A Mini Project Report on

Apsit Bookstore

Submitted in partial fulfillment of the requirements for the award of
the degree of

Bachelor of Engineering

In

Computer Engineering

by

Anjali Divekar (20102105)
Mansi Gupta (20102133)
Shivangi Kumar (20102132)
Vaishnavi Kothari (20102138)

Under the Guidance of

Prof. Bharti Khemani

Department of Computer

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UNIVERSITY OF MUMBAI
Academic Year 2021-2022

Approval Sheet

This Mini Project Report entitled ***"Apsit Bookstore"*** Submitted by ***"Anjali Divekar" (20102105), "Mansi Gupta" (20102133), "Shivangi Kumar" (20102132), "Vaishnavi Kothari" (20102138)*** is approved for the partial fulfillment of the requirement for the award of the degree of ***Bachelor of Engineering*** in ***Computer Engineering*** from ***University of Mumbai***.

Prof. Bharti Khemani
(Guide)

Prof. Sachin H Malave
(Head Department of Computer Engineering)

Place: A.P. Shah Institute of Technology, Thane
Date:

CERTIFICATE

This is to certify that the mini project entitled "***Apsit Bookstore" submitted*** by ***"Anjali Divekar" (20102105), "Mansi Gupta" (20102133), "Shivangi Kumar" (20102132), "Vaishnavi Kothari" (20102138)*** for the partial fulfillment of the requirement for award of a degree ***Bachelor of Engineering*** in ***Computer Engineering***, to the University of Mumbai, is a Bonafide work carried out during academic year 2021-2022.

Prof. Sachin H Malave
(Head Department of Computer Engineering)

Dr. Uttam D. Kolekar
(Principal)

External Examiner(s)

1.

2.

Place: A. P. Shah Institute of Technology, Thane

Date:

Declaration

We declare that this written submission represents our ideas in our own words and where others' ideas or words have been included, we have adequately cited and referenced the original sources. We also declare that We have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in our submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

_____

(Signature)

_____

(Anjali Divekar 20102105)
(Mansi Gupta 20102133)
(Shivangi Kumar 20102132)
(Vaishnavi Kothari 20102138)

Date:

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1. Introduction

Currently as being students ourselves we can say that it is quite tricky to find the reference books on our own. Many a times they are unavailable in the library and if you go to buy books from the market then their costs are quite high. The soft copies available in the internet are all scattered and unordered and many sites offering these soft copies are not free. Also, many sites are not trustable.

To resolve these issues, we have come up with the project of APSIT Bookstore where all the softcopies of the books recommended by Mumbai University are provided. They are classified anduploaded on the website in ordered and classified manner. This gives the users the ease of access of every book. The users are provided the access to the website by the admin. Users also have the privilege of leaving reviews subject wise and also on the overall performance of the website.

1.1 Abstract:

This project aims at creating efficient and reliable online reference books and text books accessing platform for computer engineering students of A. P. Shah Institute of Technology. After the implementation of this project, the users can access the soft copy of any available book in the store from anywhere. They will be provided login by the admin through the admin portal. Once they are provided with the login, they can access any book they wish to.

Currently, the study materials are scattered all over the internet or are sometimes not available in the library and some books are too costly to afford. This project allows the pdf of the books to be present in one single platform and for free. The books are classified year and their respective semester wise. The use of the proposed online software keeps the record of the books suggested by Mumbai University.

1.2 Problem Definition:

The current system involves a physical showroom where a customer searches for his requiredbook and purchases them. This process requires every aspect (customer, book, money, seller)to be physically present at the sales spot. The aim of this project is to build a website as the frontend of a bookstore and admin panel and reviews as frontend as well as backend to eliminate this physical presence at sales spots and to make accessing the study materials easier.

1.3 Objective:

Here we try to develop such a type of system which provides automation on any type of the bookshop. It keeps the record of the stock of the books. It helps the customers to access the books without any complexity. It saves the time of the user by providing access to the bookstore from anywhere. The user can also give feedback to a book by giving rating on a score of five and can also write a review. This can be helpful for other users looking for some

of the good books of that subject.

1.4 Scope:

This project has a wide scope, it is intended for only the students of Computer Department ofApsit. This project is going to develop generic software, which can be applied by any businessorganization. It aims at reducing the user's searching time and also providing a user-friendlyenvironment.

Moreover, it provides the facility of searching through various books sorted category wise to its customers. Also, the software is going to provide a huge amount of summary data. It allowsthe admin to keep record of the available books and the list of users.

2. Existing System:

In the present system to generate the reports based on the management requirement, extensive searching of records is needed. Also, in the present system user and admin have to do all the work manually. During issuing order of more stock, the project register is required to check to availability of stock in hand and it takes time to check records. Many a times we have to wait a lot to issue or purchase a book if there is a lot of rush in libraries and stores. And sometimes the book we need to borrow or buy is also unavailable due to limited stock. The offline stores are restricted by time and also distance.

2.1 Literature Review:

[1] The existing system requires manual work and often turns out to be a waste of time. The software was developed to automate the current record-keeping system, which is the process of maintaining the daily records and transactions. The use of the proposed online software keeps the records of sales and stock books automatically in the database. There are many benefits for society and the environment too. It saves time and money. Reading from a PDF makes it portable. Your retail bookstore has a limited amount of space to hold and display certain book titles, which can restrict readers' choices. Having an online database allows you to offer a wide range of titles and increase their exposure to all the stock you have. The user can also give feedback. You can also rate a book by giving it a five-star rating and leaving a review. This can be helpful for customers who intend to purchase that particular book. The aim is to build a website as the front end of a bookstore to eliminate this physical presence at the sale spot and make purchasing a book easier. Even though book stores that sell books are fun places to spend time reading. But think of all the energy required to warm or cool such a large store. We can analyze and identify the benefits as it would directly influence the productivity of the store. It provides the required data quickly to the user and also in a specified manner to the user. All the information regarding book changes is given to the user, and the reports are also generated according to the user.

