A

Major-Project

“Online Second Hand Books Website”

Project Report of subject

“Capstone Project Execution [22060]”

Submitted by

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From **Government Polytechnic, Karad** Institute has completed project of final year having title **'Online Second Hand Books Website'** during the academic year 2019-2020. The project completed in a group consisting of 4 persons under the guidance of the Faculty Guide.

Place: **Karad**

Date: 0/04/2020

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Seal of the Institute

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Place: Govt. Polytechnic, Karad

Date: /04/2020

Yours Sincerely,

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ABSTRACT

Students have many course based literature textbooks that they have stopped reading and these books are laying on the book shelves unused. These books can be sold and the proceeds can be used to buy another book the student currently needs.

This website will not only serve students but can also serve the entire population or anybody who wants to buy second hand books and want to empty their book shelves and make financial gain from it. These books can just be simply being uploaded to the website and another student or person can have access to buy the book by just visiting the website.

Students also have lesser incomes compared to the rest of the working population. Hence, any reasonable resource for getting income is always welcomed. All these will be achieved by creating a user friendly complete online shopping system for buying and selling second hand books.

This project deals with developing an e-commerce website for online book sale. It provides the user with catalogue of different books available for purchase in the store. In order to facilitate online purchase a shopping cart is provided to the user.

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Chapter 1: Introduction

1.1. Introduction and Objectives

Now a day's second hand book market is mostly handled by small vendors only and students don't have many options regarding second hands book buying and selling. Second hands book store is a platform for student to share their books with their juniors here they can upload set of books that they have and found buyer through this project both buyers and sellers will get benefit because they need not to deal with third party that is vendor.

Online used books portal is an innovative way to help customers lower their education and entertainment costs by buying and selling used books. Customers can buy or sell books through the website's combination of e-commerce platform as well as an e-classified system. The service aims to offer used books to students at the least price.

Peoples are comfortable with reading old books. Our idea revolves around providing all such people who would like to read their favorite titles in second hand or old used books, and online portal where they can order books. We also plan to create a library of these second hand books which can be borrowed and then returned after a specified period of time.

Second hand books constitute a major portion of the book retail market. The size of the Indian book retail industry is pegged at Rs.3000 crores of which organized book retail constitutes only 7%. The industry is expected to grow by approximately 15% a year. Our platform will provide an opportunity to people who normally buy new books but would like to sell them after they have read them. This makes the small contribution in the achieving goal of the industries.

Objectives:

- To simplify and automate the present manual system.
- To reduce manual effort and increase efficiency.
- Quick generation of reports to improve decision making.
- Reduce inconsistency
- User friendly
- Fast processing

1.2. Existing System and Problems

There are many websites for second hand book with wide variety of topics such as engineering, philosophy, arts and science, etc. are available. We have referred some second hand book website. In this systems, Store is arising as a dynamic online book selling and purchasing platform. This website provides many types variety of books that user want to purchase.

In BookChor website, buy second hand books of your choice and sell your collections. Students can add up to 5 listings to sell their book for free. There's also an app. The pros are that there are good discounts especially during sales, they send personalized notes along with bookmarks and though second hand books the quality is good.

Problems in Existing System:

There is important role in overcoming the various challenges faced in Indian educational systems, in improving the efficiency of the educational system and also in improving the interaction between students. Academic books are one section of the market which has not been properly explored by any book websites. Our website is only for college students use.

Following problems faced in existing system:

1) The user can sell or buy the book but in some case other user buy same book then they can't provide the exchange facility between the users.
2) If the user wants to give any suggestion or feedback, then he/she doesn't contact or send SMS to the user specifically.

1.3. Proposed System

The proposed system will offer a web-based interface for students to conveniently find buyers for their used books. Students will be able to offer their books for sale at their own prices. Students wishing to buy used books will be able to search the listings for the desired book and order it from any seller that is offering the book. The system will not deal with monetary transactions directly. The seller and the buyer will agree on the payment and book delivery method. It will be possible for the buyer and the seller to just meet up on given address that they decided and pay in cash. They will also have an option to pay through Net Banking.

The Second Hand Books Website is developed to facilitate the general Administration system to manage the various information of modules including this system such as Books, Sell, Exchange, E-book, etc.

Modules:

Facilities Provided by System:

a] Registration:

User need to register first with their basic registration details and need to create a valid login id and password.

b] Login:

Using valid login credentials, user need to login into the system in order to access the system.

c] Books:

Once user is logged into then he/she may view all the added books with their details.

d] Sell Book:

User need to upload a book if he/she wants to sell a book. System allows user to sell their books with book name and its details.

e] Buy Book:

User can search various book of their choice and buy them. Once user can register or login to the system and if any buyer is interested in buying a book then buyer's details will be displayed.

f] E-book:

User can see listings of books and pdf of books who interested to learn more information about book.

g] Exchange:

In this system, suppose two users have buy same book then they can exchange the book between them.

h] Pay module:

When the user clicks on sell button, payment form will be displayed then user follow the instruction according to given form. All the purchase history of user will be displayed with details.

i] Login:

Using valid login credentials, admin need to login into the system in order to access the system.

j] View Books:

Admin can view all the added books with their details.

k] View Transaction:

System allows admin to view all the transaction details of buying and selling a book.

l] View User:

All the registered user details will be displayed to the admin.

1.4. Advantages of Proposed System

1) Students can get their book delivered instead of actually going and buying the book.
2) Feasibility of making payment online itself.
3) Managing of inventory of the books for user becomes easier as students are not visiting and ordering it online.
4) This system saves both time and travelling cost of students.
5) User can get to know different kinds of books that they were unaware of by just searching in the system using keywords.
6) Reused books are good for environment as it helps save paper.

Chapter 2: Literature Survey

2.1. Literature Survey

1) www.pustakkosh.com

   This website allows to buy or rent books, buy and sell second hand books. Design and different modules of this website are considered for the website designs are referred.

2) www.bookchor.com

   This website is about buying and selling books which provide facility to search the book we want. Buying and selling modules of this website are referred.

3) ‘e-Bookstore: Opening Door to garden of Knowledge’ (International Islamic University Malaysia, 6 June 2017)

   Second hand book shopping has been current trend in today’s stream. The process of selling and buying the second hand book is somehow leaded to time and energy wastage. The purpose of this paper is to give solution through online second hand book shop system. The customer segment includes buyer and seller. This project has proposed conceptual solutions through Business Model Canvas (BMC), Value Proposition Canvas (VPC) and Environment Map (EM). This paper is help to review that what has been already established regarding to this project by accredited researches.

4) www.kitabay.com

   This website buys second hand books, used books, new books at suitable prices. You will find a good collection of fiction, non-fiction, academics and featured authors books.

5) www.secondhandbookindia.com

   This website is organized like a used books store. The books are ‘piled up’ and you will need to browse and make a little effort, to find an interesting book.

Chapter 3: Scope of the Project

3.1. Scope of the Project

There is a very good scope of Online Second hand book buying and selling system in India as the number students in India are continuously growing. This website is basically developed for the college students. If you want to sell your old book or want to buy second hand books in good price, then you can do it using this website.

This website is specialized on E-commerce area. This project covers all the functionalities to book selling and buying. The website is based on online shopping where user can sell their old books and also buyer can buy the old books. This website is also support to exchange of the books where user can exchange their books by making a direct contact with interested another user. Moreover, the system is able to store seller's data as well as buyer's data. Users can search books according to their branch and year. This system also provides the free Pdfs of the academic books.

The limit of this system that it analyses only registered users that is only the registered users can be able to buy books, sell their old books, access the pdfs and exchange the books. The system provides payment options as the online payment through banks and payment by direct meetings. This website also provides good user interface to interact with the customers. In technical side to develop a website and system that will oriented for web design and database system will be done by using JSP and MySQL database.

The proposed system can be by any user and it does not require any educational level, experience and technical expertise in computer field but it will be of good use if the user has the little knowledge of how to operate computer.

3.2. Feasibility Study

3.2.1. Technical Feasibility

The technical feasibility study basically centres on alternative for hardware, software and design approach to determine the functional aspects of the system. This project an "Online Second Hand Books Website" will be platform independent since it being coded using JavaScript and jsp. HTML is used to design the web pages. The system can run on any operating system. There is no restriction about the platform. System also can be run using any browser that is Internet

Explorer, Google chrome, Firefox etc. MySQL database is used to store database. Hardware requirements are compatible with all operating systems. Only registered will be able to use the system so it would be secure. The user and admin is requiring internet connectivity. The system can also be expanded as per the need of requirement specifications in future.

3.2.2. Operational Feasibility

Operational feasibility is a measure of how people are able to work with system. Since the website very user friendly so users will find it comfortable to work on this site. The system's user platform is for those who are interested to buy or sell old books and exchange their old books. The system satisfies the requirements identified.

All the data is stored in the database, so user can track their data. To exchange the books system also provide the contact details of interested user, so user can make direct contact with them. The proposed system is acceptable to user especially for students. So the proposed system is operationally feasible.

3.2.3. Economic Feasibility

As part of this, the cost and benefits associated with the proposed system compared and the project is economically feasible. The system development cost is significant. The cost and benefits may be direct or indirect and tangible or intangible.

To develop the system no extra cost is required to buy any software or hardware device. The development cost of the system is effective. The system will be available to the users in free of cost. There is no need to pay any money to use the system from user's side. Also the system will be run on any platform. As the use of system is cost effective, the system can be said as economically feasible.

3.2.4. Schedule Feasibility

In the planning phase of the project, we estimated project duration is 15 Weeks approx. It has been planned in a modular manner and one module may be developed more or less in parallel to another. All the modules are developed in decided time period with the completion of report.

