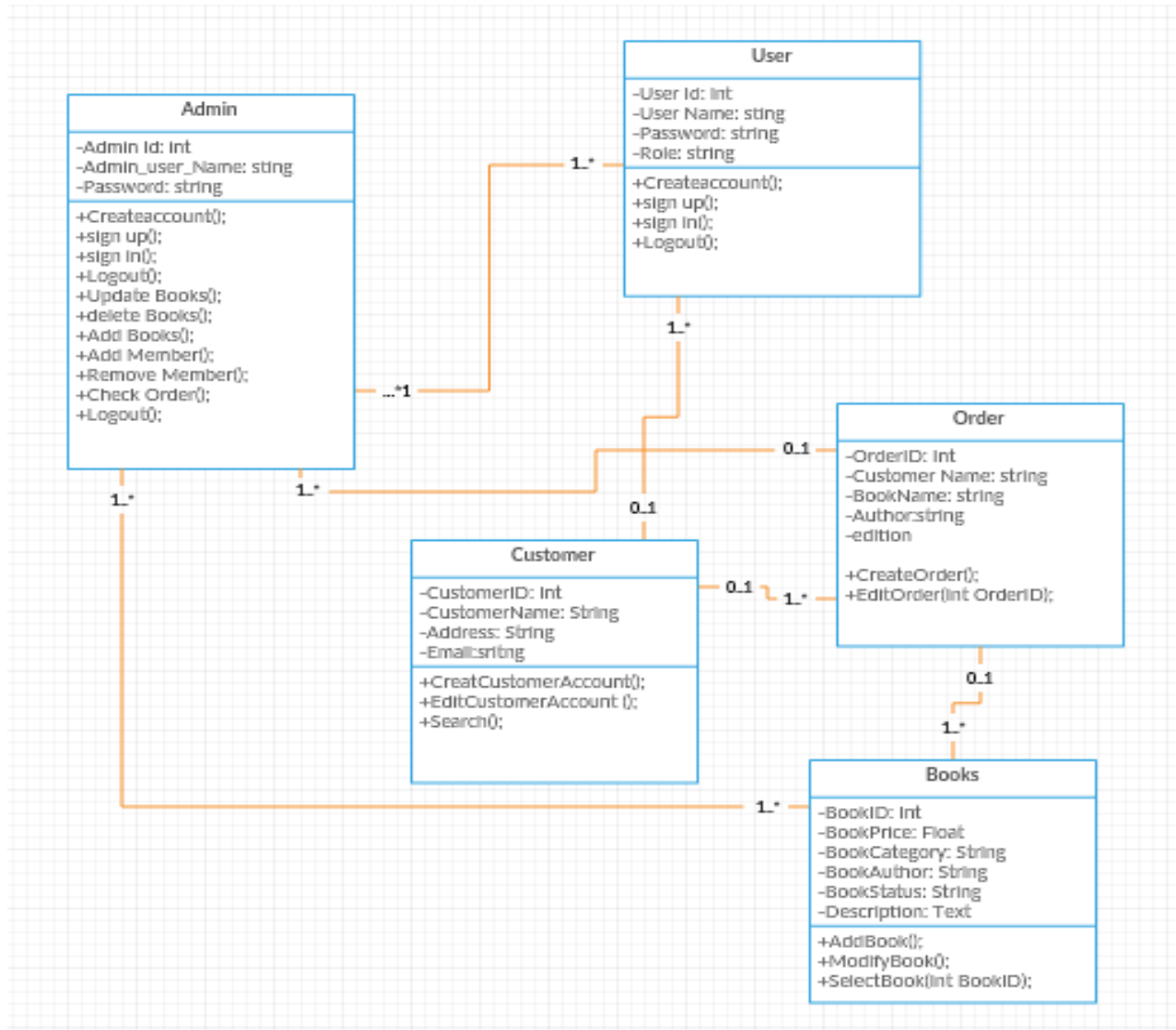


Figure 15: Class Diagram

16. E-R Diagram

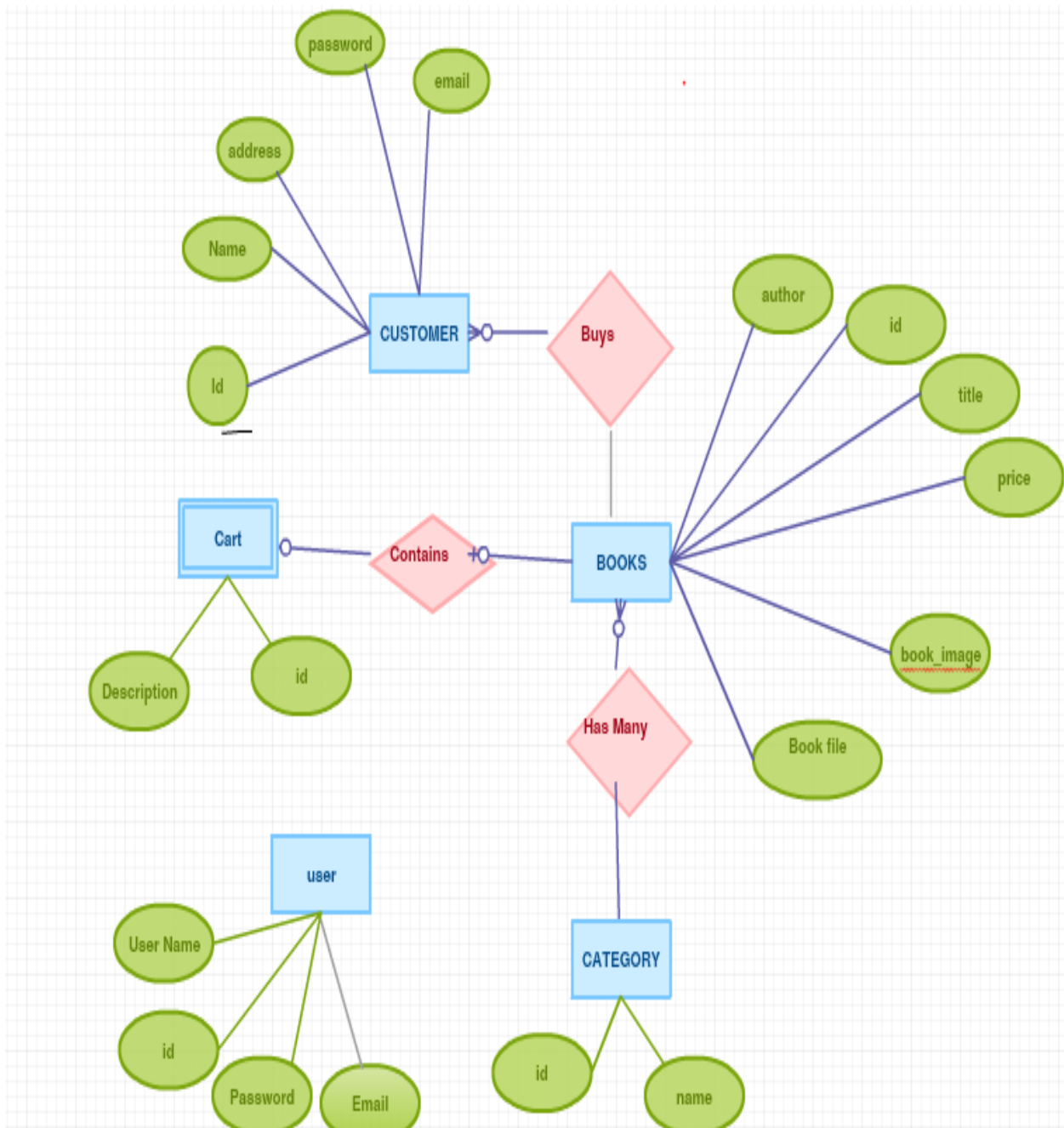


Figure 16: E-R Diagram

Chapter 6

17. User Manual

17.1 Home page

When we run the Online Book Store Website first home page is displayed. The home page will appear as below. The user and Admin will have different rights.

