BOI GHAR – An E-commerce Website

BY

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering

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4 January 2022

APPROVAL

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ACKNOWLEDGEMENT

First, we express our heartiest thanks and gratefulness to almighty God for His divine blessing makes us possible to complete the final year project successfully.

We really grateful and wish our profound our indebtedness to **Nusrat Jahan**, Sr. Lecturer, Department of CSE Daffodil International University, Dhaka. Deep Knowledge & keen interest of our supervisor in the field of "web development" to carry out this project. Her endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior drafts and correcting them at all stage have made it possible to complete this project.

We would like to express our heartiest gratitude to Professor **Dr. Touhid Bhuiyan**, Head, Department of CSE, for his kind help to finish our project and also to other faculty member and the staff of CSE department of Daffodil International University.

We would like to thank our entire course mate in Daffodil International University, who took part in this discuss while completing the course work.

Finally, we must acknowledge with due respect the constant support and patients of our parents.

ABSTRACT

Electronic commerce has increasingly become a necessary component of business strategy and a strong catalyst for economic development in the emerging global economy. E-commerce creates new opportunities for performing profitable activities online. "Boi Ghar" is a project I developed dedicated to providing excellent service in e-commerce in our country. E-commerce is growing in our country and worldwide, and people are calling for this job more and more. The reason for my interest is the rapid growth of the e-commerce trade. Most of the people that live in this region belong to lower-middle-class families. In e-commerce, we provide an easy and convenient way to solve this critical business issue. We also have e-commerce options for those who have a good income. So that everyone can easily find the books they need, our readers are displayed adequately. Our world is characterized by the practice of people going outside to buy books. People we know waste lots of time going to a store, and it is a hassle. This project was created to simplify the purchase and sale of books online so that anyone can do it quickly. It is being implemented in a certain way. After signing up on the website, people will find some product offers on the dashboard, and they can choose the product that suits their needs.

TABLE OF CONTENTS

Contents	Page
Board of examiners	ii
Declaration	iii
Acknowledgements	iv
Abstract	v
CHAPTER	
CHAPTER 1: Introduction	1-2
1.1 Introduction	1
1.2 Motivation	1
1.3 Objectives	1
1.4 Expected Outcomes	2
1.5 Project Management and Finance	2
1.6 Report Layout	2
CHAPTER 2: Background	3-4
2.1 Preliminaries	3
2.2 Related Works	3
2.3 Comparative Analysis	3
2.4 Scope of the Problem	4
2.5 Challenges	4
CHAPTER 3: Requirement Specification	5-14
3.1 Business Process Modeling	5
3.2 Requirement Collection and Analysis	5
3.3 Use Case Modeling and Description	9
3.4 Logical Data Model	12
3.5 Design Requirement	13
CHAPTER 4: Design Specification	15-17
4.1 Front-end Design	15

4.2 Back-end Design	15
4.3 Interaction Design and User Experience (UX)	15
4.4 Implementation Requirements	17
CHAPTER 5: Design Specification	18-36
5.1 Implementation of Database	18
5.2 Implementation of Front-end Design	18
5.3 Testing Implementation	32
5.4 Test Results and Reports	36
CHAPTER 6: Impact on Society, Environment and Sustainability	37-38
6.1 Impact on Society	37
6.2 Impact on Environment	37
6.3 Ethical Aspects	38
6.4 Sustainability Plan	38
Chapter 7: Conclusion and Future Scope	39
7.1 Discussion and Conclusion	39
7.2 Scope for Further Developments	39
Reference	40
Originality Report	41

LIST OF FIGURES

FIGURES	PAGE NO
Figure 3.1.1: Business process modeling	5
Figure 3.2.1: Software development life cycle (agile)	6
Figure 3.2.2: Flow Chart	7
Figure 3.2.3: Data Flow Diagram for system	8
Figure 3.2.4: E-R Diagram of the system	9
Figure 3.3.1: Use Case Modeling for Customer	10
Figure 3.3.2: Use Case Modeling for Admin / Seller	11
Figure 3.3.3: Use Case Modeling for Admin/Seller/Customer	12
Figure 3.4.1: Logical data model of the project	13
Figure 3.5.1: Architecture Design.	14
Figure 5.1: mongo dB database	18
Figure 5.2.1: Home page	19
Figure 5.2.2: Login page	19
Figure 5.2.3: Register account	20
Figure 5.2.4: Logout account	20
Figure 5.2.5: Sell Book view	21
Figure 5.2.6: Add to cart product.	21
Figure 5.2.1: checkout the final products	22
Figure 5.2.7: shipping address page	22
Figure 5.2.8: Admin dashboard	23
Figure 5.2.9: Update User Account	23
Figure 5.2.10: View Product list by Admin	24
Figure 5.2.11: view Products	24
Figure 5.2.12: update Products	25
Figure 5.2.13: Shopping categories	25
Figure 5.2.14 Product View	26
Figure 5.2.15: Search Products	26
Figure 5.2.16: Product featured	27
Figure 5.2.17: Product categories	27

Figure 5.2.18: Shopping cart	28
Figure 5.2.19: Place order	28
Figure 5.2.20: Order summary	29
Figure 5.2.21: Order details	29
Figure 5.2.22: Order History by Admin View	30
Figure 5.2.23: Payment Method	30
Figure 5.2.24: Payment with PayPal	31
Figure 5.2.25: Customer Review	31

LIST OF TABLES

TABLES	PAGE NO
Table 3.3.1: Use case description of Customer	10
Table 3.3.2: Use case description of Admin/Seller	11
Table 4.3.1: NodeJS Releases	15
Table 5.3.1: Different tests	32
Table 5.5.1: Benefits of usability testing	36

CHAPTER 1

INTRODUCTION

1.1 Introduction

Business strategies have increasingly incorporated e-commerce into their systems, and economic growth is boosted by electronic commerce. Offering customers, the desired services online is at the core of e-commerce. Clients will be able to place orders at their preferred locations as a result. This issue will be considered during the project. We hope that people will use our website for buying and selling books, as that is the primary purpose of the "Boi Ghar" project. In this case, those who have the book but do not need it can sell it to those who do. Whoever does not need it can destroy it or sell it to paper dealers in kilograms for a profit. To address this problem, we are considering the development of a specific online platform. Customers will also be able to use debit, credit, PayPal, cash, and visa cards to make payments online, or they can pay in cash once the product is delivered. On this site, vendors and buyers will be able to purchase and sell products through an admin panel that will facilitate the distribution of products. The website offers a variety of functions like an e-commerce platform that is easy to access.