3.3. Requirements Specifications

- Hardware specifications

PC	: Intel(R) Core (TM) i3-7020U CPU
Processor	: 2.30 GHz CPU
RAM	: 8GB
Hard disk	: 5GB

- Software Specifications

Operating System	: Windows 10
Editor	: Eclipse, Visual Studio Code
Database	: MySQL Database
Browser	: Any Browser
Server	: Apache-tomcat-8.0.0

- Languages used
  1) HTML
  2) JavaScript
  3) JSP
  4) CSS (For Styling web pages)

- Functional requirements of the system:

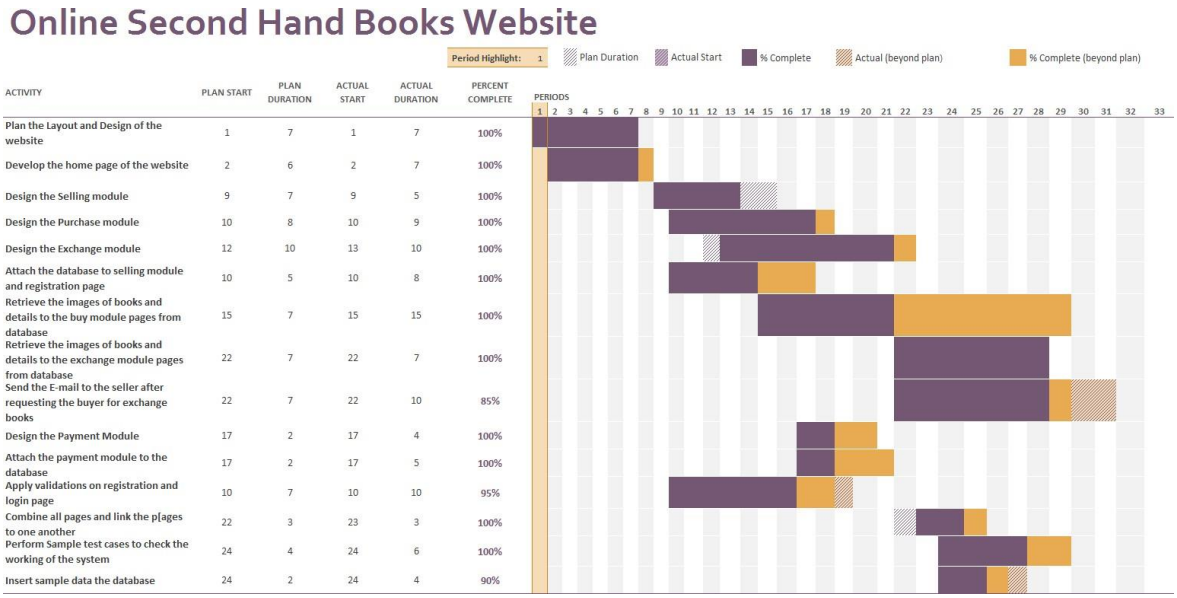
1) Seller is able to upload their old books with all details of the books including expected price.
2) The only registered users can able to use the system means doing any operation like selling and buying system ask user for enter the valid user ID (Email address) and password.
3) System ask the user to enter details in order to become registered user. The multiple users with same email-id i.e. username is not valid. If user fills appropriate details, then it will be saved in the database.

4) In seller module, if seller will upload the book then it will be displayed in the buyer module according to the branch of the uploaded book.
5) If buyer want to buy any book, then he/ she should go through the payment module. If he/ she completes the payment process, the book will be deleted from the database.
6) The administrator can see and manipulates all the databases using admin login.
7) To exchange the books, the all contact details are provided in exchange module. So the directly contact can be made between the users which are interested in exchanging books.
8) The users get automatically logout when they close the system.

The above mentioned points are the enhancements which can be done to increase the applicability and usage of this project. Here we can maintain the records of books, stoke and registered users. Enhancements can be done to maintain all the project. We have left options open so that if there is any other future requirement in the system by the user for the enhancement of the system then it is possible to implement them.

Chapter 4: Methodology

4.1. Gantt Chart



ACTIVITY	PLAN START	PLAN DURATION	ACTUAL START	ACTUAL DURATION	PERCENT COMPLETE
Plan the Layout and Design of the website	1	7	1	7	100%
Develop the home page of the website	2	6	2	7	100%
Design the Selling module	9	7	9	5	100%
Design the Purchase module	10	8	10	9	100%
Design the Exchange module	12	10	13	10	100%
Attach the database to selling module and registration page	10	5	10	8	100%
Retrieve the images of books and details to the buy module pages from database	15	7	15	15	100%
Retrieve the images of books and details to the exchange module pages from database	22	7	22	7	100%
Send the E-mail to the seller after requesting the buyer for exchange books	22	7	22	10	85%
Design the Payment Module	17	2	17	4	100%
Attach the payment module to the database	17	2	17	5	100%
Apply validations on registration and login page	10	7	10	10	95%
Combine all pages and link the p[ages to one another	22	3	23	3	100%
Perform Sample test cases to check the working of the system	24	4	24	6	100%
Insert sample data the database	24	2	24	4	90%

Fig.1 Gantt Chart

4.2. Actual Process Followed

Initiation of this project starts with gathering all of the necessary requirements from lecturers and students in order to produce a website which is feasible to be maintained and meet user requirements. In order to know the problem faced by buyer and seller of old books, firstly we are try to gaining all information for the project. We use this information to know the problem and benefits that should be provided by this system. This is done to know the what are the criteria that fit into customers need.

Based on literature survey as well as data collection, the prototype of the system was developed. Construction of the prototype was modified according to the feedback of the end users. The prototype which results from the design phase is then evaluated by the students and the evaluation results can be used to refine the requirements for the software to be developed. Iteration occurs as the prototype will be refine to satisfy the user requirements, while at the same time enabling the developer to better understand what needs to be done.

- Steps Actually Performed:
  1) Firstly, we develop the home page.
  2) After that we design the seller and buyer modules.

3) We design the exchange module and develop the view PDF module as we planned in the planning phase.
4) We develop the code for perform different validations on various input fields which take input of the user as registration and selling book page.
5) Then We develop the code for the inserting the data input from the user into the specified database tables.
6) We develop the code using JSP to retrieve data and images from database and display into the buying module pages.
7) We attach the payment module and then insert the payment details in the payment table of the database.
8) After completing all pages, we linked all pages to each other and combine our project.