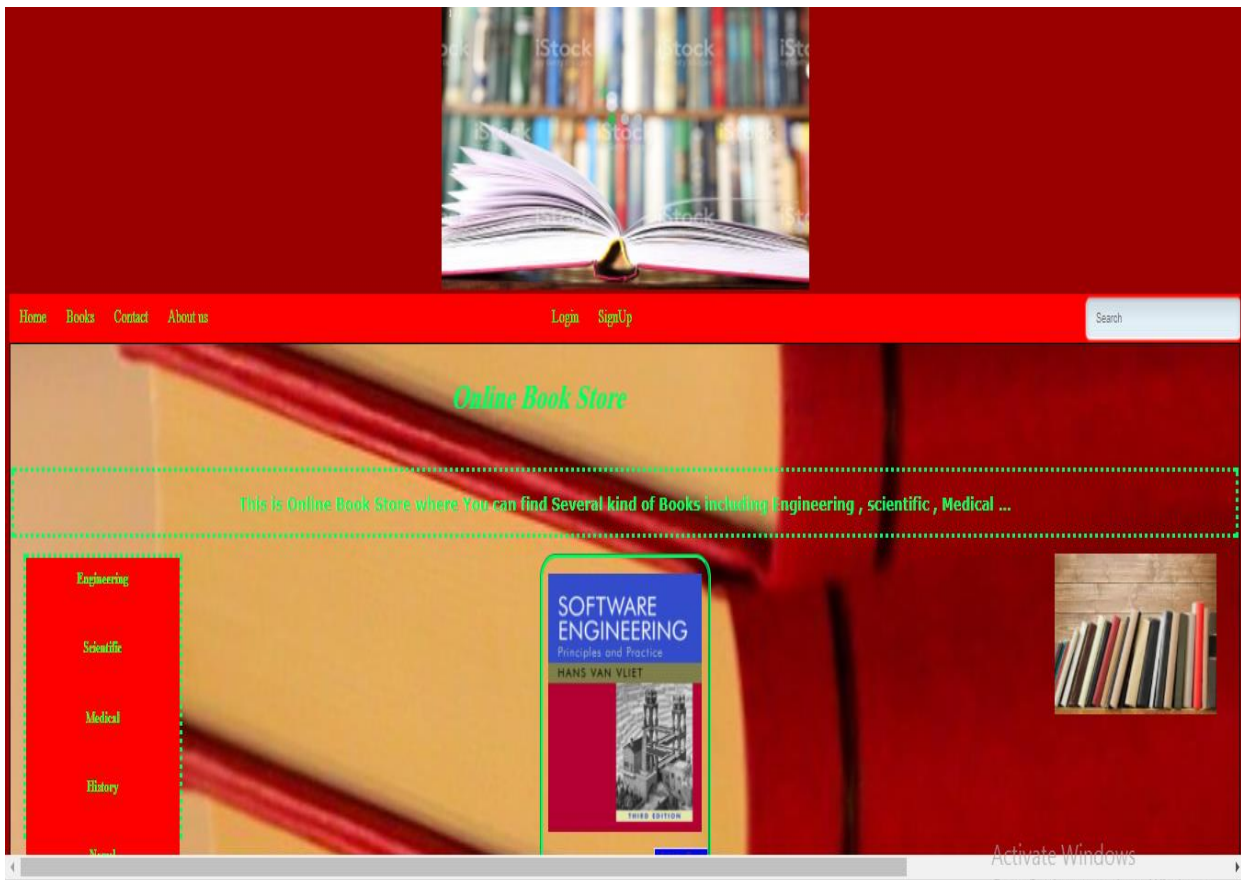


Figure 17.1: Home Page

If you are a new user you can register using the register link or if you are already a user you can login to purchase book and pay using the checkout. Any common user can use the search option in the home page to search for a book according to his/her choice by entering a Title of the book

17.2 Sign up page

A user should enter all the required fields' information. After entering the specified information user should click the submit button to register.

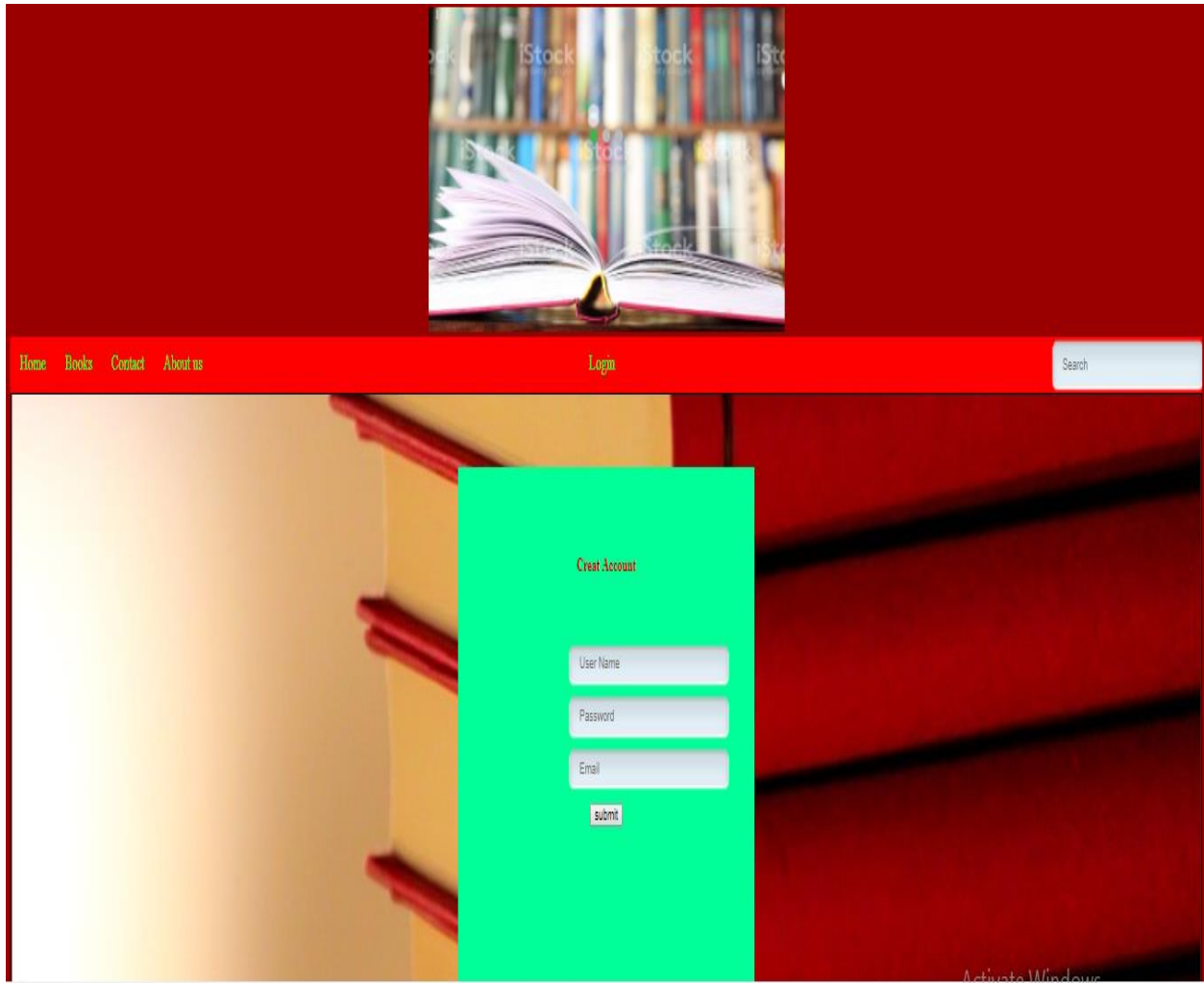


Figure 17.2: Sign up Page

17.3 Login page

After successfully registration you can login to the Website. Login page is used to login to the website. Login page will appear as below.

