A PROJECT REPORT

ON

ONLINE BOOK STORE

DONE BY

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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 selected books are displayed in a tabular format and the user 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. I want to develop a similar website using Java, SQL workbench.

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 account details or new customers can set up an account very quickly. They should give the details of their name, contact number and shipping address. The user can also give feedback to a book by giving ratings on a score of five. The books are divided into many categories based on subject like Software, Fiction, English, Religious etc.

The Online Book Store Website provides customers with online shopping through a web browser. A customer can, create, sign in to his account, place items into a shopping cart and purchase using his 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.

Contents:

Chapter-1
INTRODUCTION TO THE STUDY

Introduction:

The main objective of the project is to create an online book store that allows users to search and purchase a book based on title, author and subject. The selected books are displayed in a tabular format and the user can order their books online through credit card payment. The Administrator will have additional functionalities when compared to the common user.

1.1 Definition of Problem:

There are many online book stores like Powell's, Amazon which were designed using Html. I want to develop a similar website using Java, SQL Workbench. 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 account details or new customers can set up an account very quickly. They should give the details of their name, contact number and shipping address. The user can also give feedback to a book by giving ratings on a score of five. The books are divided into many categories based on subject Like Software, Database, English, Architecture etc.

1.1.1 Advantages over existing system:

- Faster and efficient system
- Wider range services available under one roof
- Highly Secure and Portable application
- Provides a facility for the Users to search for their desired book
- Provides efficient search mechanism using dynamic query generation

1.1.2 Disadvantages of existing system:

- Doesn't provide effective and efficient services for different users of this system.
- Doesn't provide secure and portable application
- Doesn't provide the facility to the User to search the books by category or by publisher
- Doesn't provide Fast and efficient system

With the advent of new technology every task in modern life is being absorbed rapidly within the routine of human life. Such technologies are applied for various fields to improve the overall system performance to improve the productivity and popularity of the organization.

1.2 Proposed System:

This product has been mainly designed to overcome some of the problems faced with the previous system. The main problem faced was unnecessary delay in generating the required information by all unnecessary fields into consideration.

It provides an efficient way to pass the information between different users to cater their needs. It is a common platform where guest user and Customers come under roof. It is a one stop information clearing house about Books. Book Store mainly aims on two kind of users:

Admin:

Add books, delete and book details, add or modify customers, etc.

Customers:

View books, add to cart, place order and delete from cart.

1.3 Number of Modules:

1) **A Home page with product catalog:**

This is the page where the user will be navigated after a successful login. It will display all the book categories and will have a search keyword option to search for the required book.

2) **Search:**

A search by keyword option is provided to the user using a textbox .The keyword to be entered should be the book title.

3) **Shopping Cart:**

The user can manage a shopping cart which will include all the books he selected. The user can edit, delete and update his shopping cart. A final shopping cart summary is displayed which includes all the items the user selected and the final total cost.

4) **Administration:**

The Administrator will be provided with special functionalities like

- Add or delete a book category
- Add or delete a member

Chapter 2

Feasibility Study:

2.1 Technical feasibility:

The system is self-explanatory and does not need any extra sophisticated training. As the system has been built by concentrating on the Graphical User Interface Concepts, the application can also be handled very easily with a novice User. The overall time that is required to train the users upon the system is less than half an hour.

The System has been added with features of menu-driven and button interaction methods, which makes the user the master as he starts working through the environment. The net time the customer should concentrate is on the installation time.

2.2 Financial Feasibility

i) Time Based: Contrast to the manual system management can generate any report just by single click. In manual system it is too difficult to maintain historical data which become easier in this system. Time consumed to add new records or to view the reports is very less compared to manual system. So this project is feasible in this point of view.

ii) Cost Based: No special investment need to manage the tool. No specific training is required for employees to use the tool. Investment requires only once at the time of installation. The software used in this project is freeware so the cost of developing the tool is minimal and hence the overall cost.

Chapter 3

System Design

3.1 UML Diagrams:

- The entire system is projected with a physical diagram which specifics the actual storage parameters that are physically necessary for any database to be stored on to the disk. The overall systems existential idea is derived from this diagram.
- The relation upon the system is structure through a conceptual ER-Diagram, which not only specifics the existential entities but also the standard relations through which the system exists and the cardinalities that are necessary for the system state to continue.
- The content level DFD is provided to have an idea of the functional inputs and outputs that are achieved through the system. The system depicts the input and output standards at the high level of the systems existence.

3.1.1Data Flow Diagrams:

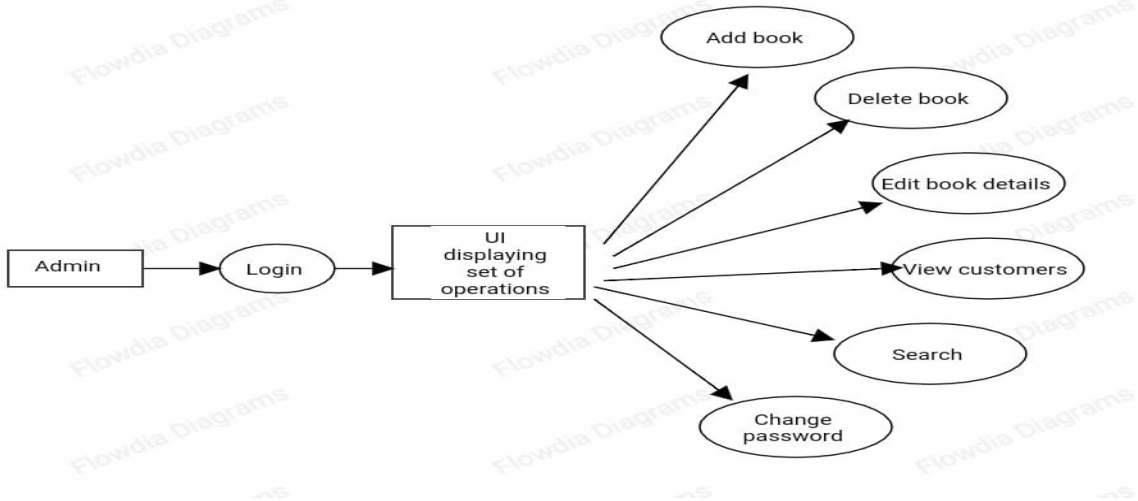


Fig 3.1 Level 1 Data flow Diagram for admin

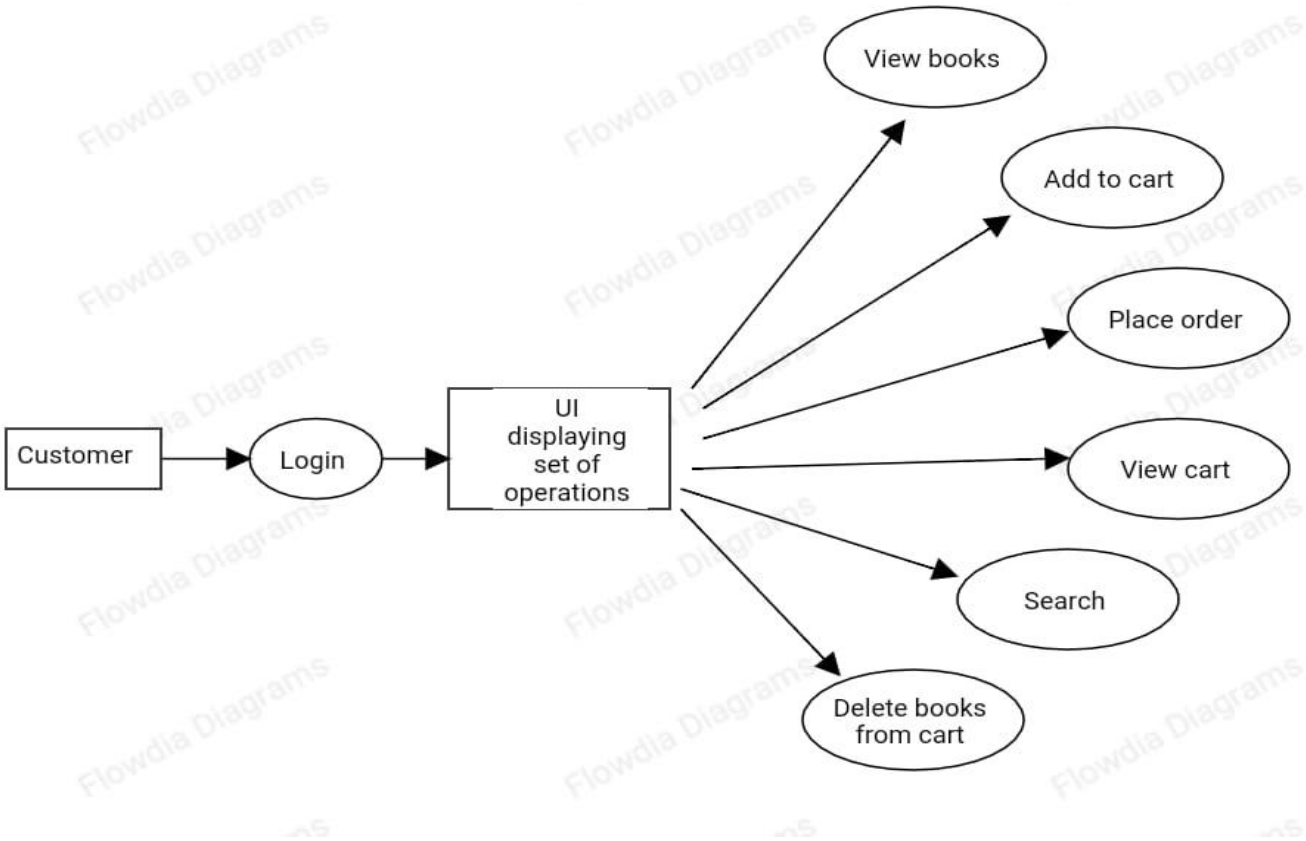


Fig 3.2 Level 2 Data flow diagram for Customer

3.1.2 Use Case:

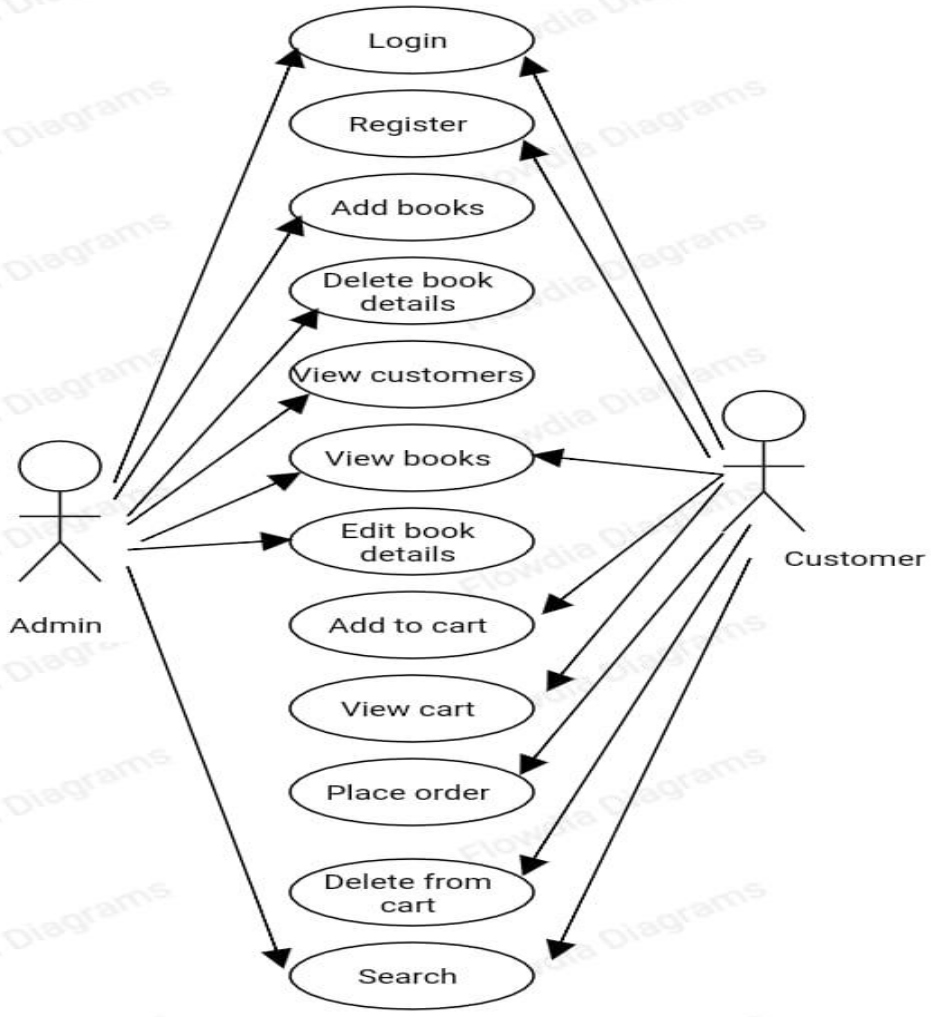


Fig 3.3 Use Case Diagram

3.1.3 Sequence Diagram:

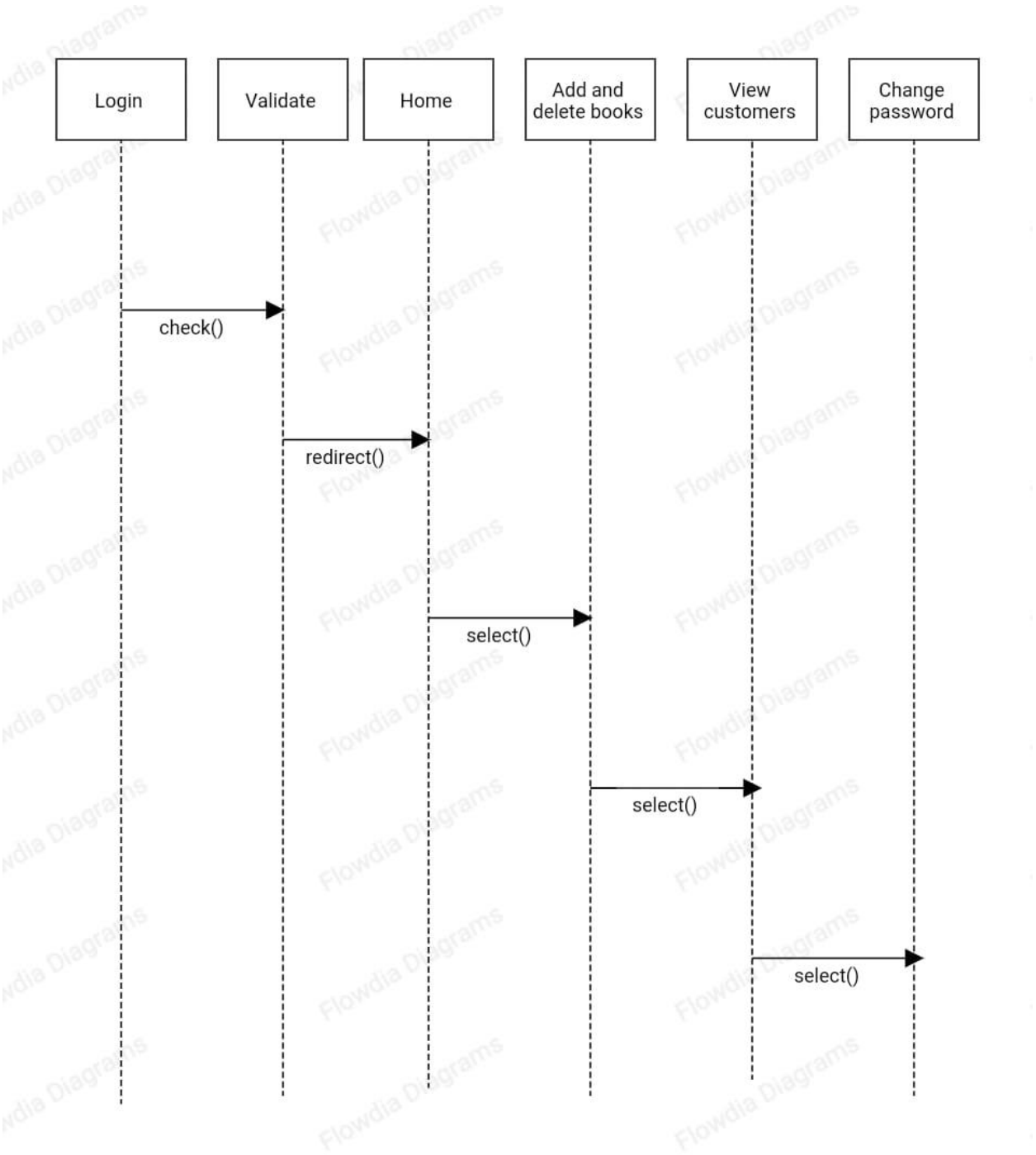


Fig 3.4 Sequence diagram for Admin

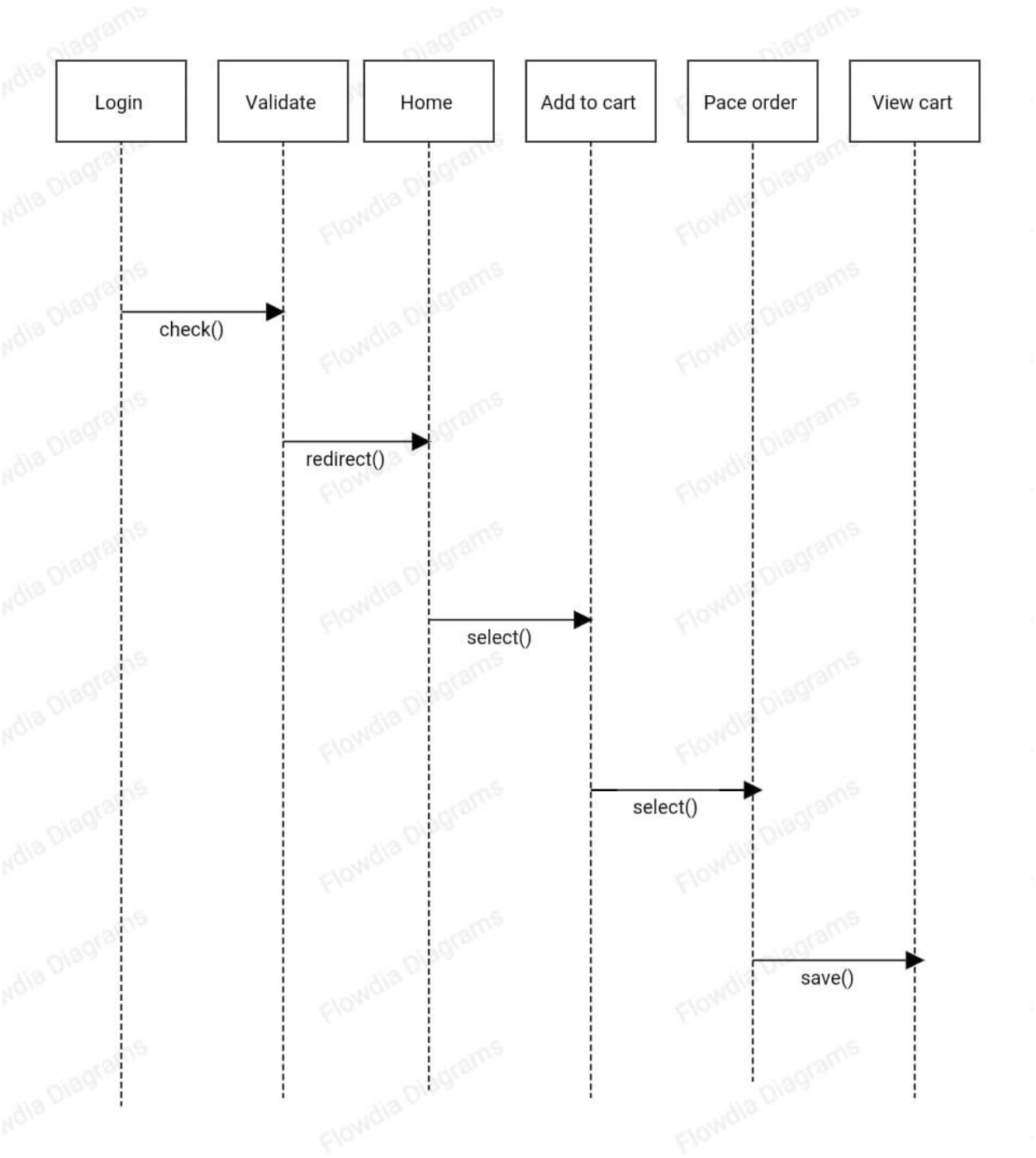


Fig 3.5 Sequence Diagram for Customer

3.1.4 Activity Diagrams:

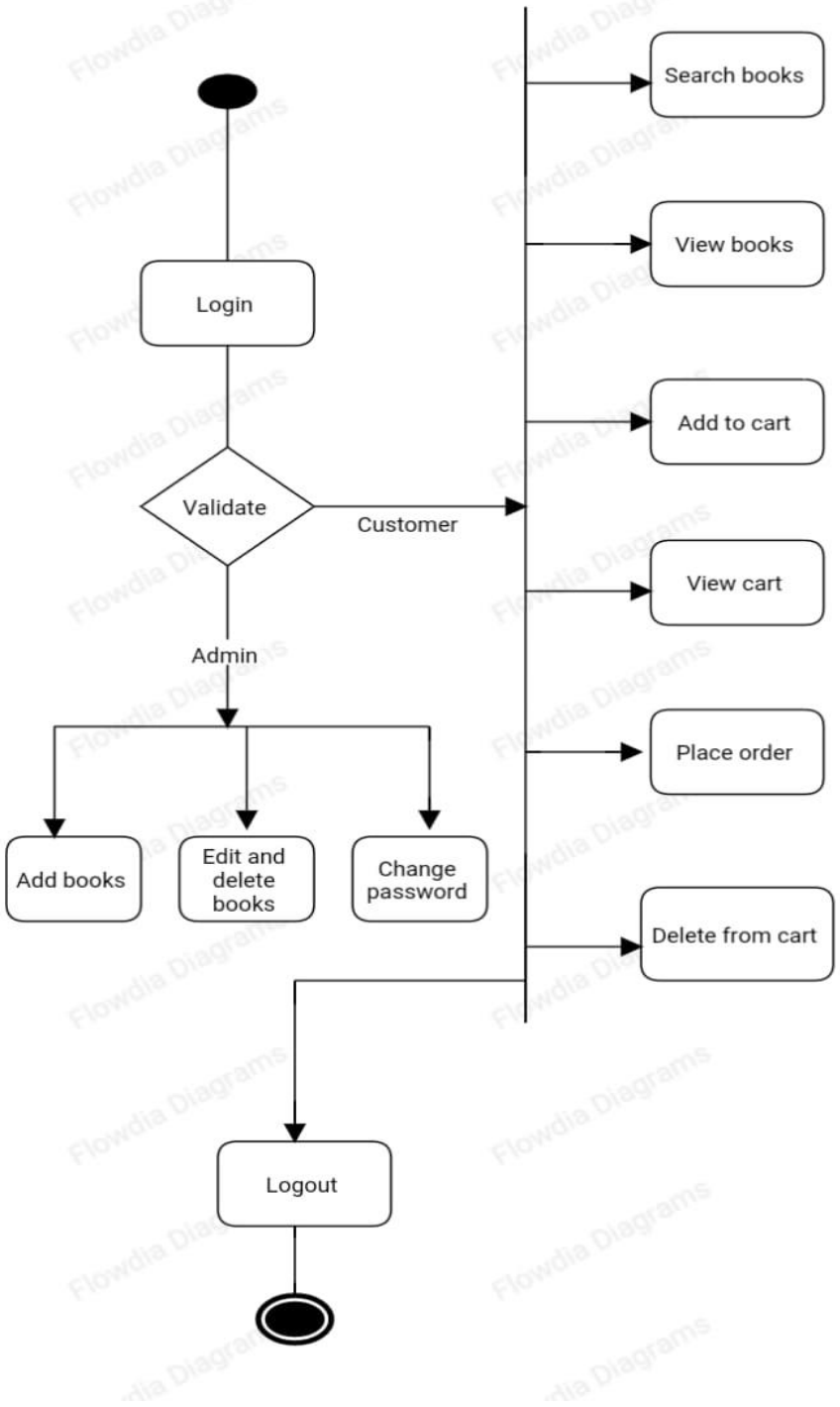


Fig 3.6 Activity Diagram 1

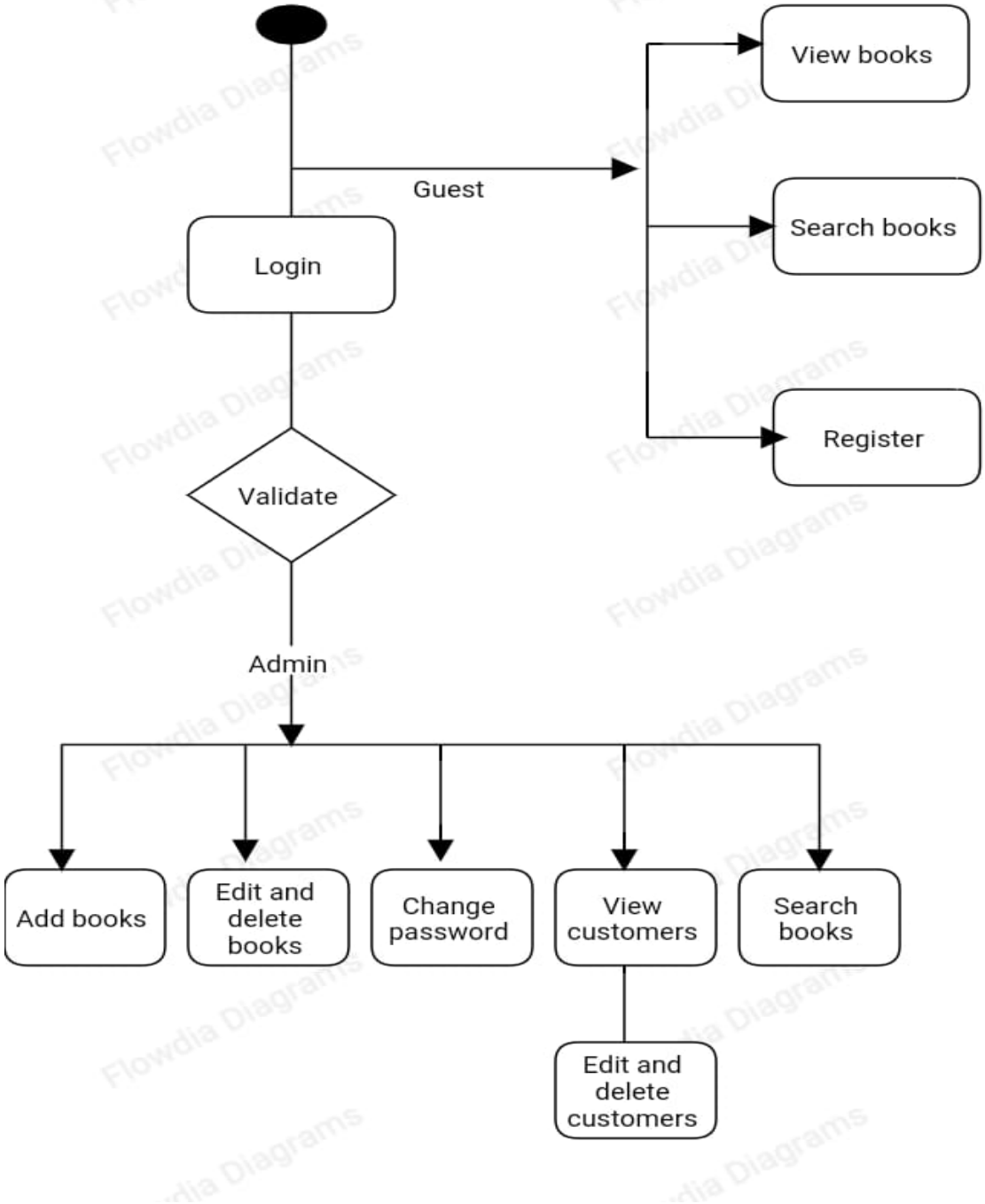


Fig 3.7 Activity diagram 2

3.1.5 Class Diagrams:

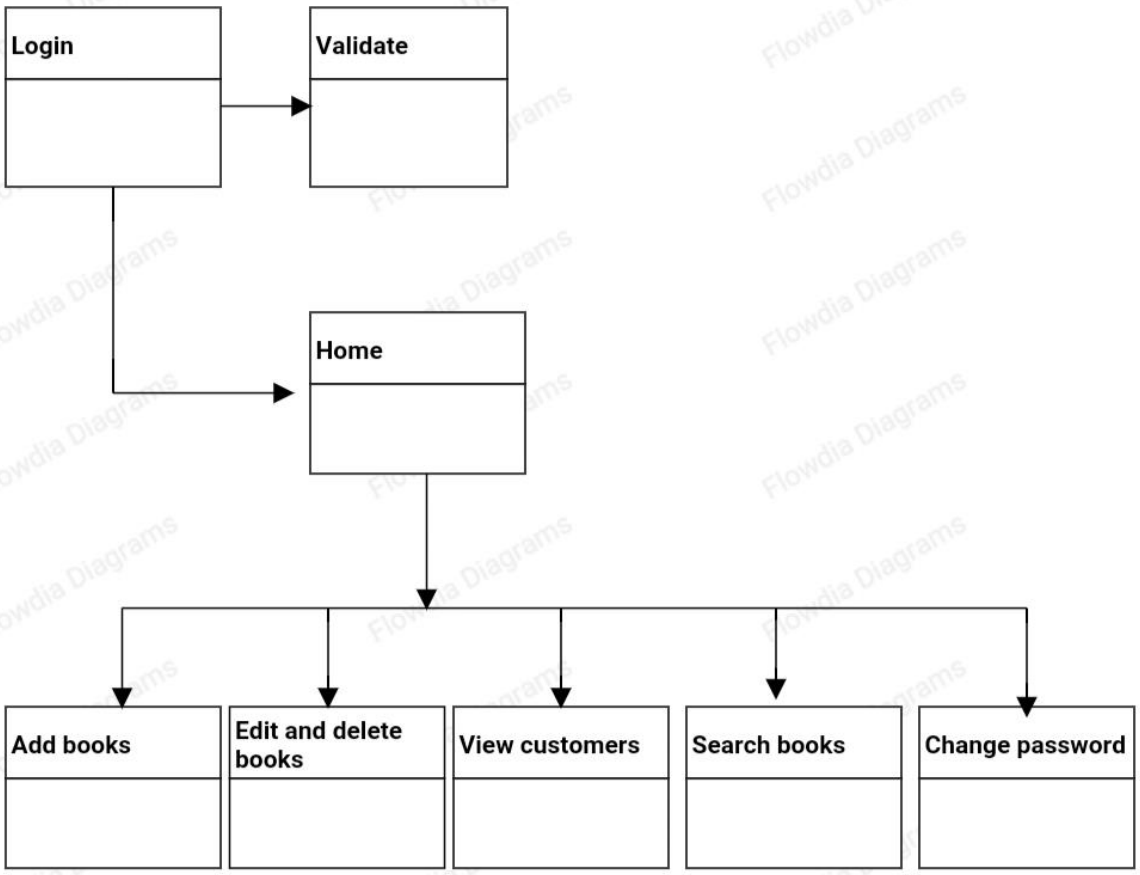


Fig 3.8 Class Diagram 1

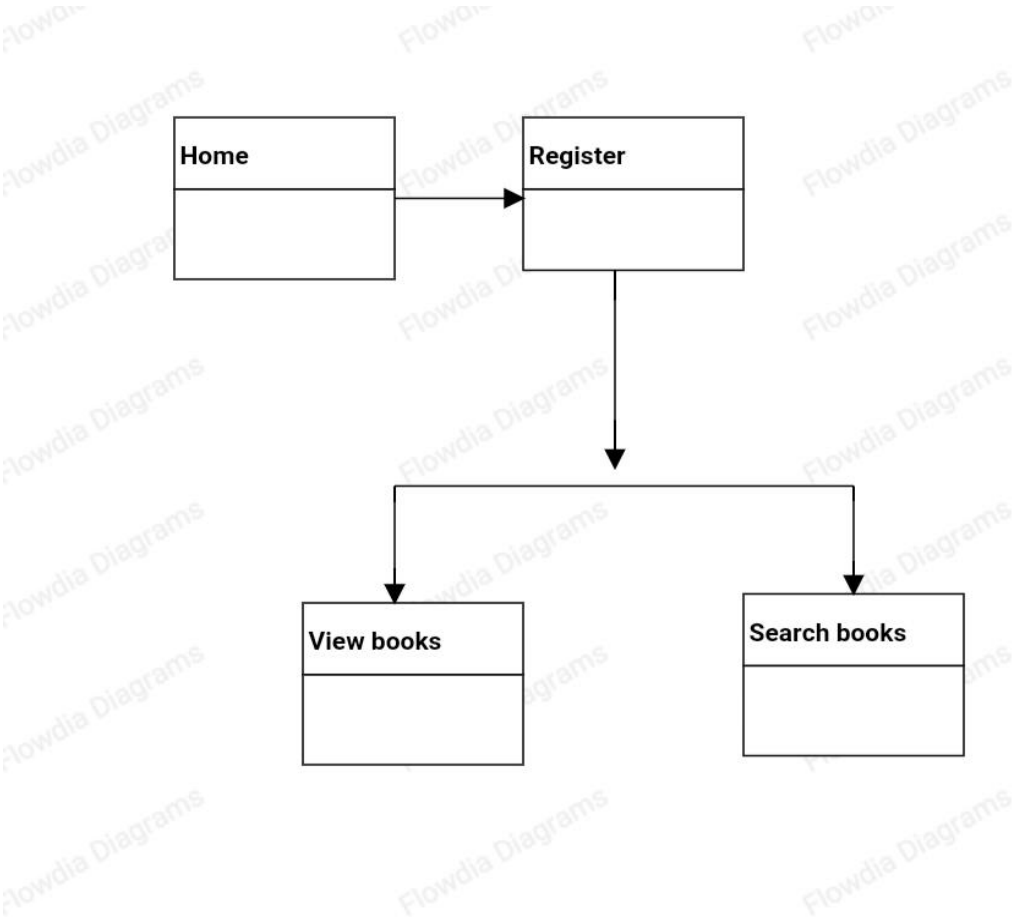


Fig 3.9 Class Diagram 2

3.2 Database design:

The total number of database tables that were identified to build the system is 5. The major part of the database is categorized as

3.2.1. Transactional components: The Transactional components are useful in recording the transactions made by the system. All the goods bookings, loadings, deliveries, demurrages and receivers etc information handled by these components

3.2.2. Data Dictionary components: These components are used to store the major information like Customer details, branches, book detail, etc.