Chapter 5: Proposed Detailed Methodology

5.1. System Architecture/Design:

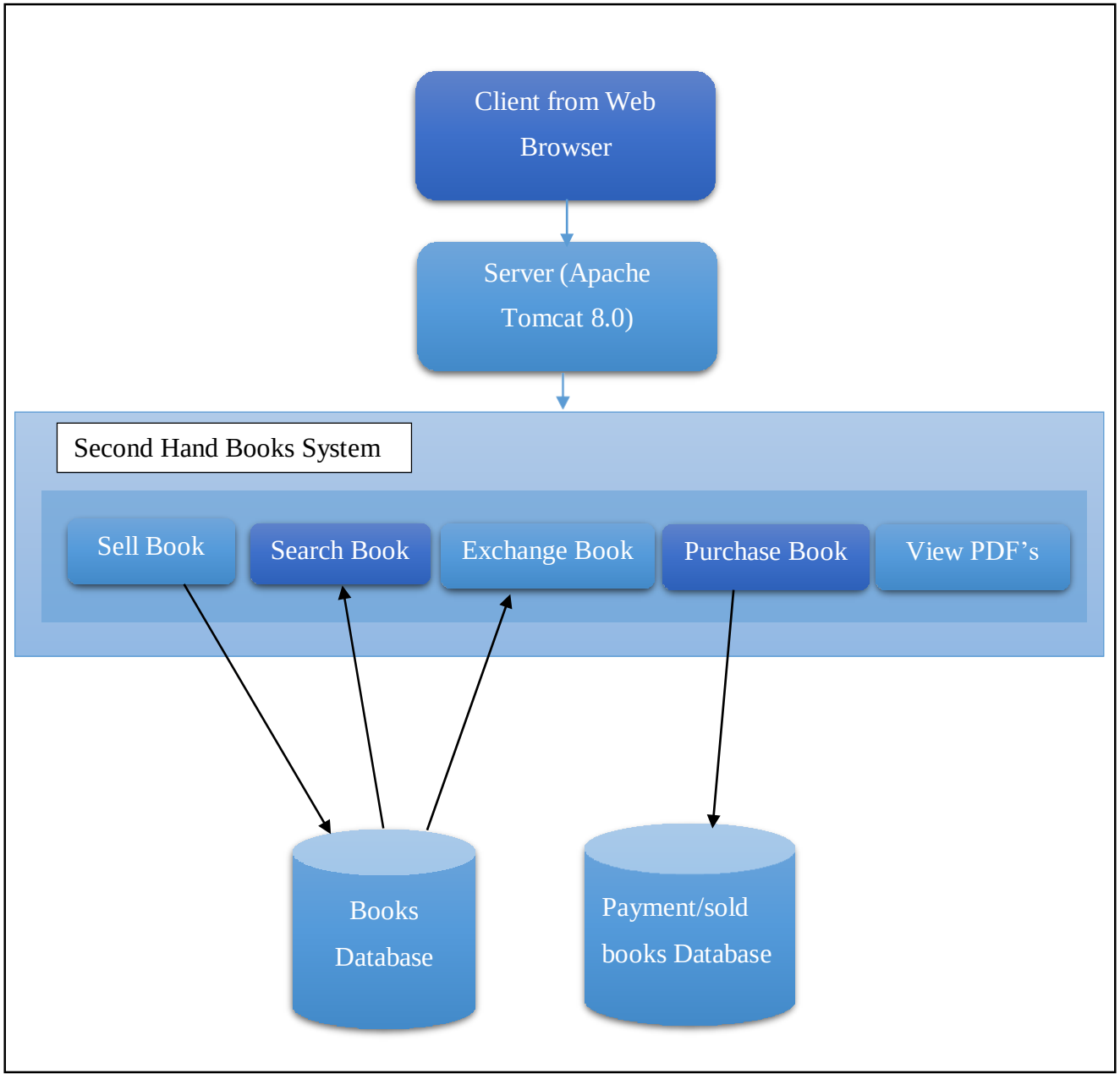


Fig.2. Architecture of Online Second Hand Books Website

5.2. UML's:

5.2.1. DFD

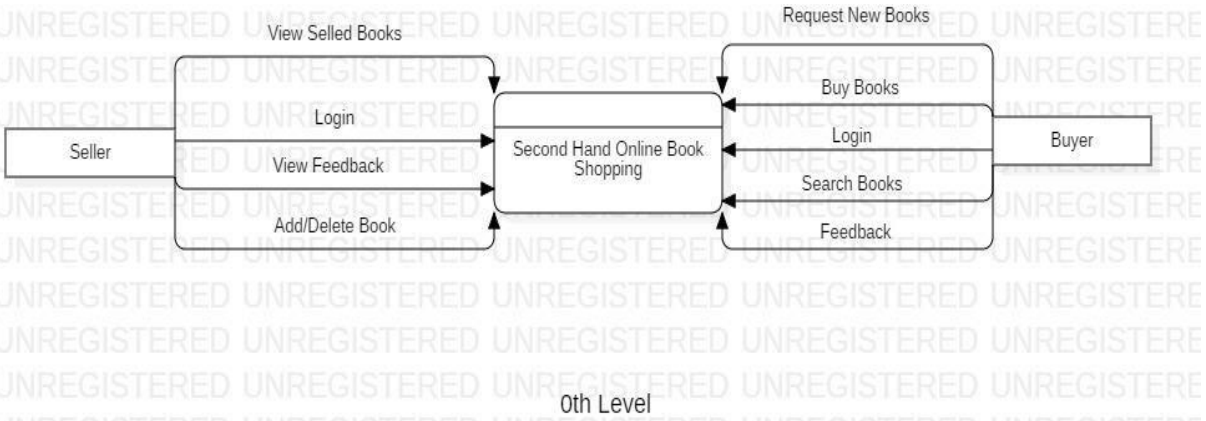


Fig.3. 0th Level DFD

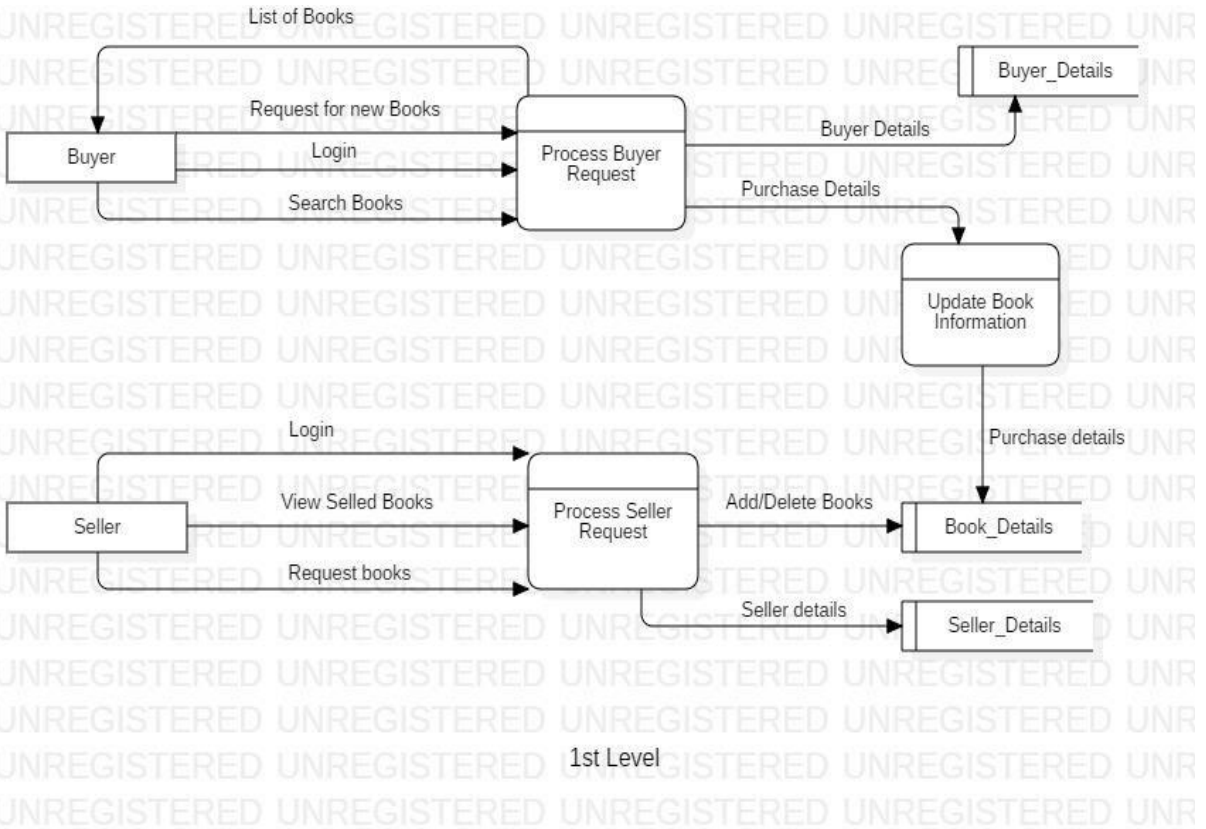


Fig.4. 1st Level DFD

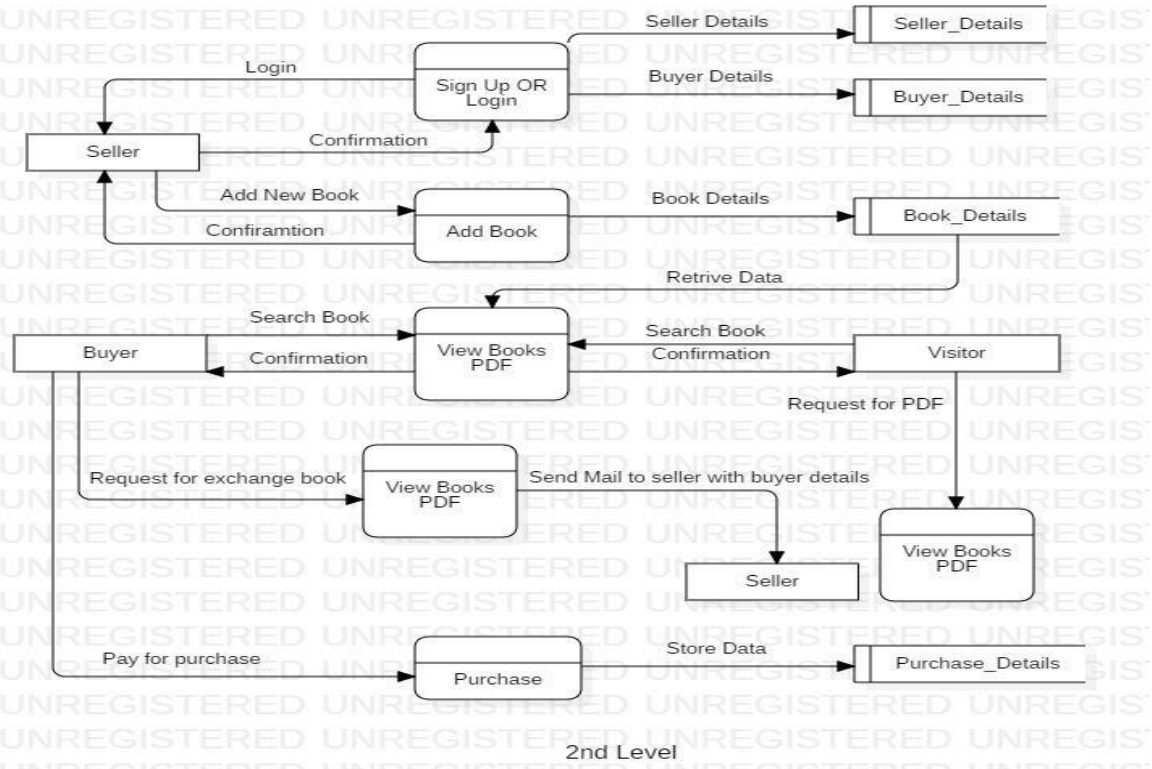


Fig.5. 2nd Level DFD

5.2.2. Use Case Diagram

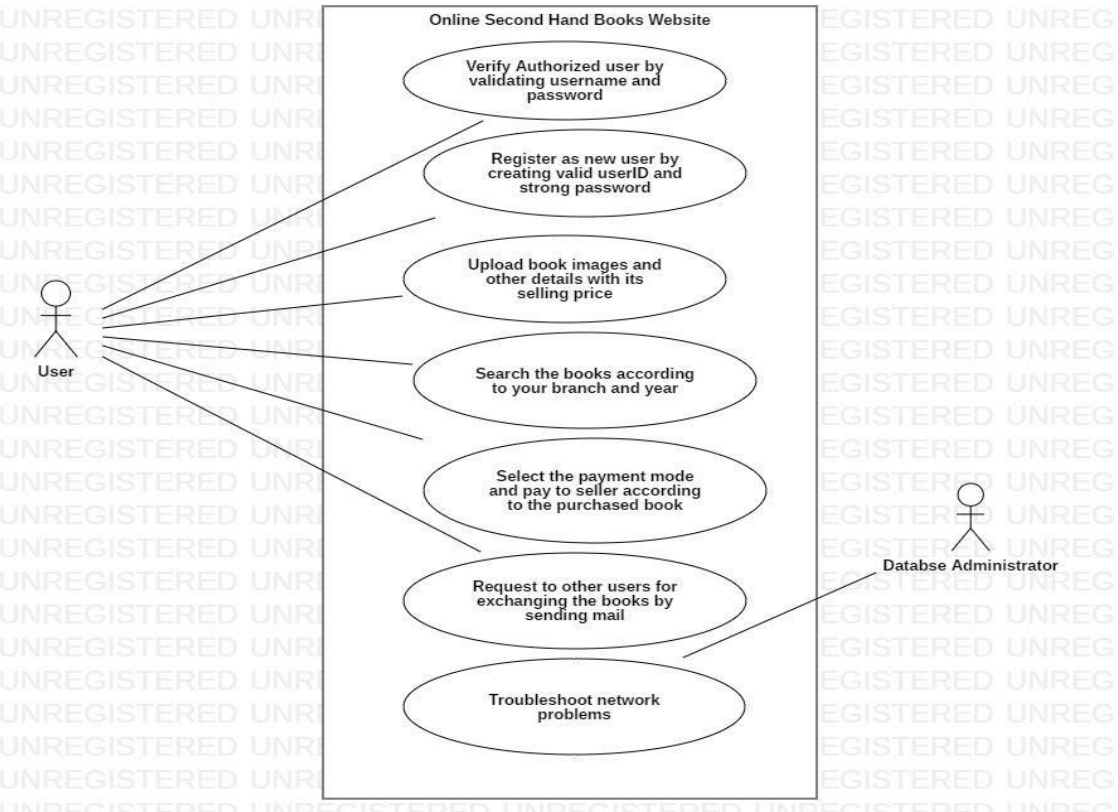


Fig.6. Use Case Diagram

5.2.3 Activity Diagram

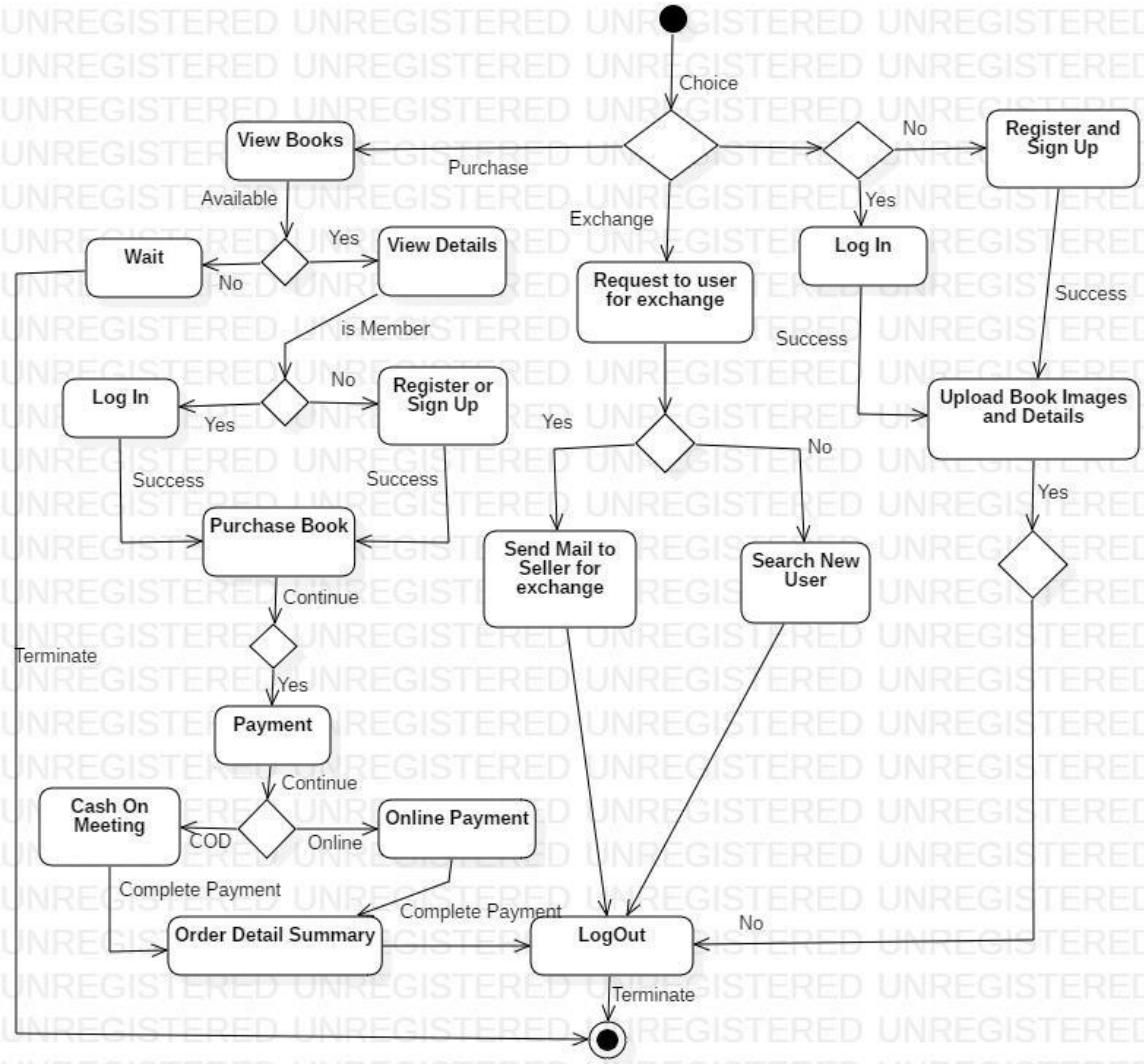


Fig.7. Activity Diagram

5.3. Modules:

5.3.1. Admin Module:

Admin will use this application to give them access to the person who wants to purchase books and make a contribution by selling old books, the even admin will add new data regarding books so that the user can easily access it and purchase the books on demand.