[2] E-books have now grow to be an necessary a part of library collections. E-books emerged little later than e-journals, but they've quickly turn out to be critical almost about library budgets, acquisition, cataloguing, offerings and usage. Users too are interested in this layout of studying material. Many stakeholders have hobby in e-books from one-of-a-kind factors of view. For example, the publishers and aggregators are interested in e-books as a marketplace commodity. The library professionals are keenly interested by e-books as a brand-new layout to serve customers and every other possibility to increase their offerings. Researchers from many different issue regions too are interested by this new conversation layout. Quick to study and smooth to manipulate formats, aesthetics, 'task-era fit`, everywhere whenever availability, user friendliness, etc. are a number of the not unusual place motives for using e-books. Being capable of use even if the library is closed and might be used concurrently with the aid of using many customers are the different motives why customers favored e-books. E-books may be study on desktops, laptops, smartphones, in addition to on committed e-book studying gadgets which include Kindle. Availability of low-price cellular studying gadgets has created beneficial circumstance for of e-books in India. From then literature reviewed right here it may be concluded that e-books will

preserve as an crucial verbal exchange medium. At the same time, it must be remembered that the published book will also preserve its importance.

[3] Nowadays the market of second-hand goods is gaining quite a popularity and e-commerce websites and marketing could be the main reason behind this. People are understanding the benefits of reselling their products instead of just discarding them. The buyers are also realizing the advantages of purchasing second-hand products with the main advantage being the availability of second-hand products at a cheaper rate. The reselling market is a better alternative and it also poses a threat to the new products not only for economic reasons but also because it is available at a lower rate and provides a better option for the used goods rather than discarding them. Our bookstore provides a single platform for the pdfs of reference books for computer engineering and also provides a platform to the users to resell the hard copies of the reference books they had bought earlier and don't need anymore. They will be guaranteed a secured platform and will also have the ease of not going on a buyer search. They will be also given the privilege to set the desired amount for the book they are reselling.

[4] The Internet by far plays a major role in people's lives. It has drastically improved the quality of life and the standard of living of so many people. The online bookstore system has eased the life of so many book lovers by making it easy for them to purchase books online. Online bookstores have provided people with a wider network. People do not have to consider whether they have time or not, do not have to think about travelling to the store, they can just sit in the comfort of their homes and scroll through the app to find their favorite book. Today, Android systems are growing very rapidly and hold a dominant position in the mobile internet market. The Android system here is divided into two modules: the User module (the foreground of the app) and the Admin module (the background of the app). The users will have to first register themselves on the app, then they can browse books based on categories, view its detailed information, select the book they like, checkout by submitting their order and completing the payment. Users can also search out the books they want to buy through the search bar. The admin module is similar to the purchase and sale mechanism of an ordinary bookstore. Bookstore admin can manage the details of each book, add or delete a book or a category, upload a cover picture of the book to enhance the visual effects of browsing books. Admins can also add, edit or delete details of any user. Admins can manage and process book orders placed by the users. To develop this app, Android Studio IDE, JDK 1.8, was used. Database was applied to the back-end cloud service platform Bmob.

3. Technology Stack:

3.1 Frontend:

In the frontend we have used HTML, CSS and JavaScript for designing our webpage to make itmore user-friendly and easier to use.

3.2 Server-side:

We will be using server-side servlets for java development that enhances the server's functionality.

3.3 Visual Studio Code:

Visual Studio Code, also commonly referred to as VS Code, is a source-code editor made by Microsoft for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git. VSCode is used to write and run the website. The version used is 1.66

3.4 Backend:

For the backend part i.e., the databases of admin panel and reviews section we use PHP andMySQL. PHP (Hypertext Preprocessor) is known as a general-purpose scripting language that can be used to develop dynamic and interactive websites. It was among the first server-side languages that could be embedded into HTML, making it easier to add functionality to web pages without needing to call external files for data.

3.5 Server:

XAMPP is used for compilation, execution and rendering of the web page.

Benefits and Applications:

3.6 Benefits for Society:

- Those who have bookstores situated far from their places have to take transport to reach there. With the help of an online bookstore this issue can be resolved.
- In remote areas even if there are libraries, they lack good reference books for higher studies.
- It saves time and money.
- Reading from a pdf makes it portable. You can continue your reading even if you are moving.
- The platform is safe to access.
- The reviews system will help the users to find the best books for each subject.

3.7 Benefits for Environment:

- In printing books, a lot of paper is utilized which means more deforestation. Downloading a pdf can reduce deforestation.
- Whenever you buy an eBook, you are essentially bypassing the old requirement of a fossil fuel vehicle to deliver or pick up the product. The production of printed books produces about 10 times more CO2 in the atmosphere than eBooks.
- Printing books also requires a lot of electricity to produce traditional books.
- Even though book stores that sell books are fun places to spend time and read, think of all the amount of energy required to warm or cool such a large store.
- Physical presence of a bookstore also takes up a lot of land space. This land otherwise can also be utilized for greener means like planting trees, gardens or farming.

3.8 Applications:

- The system can be very well used by the bookstore shopkeepers to expand theircustomers.
- The system can also be implemented in publishing houses.
- Your retail bookstore has a limited amount of space to hold and display certain book titles, which can restrict readers' choices. Having an online database allows you to offera wide range of titles and increase their exposure to all the stock you have.
- The stock never ends.
- A bookstore's presence online can give your business an edge to earn great results and meet the evolving needs of the modern customer.
- An online store is not limited and is free.

4. Project Design:

4.1 Proposed System:

In this project you can view any book very easily online. This is controlled by a admin who have full control over all the books and users. Online bookstore provides a platform where all the books are kept in an arranged way and you can choose your required book by just selecting it from the store. While selecting book one can view the reviews of other users. Chances of theft are very less.