3.2.3. General components: These components are used to store the general information like login information etc.

3.3 Database Tables:

i) Admin table: This table holds the email id and password of admin

ii) Customer: Holds the contact information of registered users

iii) Book: Holds the details of every book which is added.

iv) Orders: Holds the details of orders placed by the customers.

v) Cart: Holds the details of every book which is added by the customer in the cart

To create the application the following tables are used:

- **Book:**

Table 5.3.2

Field Name	Data Type	Size
bookId	INT	11
bookName	VARCHAR	255
prize	DOUBLE	-
authorName	VARCHAR	255
publisher	VARCHAR	255
bookDesc	VARCHAR	255
category	VARCHAR	255
quantity	INT	11
bookImage	blob	-
filename	VARCHAR	255

- **Customer:**

Field Name	Data Type	Size
customerId	INT	11
customerName	VARCHAR	255
emailId	VARCHAR	255
mobNo	VARCHAR	255
password	VARCHAR	255
address	VARCHAR	255

- **Admin:**

Field Name	Data Type	Size
email	VARCHAR	255
password	VARCHAR	255

- **Cart:**

Field Name	Data Type	Size
cartId	INT	11
bookId	INT	11
emailId	VARCHAR	255
bookQuantity	INT	11

- **Orders:**

Field Name	Data Type	Size
orderStatus	VARCHAR	255
totalBill	DOUBLE	-
emailId	VARCHAR	255
orderDate	VARCHAR	255

3.4 E-R Diagram:

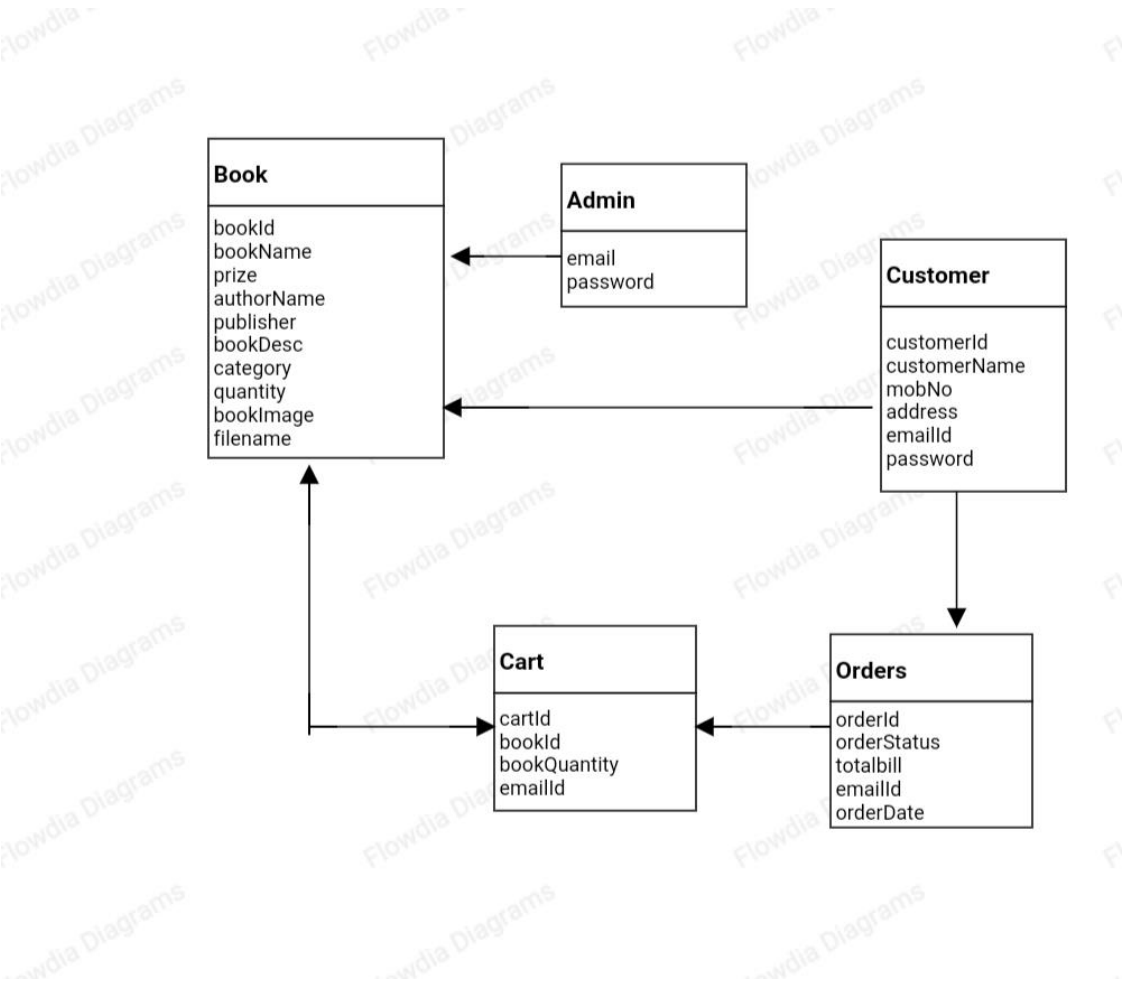


Fig 3.10 E-R Diagram

Chapter 4

Software and Hardware Requirements

4.1 Required Hardware

Pentium IV processes architecture

2 GB RAM.

40 GB Hard Disk Space

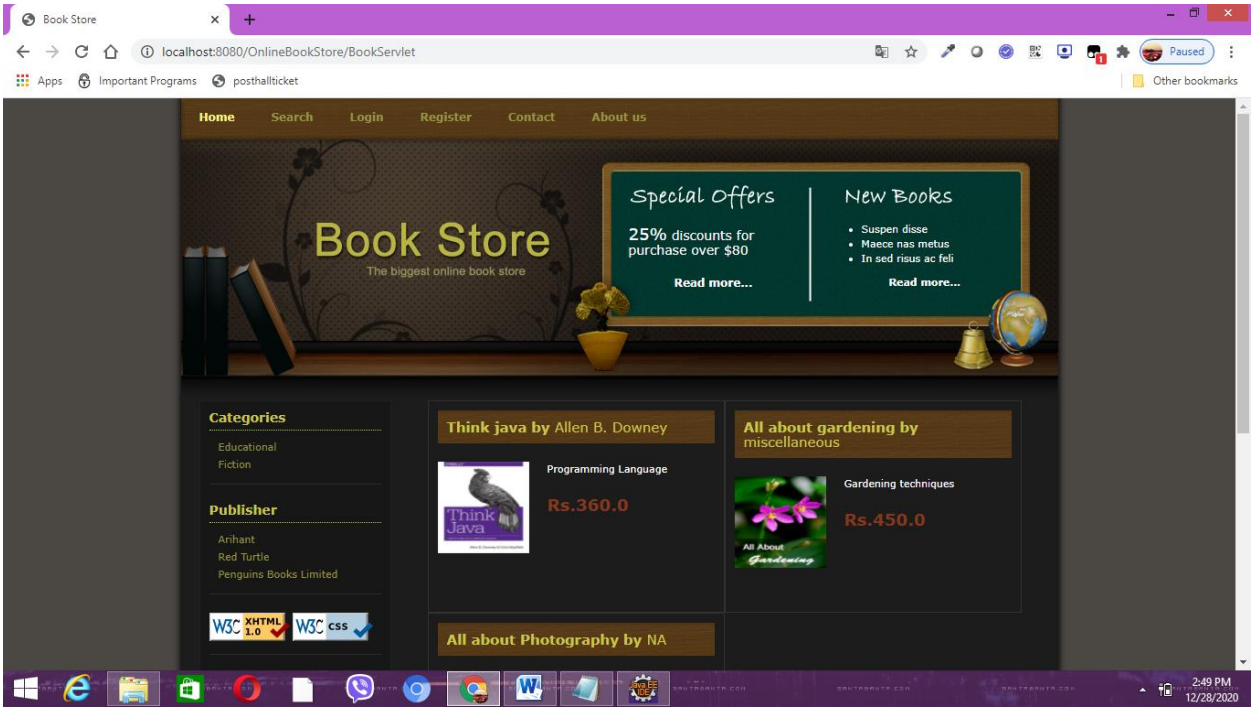
Ethernet card with an Internet or Internet zero.

4.2 Required Software

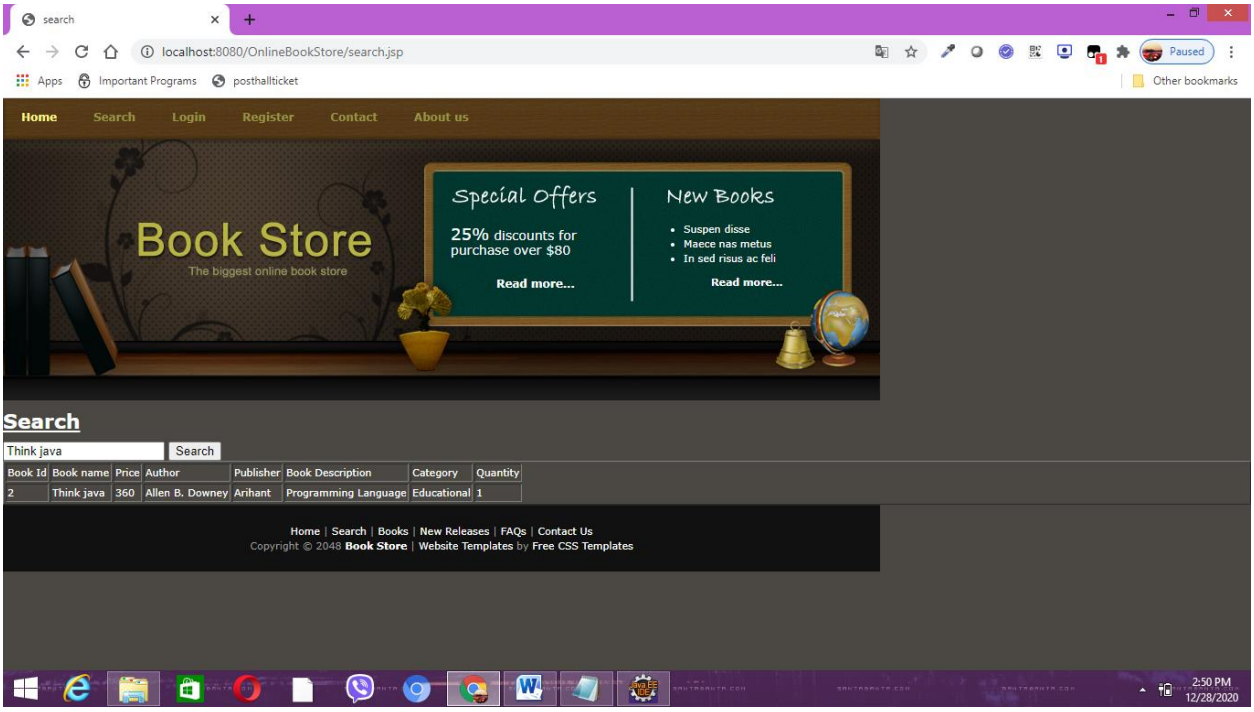
Database	: MySQL 5.6, MySQL 3.51 JDBC driver
Server	: Apache Tomcat 8.5
Front end	: JSP / Servlets, J2SDK 1.4, HTML, CSS, Ajax, JQuery,Java Script
IDE	: Eclipse neon

Chapter 5
System Screenshots:

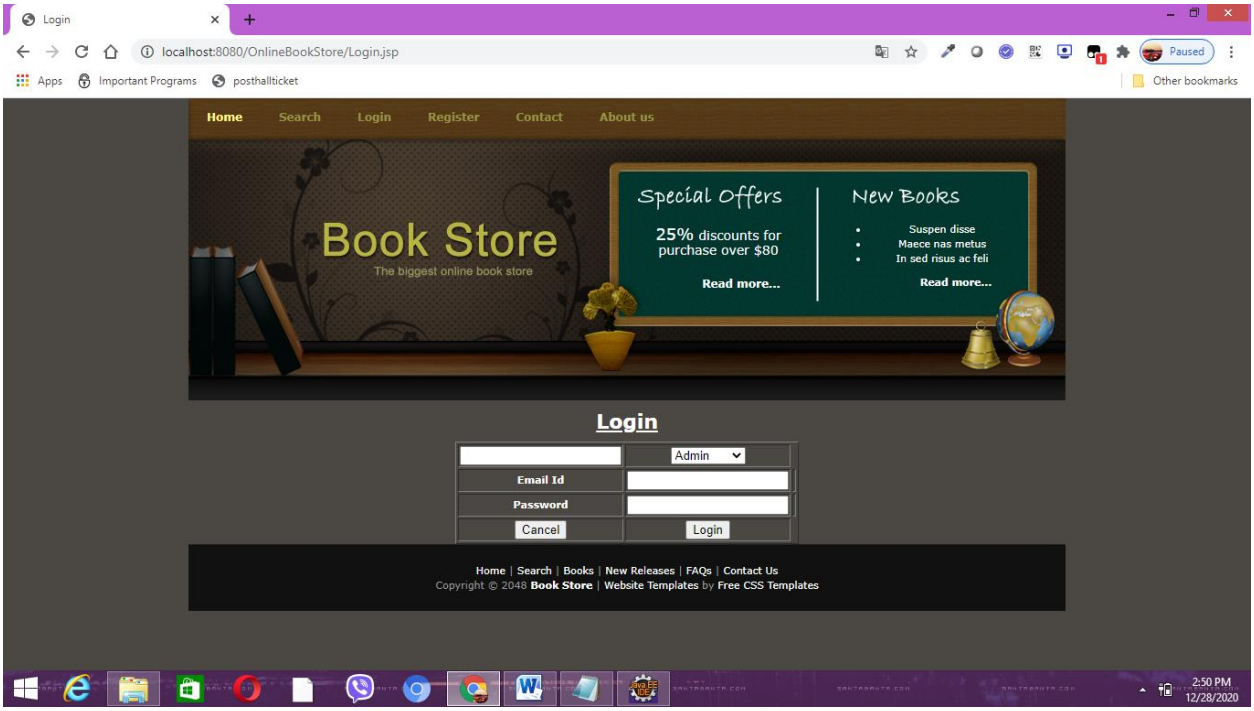
➢ Home page :



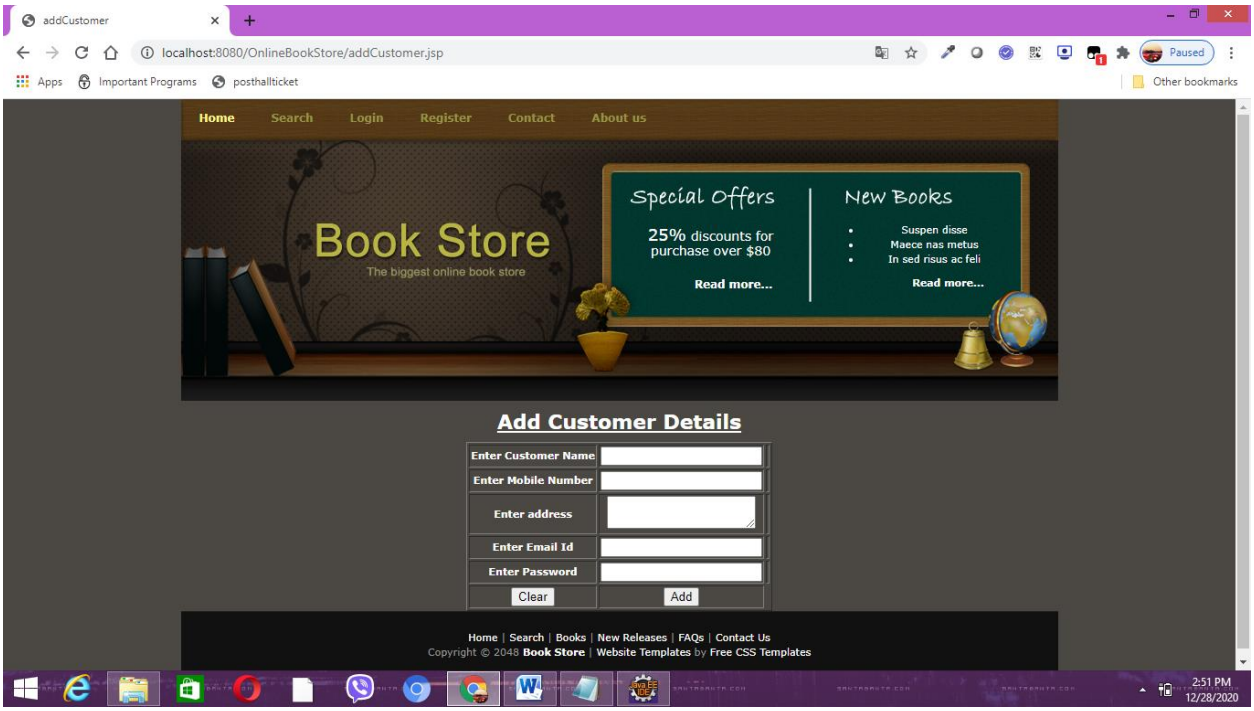
➢ Search Page:



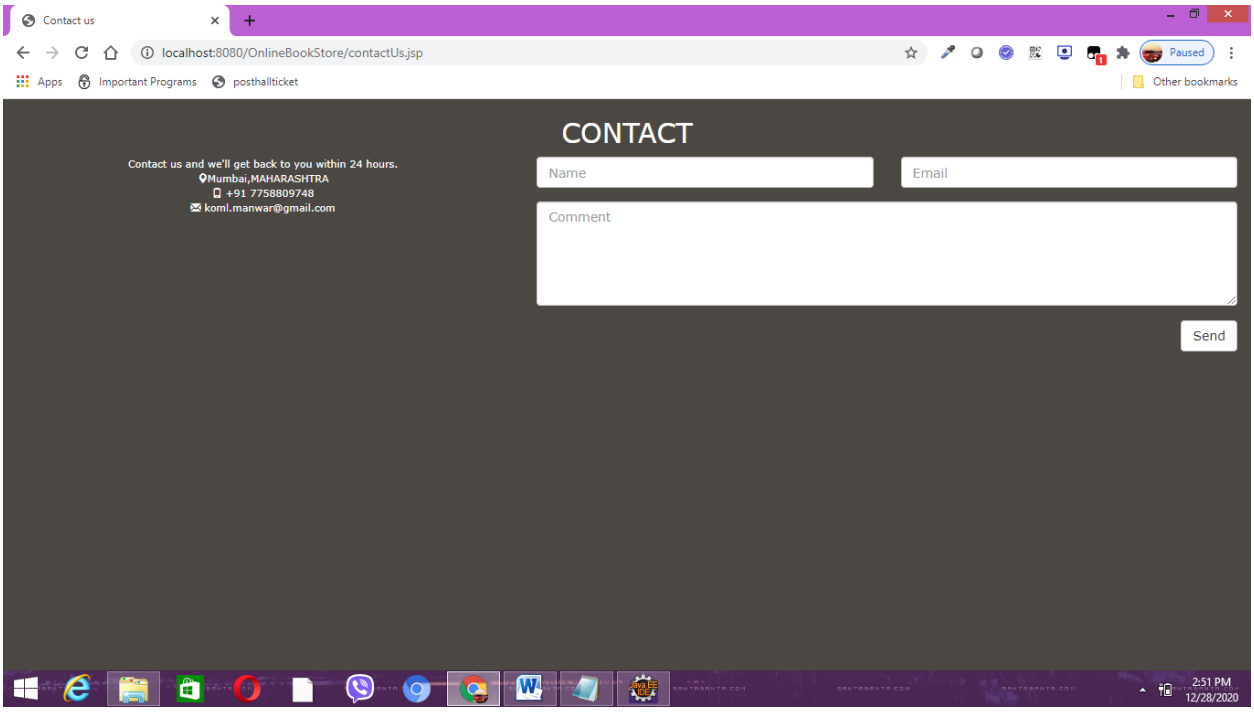
- **Login Page:**



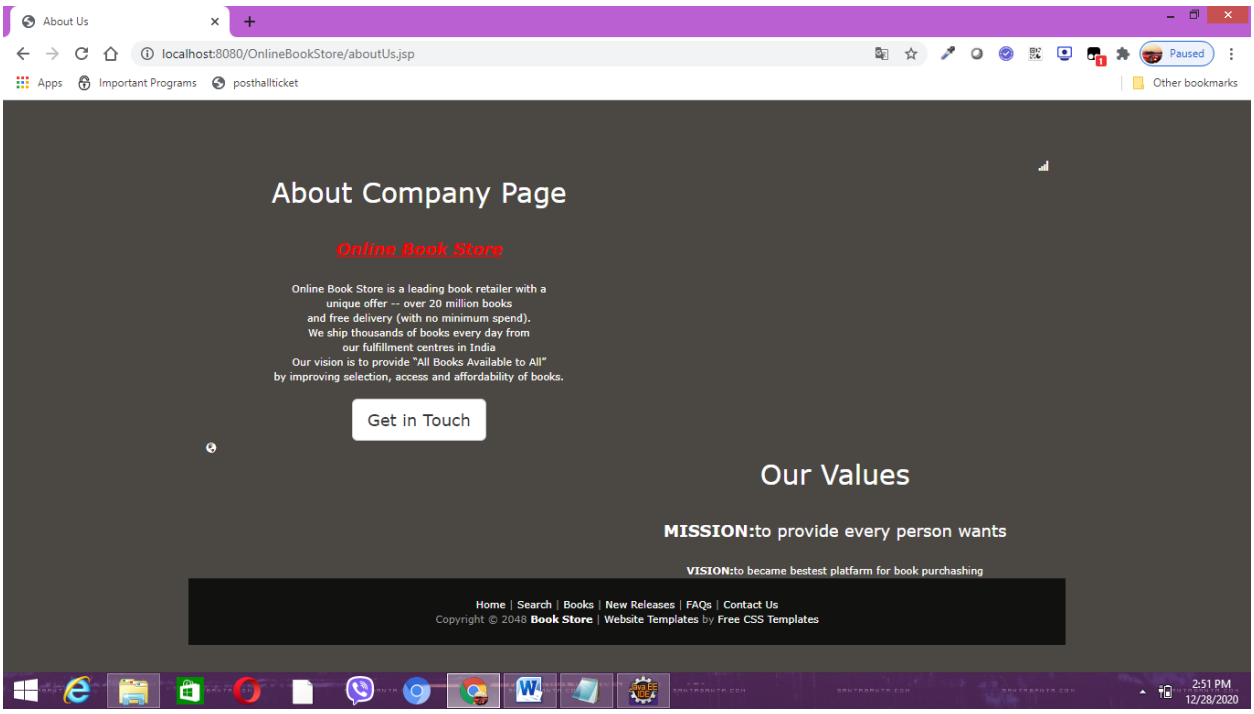
- **Register:**



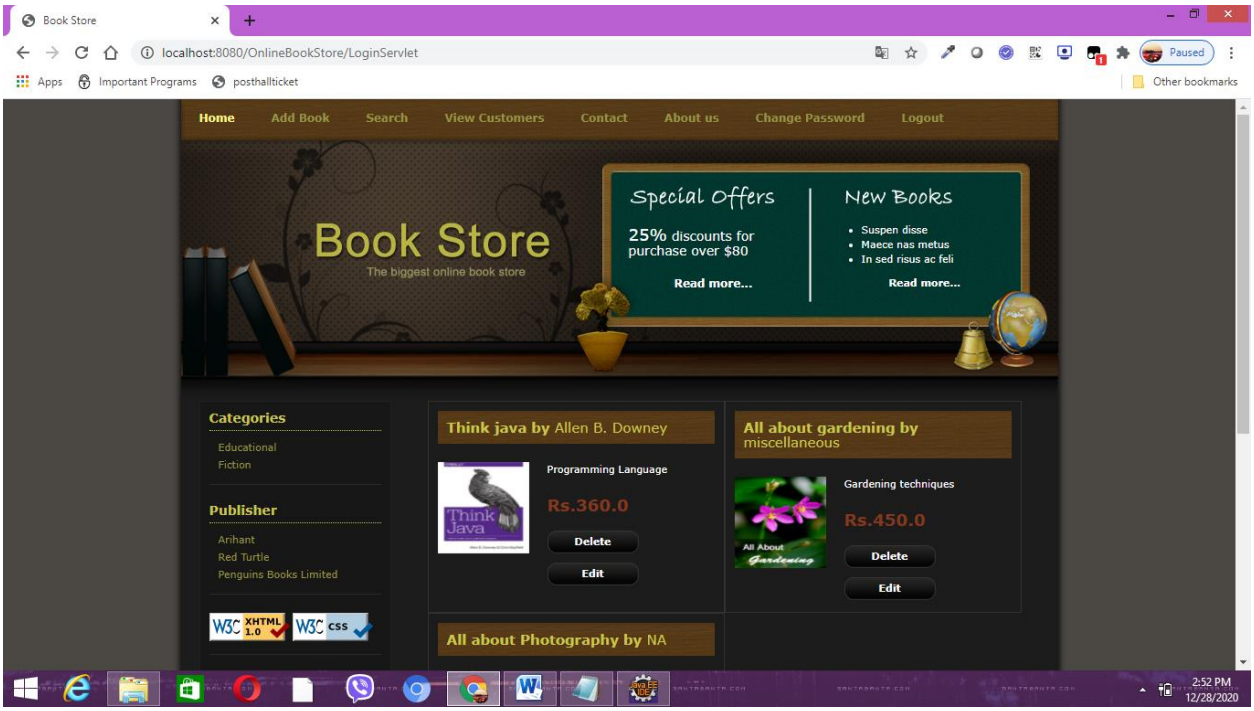
- **Contact us:**



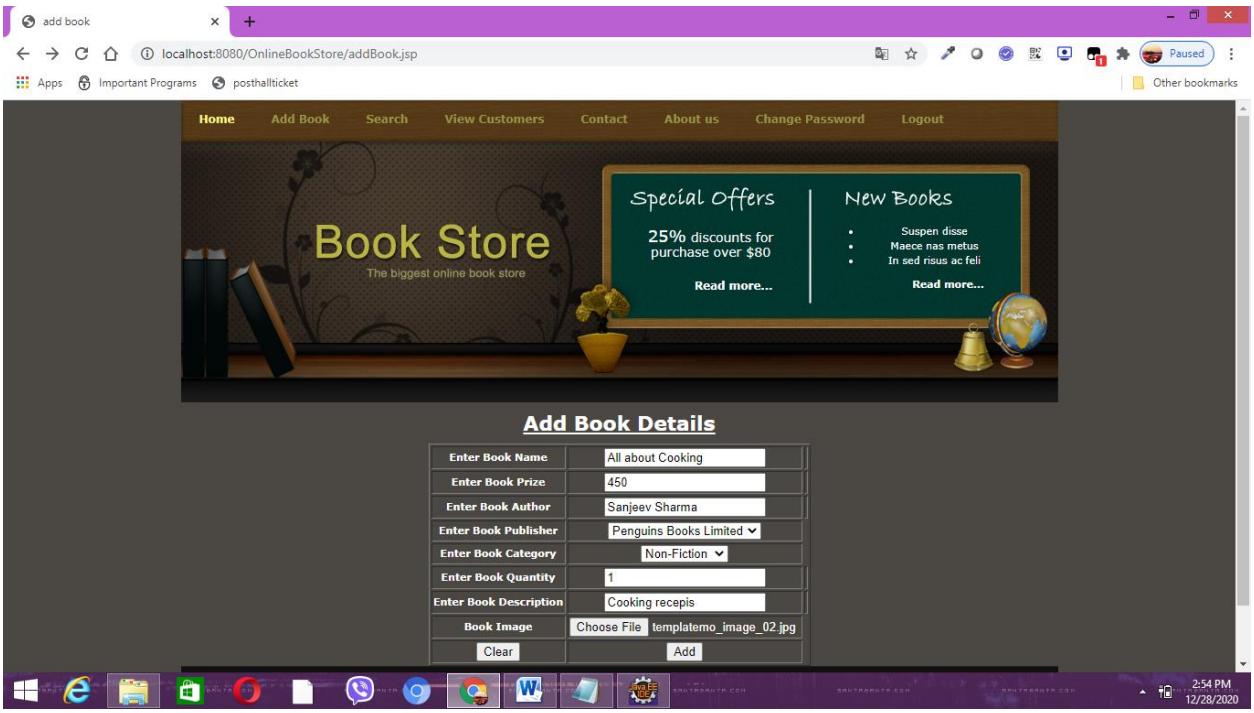
- **About us:**



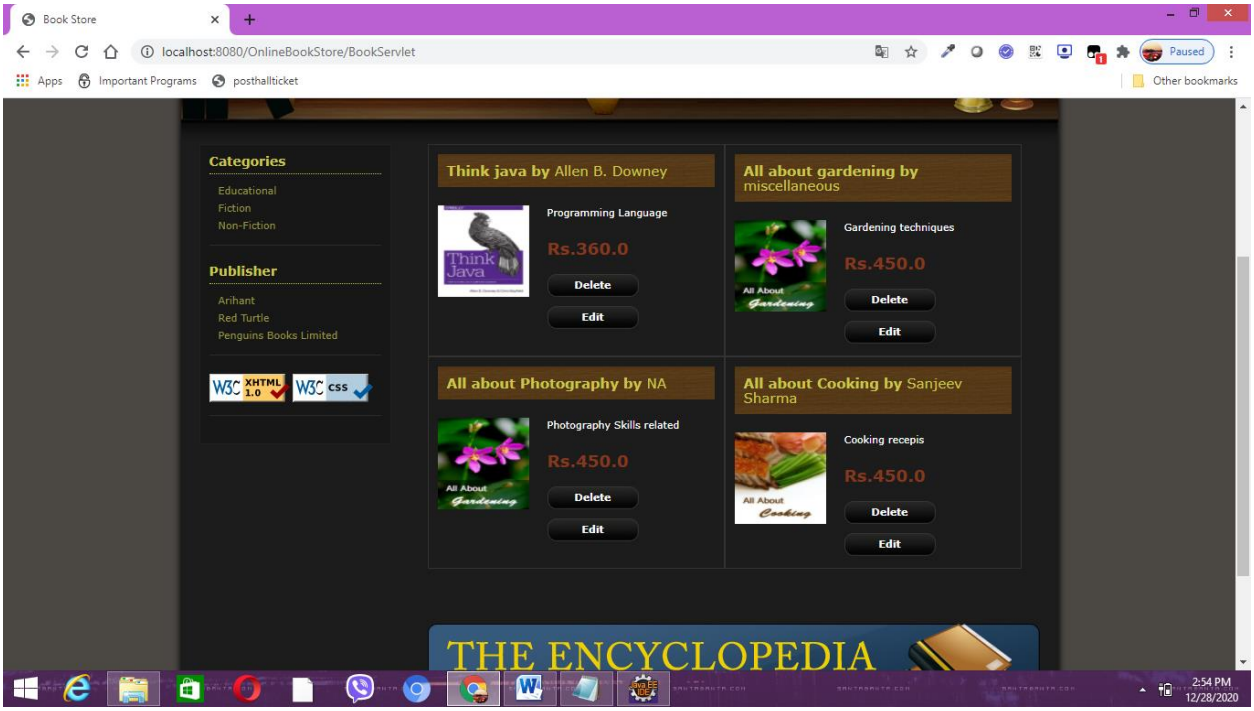
- **Admin Login**