1.2 Motivation

We are inspired by seeing many other countries' websites. At present, many school/college/university/ students and many people throw away their old books after getting their class promotions. This project is for those who can sell discarded books to others without throwing the books. Some people waste money by throwing old books away. So that time, we got that idea, and we made our plan to implement this project. In addition, we also have an e-selling option so that anyone can buy books by their related choosing books, because we can add any category here old and new books.

1.3 Objectives

Our main goal is to develop a trading platform to help buyers and sellers swap books at a very reasonable price. Our system includes a registration form that allows new users to sign up for the service and view various books. With our project, we can handle

many users at one time and give each of them a great experience. We use our project on a web-based platform.

1.4 Expected Outcome

As a result of our project, we hope that our customers will have new opportunities. For those who are willing to purchase books, this is a new experience. There will be an opportunity to collect books from the "Boi Ghar" website. A customer must create an account to access the full features of the website. For customers to find books more efficiently, there will be a book category on the website. Logging into and out of the website will be possible using a unique account. The purchase of books will be potential from anywhere and anytime as MasterCard, Visa Card, and Cash are accepted.

1.5 Project Management and Finance

A site management plan contains several minor tasks that require expert knowledge. Project deadlines, budgets, and access to all stakeholders are our key goals here. After almost completing all the work, we intend to make this project open-source since we depend on the backend server for financial reasons and must bear the costs. We will try to minimize the cost by efficiently designing the app, regardless of how expensive it will be. Furthermore, we will add additional features in the future based on users' needs. In addition, because we will be continuing the project, the initial cost will be covered by us.

1.6 Report Layout

Throughout this project, we will introduce our system and the terms and concepts related to it. As part of our recent study of similar projects, we examined ways to improve this one. The issues and challenges we encountered are addressed in chapter 2. In chapter 3, we describe the three phases of backgrounds. The document also includes a requirement specification and a list of user requirements. Our solution to the problem is discussed in chapters 4 and 5. We also discuss which technologies we employ. Our conclusions and future work suggestions are discussed in chapter 6.

CHAPTER 2

BACKGROUND

2.1 Preliminaries

We currently purchase books from the library. When we go to the bookstore to buy books, we must first locate and buy books. We have to go to several stores to find the books we require. Looking for books in libraries is a waste of valuable time. Furthermore, many retailers do not have a book collection. In addition, the cost of books in the library is usually substantially higher. Again, many students who are advanced to a new class do not require the previous class's books. The books then become outdated. In this case, everyone will collect any new and old books from our "Boi Ghar" platform.

2.2 Related Works

Online books can be bought and sold through numerous websites. This project differs from all others because we have an extensive library with both new and old books. This project will act as a platform to connect buyers and sellers. In this case, buyers and sellers will be able to buy and sell using our project. After purchasing the product, it is managed by people with project management responsibilities who deliver it to the consumer. The product, however, will come through our project from buyer to seller. Online books can be bought and sold through numerous websites. This project differs because we will have an extensive library with both new and old books. This project will act as a platform to connect buyers and sellers. In this case, buyers and sellers will be able to buy and sell using our project.

2.3 Comparative Studies

We have a lot of e-commerce websites in our country, but we are working on our book idea. With our e-commerce service, we will be able to fulfill our dream, and our e-commerce site will be able to achieve our vision. In future business arrangements, we hope to use a commercial approach. We must reduce wasteful spending while maintaining the highest degree of security. Taking care of our customers is our number one priority. This project will increase positive communication and interaction between visitors and create an integrated information management system for the

delivery and receiving processes. Because e-commerce has become increasingly important for people in all countries, I accepted this project. My goal when creating this project was to take my work experience and do a better job.

2.4 Scope of the problem

We are developing a web-based bookselling system as the central focus of our project. On-time, this platform will be a convenient method of connecting sellers and buyers. This online process will be popular because the participants will receive regular support, directions & feedback, and all obstacles must be removed. That offers excellent data security along with reliable storage and backup capabilities at every level of user-system interaction. People will be able to select their product according to their preferences and will be able to get it at the lowest price. A new online platform lets shopkeepers and customers communicate with one another. "Boi Ghar" is an advertisement on Shopkeeper's website promoting the product differently.

2.4.1 Business Analysis

Online platforms are primarily used to build these business applications. A business person can quickly sell books using the medium of this website, and he can advertise his institution since the website offers a platform for online sales.

2.4.2 Time Saving

This application can save our time and money also. We have to look in different stores to purchase the books we need. This is a waste of valuable time looking for books in libraries. Through our website, anyone can find all the books they need quickly, and we can use that time for other purposes, which will save our time.

2.5 Challenges

Our goal is to create an environment that is safe for Library users and user-friendly. It is also challenging to design an interactive interface. We need an admin panel that can manage dynamic projects. Since this application will be platform-independent, we must provide a consistent backend to run smoothly on any platform. Providing reasonable security on this website is our top priority. It will be a great challenge for us to see customers happy always. This web application is very user-friendly for both shopkeepers and customers.

CHAPTER 3

REQUIREMENT SPECIFICATION

As its name implies, a Requirement Specification outlines the design of a product and the standards that must be met to verify a product's quality. Specifications include information that will help with the design, verification, and maintenance of the product. The system is capable of performing a variety of functions based on the requirements. The requirements specification of an organization explains what it must do to accomplish its purpose.

3.1 Business Processing Modeling

As shown in figure 3.1.1, we have a Business Process Model for our application.

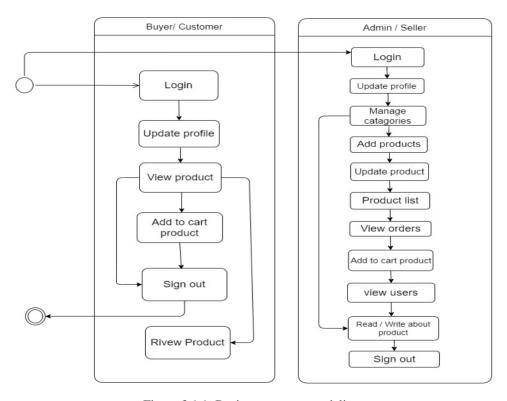


Figure 3.1.1: Business process modeling

3.2 Requirement Collection and Analysis

This process is part of requirement analysis. As part of it, requirements are determined, documented, analyzed, validated, and managed for a new product or project, considering that different stakeholders may have varying needs. Every type of project

starts with the collection of requirements. Project management must collect requirements as well as management requirements. Without the proper requirements, project management is incomplete. Without a thorough understanding of the requirements for the solution, a project could run at risk unintentionally. There might then be disagreements. This is why gathering requirements should be the responsibility of the team. We should do this as soon as possible.