4.2 Flow of Modules:

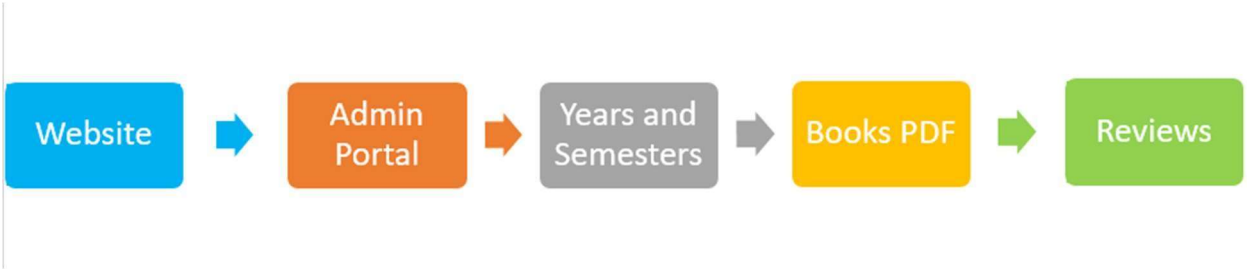

Figure 1: Flow of Modules

First we build the website as it is the base of our project. Then once the website has been created, we add an admin panel to the website. Here the admin can provide registration to the users. Hence, the user can use these credentials for login. After this we add the years and semester categories in the website. Once this is done we can add the pdf books of the respective subjects. Later we provide the option for leaving the reviews to the to the user. They can leave their review on the overall website and also subjectwise.