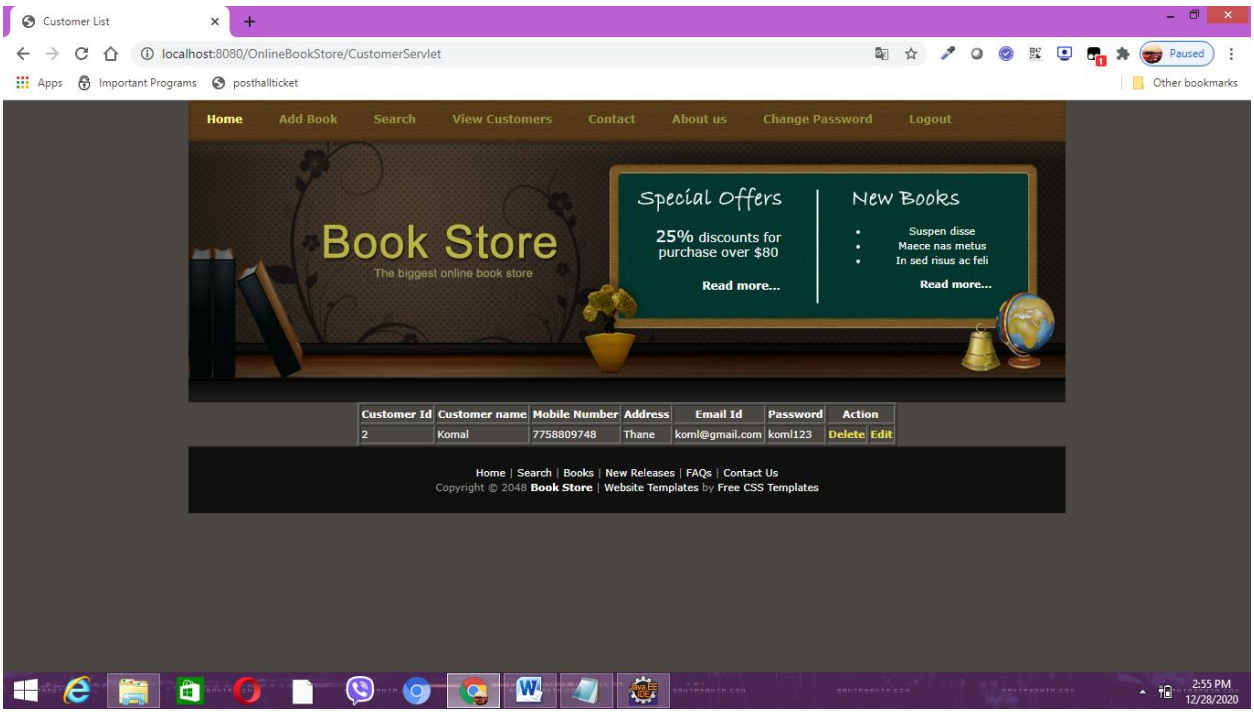
- **Admin can Add book details:**



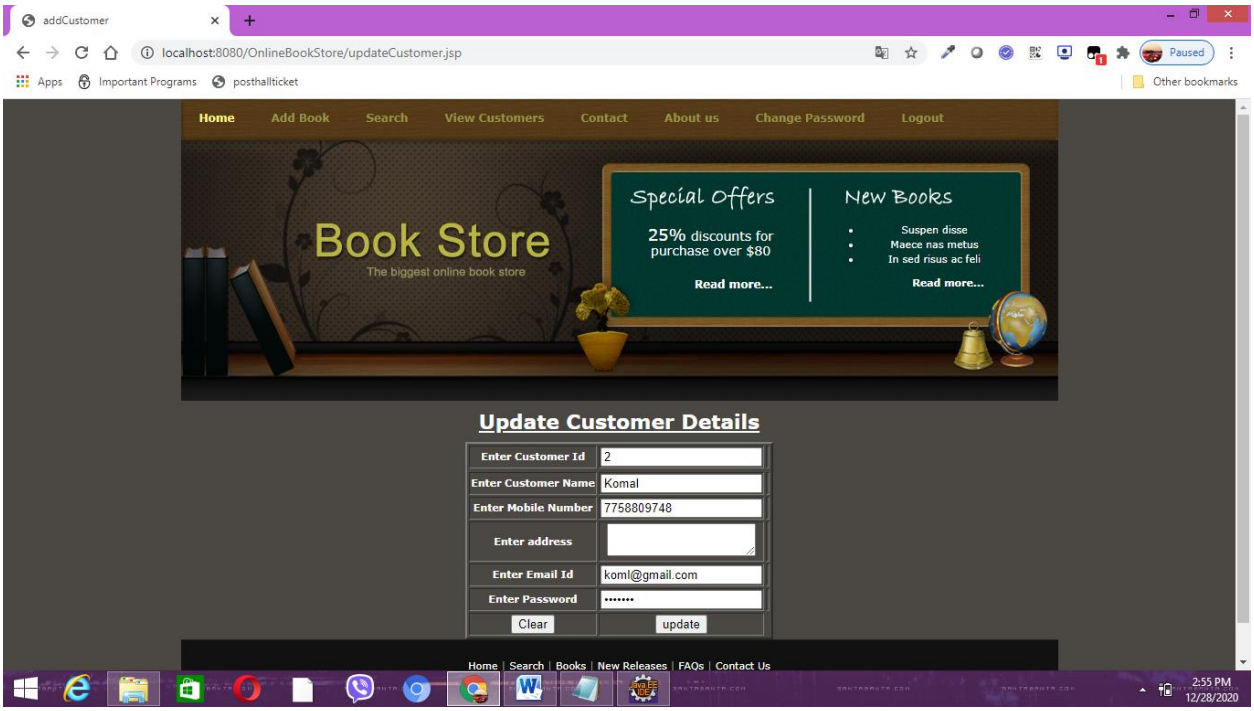
- **After adding book GUI look like these:**



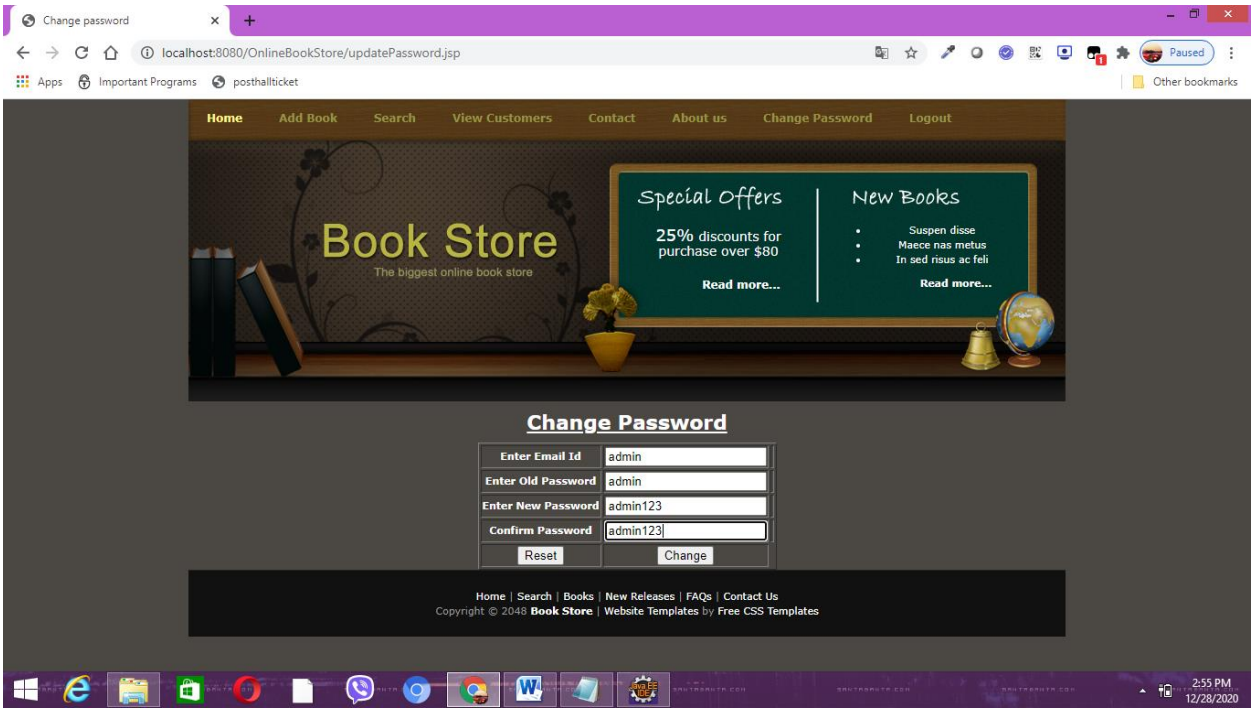
- **Admin can view Customers:**



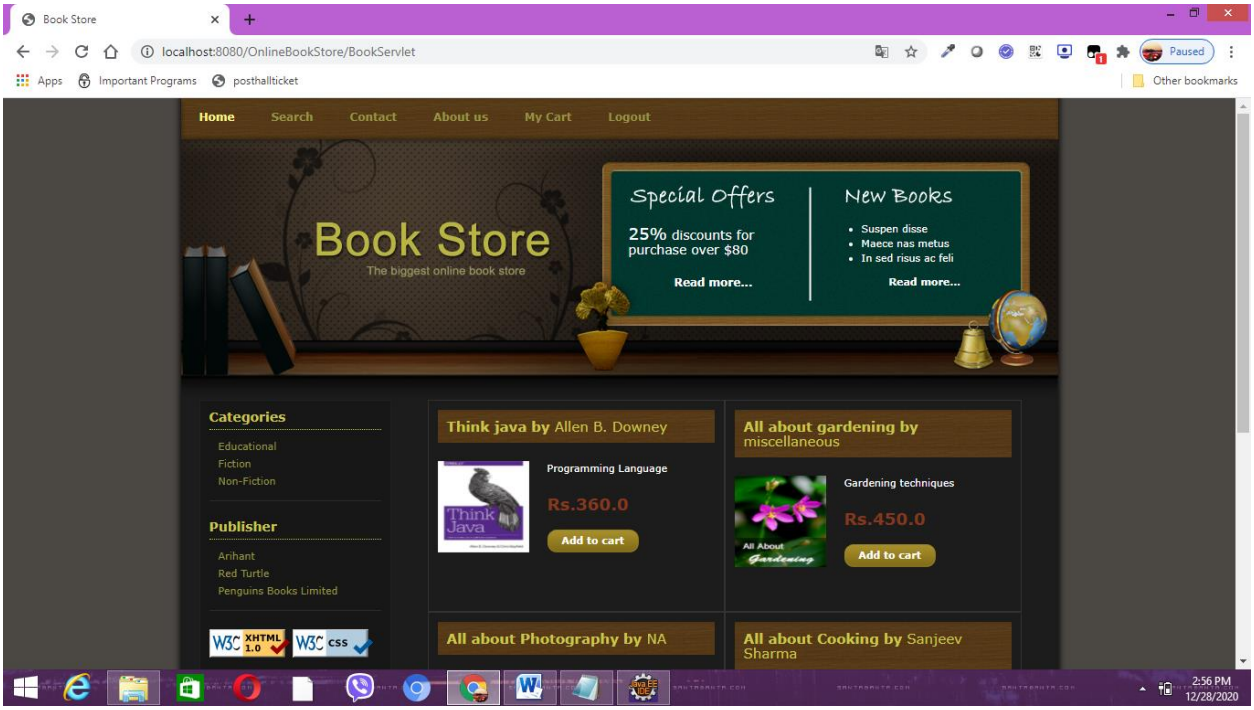
- **Admin can update Customer details:**