Requirements of the software are given below:

- Make the procedure easy for consumers.
- More user-friendly for the customer.
- Keep updated with the product.

3.2.1 Software Development Life Cycle (Agile)

As a result of its linear sequential criteria, each phase must be complete before the next begins, making this version of the (SDLC) systems development life cycle model one of the most popular. We reviewed what was happening at every project stage to ensure we were on the right track.

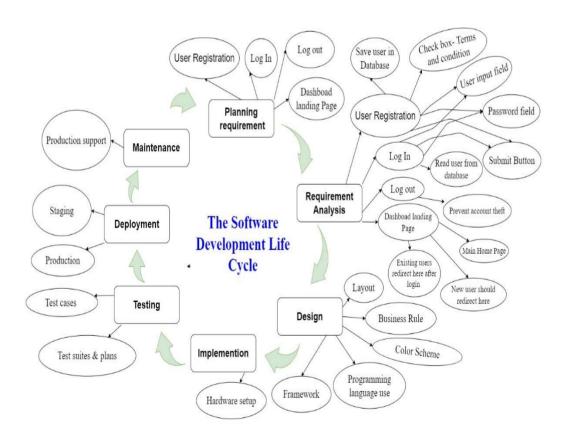


Figure 3.2.1: Software development life cycle (agile).

3.2.2 Flow Chart

As shown in figure 3.2.2, the procedures followed by our "Boi Ghar".

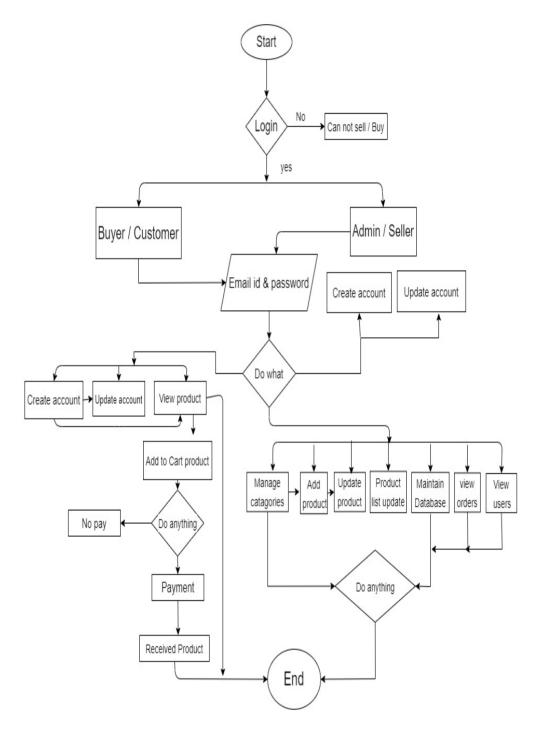


Figure 3.2.2: Flow Chart

3.2.3 Dataflow Diagram

The data flow diagram represents how data is transferred through an information system, illustrating several aspects of its process. An initial (DFD) data flow diagram is generally used to visualize. The method and develop an overview that can later be

embellished. The structure of data processing can also be visualized using DFDs (structured design). In the DFD below, data sources and destinations are presented and storage locations of the input and output data.

The Dataflow Diagrams displayed in Figure 3.2.3 show these details.

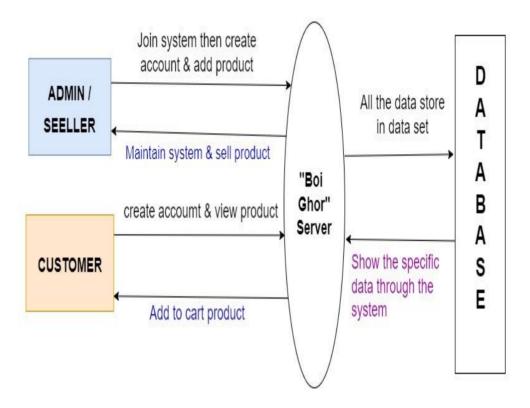


Figure 3.2.3: Data Flow Diagram for system

3.2.4 Entity Relationship Diagram

Entity-relationship diagrams (ERD) are graphical representations of the relationships between the entities of an information system. The entity framework infrastructure is represented by an ERD, which is a conceptual representation of data.

As shown Figure 3.2.4 illustrates the Entity Relationship Diagram of our application. An ERD consists of the following elements:

- Entities
- Relationship
- Attribute

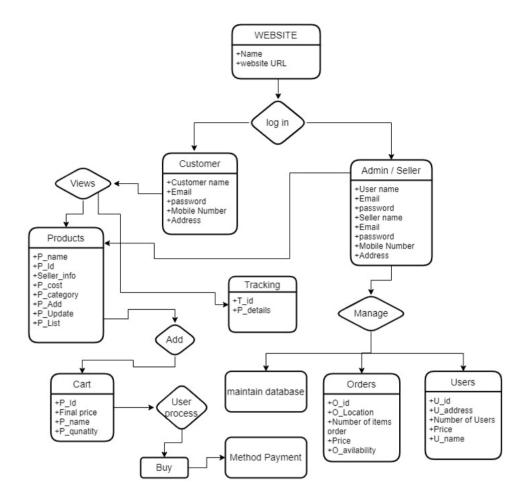


Figure 3.2.4: E-R Diagram of the system

3.3 Use case modeling and description

Simple use case diagrams describe a user's interaction with a system by showing the relationship between the user and the different scenarios in which the user takes part. In a use case diagram, different types of users and application scenarios can be identified. An analysis of the system has shown that this sector should be presented to the user. Below is a list of key sectors:

- Customer
- Admin / Seller

3.3.1 USE CASE FOR Customer

After logging in, customers can access most areas, such as review posts, product lists, Product categories, and view products. However, to write comments and add to cart products & payments, the customer needs to create their account.