4.3 Data Flow Diagrams:

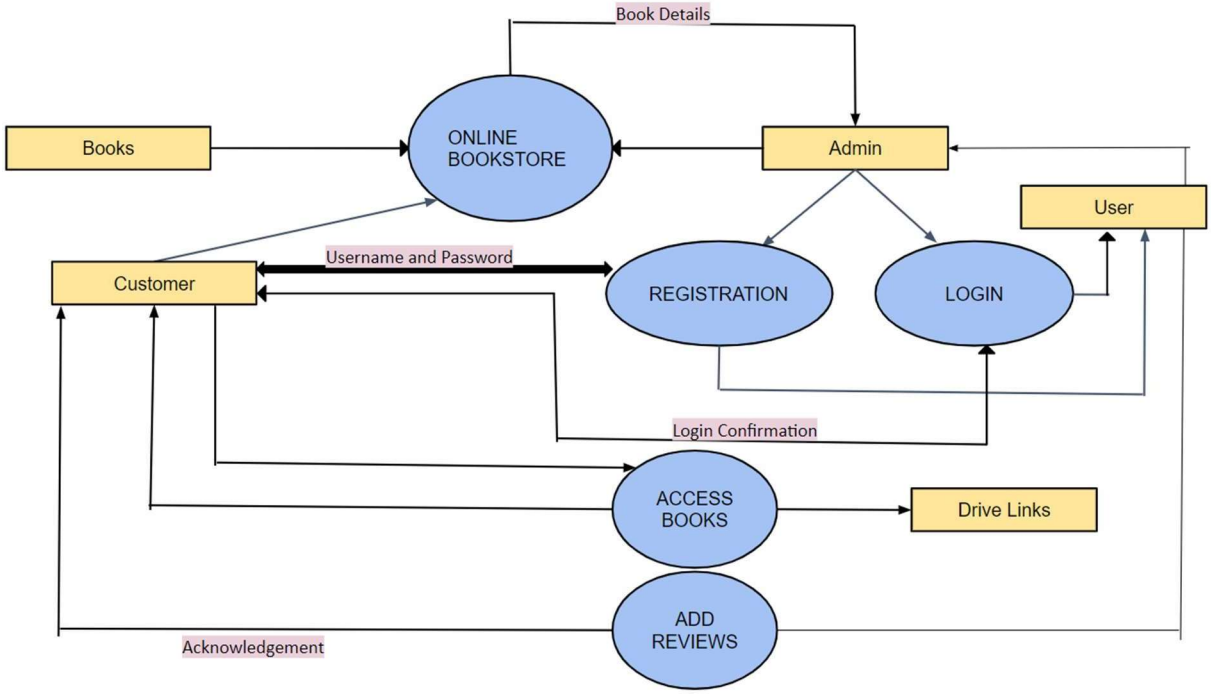

Figure 2: Data Flow Diagram

4.4 Use Case Diagrams:

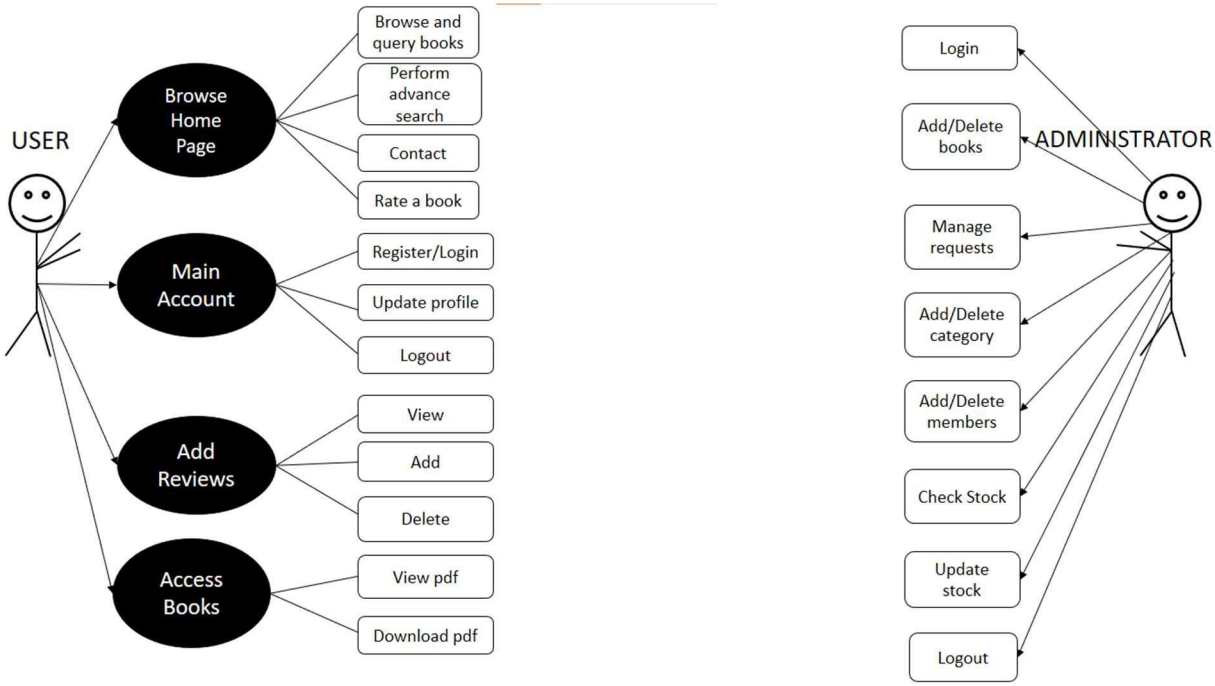

Figure 3: Use Case Diagram

4.5 Modules of the System:

The project is divided into various modules to help the work divide into small yet efficient modules. Each modules output acts as an input to the next module. Each module requires a specific set of knowledge and skill which takes time hence they have been divided accordingly.

4.5.1 Website:-

The very first module involves the creation of the website as the project is entirely web-based application making the development of the website a crucial part. To build the website we have used html, css and javascript for the frontend and php and MySQL for the backend.

4.5.2 Admin Portal: –

The admin in the admin portal provides the password for login to the users for accessing the website. The admin can also add/delete/update the record of the users and the books and can also update the database.

4.5.3 Years and Semesters: –

The website is classified into years and years are classified into their respective semesters.

4.5.4 Books PDF: –

The drive link of the pdfs of books is provided and clicking on open pdf option leads to the desired book.

4.5.5 Reviews:

The users can leave reviews and ratings for books on the respective subject and also on the homepage of the website for the functioning of the entire website.

5. Project Implementation:

5.1 Pseudo Code:

mainWeb.html > html > body > header.header > div.header-div2 > nav.nav-bar > a

```
<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="UTF-8">
        <meta http-equiv="X-UA-Compatible" content="IE=edge">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
        <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.0.0-beta3/css/all.mir
        <title>Book-Warm</title>
        <link rel="stylesheet" href="styleWeb.css">
    </head>
    <body>
        <!---------- HEADER STARTS ------------------------->
        <header class="header">
            <div class="header-div">
                <!-- <a href="#" class="logo"> <i class="fas fa-book"></i> BookWarm </a> -->
                <a href="#" class="logo">
                    <img class="logo-img" src="images/logo.jpg" alt="Logo">
                </a>

                <form action="" class="search-form">
                    <input type="search" name="" placeholder="Search here..." id="search-box">
                    <label for="search-box" class="fas fa-search"></label>
                </form>

                <div class="icons">
                    <div id="search-btn" class="fas fa-search"></div>
                    <!-- <a href="#" class="fas fa-heart"></a> -->
                    <div id="login-btn" class="fas fa-user"><a href="/Dashboard2/registration.php">Dashboard</a>
                </div>
            </div>

            <div class="header-div2">
```