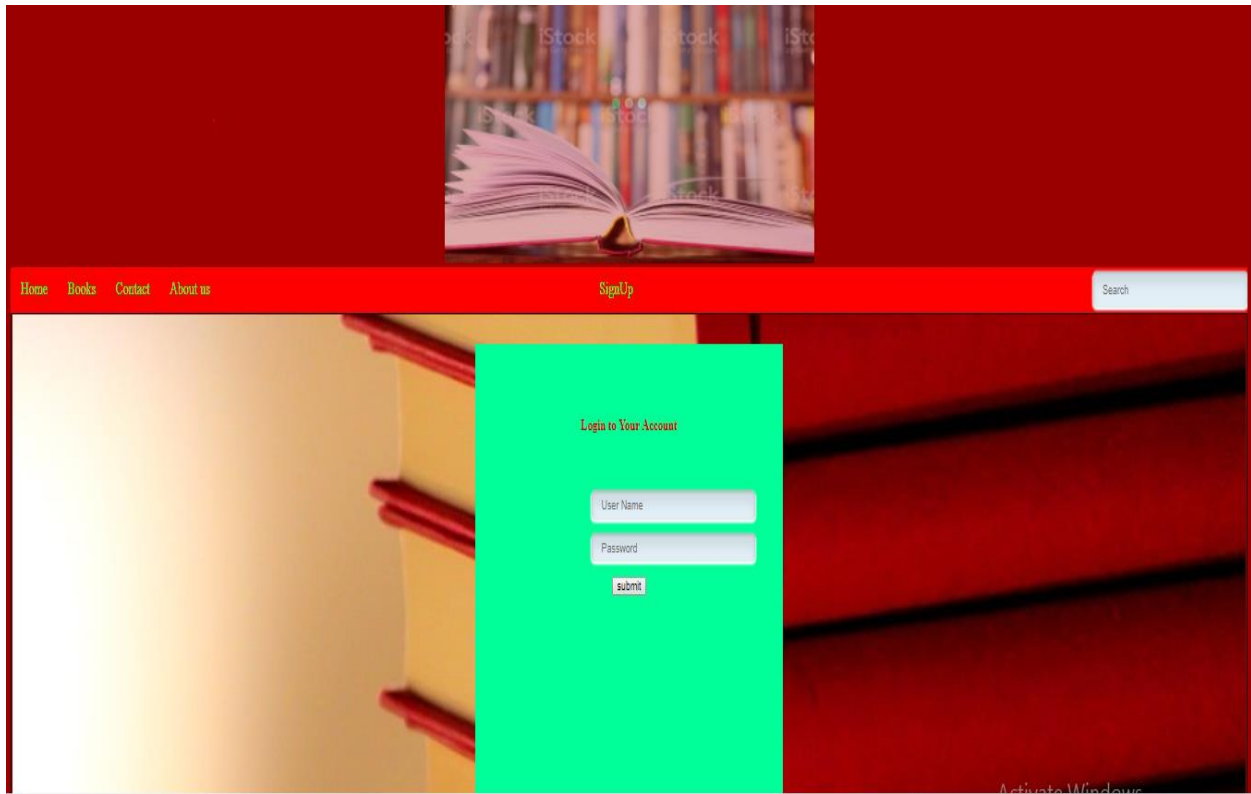


Figure 17.3: Login Page

17.4 Books

After successful login customer can navigate to the Book page where you can search several kinds of Books by title, category and then he/she can select the book by clicking on provided link under the book image and then can add to cart .

A customer without sign in to his/her account can not navigate to this page. This page is appearing as below.

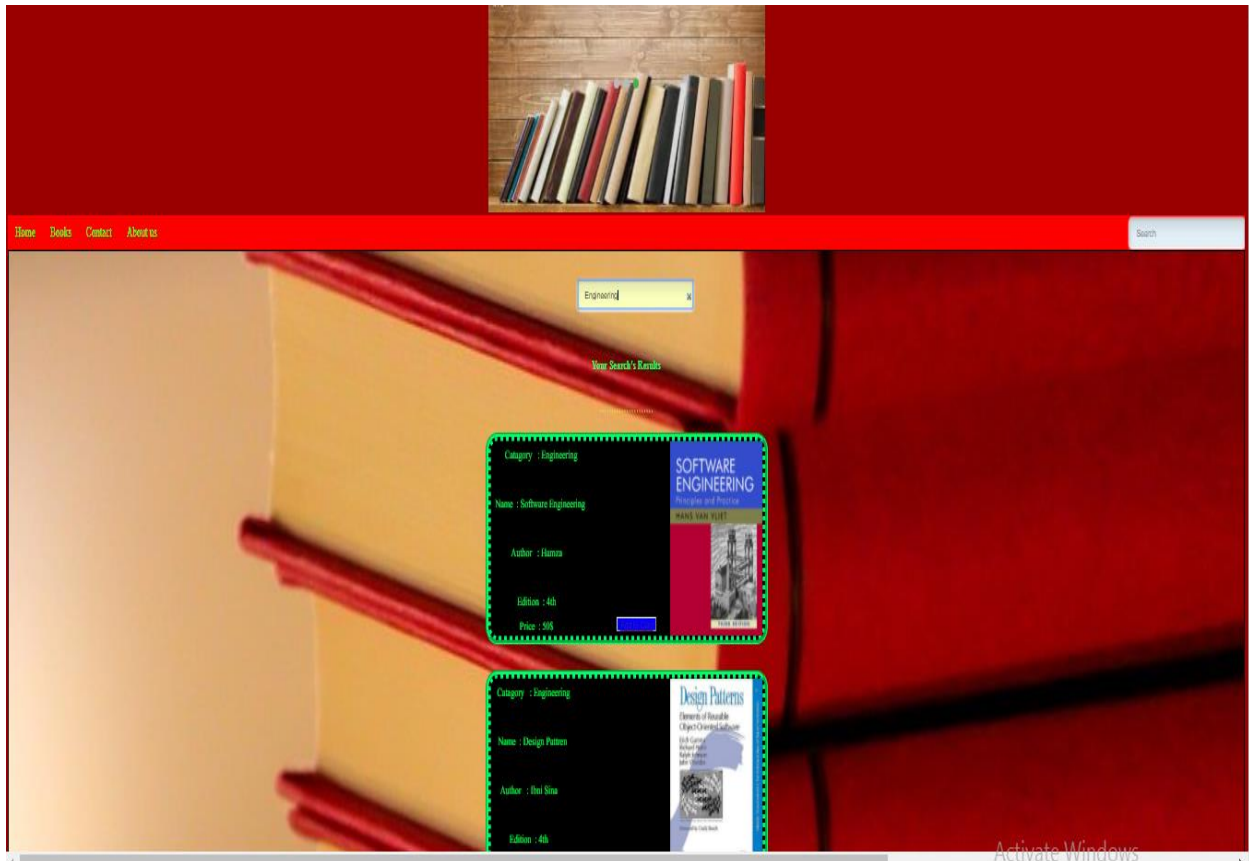


Figure 17.4: Books Page

17.5 Profile page

After successful login user will navigate automatically to the profile page .When user going to know about the information when he/she has been given during registration to this website he/she should click on see profile page and a div should be appear which contain all the personal information.