Table 3.3.1: Use case description of Customer

Use case name	Customer
Actor	Admin, Visitor, Seller
Pre-condition	None
Primary path	Email id ,Password, Phone no, User name
Exceptional Path	Invalid Email, Invalid Id

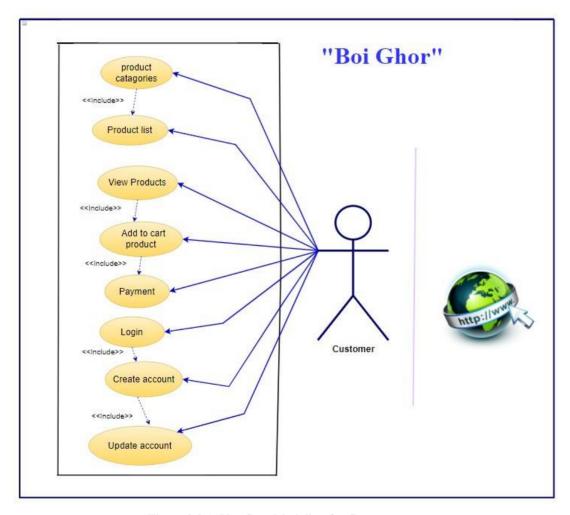


Figure 3.3.1: Use Case Modeling for Customer

3.3.2 Use Case for Admin/Seller

Admins can access most areas, such as reading and writing posts, product lists, managing product categories, adding products, updating products, viewing orders, viewing users, maintaining the database. The most important thing is that without admin, there is no selling request accepted.

Table 3.3.2: Use case description of Admin/Seller

Use case name	Admin
Actor	Customer, Visitor
Precondition	None
Primary Path	Email Id , Password, user name
Exceptional Path	Mobile number, Invalid id

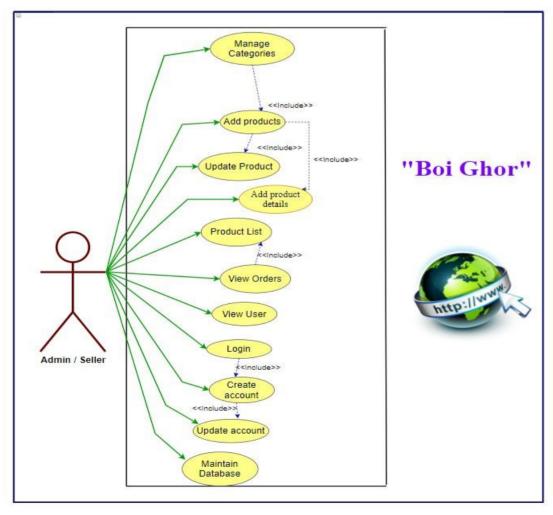


Figure 3.3.2: Use Case Modeling for Admin

3.3.4 Use Case Description

The document provides information on the entire Use Case Model, including all information in the below image. A table and picture have already been delivered to describe each use case.

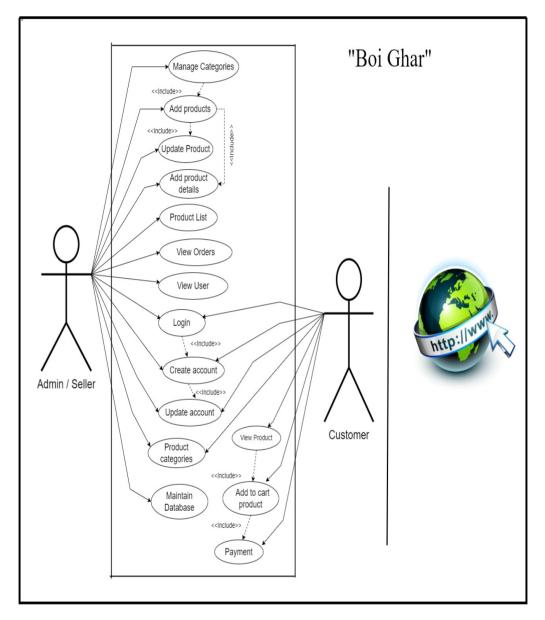


Figure 3.3.4: Use Case Modeling for Admin/Seller/Customer

3.4 Logical Data Model

Data modeling at this stage primarily consists of visualizing the elements of data concerning one another and detailing the attributes of each data element. Logic data modeling functions to summarize the characteristics. This assumes that our project is

understood for the logical model. We must use specific information from our project and make explicit connections.

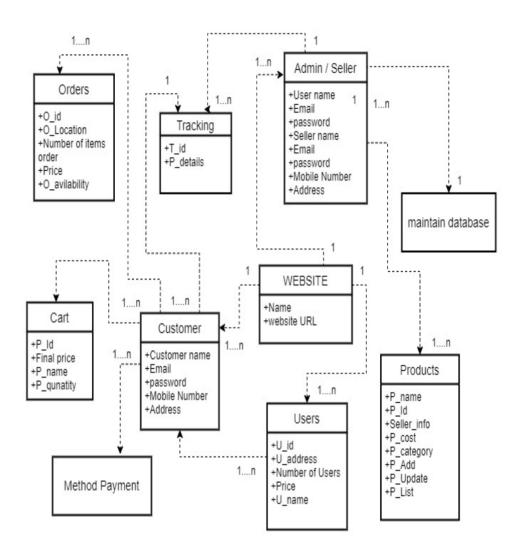


Figure 3.4.1: Logical data model of the project

3.5 Design Requirement

An architectural design of a system defines components, modules, interfaces, and data required to fulfill a set of requirements. Throughout this chapter, we have illustrated the overall system design, including architectural design, use case diagram, flow chart, and data flow diagram. The whole concept has been designed with the user in mind. This project has been designed with modern and updated tools. Furthermore, new ideas for making it accessible have been considered. Any changes you want to make can be made when you have time.

Architecture Design

Architecture design describes the structure, behavior, and analysis of the system. It emphasizes the creation of the architecture of the system.

Our application's architectural design shows that-

- A user can access our application by entering its web address into the web browser.
- The website server receives this link request.

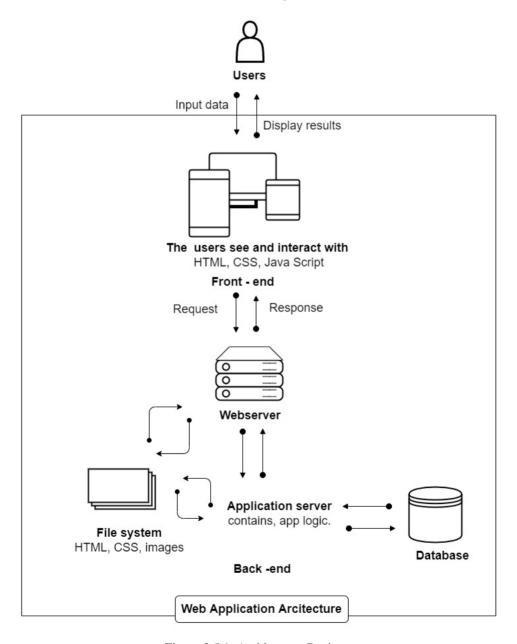


Figure 3.5.1: Architecture Design.