Figure 4: Home Page Code

6. Result:

6.1 Home Page:

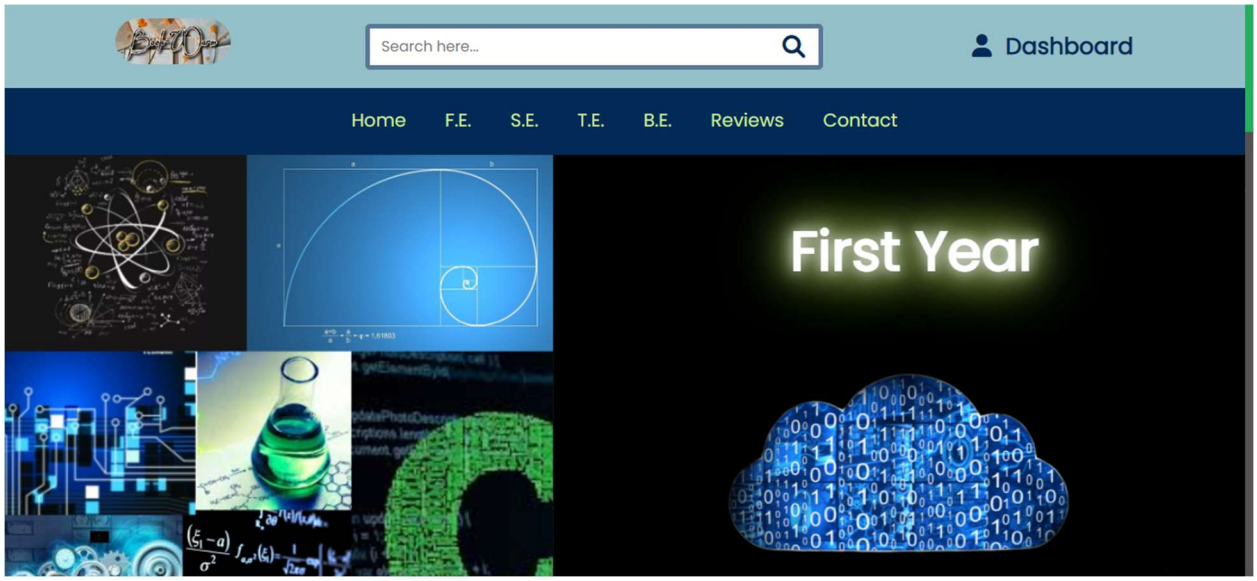

Figure 5: Home Page

6.2 Year Page:

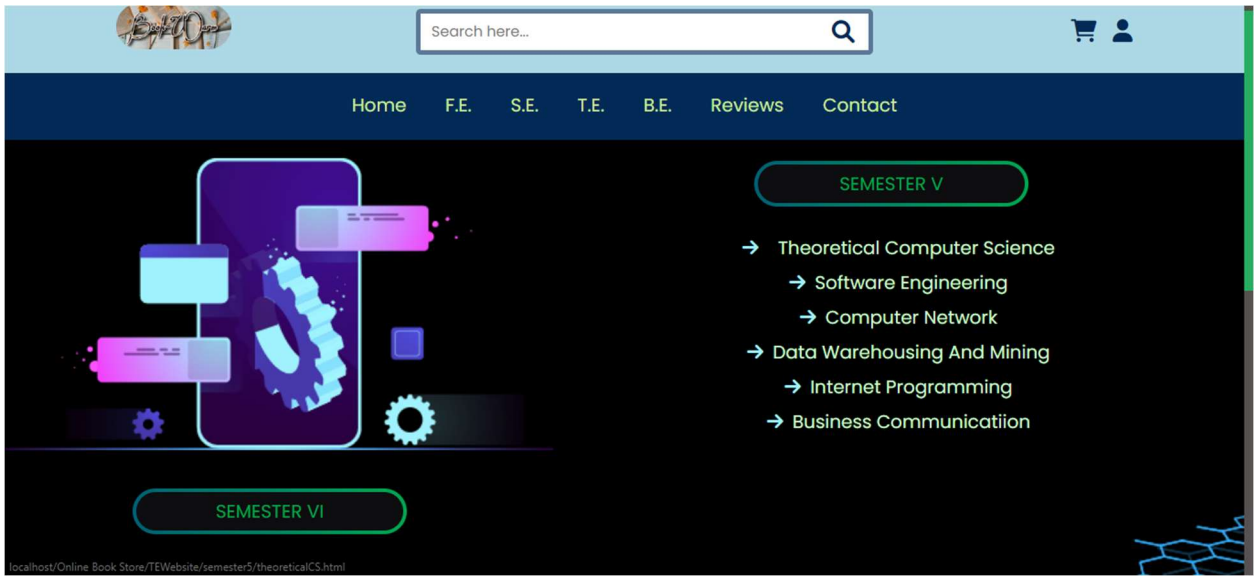

Figure 6: Year Page

6.3 Subject Page:

Figure 7: Subject Page

6.4 Book PDF:

```
68
69    <!---------------- BOOK 1 ---------------------->
70    <div class="swiper-slide box">
71        <div class="image">
72            <img src="/Online Book Store/TEWebsite/TEimages/Semester 5/IntroductionToTheTheoryOfComputation.jpg" al
73        </div>
74        <div class="content">
75            <h3>Introduction To The<br>Theory Of Computation</h3>
76            <a href="https://drive.google.com/file/d/1Ew1D7LiOJC_CSwIWVaanKQDfReKQRUg4/view?usp=sharing" class="btn
77        </div>
78    </div>
```