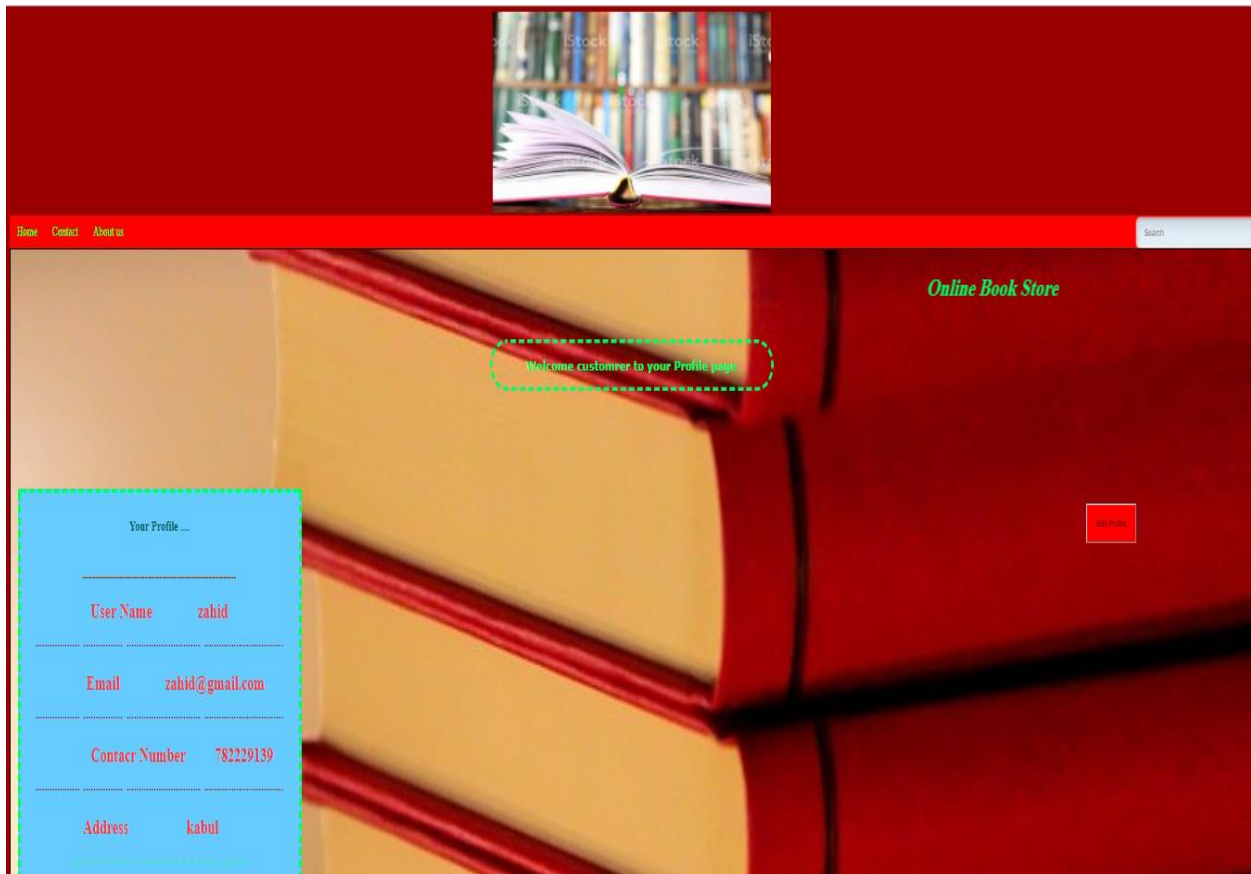


Figure 17.5: Profile Page

To Edit the user profile he will click on the Edit profile button. After clicking on the edit profile button all the information should appear inside the textfields which are editable after desirable modification the update button is given to confirm and submit the modification of the profile .

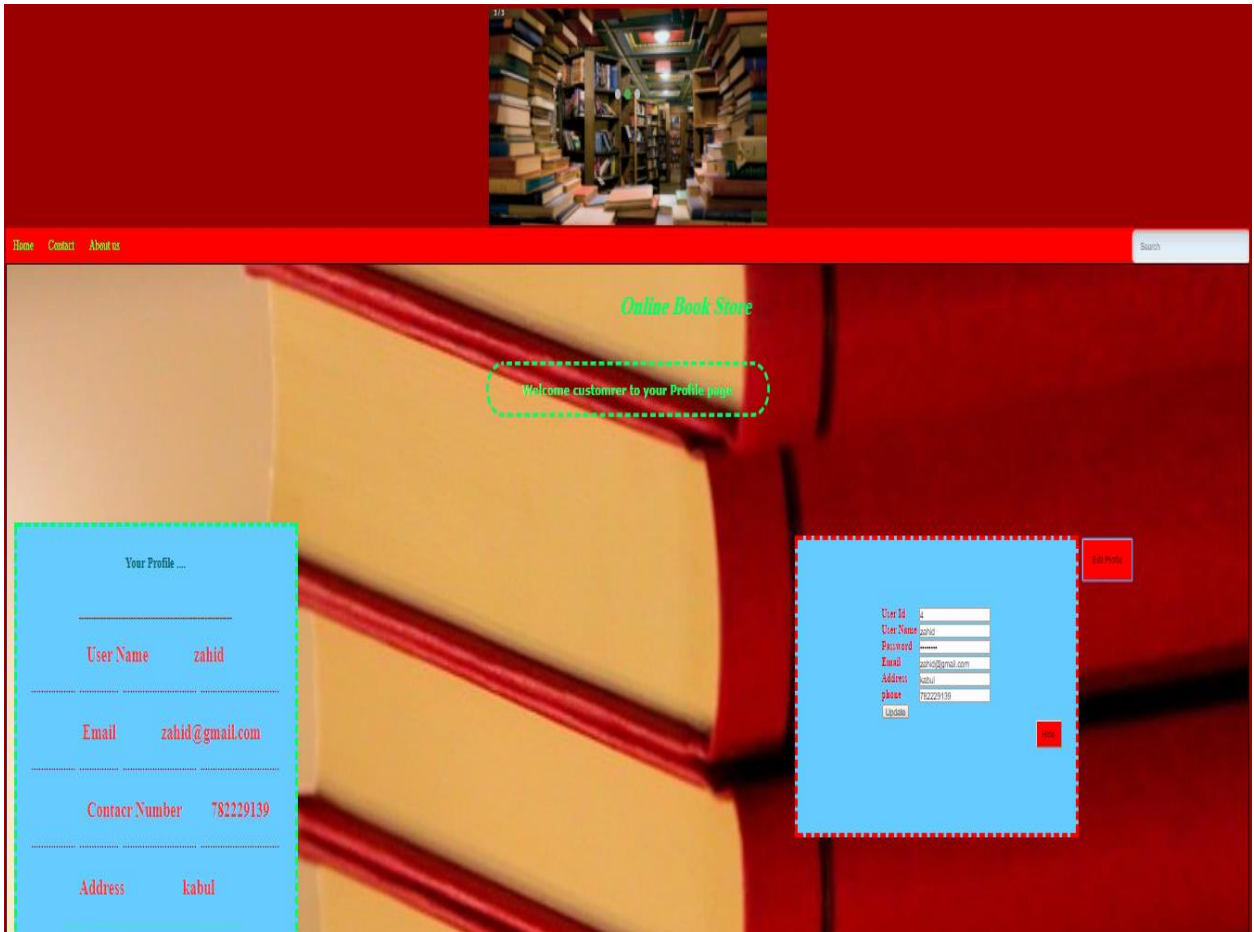


Figure 17.5: Profile Page

17.6 Add To Cart

When customer select a book searched in Book page or select from home page then he can add it to cart by clicke the button in bottom side of the picture as seems below