CHAPTER 4

DESIGN SPECIFICATION

4.1 Front-end Design

UI design is the front-end process that is used by users. Each application relies on this design for success. The usefulness and usability of an application must be taken into consideration when designing. User-friendly, simple, and easy-to-use designs are a must. Anyone visiting the application should be able to understand the front-end design. Besides using any template or other method for the design, coding is used as well. HTML, CSS, Java script is used to create the front end of the application.

The following are the front-end tools that have been used to develop our project system:

- > HTML5,
- > CSS3,
- > JAVA SCRIFT (next is),
- Bootstrap

4.2 Back-end Design

Many developers must always discuss the front-end as well as the back-end of their applications. Client-side code is referred to as the front-end. The user interface is created with this code (typically HTML, CSS, and JavaScript). The server's back-end code receives client requests and returns data to the client according to the setup logic. A database is also included in the back-end, which permanently stores all of the application's data. Node JS is a framework frequently utilized by Value Coders. The back-end design of our application uses NodeJS, which includes the latest tools. The only configuration needed is to specify a path to store and create a database file.

4.3 Interaction Design and User Experience

Table 4.3.1: NodeJS Releases

Version	Date	Npm
Node.js 17.1.0	2021-11-09	8.1.2

Node.js 17.0.1	2021-10-20	8.1.0
Node.js 17.0.0	2021-10-19	8.1.0
Node.js 16.13.0	2021-10-26	8.1.0
Node.js 16.12.0	2021-10-20	8.1.0
Node.js 16.11.1	2021-10-12	8.0.0

Design

A successful project can be ensured during the design phase. Designing a project of high quality means combining processes, materials, and ideas to achieve success. It is the project manager's responsibility to make sure that the budget and schedule of the project are kept intact.

An entirely user-friendly design was implemented in the project. The project was designed using new tools. The project was improved by applying several new ideas. In the future, changes will be possible.

Completion

As part of our project, we will build a Web Service Recommender System. The websites of each dashboard will have the ability to be updated at any time.

Project Deliverables

Deliverables are not the final products of a project but rather their processes or results. In other words, a project deliverable could be as large as the project objective itself or as small as the project reporting.

Positive changes in the world are expected as a result of project deliverables. Deliverables can include improvements in processes, providing new or improved services, improving service quality, maintaining the organization's image and reputation, reducing risks, and increasing the efficiency and effectiveness of staff.

Resource Allocation

According to an organization's strategic goals, resources are assigned and managed. Resource allocation is used in software planning to ensure that available resources, such as people, are allocated accordingly to achieve long-term goals. It is common practice to give resources among several projects within a business or academic unit.

4.4 Implementation Requirements

Policy, standard, or protocol implementation involves implementing a plan, idea, model, specification, or method by carrying out, executing, or practicing it. It is implementation (transition) requirements when they are designed to assist the transition from the existing state to the desired future state, but are not required afterward. The key functions of requirements analysis in systems and software engineering are to analyze, document, validate, and manage software requirements. In addition, determining which expectations need to be met by the various stakeholders is part of this process.

Non-Functional Requirement

This section describes some of our systems non-functional requirements:

Efficiency Requirement

Whenever our system is used by any business institution, any product can be updated based on the category.

Reliability Requirement

Customers should have the ability to search for products based on each categorized area of the system.

Usability Requirement

A user-friendly environment and easy-to-use are among the best features of the "Boi Ghar" system.

Implementation Requirements

Implementation of the system using CSS5, HTML5, JAVASCRIPT, next JS for frontend implementation. MongoDB will be used for database connectivity. Responsive web design is used to make the web application compatible with any screen.

Delivery Requirement

The whole system is expected to be delivered in four months with a weekly evaluation by the project guide.

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Implementation of Database

Our database is implemented in such a way that it can handle multiple concurrent requests simultaneously. We have used MySQL, which is currently the most popular relational database management system. We use MongoDB for our database set. It contains all kinds of data about our background system. Moreover, it is open source it can be modified to our needs if necessary. The administration of our database can be securely handled by PHP My Admin, which is available on most platforms. All our application data will be stored here, including class information and user details. Here is a snapshot of our database set. As shown in the mongo dB database screen can be seen in Figure 5.2.1.

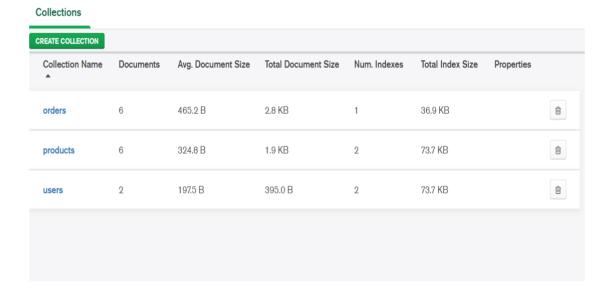


Figure 5.1: mongo dB database

5.2 Implementation of Front-end Design

To design the website all pages like home page, product view page, shop page, about us, contact us, Tracker, cart, and all other pages are given below:

Homepage

As shown in the Homepage screen can be seen in Figure 5.2.1.

This is the homepage of our project. This page is also known as the main page, and this is the main page of the site. After entering into our site users can see this page first. After searching this page comes out 1st.



Figure 5.2.1: Home page

Login:

As shown in the login screen can be seen in Figure 5.2.2.

Whenever a user opens their app, the first screen they see is the login screen. The admin/seller can access the website dashboard using the login information associated with the admin panel. On the other hand, the seller can access the website dashboard using the login information associated with their website. To access the dashboard, data has to be inserted. If they have already added them, they will be redirected to the website's home screen if they need to fill out their remaining information.

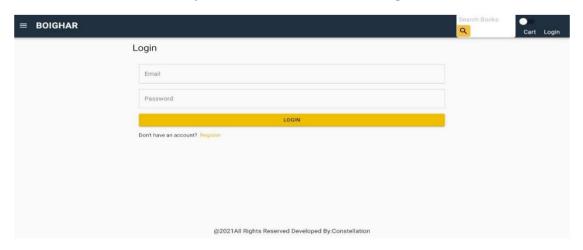


Figure 5.2.2: Login page

Register Account:

As shown in the Register screen can be seen in Figure 5.2.3.

A user must first register to purchase any book from our "Boi Ghar" website. Input should be given with username, email, password, confirm the password in the registration section. And the user's account will be created on our "Boi Ghar" website, which will carry the specific identity of each user on our "Boi Ghar" website. And it will allow you to connect to our "Boi Ghar" website.