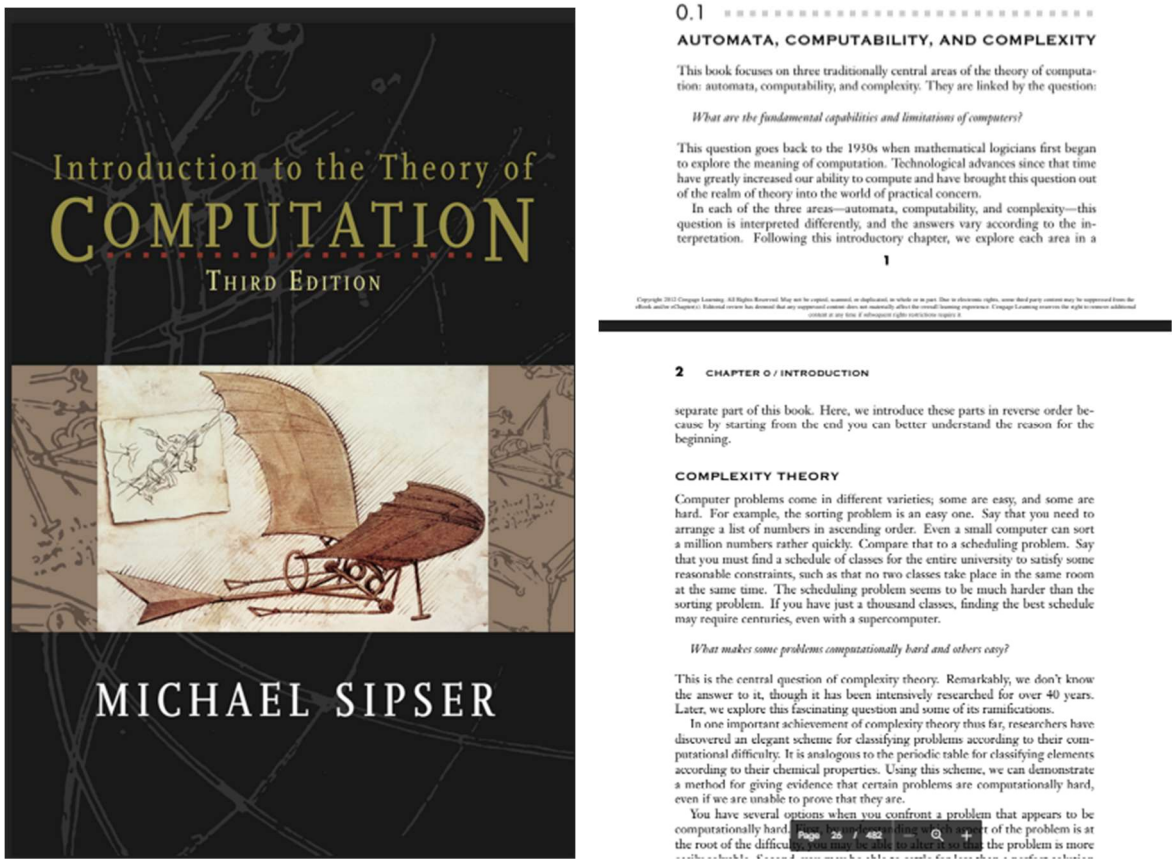

Figure 8: Books PDF

6.5 Admin Dashboard:

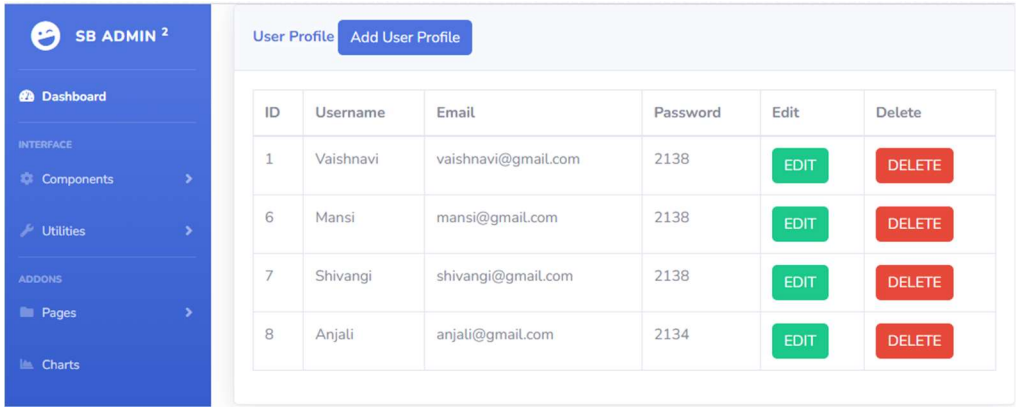

Figure 9: Admin Dashboard- Frontend

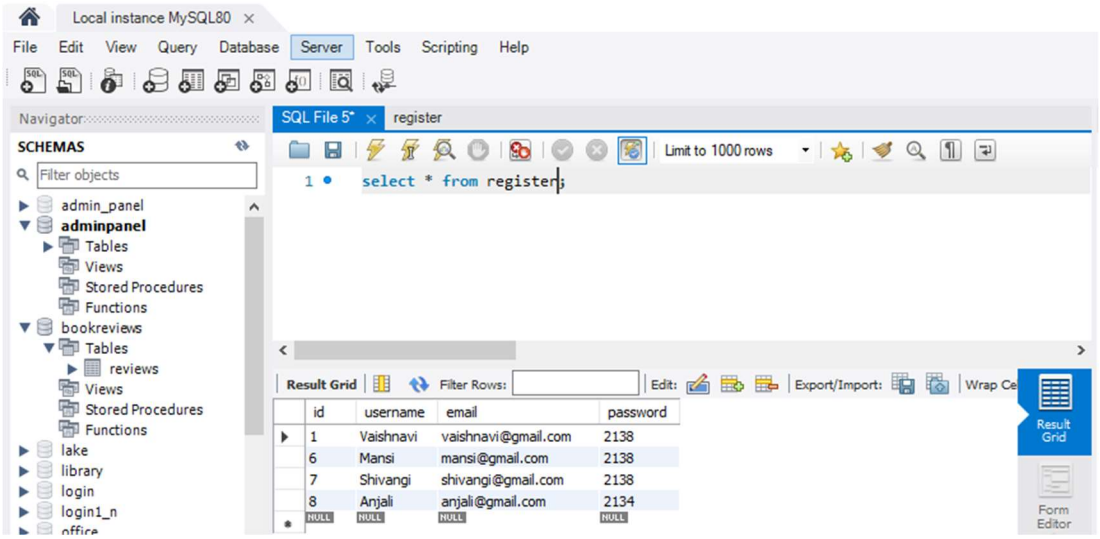

Figure 10: Admin Dashboard- Backend

6.6 Reviews:

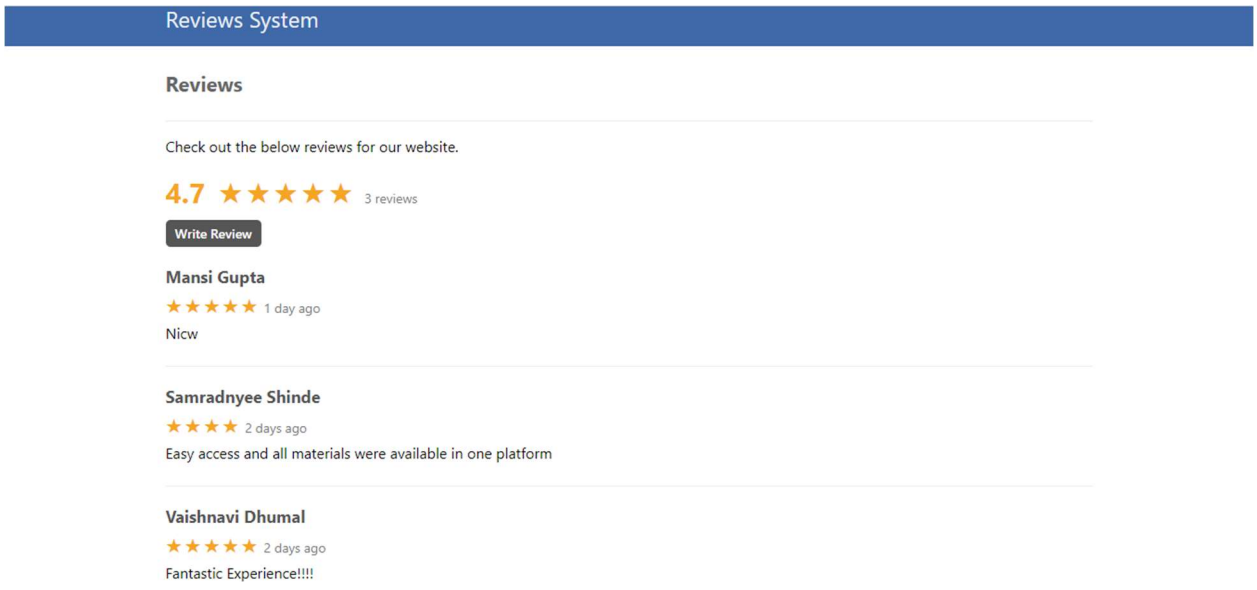

Figure 11: Reviews- Frontend

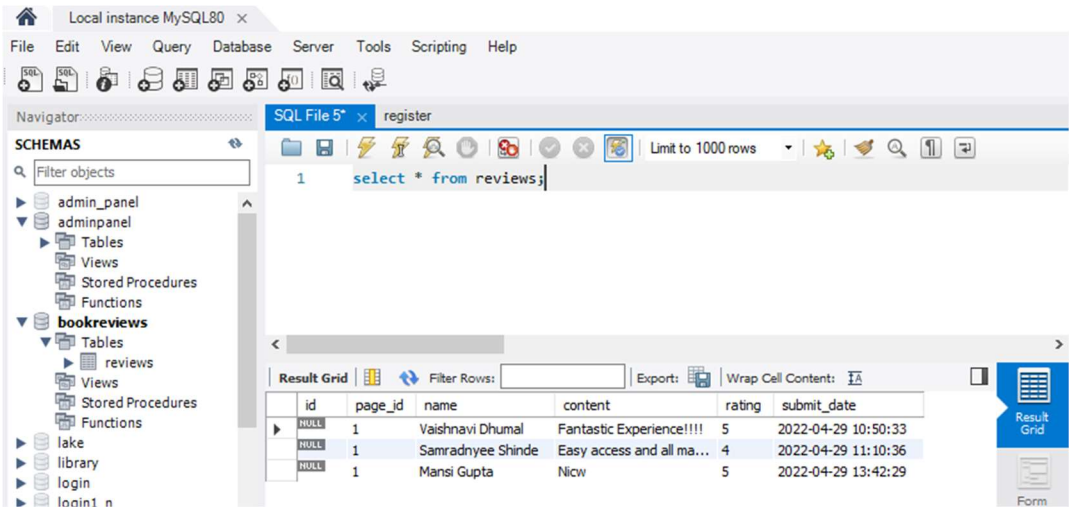

Figure 12: Reviews- Backend

7. Conclusion:

This Bookshop Automation System is an attempt to overcome the present inefficient and time consuming process of locating, reserving and purchasing quality reading materials available in the store. Currently, clients have to go through a time consuming process to perform aforementioned tasks which cause waste of labor and firms resources. Through our automated book store solution, we provide an easy way of searching, reserving and purchasing of books. User data are validated and checked for authenticity with the data stored in the system database. All the newly coined processes will address time consuming, ineffective and inefficient areas of the existing system which has being wasting a lot of firms resources such as, labor,electricity, equipment, products and services, while discouraging customers to make purchases and repelling clients from the book store. Proposed system will support both clients and the store in many areas. It's worth analyzingand identifying the benefits as it would directly influence the productivity of the store. Customer satisfaction plays the most vital role in any form of product and service renderingstore as the existence of any firm solely depends on its customer-base. Therefore, every system should facilitate the customer satisfaction up to a certain extentwhich is feasible from the company perspective.

The aforementioned facts ensure customer satisfaction to a greater extent benefiting the store in:

- Retaining current customers.
- Tempting current customers to attract their friends to the store.
- Attracting new customers.
- Enhancing the customer faith on the firm due to secure transaction techniques while temping customers to make more online purchases.
- Identifying profitable customers.
- Identifying different categories of customers.