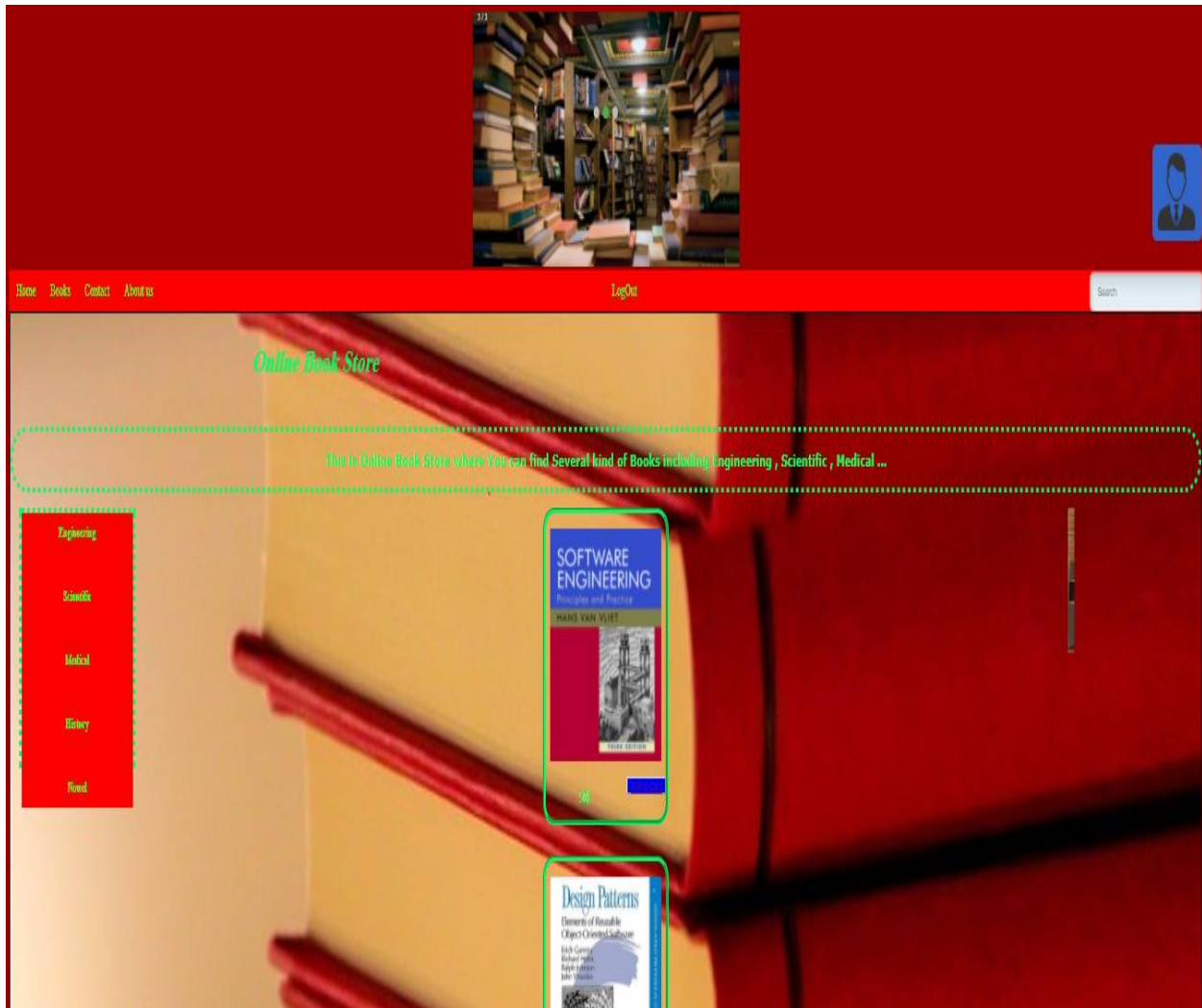


Figure 17.6: Add To Cart Page

17.7 See cart

After clicking on the add to the cart button a new page should appear which contain the details of the selected book and it seems as bellow.

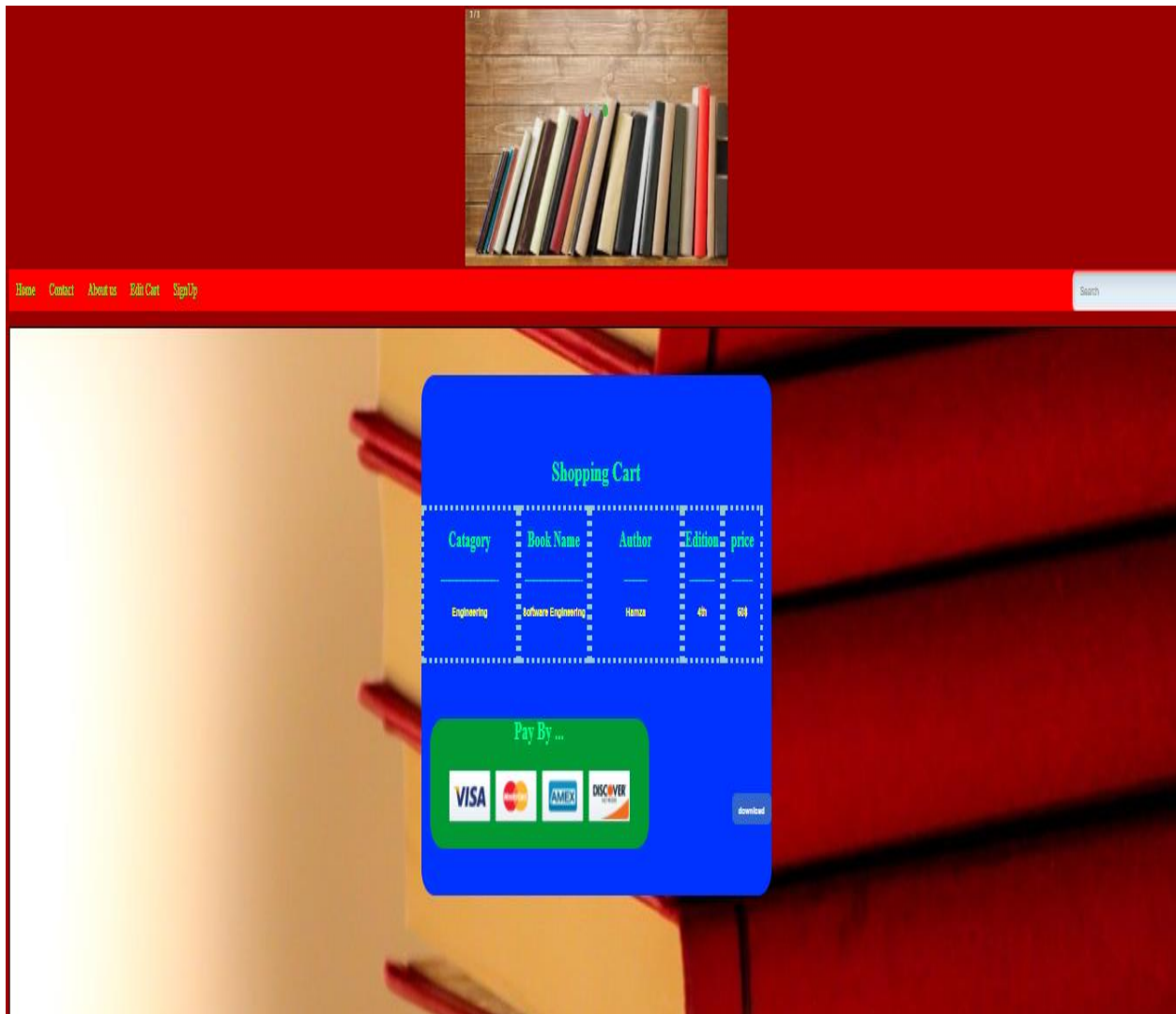


Figure 17.7: See Cart Page

17.8 Admin Page

After successful login admin should navigate to the admin page which contains Insert books, update books, delete books, add user, delete user, to manage both user accounts and books related information in the website.