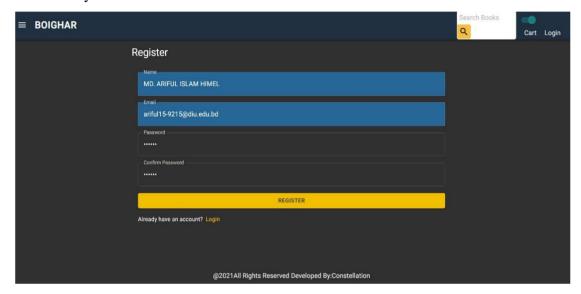


Figure 5.2.3: Register account

Logout:

As shown in the logout screen can be seen in Figure 5.2.4.

Having logged in and joined our website, if a user wishes to leave our website, he can click on the logout option at the top.

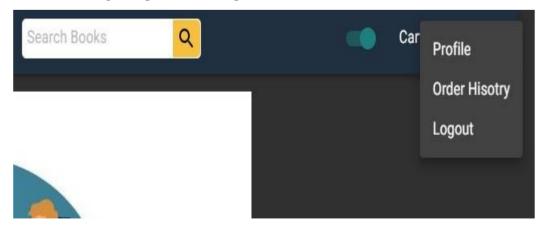


Figure 5.2.4: Logout account

Sell Home Page:

As shown in the book view screen can be seen in Figure 5.2.5.

The website dashboard will have a pick of different types of book collections. Buyers can view the book of their choice and select to shop from here.

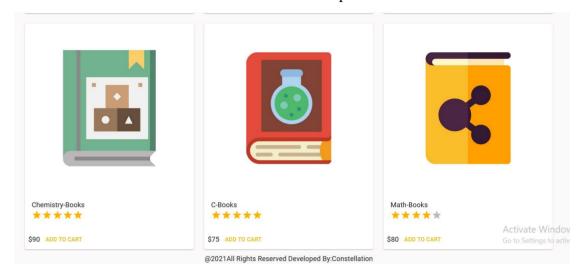


Figure 5.2.5: Sell Book view

Add to Cart:

As shown in the add to cart screen can be seen in Figure 5.2.6.

This page is a cart system. After the user likes the book, he has to click on the add to cart option on the screen if he wants to buy the book. And the user will take him under control in his next step.

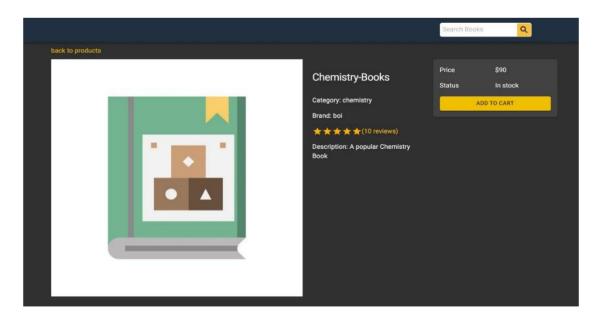


Figure 5.2.6: Add to cart product.

Checkout:

As shown in the checkout screen can be seen in Figure 5.2.6.

Users can see what books they have purchased from the website by clicking on the checkout option. And if the customer wants to delete any product, then benefits can be taken from there.

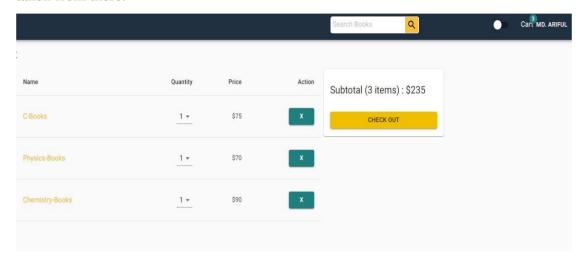


Figure 5.2.1: checkout the final products

Shipping Address:

As shown in the shipping address screen can be seen in Figure 5.2.7.

Provides instructions on where the product will be delivered via the shipping address. The shipping address user gives his name and home address to the City Postal Code, Countries name through which our admin panel gets the address where the product should be delivered. And at that address, our admin panel manages to wipe their product.

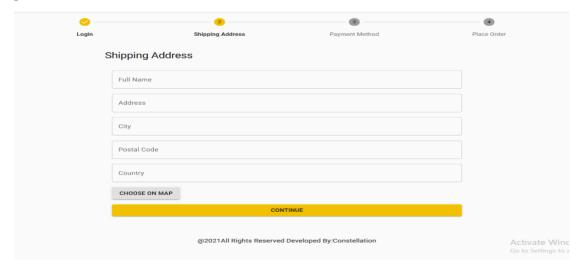


Figure 5.2.7: shipping address page

Admin Dashboard:

As shown in the Admin dashboard screen can be seen in Figure 5.2.8.

The dashboard shows an admin how many people use the website, how many orders are placed, and what type of products are purchased. The list of sales charts using the website is also displayed.

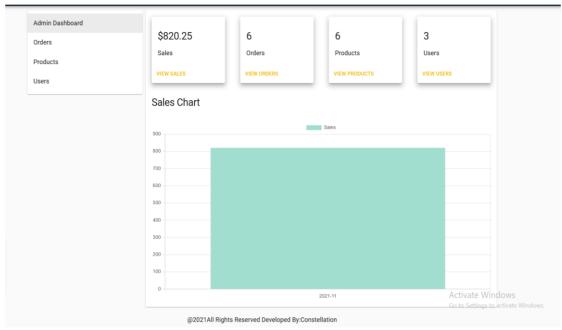


Figure 5.2.8: Admin dashboard

Update User Account:

As shown in the Update User Account screen can be seen in Figure 5.2.9.

A user's profile can be updated by simply going to the profile option, changing their username, email, password, or other information, and clicking on update.

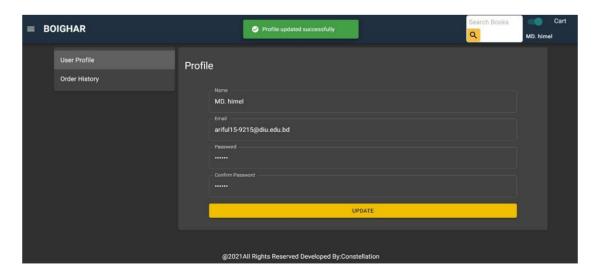


Figure 5.2.9: Update User Account

View Product list by Admin:

As shown in the View Product list by Admin screen can be seen in Figure 5.2.10.