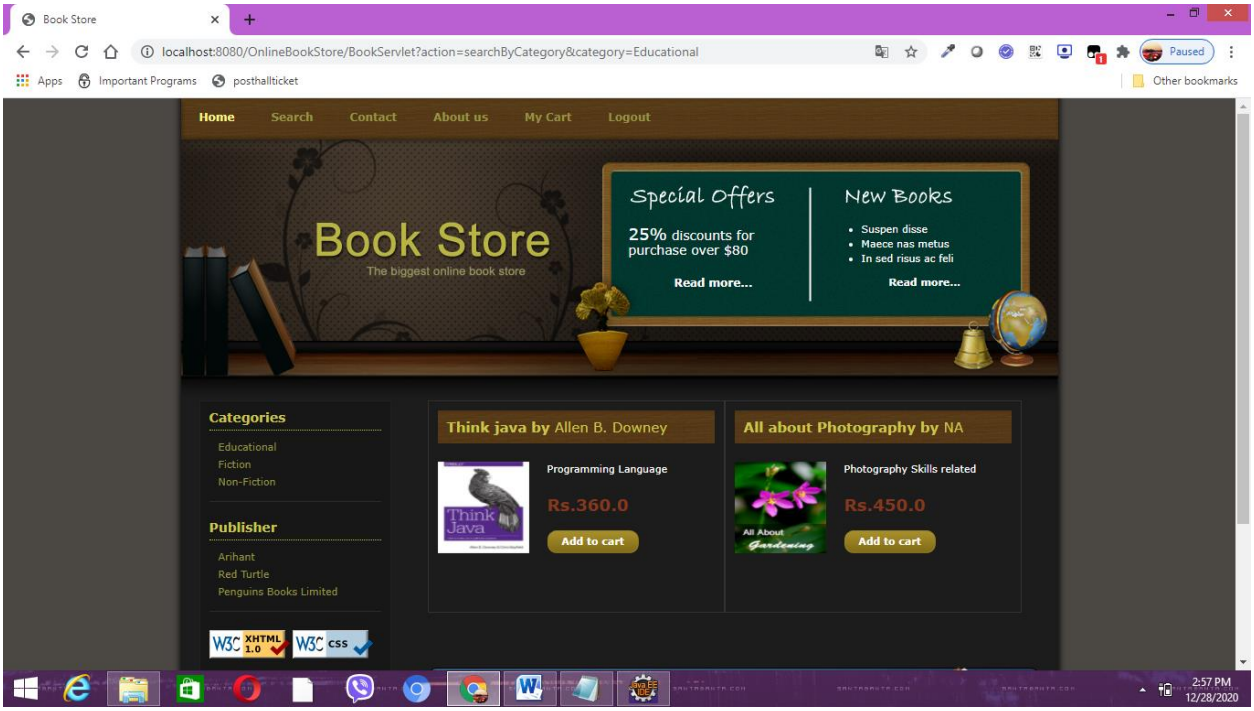
- **Admin can change his password:**



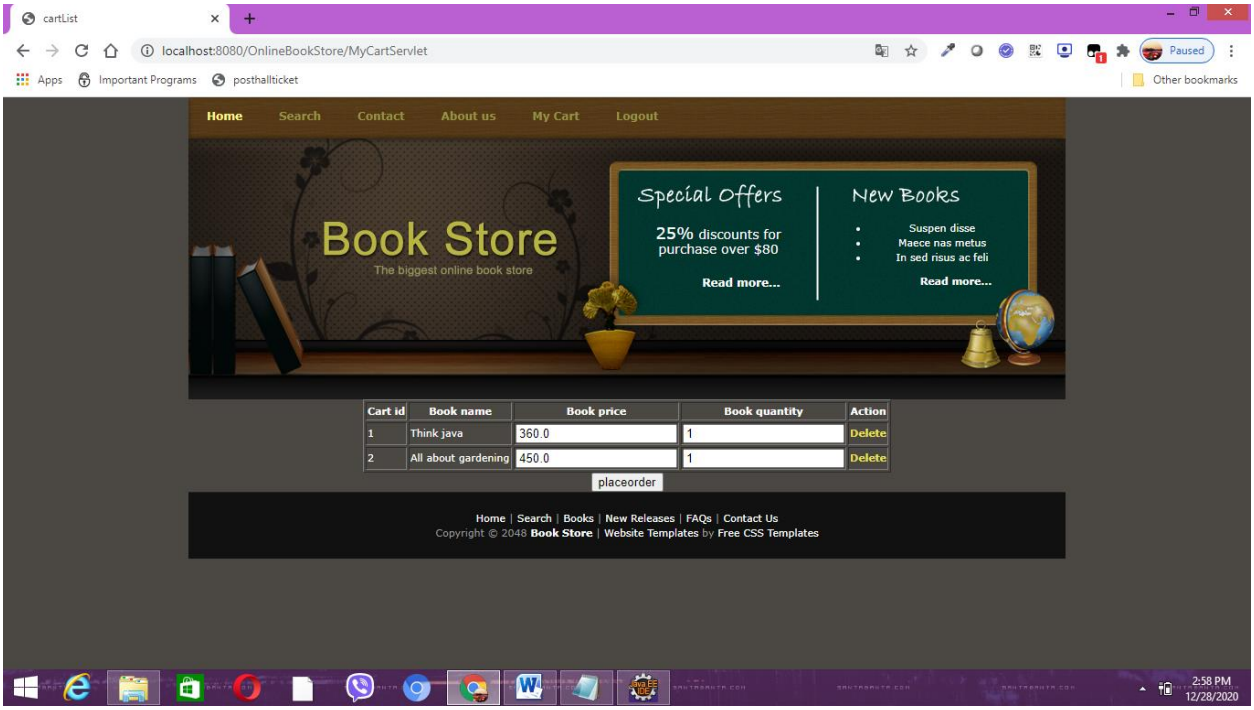
➢ Customer Login:



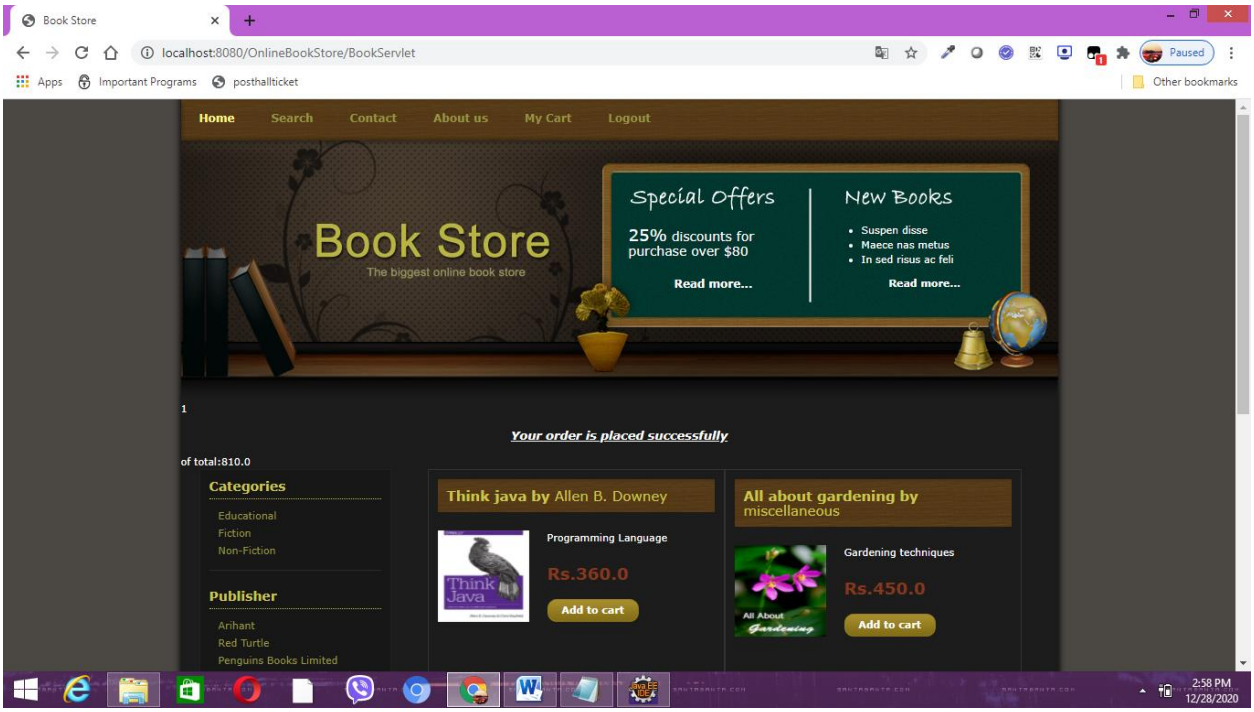
➢ View books by Category:



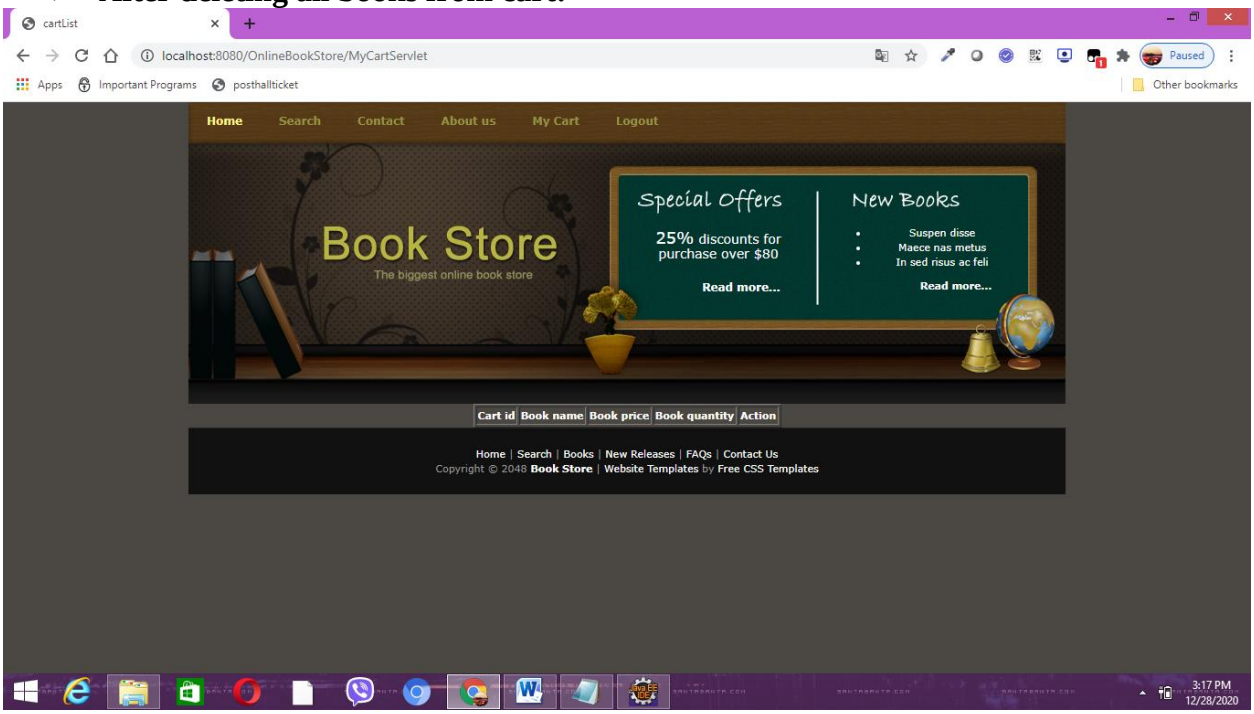
- **After adding book in the cart, cart will look like these:**



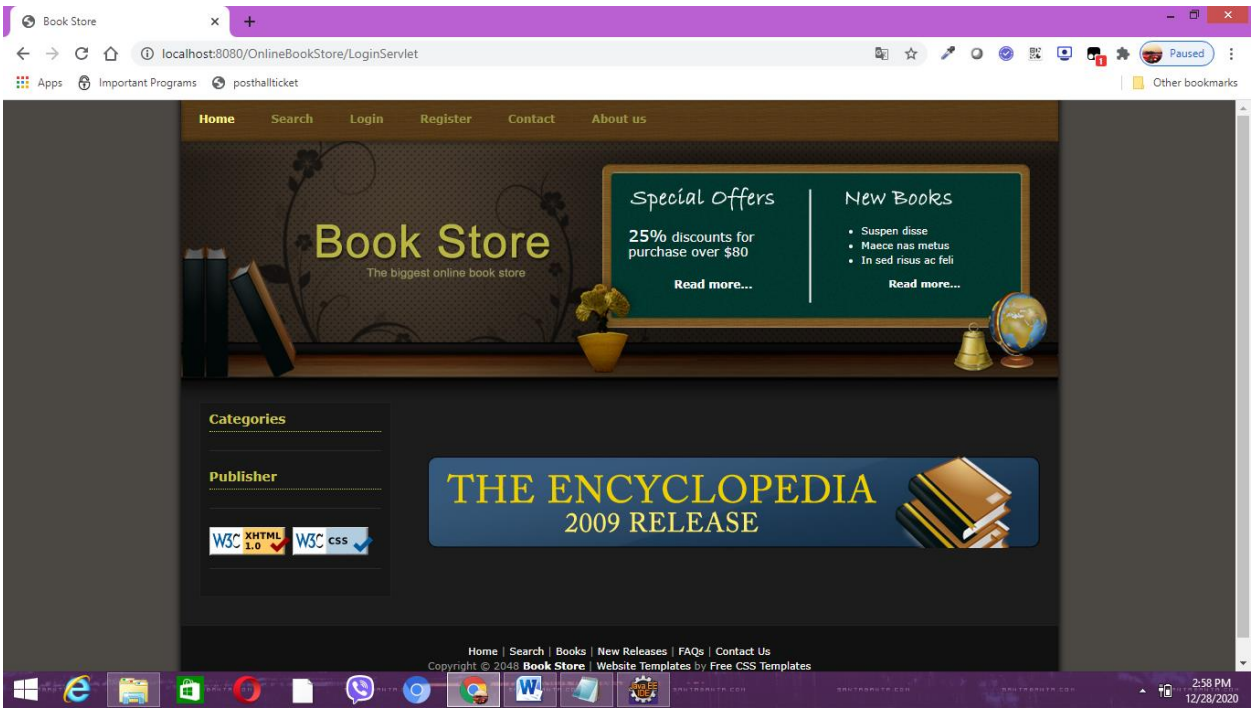
- **After placing the order:**



- **After deleting all books from cart:**



- **Logout:**



Chapter 6
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.

Chapter 7
Conclusion and Recommendations:

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 ecommerce web site that can be used to buy books online. JAVA was the language used to build this application. Jsp and Servlets uses MySQL workbench to interact with the database as it provides in-memory caching that eliminates the need to contact the database server frequently .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.

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