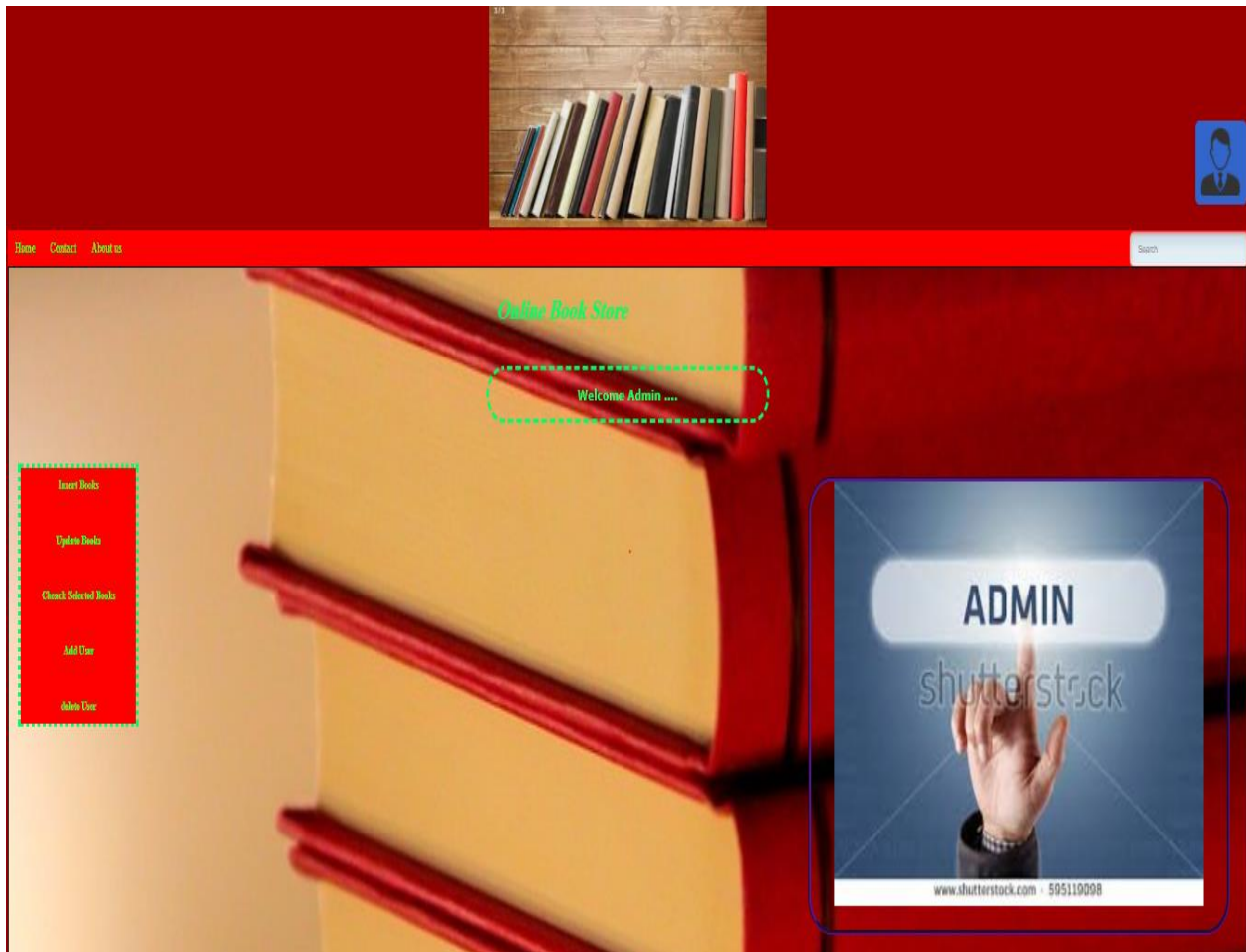


Figure 17.8: Admin Page

17.9 Insert Books

By clicking on this button the admin will be able to add books of different categories like Engineering, Medical, scientific and etc...

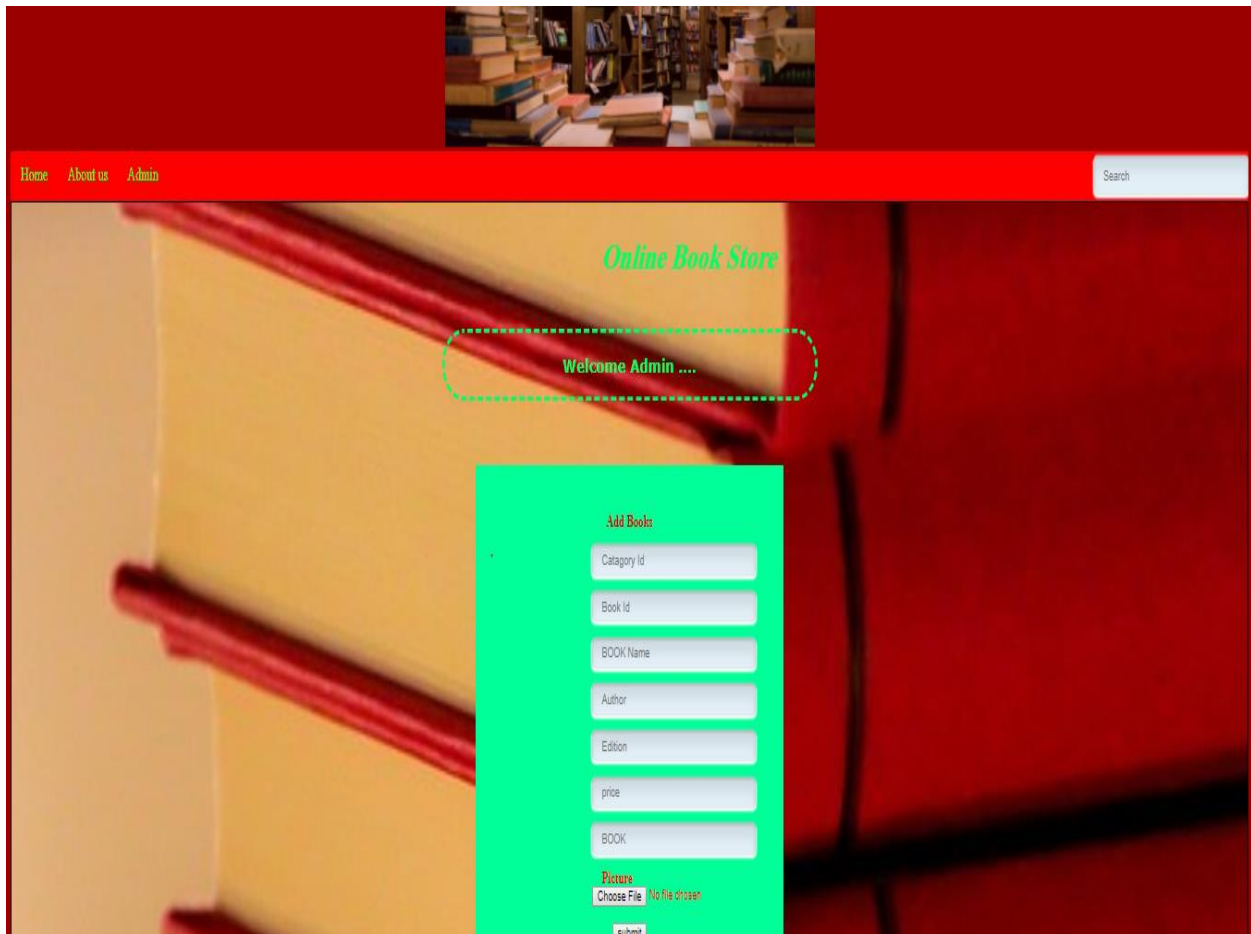
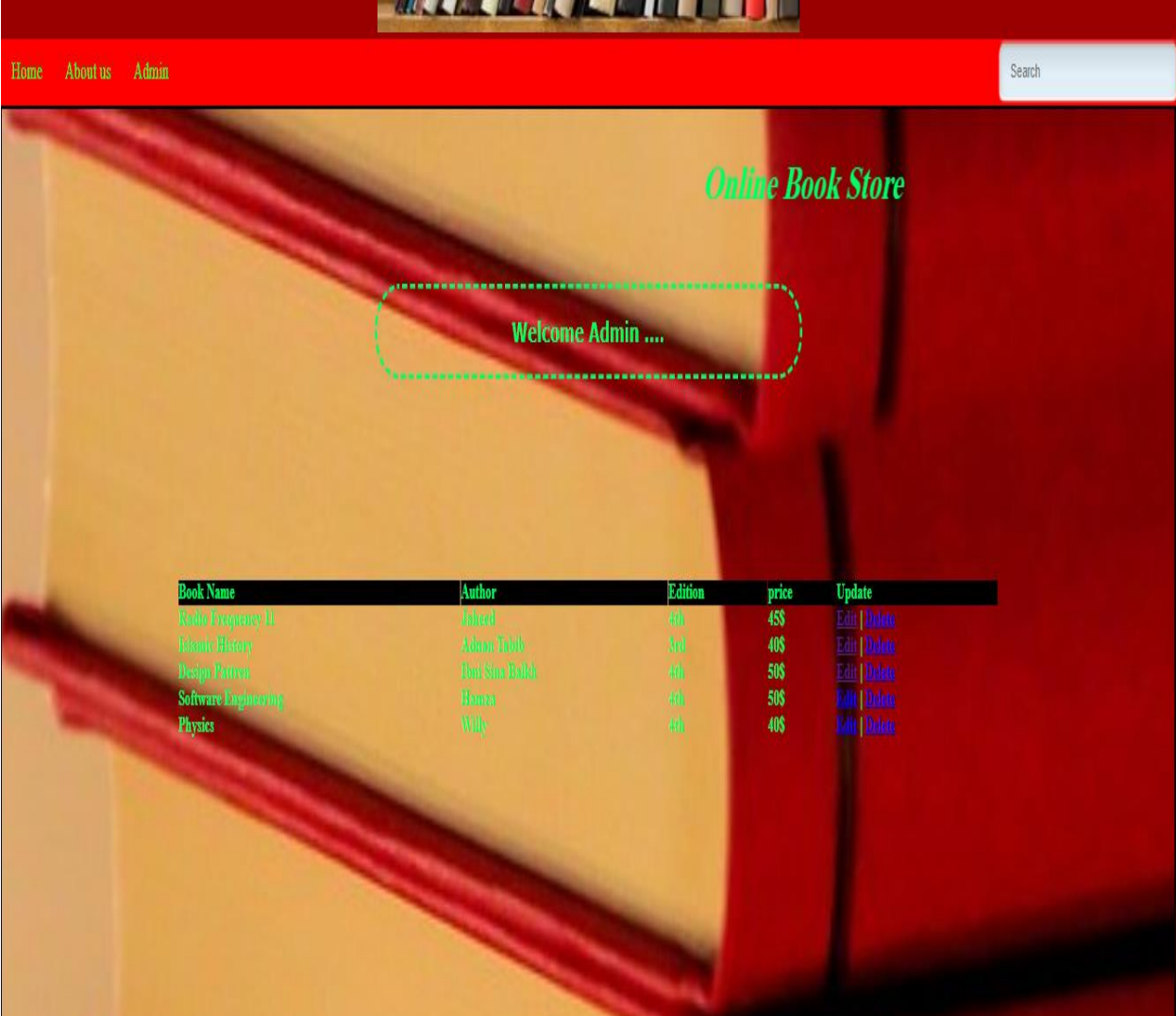


Figure: 17.9: Insert Books Page

17.10 Update and Delete Books

If the admin wants to update or delete his desirable books he should click on the update books button then he should be navigated to this page which seems below, where he can update and delete books.