Specifications:

1. Admin can approve the request who want to purchase or sell the book.
2. Admin have all authorities regarding the seller and buyer details and their existence in the system.

3. Admin can check the feedbacks of the buyer.

5.3.2. Member Login Module:

This option of the system will help the user to get a login and check the notifications if any wants to sell the book or wants to purchase the book to the buyer and seller respectively.

Specifications:

1. In this module if the new user wants to use this system then, create new user account option will be enabled for him/her.
2. If the user has its account already then he/she can login into the system by his/her valid username and password.
3. Log in and log out functionality will be provided.
4. User can change and create new password.

5.3.3. Registration Module:

This option will be enabled only for those users who are new in the system and wants to part of the system.

Specifications:

1. In this module the new user will be able to create new account by filling the registration form.
2. User has an ability to make new username and password according to his/her choice.
3. User profile will be created.

5.3.4. Seller Module:

In this module all the seller details are stored and the seller can upload his/her books for selling.

Specifications:

1. Seller has an ability to check the feedback of the buyer regarding his/her book.
2. Seller can upload books and delete their own books uploaded.
3. Seller knows the status of their books uploaded.

4. Seller can get notification if any buyer wants to purchase the book uploaded by him/her.

5.3.5. Buyer Module:

In this module all the details of buyer will be stored and the buyer can check the books according to his/her requirements.

Specifications:

1. Buyer can get the notification regarding the book that he/she wants to purchase but at current time the book is not available.
2. Buyer can check his/her history regarding the purchase of the books.

5.3.6. Exchange Module:

In this module the books are displayed which the seller wants to exchange with their details. The buyer can request the seller by sending the e-mail to the seller with their all details for exchanging the books.

Specifications:

1. The books are displayed with their seller details.
2. The e-mail is send to seller for requesting the book exchange with buyer details.

5.3.7. View PDF Module:

This module allows the visitor to download or view the free PDF according to your branch. This PDF contains the reference books of each branch.

Specifications:

1. Search the books according to the branch.
2. Free download and view PDF.
3. PDF of reference books are available.

5.3.8. Payment Module:

Considering the fact that the website is small for now and to make it easy for people to trust the website by giving out their credit card numbers and actually buy books on this website we will outsource financial handling to trusted and well known online payment service called as Net Banking.

Specifications:

1. Buyer pays to seller account directly.
2. Buyer gets feedback about the process.
3. Seller gets informed that account is credited.

5.4. Database Design:

Tables in Database:

Users	
Field	**Description**
Name	Varchar (45)
Password	Varchar (45)
Address	Varchar (50)
Pincode	Varchar (45)
State	Varchar (45)
Postalcode	Varchar (45)
Phone	Integer

Table 5.4.1 Schema of Users Table

LoginDetails	
Field	**Description**
Email ID	Varchar (45)
Password	Varchar (45)

Table 5.4.2 Schema of LoginDetails Table

CO	
Field	**Description**
branch	Varchar (45)
Year	Varchar (45)
Mode	Varchar (50)
Bookcount	Varchar (45)
Title	Varchar (45)
Description	Varchar (45)
OriginalPrice	Integer
Price	Integer

BookImage	BLOB
SellerName	Varchar (45)
Contact	Integer

Table 5.4.3 Schema of Computer Branch Table

CE	
Field	**Description**
branch	Varchar (45)
Year	Varchar (45)
Mode	Varchar (50)
Bookcount	Varchar (45)
Title	Varchar (45)
Description	Varchar (45)
OriginalPrice	Integer
Price	Integer
BookImage	BLOB
SellerName	Varchar (45)
Contact	Integer

Table 5.4.4 Schema of Civil Branch Table

ME	
Field	**Description**
branch	Varchar (45)
Year	Varchar (45)
Mode	Varchar (50)
Bookcount	Varchar (45)
Title	Varchar (45)
Description	Varchar (45)
OriginalPrice	Integer
Price	Integer
BookImage	BLOB
SellerName	Varchar (45)

Contact	Integer

Table 5.4.5 Schema of Mechanical Branch Table

EE	
Field	**Description**
branch	Varchar (45)
Year	Varchar (45)
Mode	Varchar (50)
Bookcount	Varchar (45)
Title	Varchar (45)
Description	Varchar (45)
OriginalPrice	Integer
Price	Integer
BookImage	BLOB
SellerName	Varchar (45)
Contact	Integer

Table 5.4.6 Schema of Electrical Branch Table

ET	
Field	**Description**
branch	Varchar (45)
Year	Varchar (45)
Mode	Varchar (50)
Bookcount	Varchar (45)
Title	Varchar (45)
Description	Varchar (45)
OriginalPrice	Integer
Price	Integer
BookImage	BLOB
SellerName	Varchar (45)
Contact	Integer

Table 5.4.7 Schema of Electronics & Telecommunication Branch Table

INSTRU	
Field	**Description**
branch	Varchar (45)
Year	Varchar (45)
Mode	Varchar (50)
Bookcount	Varchar (45)
Title	Varchar (45)
Description	Varchar (45)
OriginalPrice	Integer
Price	Integer
BookImage	BLOB
SellerName	Varchar (45)
Contact	Integer

Table 5.4.8 Schema of Instrumentation Branch Table

SoldBooks	
Field	**Description**
BuyerName	Varchar (45)
BookName	Varchar (45)
Price	Integer
SellerName	Varchar (45)
Contact	Integer
PaymentMode	Varchar (45)
Branch	Varchar (45)
Year	Varchar (45)

Table 5.4.9 Schema of SoldBooks Table

5.5. Code:

- Seller Module:

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
```

```
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<%@ page import ="java.sql.*" %>
<%@ page import ="javax.sql.*" %>
<%@ page import ="java.io.*" %>
<%@ page import ="java.io.File" %>
<%@ page import ="java.io.FileInputStream" %>
<%
FileInputStream fs=null;
File file=null;
String query=null;
String branch=request.getParameter("branch");
String year=request.getParameter("year");
String bookcount=request.getParameter("txtCount");
String title=request.getParameter("txtTitle");
String description =request.getParameter("txtDis");
String originalprice=request.getParameter("txtOri");
//String discount=request.getParameter("txtDiscount");
String price=request.getParameter("txtPrice");
String myimg=request.getParameter("img1");
String mode=request.getParameter("mode");
String seller=request.getParameter("txtName");
String contact=request.getParameter("txtMob");
String email=request.getParameter("txtEmail");
//out.print(branch);
//out.print(myimg);
 Class.forName("com.mysql.jdbc.Driver");
java.sql.Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/cpe","root","root");

if(branch.equals("CE")){
    query="INSERT INTO CE VALUES(?,?,?,?,?,?,?,?,?,?,?,?,?)";
}
if(branch.equals("CO")){
    query="INSERT INTO CO VALUES(?,?,?,?,?,?,?,?,?,?,?,?,?)";
}
if(branch.equals("EE")){
    query="INSERT INTO EE VALUES(?,?,?,?,?,?,?,?,?,?,?,?,?)";
}
if(branch.equals("ET")){
    query="INSERT INTO ET VALUES(?,?,?,?,?,?,?,?,?,?,?,?,?)";
}
if(branch.equals("IS")){
    query="INSERT INTO instru VALUES(?,?,?,?,?,?,?,?,?,?,?,?,?)";
}
if(branch.equals("ME")){
    query="INSERT INTO ME VALUES(?,?,?,?,?,?,?,?,?,?,?,?,?)";
}
```