Admin can see product details by going to product options in his dashboard. Within the admin dashboard's product options, users can view the names of the people who have ordered, the price, the category, quantity, and rating of the product, and the action they will take on the products.

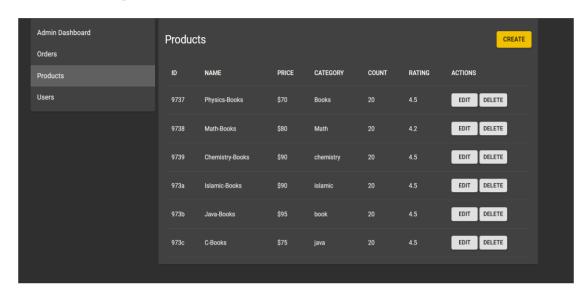


Figure 5.2.10: View Product list by Admin

Website view Products:

As shown in the View Product list screen can be seen in Figure 5.2.11.

A customer can see what kind of books are available on the website.

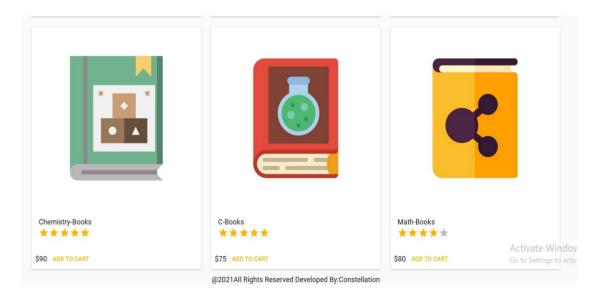


Figure 5.2.11: view Products

Update Products:

As shown in the update Product list screen can be seen in Figure 5.2.12.

If Admin wants to add a new book on the website, go to the option of edit product, go to the books name, upload the book's writer, price, the image of the book, and all the details of the new book are given so that it can be uploaded.



Figure 5.2.12: update Products

Shopping categories:

As shown in the update Product list screen can be seen in Figure 5.2.13.

All customers can categorize their shopping by accessing our "Boi Ghar" website. For example, by searching the book name, price range, brands, etc. A customer can get the book he needs.



Figure 5.2.13: Shopping categories:

Product View:

As shown in the Product View screen can be seen in Figure 5.2.14.

We have a book rating system on our website which the books that are most popular on our website will be shown on the popular product list. Which will help any buyer buy books according to their popularity.

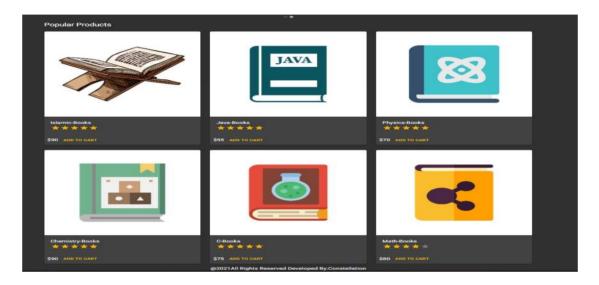


Figure 5.2.14 Product View

Search Products:

As shown in the Search Products list screen can be seen in Figure 5.2.15.

A search option is provided on our website. If the customer wants to find the book of their choice, click based on the search option name of that book. It will be displayed to the customer.

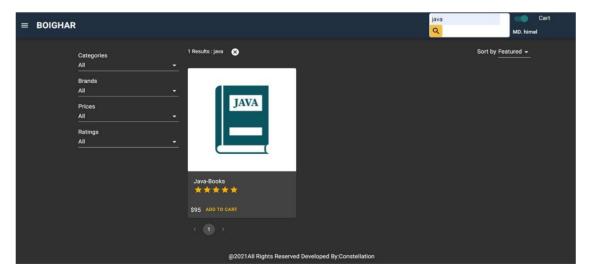


Figure 5.2.15: Search Products

Product featured:

As shown in the Product featured list screen can be seen in Figure 5.2.16.

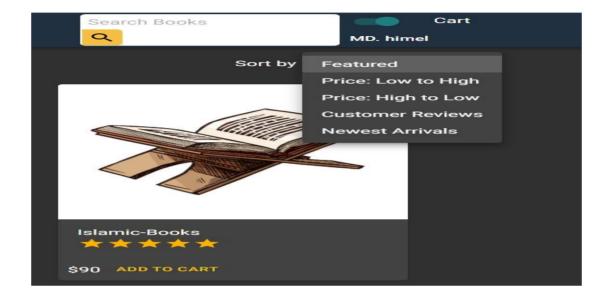


Figure 5.2.16: Product featured

Product categories:

As shown in the Product categories list screen can be seen in Figure 5.2.17.

By searching the book brands, price range, brands, etc. A customer can get the book he needs.

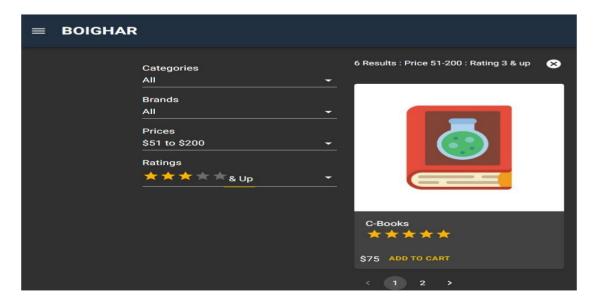


Figure 5.2.17: Product categories

Shopping cart:

As shown in the Shopping cart screen can be seen in Figure 5.2.18.

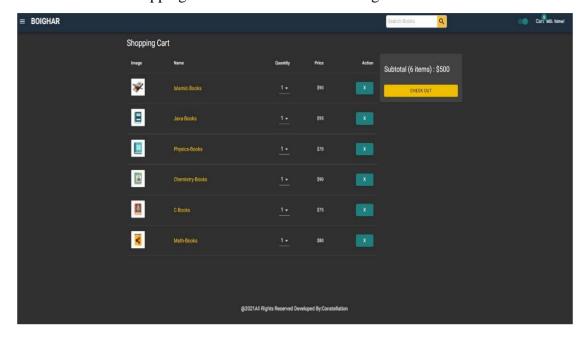


Figure 5.2.18: Shopping cart

Place order:

As shown in the Place order list screen can be seen in Figure 5.2.19.