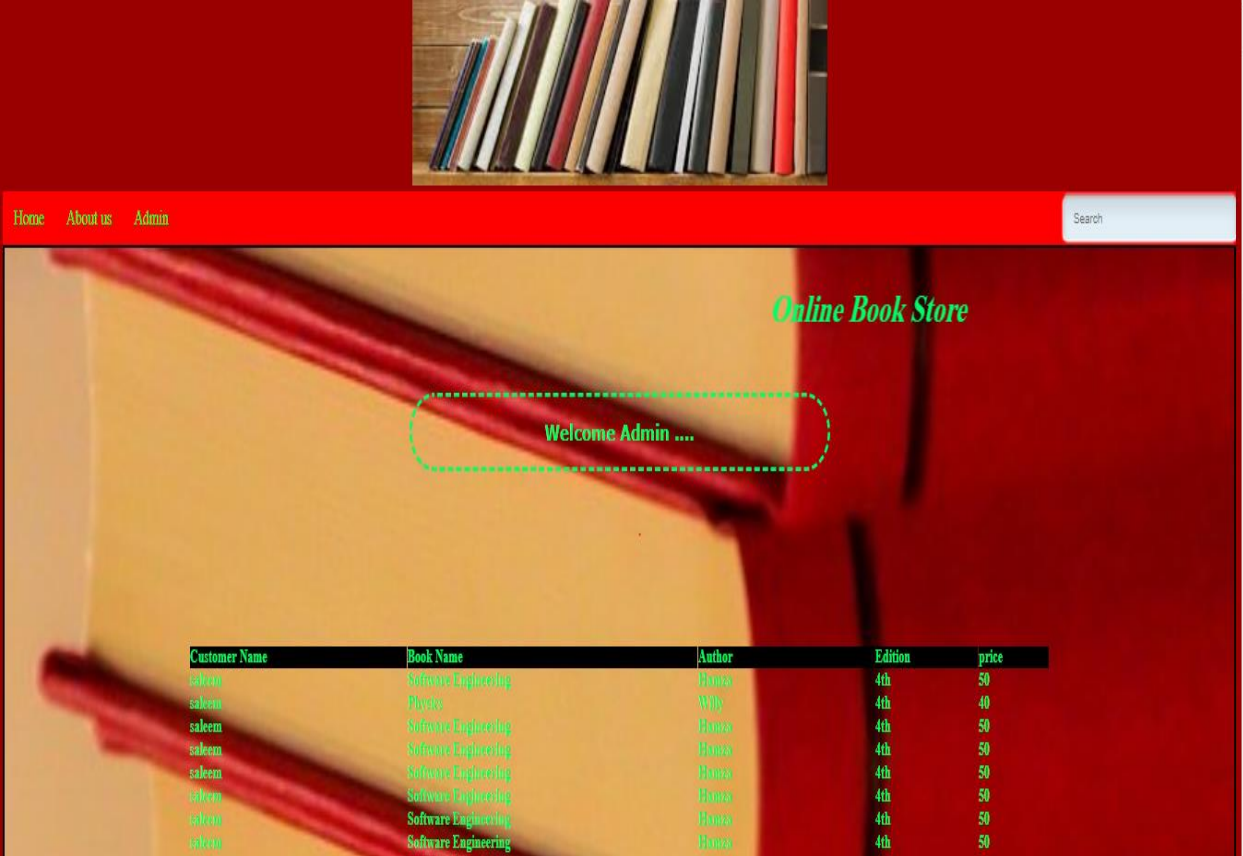


| Book Name | Author | Edition | price | Update |
|----------------------|-----------------|---------|-------|---|
| Radio Frequency II | Jahed | 4th | 45\$ | Edit Delete |
| Islamic History | Adnan Tabib | 3rd | 40\$ | Edit Delete |
| Design Pattern | Doni Sina Bulki | 4th | 50\$ | Edit Delete |
| Software Engineering | Hanna | 4th | 50\$ | Edit Delete |
| Physics | Willy | 4th | 40\$ | Edit Delete |

Figure 17.10: Update and Delete Books Page

17.11 See Selected Books

if user willing to see the selected book to buy by the customer he should click on the see selected books button , then he can see the list of the books with all descriptions along side with the customer name who selectd the book , and it appear as bellow.



The screenshot displays the 'See Selected Books' page of an online book store. The page features a red header with navigation links for 'Home', 'About us', and 'Admin', and a search bar. The main content area has a background image of books and a red pen. The text 'Online Book Store' is displayed in green, and a green dashed oval highlights the text 'Welcome Admin'. Below this, a table lists the selected books with columns for Customer Name, Book Name, Author, Edition, and price.

| Customer Name | Book Name | Author | Edition | price |
|---------------|----------------------|--------|---------|-------|
| saleem | Software Engineering | Huara | 4th | 50 |
| saleem | Physics | Wib | 4th | 40 |
| saleem | Software Engineering | Huara | 4th | 50 |
| saleem | Software Engineering | Huara | 4th | 50 |
| saleem | Software Engineering | Huara | 4th | 50 |
| saleem | Software Engineering | Huara | 4th | 50 |
| saleem | Software Engineering | Huara | 4th | 50 |
| saleem | Software Engineering | Huara | 4th | 50 |
| saleem | Software Engineering | Huara | 4th | 50 |
| saleem | Software Engineering | Huara | 4th | 50 |

Figure 17.11: See Selected Book Page

17.12 Add User

When admin wants to add new user he should click on this button

So then he (admin) can add new user by inserting the personal information .