```
PreparedStatement ps = con.prepareStatement(query);
ps.setString(1,branch);
ps.setString(2,year);
ps.setString(3,mode);
ps.setString(4,bookcount);
ps.setString(5,title);
ps.setString(6,description);
ps.setString(7,originalprice);
//ps.setString(8,discount);
ps.setString(8,price);
String path="C:/Users/MAHESH/Pictures/"+myimg;
file = new File(path);
//out.print(file);
fs = new FileInputStream(file);
//ps.setBlob(9,fs,fs.available());
ps.setBinaryStream(9, (InputStream)fs, (int)(file.length()));
ps.setString(10,path);
ps.setString(11,seller);
ps.setString(12,contact);
ps.setString(13,email);
int i = ps.executeUpdate();
response.sendRedirect("index.jsp");
//out.print("Congratulations...!!!");
//out.print(myimg);
%>
</body>
</html>
```

- Buyer Module:

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
   pageEncoding="ISO-8859-1"%>
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Online Second Hand Books</title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" href="https://fonts.googleapis.com/css?family=Raleway">
<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.min.css">
<link rel="stylesheet" type="text/css" href="DeptStyles.css">
</head>
<body>
<%@ page import ="java.sql.*" %>
<%@ page import ="javax.sql.*" %>
<%@ page import ="java.io.*" %>
<%@ page import ="java.io.File" %>
<%@ page import ="java.io.FileOutputStream" %>
<%
try{
```

```
		String user=session.getAttribute("userId").toString();
		//out.println(user);
		}catch(Exception e){
			out.print("<script>alert('Login into the System first...!')</script>");
			response.sendRedirect("login.jsp");
		}
%>
 <!--First Menu Bar-->
<div class="topnav" id="home">
   <a style="margin-left: 30%;">Icon</a>
   <input type="text" placeholder="Search..." name="search"/>
   <button type="submit"><i class="fa fa-search"></i></button>
</div>
  <!--Second Menu Bar-->
<div class="navbar">
  <a href="index.jsp" style="margin-left: 27%;">Home</a>
  <div class="dropdown">
    <button class="dropbtn">Books
      <i class="fa fa-caret-down"></i>
    </button>
    <div class="dropdown-content">
      <div class="header">
        <h2>Diploma Books Categories</h2>
      </div>
      <div class="row">
        <div class="column">
          <h4>Computer Engineering</h4>
          <a href="co.jsp">FY CO</a>
          <a href="co.jsp">SY CO</a>
          <a href="co.jsp">TY CO</a>
        </div>
        <div class="column">
          <h4>Mechanical Engineering</h4>
          <a href="me.jsp">FY ME</a>
          <a href="me.jsp">SY ME</a>
          <a href="me.jsp">TY ME</a>
        </div>
        <div class="column">
          <h4>Civil Engineering</h4>
          <a href="ce.jsp">FY CE</a>
          <a href="ce.jsp">SY CE</a>
          <a href="ce.jsp">TY CE</a>
        </div>
        <div class="column">
          <h4>Electrical Engineering</h4>
          <a href="ee.jsp">FY EE</a>
          <a href="ee.jsp">SY EE</a>
          <a href="ee.jsp">TY EE</a>
        </div>
        <div class="column">
```

```
        <h4>ENTC Engineering</h4>
        <a href="entc.jsp">FY EJ</a>
        <a href="entc.jsp">SY EJ</a>
        <a href="entc.jsp">TY EJ</a>
       </div>
       <div class="column">
        <h4>Instrumentation Engineering</h4>
        <a href="is.jsp">FY IS</a>
        <a href="is.jsp">SY IS</a>
        <a href="is.jsp">TY IS</a>
       </div>
     </div>
   </div>
  </div>
  <a href="seller_final.jsp">Sell</a>
  <a href="exchange.jsp">Exchange</a>
  <a href="COebook.html">E-Book</a>
  </div>
<div class="section-row">
   <div class="page-container">
   <div class="section-column left">
    <div class="department">
     <br>
     <h1 style="font-size: xx-large;">Computer Engineering</h1><br>
     <center><h2><a href="#fy" style="color: white;text-decoration: none;">First
Year</a></h2>
     <h2><a href="#sy" style="color: white;text-decoration: none;">Second
Year</a></h2>
     <h2><a href="#ty" style="color: white;text-decoration: none;">Third
Year</a></h2></center>
    </div>
   </div>
  <div class="section-column right">
   <div class="content">
   <%
   Class.forName("com.mysql.jdbc.Driver");
   java.sql.Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/cpe","root","root");
   Statement st=con.createStatement();
   byte[] imgdata=null;
   //OutputStream o=response.getOutputStream();
   ResultSet rs=st.executeQuery("select * from co");
    %>
    <div class="dept-row">
    <%
          while(rs.next()){
               Blob image=null;
               image=rs.getBlob("bookimage");
               imgdata=image.getBytes(1, (int)image.length());
               String path=image.toString();
```

```
                    //o.write(imgdata);
                    //o.flush();
                    //out.println("<img src='"+image.toString()+".jpeg'>");
                %>
                <div class="dept-column">
                        <div class="card">
                  <img src="<%=rs.getString("imagepath") %>" alt="Book"
width="100px" height="100px"/>
                  <h1><%= rs.getString("title") %></h1>
                  <p class="price"><i class="fa fa-rupee"></i><%=
rs.getString("price") %></p>
                  <p><%= rs.getString("description") %></p>
                  <p><a href="payment.jsp?value=<%=
rs.getString("title")%>&seller=<%= rs.getString("sellername")%>&branch=<%=
rs.getString("branch")%>"><button>Buy Now</button></a></p>
            </div>
          </div>
       <%
    }
    %>
    </div>
</div>
 </div>
</body>
</html>
```

Chapter 6: Results and Applications

6.1. Testing

6.1.1. Unit Testing

As the unit testing is performed at the individual units of the system. Unit testing is performed on this system's smallest units as the text fields validations for taking the proper input from the user.

Sample Test Case 1*:*

Positive Testing – Check the confirm password field of the registration page as it compares the values of password field and confirm password field and if it is same then accept that password.

Input – Enter same text in password and confirm password field.

Output –

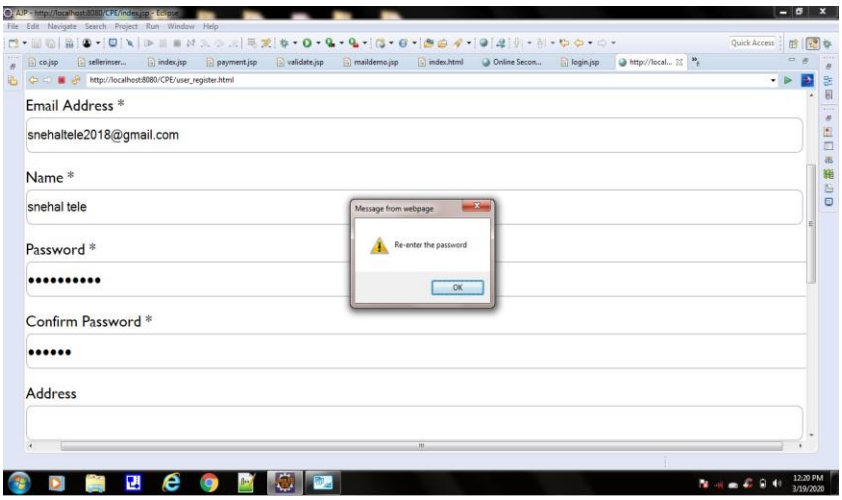


Fig.8 Output of unit test 1

Result – Pass

Sample Test Case 2:

Negative Testing – Check the validation of mobile number text field. If the mobile number is greater than 10 it should give alert message and does not accept that number.

Input – 11-digit mobile number.

Output –

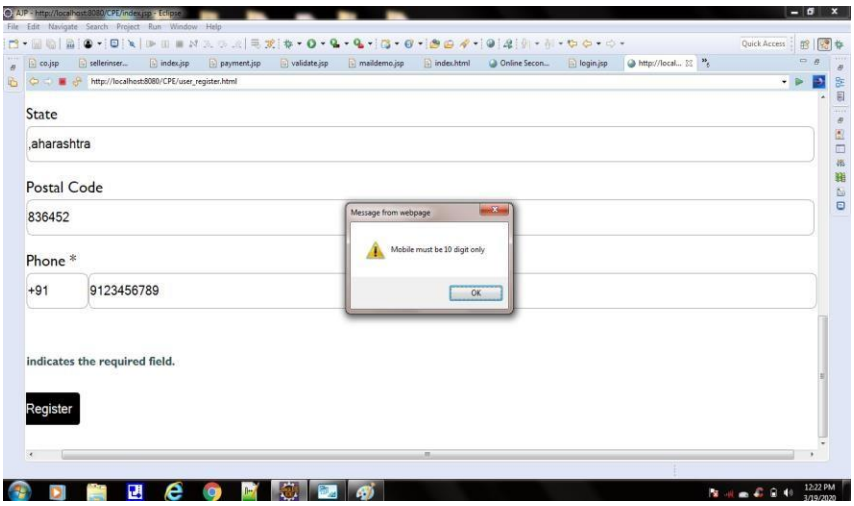


Fig.9 Output of unit test 2

Result – Pass.

6.1.2. Integration Testing

As the integration testing is performed by combining individual units and tested as a group. We performed the integration testing on two phases as the component integration testing and system integration testing.

Component Integration Testing:

Sample Test Case 1:

Checks the functionality of seller module as when the seller sells the book by entering the details of the book and after selling that book the book will be displayed in the page according to the branch entered by the seller with details.

Input – Enter the valid book details on sell book page.

Output –

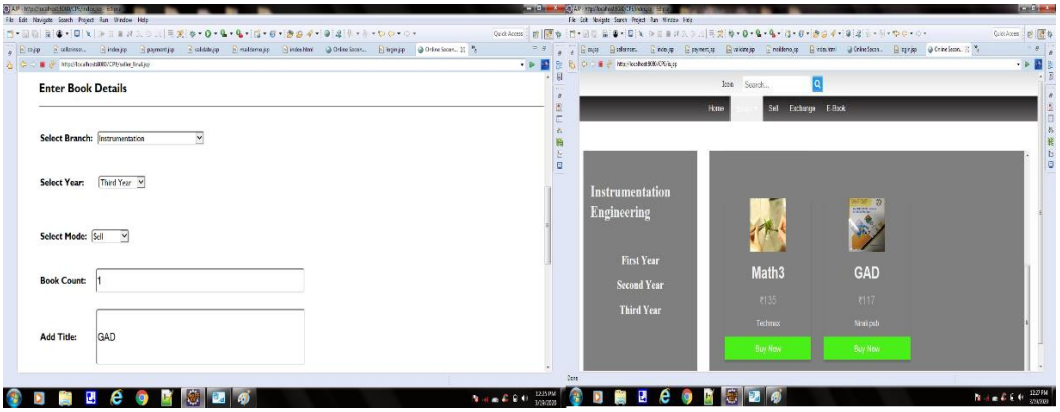


Fig.10 Output of integration test 1

Result – Pass.

System Integration System:

Sample Test Case 1:

Checks the functionality provided by buyer module when the buyer purchases the book and in the payment module the payment mode is chosen as net banking then according to the bank selected the bank website will be opened.

Input – Chose the payment mode as Net Banking and click on the bank image.

Output –

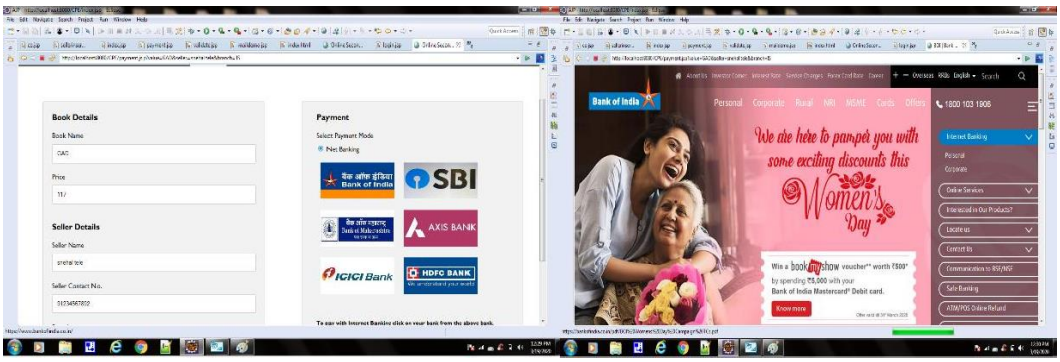


Fig.11 Output of integration test 1

Result – Pass.

6.1.3. System Testing

As the system testing contains Performance testing, Load testing, Stress testing, Scalability testing which would decide the specific limit to the system. For this we use Apache JMeter software to test our system to identify its limit and find out its strong and weak points, we use the automated tool for system testing.

From above testing we finally conclude that the at one time the 100 people can visit the site at 101th person the system gives the low response to load and works slowly.

6.1.4. Acceptance Testing

As the acceptance testing is to evaluate the system's compliance and the business requirements. The acceptance testing is performed by giving our system to the end user and checks the overall functionality of the system.