- Making necessary alterations and plans to address broader range of customers. Identifying key areas of the inventory which need to be maintained at a healthy stock limit.
- Analyzing trends to make more effective management decisions and development of new strategies to increase profit.

These particulars will make sure the broadening the customer base of the store which will have good impact on the sales and revenue of the store. Employee satisfaction also plays an influential role in healthy revenue levels of a firm. Due to the proposed system, employees will have to handle minimum amount of workload than that of the

existing system which will help the employees to provide optimal service to the firm while maintaining healthy physical and mental levels. Proposed system will reduce transaction and agency cost of the store up to a certain extent since the transactions are automated and need of minimal labor to handle workas the their work has been governed by the system.

Even though these advantages prevail, due to lack of IT literacy and fluency of clients and lack of distribution of internet facility will have a negative impact and it will take some time to cover up the capital investment made on implementing the new system. Since the technical facilities are expanding in great heaps, proposed system will facilitate enhancing productivity immensely.

This Bookshop Automation System is an attempt to overcome the present inefficient and time-consuming process of locating, reserving and purchasing quality reading materials available in the store. Currently, clients have to go through a time-consuming process to perform a forementioned tasks which cause waste of labor and firms resources. Through our automated book store solution, we provide an easy way of referring books. User data are validated and checked for authenticity with the data stored in the system database. All the newly coined processes will address time consuming, ineffective and inefficient areas of the existing system which has being wasting a lot of firms resources such as, labor, electricity, equipment, products and services, while discouraging customers to make purchases and repelling clients from the book store.