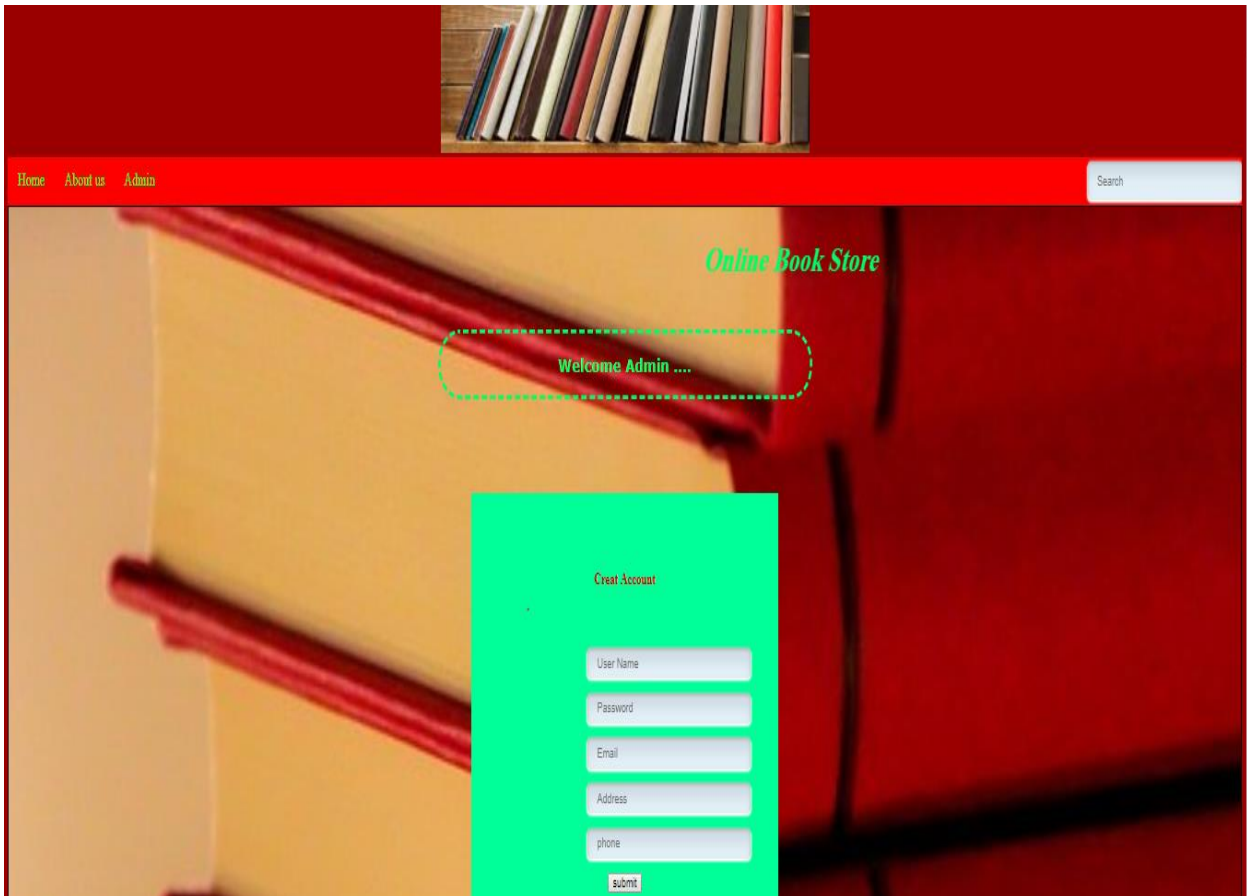


Figure 17.12: Add User Page

17.13 Delete User

If admin wants to delete a user he can perform this action by clicking on the delete user button.

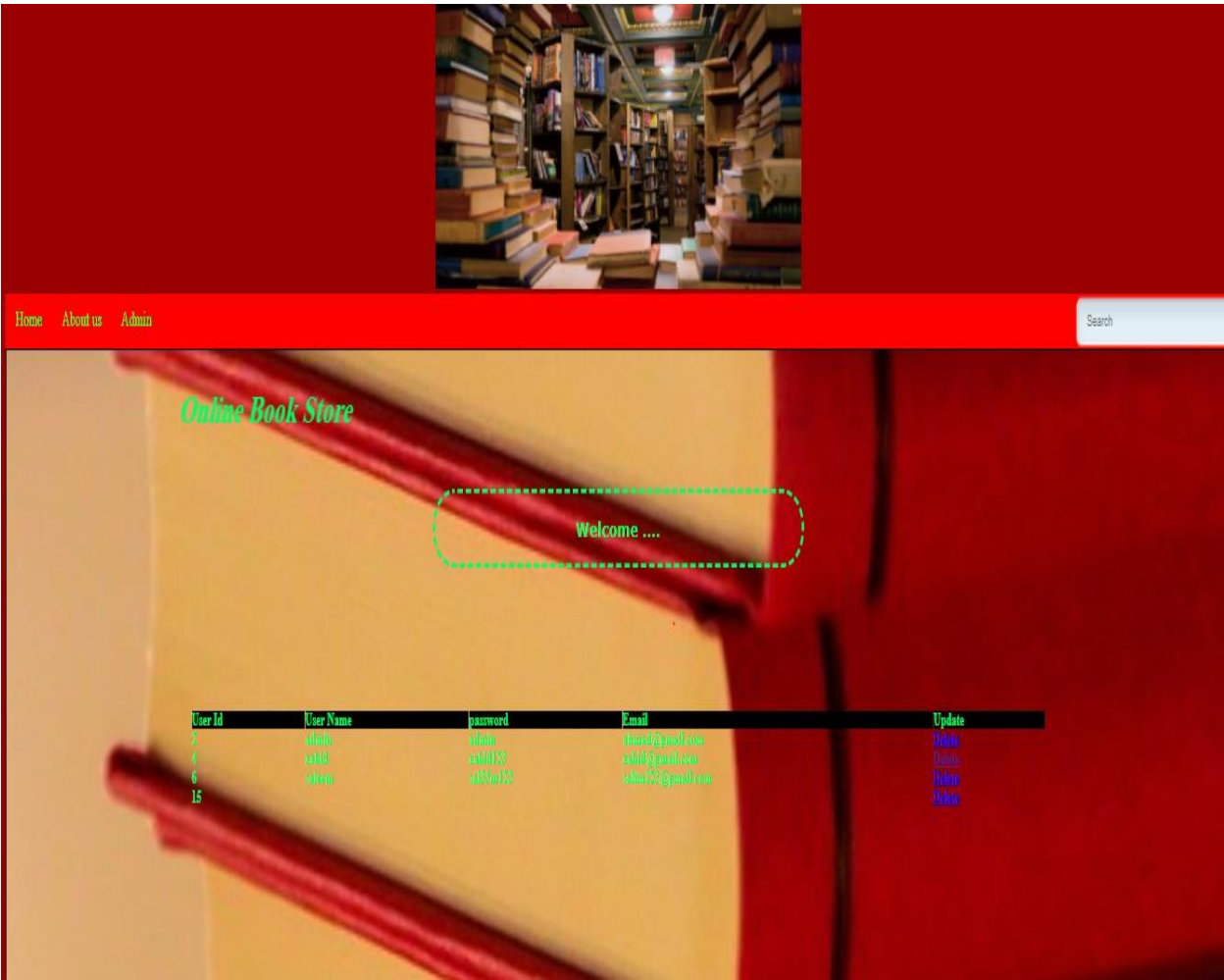


Figure 17.13: Delete User Page

18. Limitations and Future Development

There are some limitations for the current system to which solutions can be provided as a future development:

1. The system is not configured for multi- users at this time. The concept of transaction can be used to achieve this.
2. The Website is not accessible to everyone. It can be deployed on a web server so that everybody who is connected to the Internet can use it.
3. Credit Card validation is not done. Third party proprietary software can be used for validation check.

As for other future developments, the following can be done:

1. The Administrator of the web site can be given more functionality, like looking at a specific customer's profile, the books that have to be reordered, etc.
2. Multiple Shopping carts can be allowed.

19. Conclusion

The Internet has become a major resource in modern business, thus electronic shopping has gained significance not only from the entrepreneur's but also from the customer's point of view. For the entrepreneur, electronic shopping generates new business opportunities and for the customer, it makes comparative shopping possible. As per a survey, most consumers of online stores are impulsive and usually make a decision to stay on a site within the first few seconds. "Website design is like a shop interior. If the shop looks poor or like hundreds of other shops the customer is most likely to skip to the other site". Hence we have designed the project to provide the user with easy navigation, retrieval of data and necessary feedback as much as possible. In this project, the user is provided with an e-commerce web site that can be used to buy books online. To implement this as a web application we used JSP as the Technology. JSP has several advantages such as enhanced performance, scalability, built-in security and simplicity. To build any web application we need a programming language such as PHP, JAVA, HTML and so on. PHP and JavaScript was the language used to build this application. For the client browser to connect to the engine we used MySQL as the Web Server. PHP and MySQL uses sql driver to interact with the database as it provides in-memory caching that eliminates the need to contact the database server frequently and it can easily deploy and maintain an application. MySQL was used as back-end database since it is one of the most popular open source databases, and it provides fast data access, easy installation and simplicity.

A good shopping cart design must be accompanied with user-friendly shopping cart application logic. It should be convenient for the customer to view the contents of their cart and to be able to remove or add items to their cart. The shopping cart application described in this project provides a number of features that are designed to make the customer more comfortable. This project helps in understanding the creation of an interactive web page and the technologies used to implement it. The design of the project which includes Data Model and Process Model illustrates how the database is built with different tables, how the data is accessed and processed from the tables. The building of the project has given me a precise knowledge about how PHP, HTML, JavaScript and JQuery and MySQL are used to develop a website, how it connects to the database to access the data and how the data and web pages are modified to provide the user with a shopping cart application.