Sample Test Case 1:

Check the actual functionality provided for buyer from buyer module. First login to the system and find out your branch and buy your selected book and select the payment mode as cash on meeting and again check that book in the system it should be consider as sold and removed from the system.

Input – Follow each process for purchasing book.

Output –

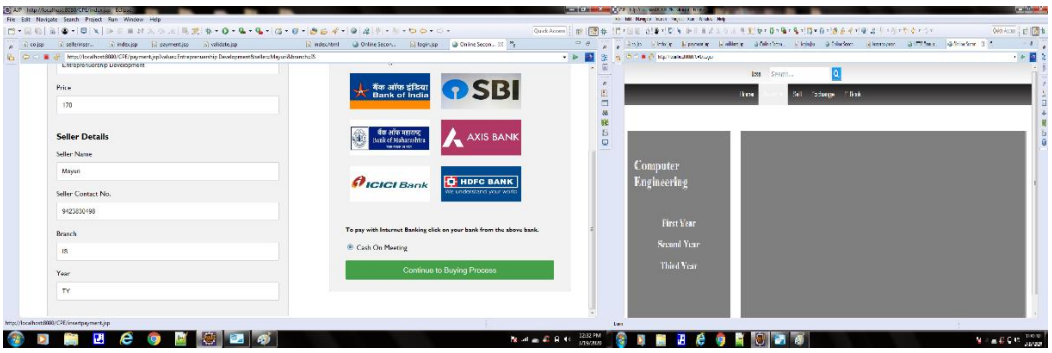


Fig.12 Output of acceptance test 1

Result – Pass.