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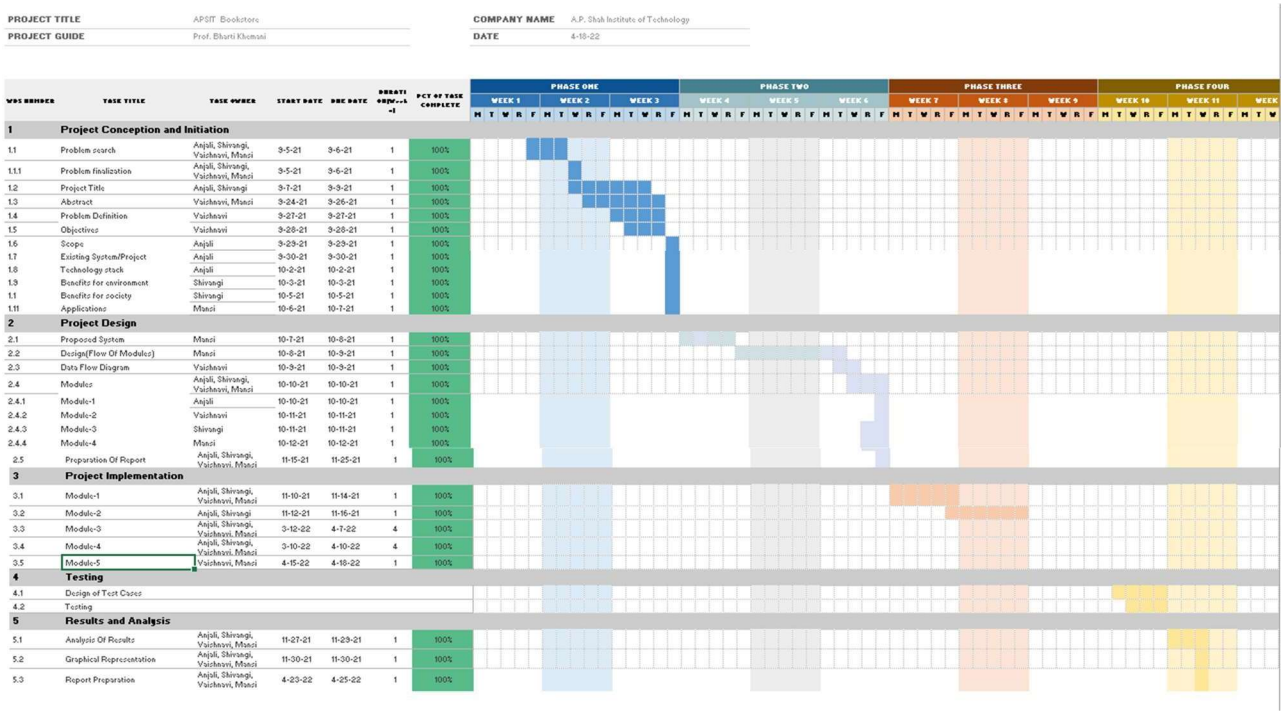
9. Annexure:

- **Gantt chart:**



PROJECT TITLE	APSIT Bookstore	COMPANY NAME	A.P. Shah Institute of Technology
PROJECT GUIDE	Prof. Bharti Khemani	DATE	4-18-22

WBS NUMBER	TASK TITLE	TASK OWNER	START DATE	DUE DATE	DURATION (days)	PCT OF TASK COMPLETE
1	**Project Conception and Initiation**					
1.1	Problem search	Anjali, Shivangi, Vaishnavi, Mansi	3-5-21	3-6-21	1	100%
1.1.1	Problem finalization	Anjali, Shivangi, Vaishnavi, Mansi	3-5-21	3-6-21	1	100%
1.2	Project Title	Anjali, Shivangi	3-7-21	3-9-21	1	100%
1.3	Abstract	Vaishnavi, Mansi	3-24-21	3-26-21	1	100%
1.4	Problem Definition	Vaishnavi	3-27-21	3-27-21	1	100%
1.5	Objectives	Vaishnavi	3-28-21	3-28-21	1	100%
1.6	Scope	Anjali	3-29-21	3-29-21	1	100%
1.7	Existing System/Project	Anjali	3-30-21	3-30-21	1	100%
1.8	Technology stack	Anjali	10-2-21	10-2-21	1	100%
1.9	Benefits for environment	Shivangi	10-3-21	10-3-21	1	100%
1.1	Benefits for society	Shivangi	10-5-21	10-5-21	1	100%
1.11	Applications	Mansi	10-6-21	10-7-21	1	100%
2	**Project Design**					
2.1	Proposed System	Mansi	10-7-21	10-8-21	1	100%
2.2	Design(Flow Of Modules)	Mansi	10-8-21	10-9-21	1	100%
2.3	Data Flow Diagram	Vaishnavi	10-9-21	10-9-21	1	100%
2.4	Modules	Anjali, Shivangi, Vaishnavi, Mansi	10-10-21	10-10-21	1	100%
2.4.1	Module-1	Anjali	10-10-21	10-10-21	1	100%
2.4.2	Module-2	Vaishnavi	10-11-21	10-11-21	1	100%
2.4.3	Module-3	Shivangi	10-11-21	10-11-21	1	100%
2.4.4	Module-4	Mansi	10-12-21	10-12-21	1	100%
2.5	Preparation Of Report	Anjali, Shivangi, Vaishnavi, Mansi	11-15-21	11-25-21	1	100%
3	**Project Implementation**					
3.1	Module-1	Anjali, Shivangi, Vaishnavi, Mansi	11-10-21	11-14-21	1	100%
3.2	Module-2	Anjali, Shivangi	11-12-21	11-16-21	1	100%
3.3	Module-3	Anjali, Shivangi, Vaishnavi, Mansi	3-12-22	4-7-22	4	100%
3.4	Module-4	Anjali, Shivangi, Vaishnavi, Mansi	3-10-22	4-10-22	4	100%
3.5	Module-5	Vaishnavi, Mansi	4-15-22	4-18-22	1	100%
4	**Testing**					
4.1	Design of Test Cases					
4.2	Testing					
5	**Results and Analysis**					
5.1	Analysis Of Results	Anjali, Shivangi, Vaishnavi, Mansi	11-27-21	11-29-21	1	100%
5.2	Graphical Representation	Anjali, Shivangi, Vaishnavi, Mansi	11-30-21	11-30-21	1	100%
5.3	Report Preparation	Anjali, Shivangi, Vaishnavi, Mansi	4-23-22	4-25-22	1	100%

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