6.2. Snapshots

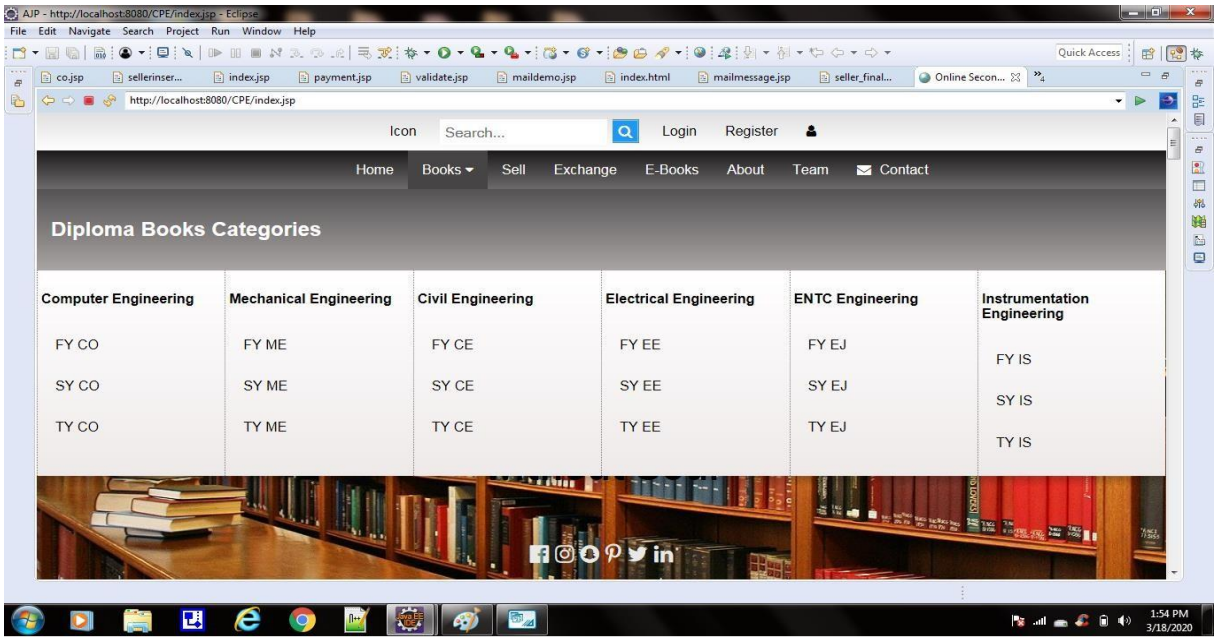


Fig.13. Home Page

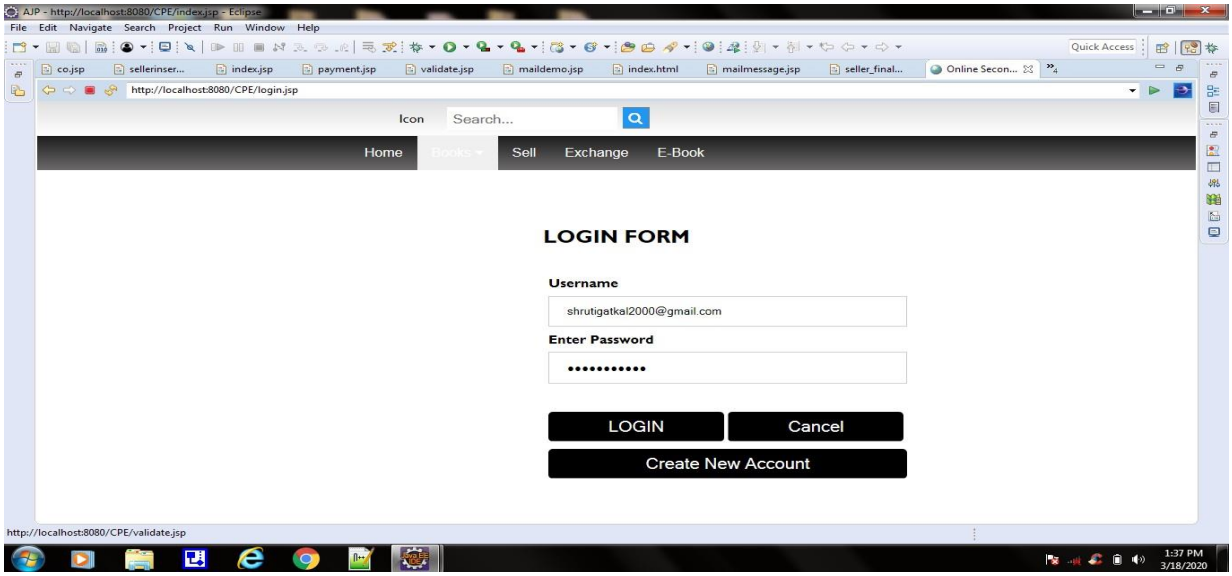


Fig.14. Login Page

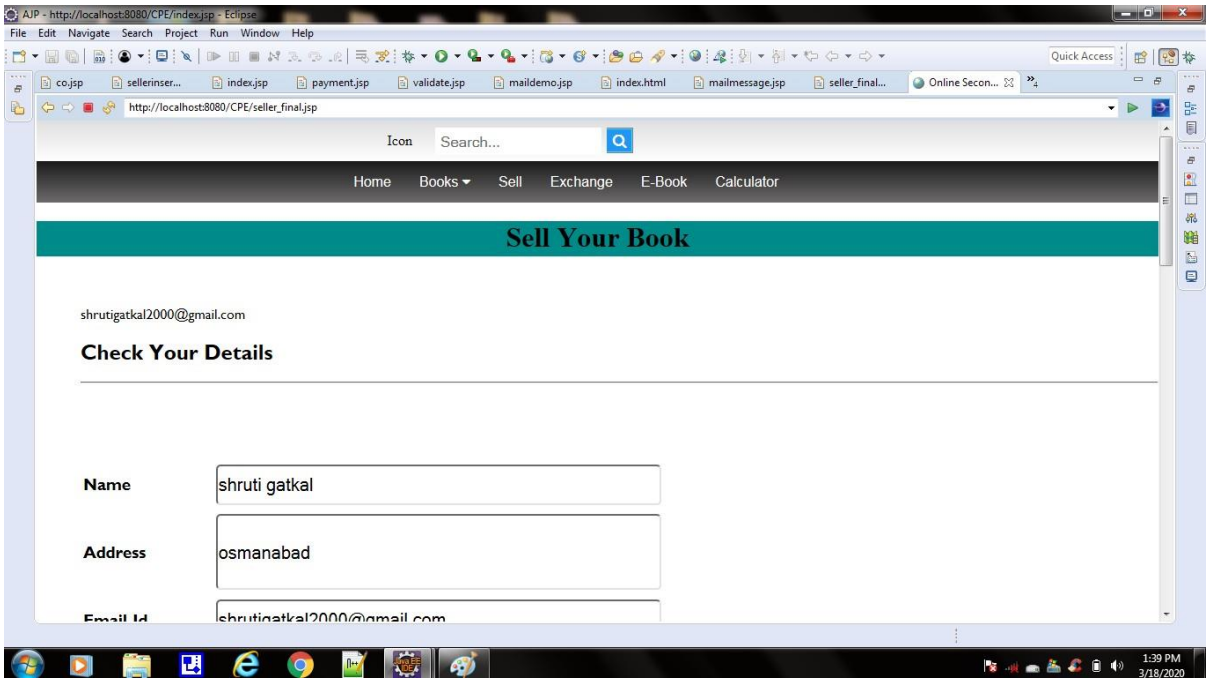


Fig.15. Selling Module

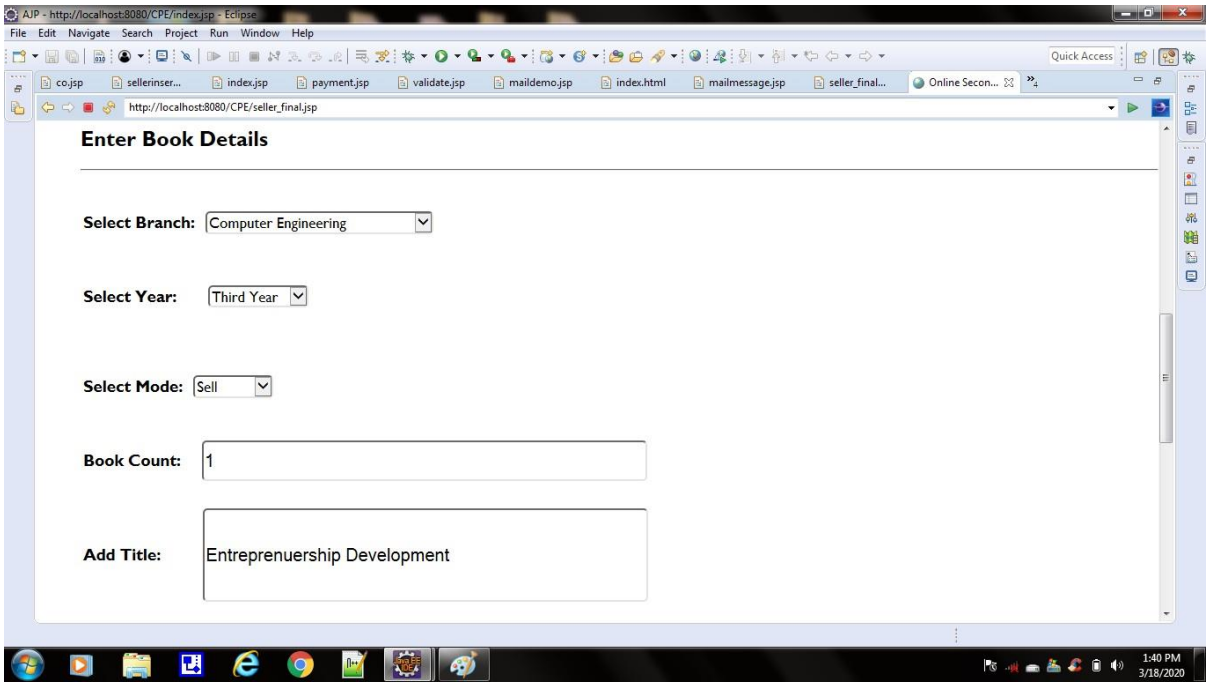


Fig.16. Entering Details of Book in selling page

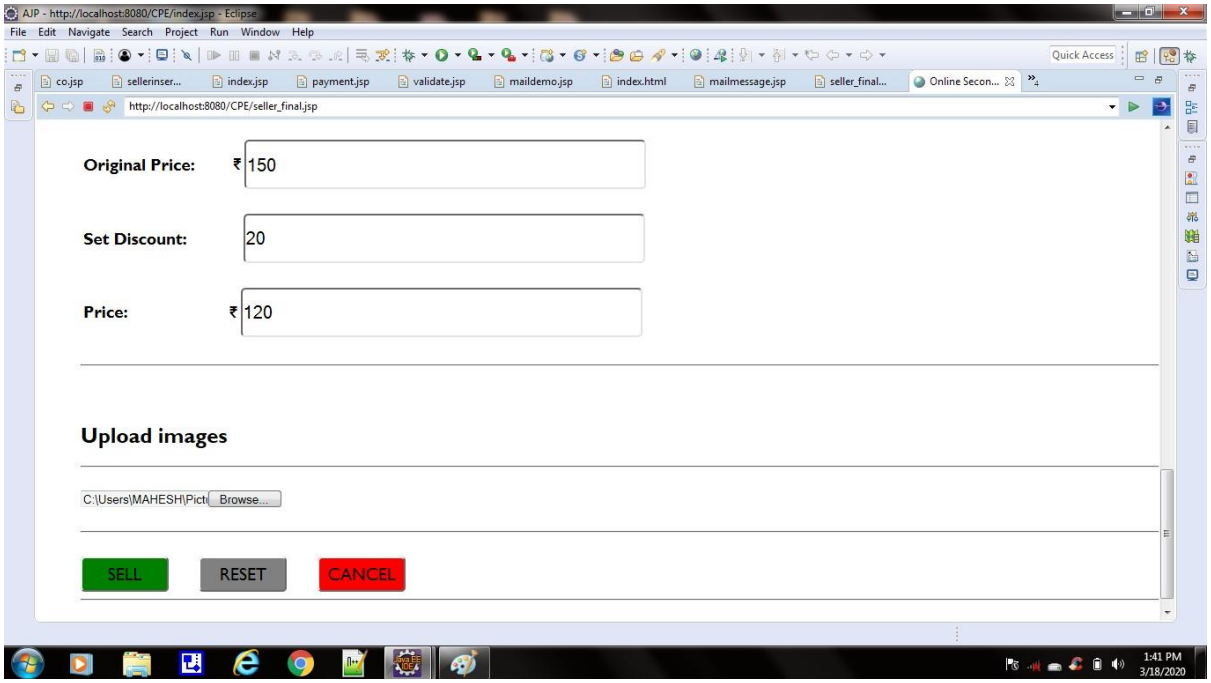


Fig.17. Uploading book image in selling module.

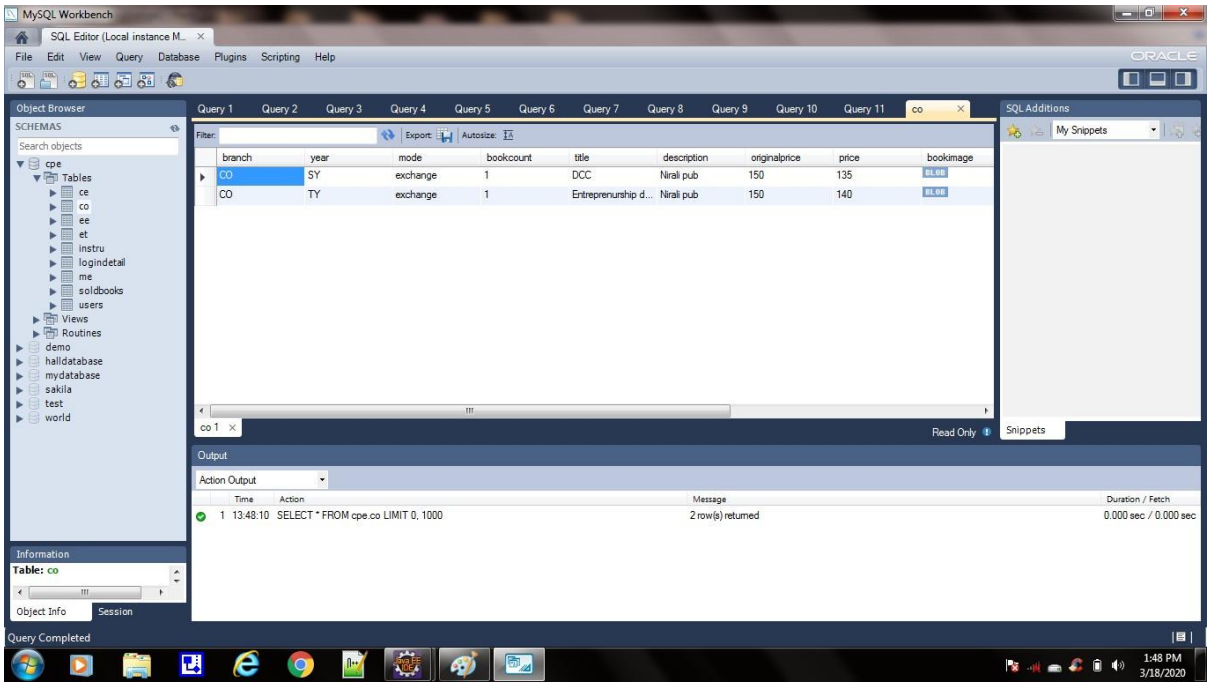


Fig.18. Store the data of book in database according to branch

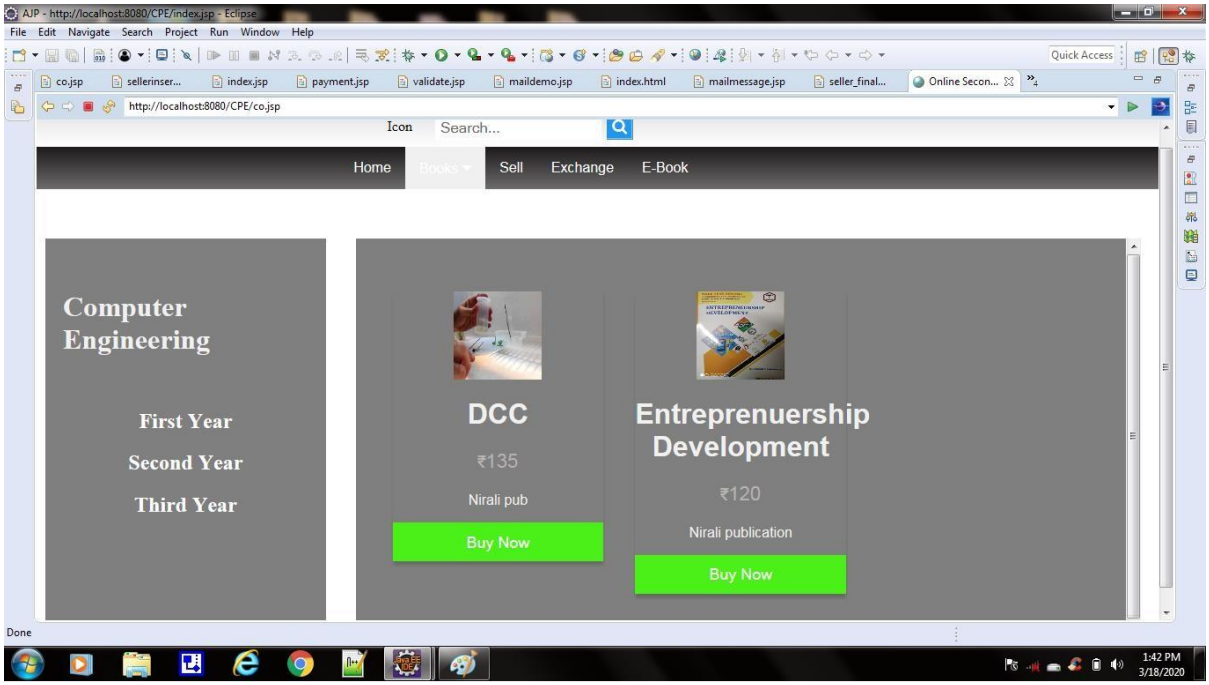


Fig.19. Search books according to the branch for buying

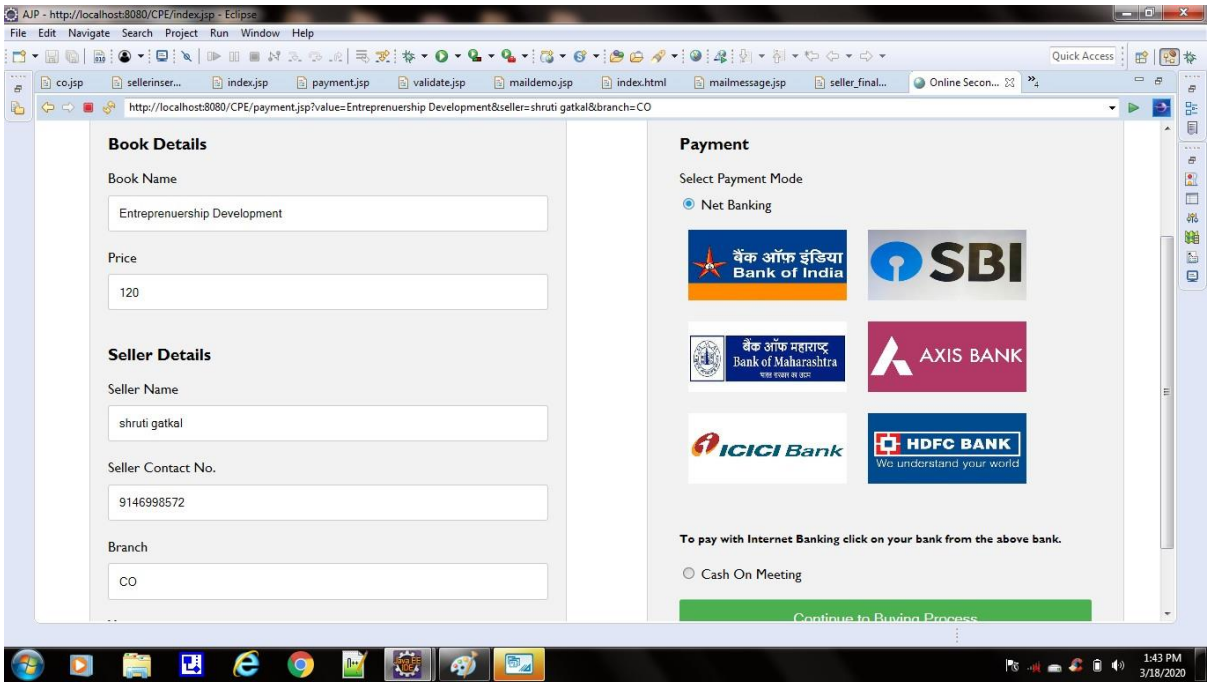


Fig.20. Payment Page

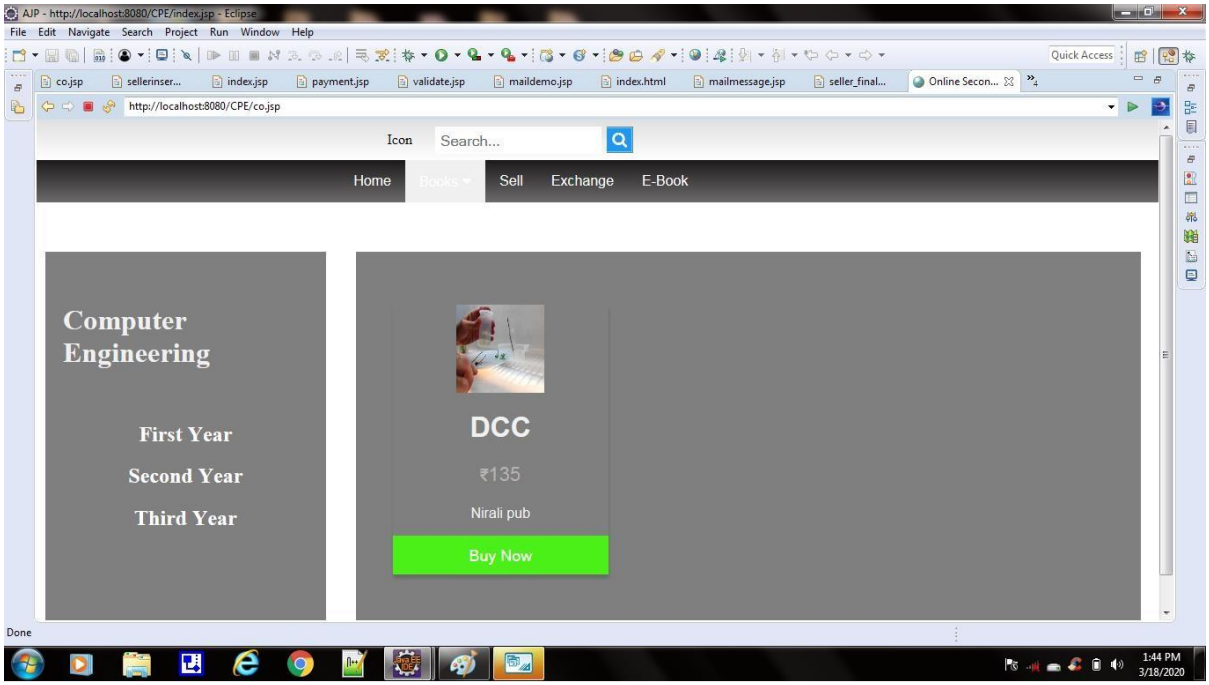


Fig.21. Buying module after book was sold

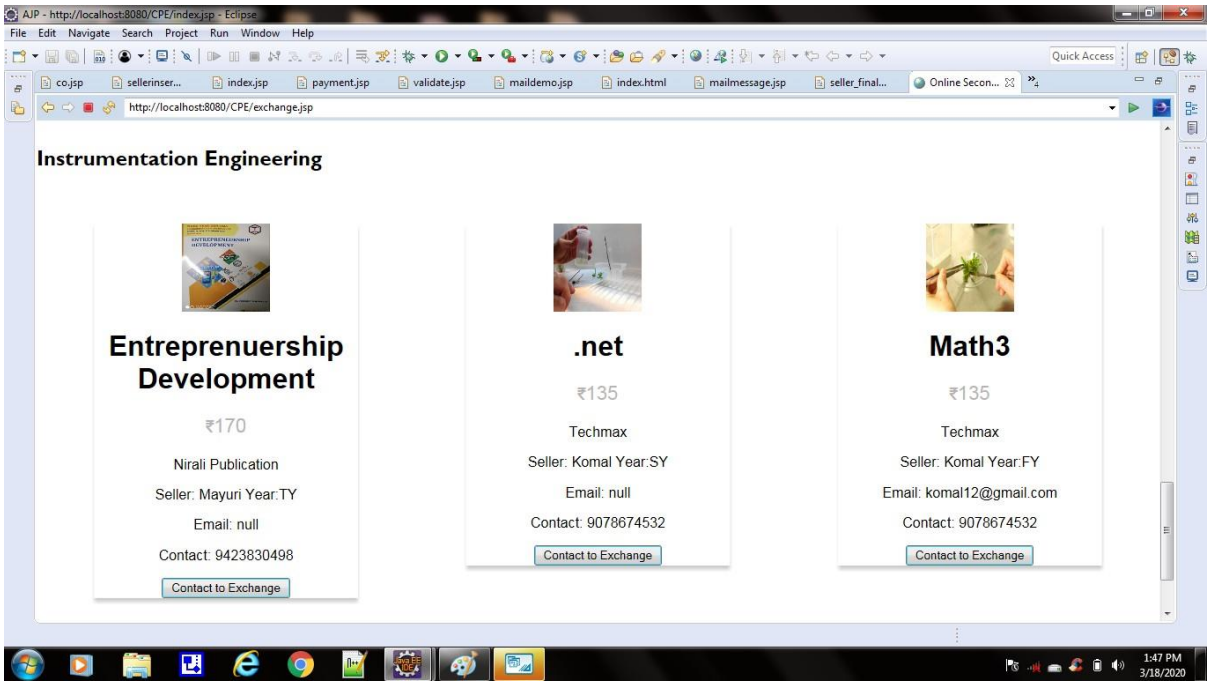


Fig.22. Exchange Module

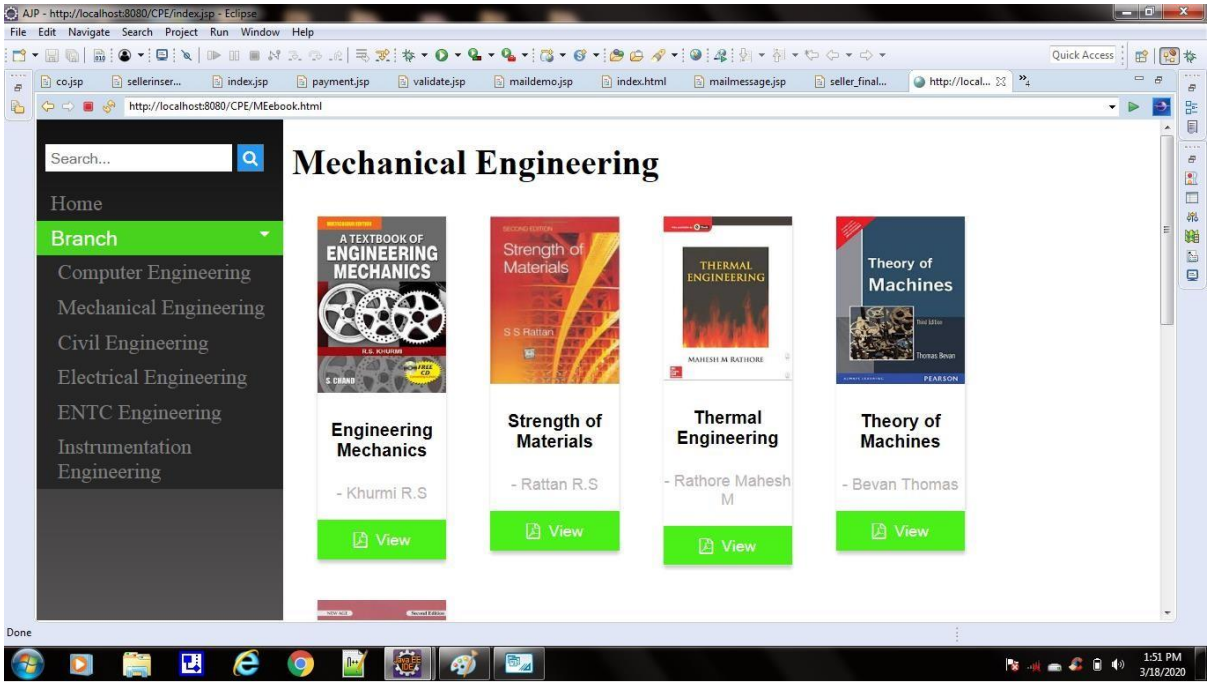


Fig.23. View PDF page

6.3. Applications

1) This system can be used for college purpose as students require books from their seniors but because of their busy schedule of college they don't interact properly. So, this system provides platform for those students.
2) This project is applicable to engineering students specially for the diploma students who have some economic problem and doesn't afford the reference book. So the system gives the facility to view or download free PDF of reference books.
3) The exchange module provides the student for exchange their books for reading purpose also.
4) For communication it provides the SMS and email facility to provide feedback and communicate for exchanging books.

Chapter 7: Conclusions and Future Scope

7.1. Conclusion

Our goal was to create an application where people will upload books and be able to sell them and buy them. Online Second hand books Buying and Selling System is an online web application where the customers can sell and buy old books, exchange their old books and also can access the online free pdfs of the books. With the goals achieved the basis of application and this project has been achieved. Building this web application has been enriching because throughout the project we learnt lot about JSP (Java Server Page) framework. We have tried to our level best to make the system an interactive as possible. Careful planning made our job easier because we had carefully think about the type of architecture, the design and the database type to use. When this was done we proceeded with implementation.

Existing systems are able to buy and sell books, but our system provides a facility to exchange the books. It provides a friendly graphical user interface which probes to better so, it is easy to use for users with little knowledge of computer. The developed system is feasible and changes whenever can be made easy. The speed and accuracy are maintained in proper way. This application is efficient in maintaining the all the records regarding to customers, available books, sold books and can easily perform operations on this records. This software also reduces the load for searching second hand book sellers and buyers manually. As the system allows only registered users to buy and sell books, the data security will be get maintained. The system is also economically feasible.

7.2. Future Scope

1) Now a day's people are more interested in online shopping. As the system is reliable to buy online books peoples can use the system.
2) It is possible the implementation is not only for limited books. Planning can be expanding it for not only for academic books but also for other non-academic books such as articles, magazines etc. in future.
3) In future, this website is accepted and being used properly by peoples especially by the students.
4) The administrator of the website can be given more functionalities, like search directly for the books, looking at a specific customer's profile.

5) The development of this project surely prompts many new areas of investigations. This project has wide scope to implement it in any ecommerce website.
6) We can also be planning to provide the user with the facility of online chat system.
7) Seller wise books can be maintained in the future.
8) We can add the payment gateways and debit/ credit card payment options in future.

Chapter 8: Reference and Bibliography

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