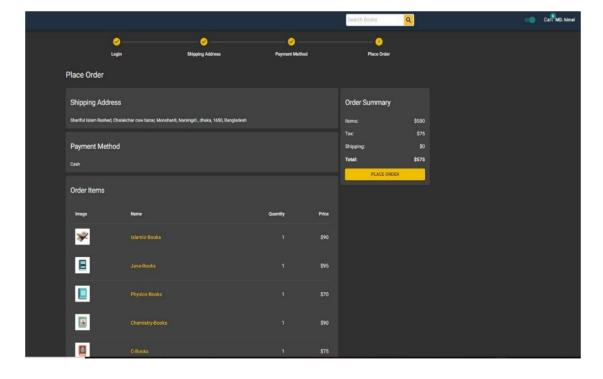


Figure 5.2.19: Place order

Order summary:

As shown in the Order summary screen can be seen in Figure 5.2.20.

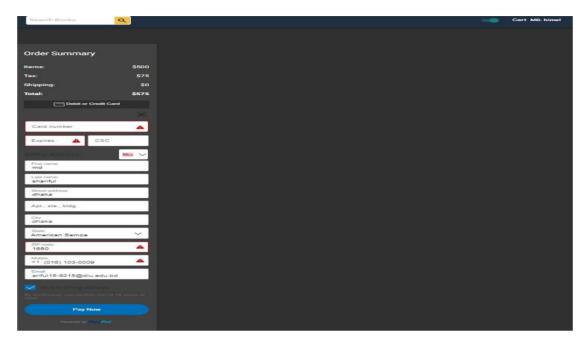


Figure 5.2.20: Order summary

Order details:

As shown in the Order details screen can be seen in Figure 5.2.21.

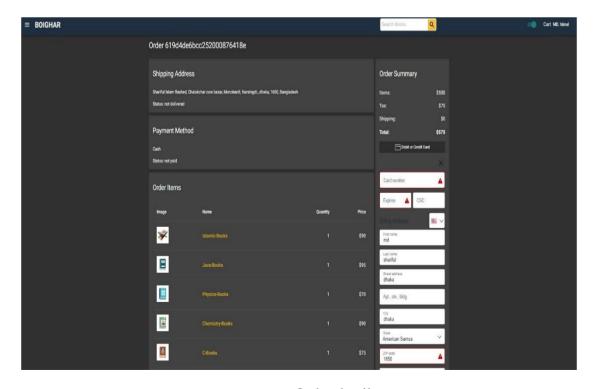


Figure 5.2.21: Order details

Order History by Admin View:

As shown in the Order History by Admin View list screen can be seen in Figure 5.2.22.

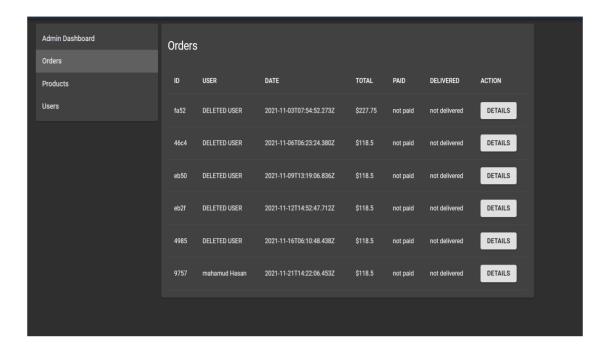


Figure 5.2.22: Order History by Admin View

Payment Method:

As shown in the Payment Method screen can be seen in Figure 5.2.23.

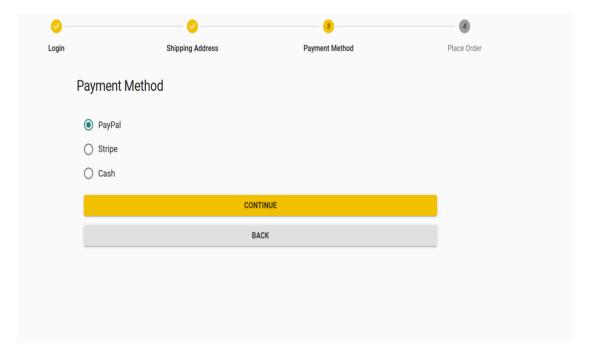


Figure 5.2.23: Payment Method

Payment with PayPal:

As shown in the Payment with PayPal screen can be seen in Figure 5.2.24.

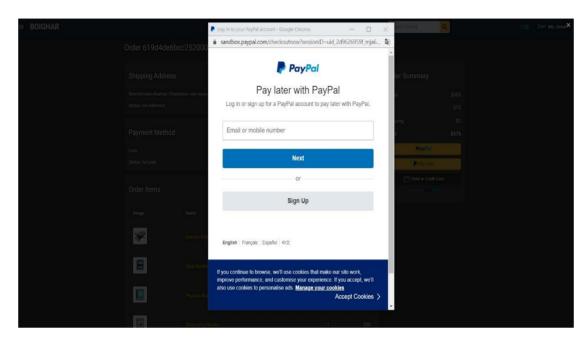


Figure 5.2.24: Payment with PayPal

Customer Review:

As shown in the Customer Review screen can be seen in Figure 5.2.25.

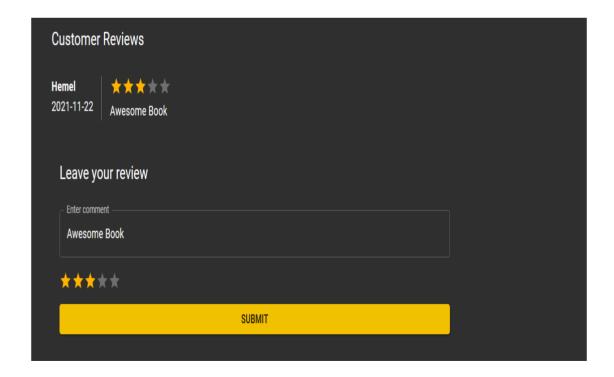


Figure 5.2.25: Customer Review

5.3 Testing Implementation

Testing is the procedure for testing approaching implementation system where tester or system architect might find cases and spaces, could it be implementable and have limitation. Here we make some basic tests to our system.

We are given the value below:

Table 5.3.1: Different tests

Test Case		Test Input	Expected	Obtained	Pass /
			Outcome	Outcome	Fail
1.	Registration.	Show restriction	all the information	Registration	Pass
		to fill all the field	input correct	successful	
2.	Admin/	Login via a	Successfully login	Successfully	Pass
	Seller login.	device with real		login	
		information			
3.	Admin/	Incorrect input	Login Failed	Login Failed	Pass
	Seller				
	Login.				
4.	Customer	Login via a	Successfully login	Successfully	Pass
	login.	device with real		login	
		information			
5.	Customer	Incorrect input	Login Failed	Login Failed	Pass
	login.				
6.	Customer	Empty all the	Show restriction to	Field must be	Pass
	Create	field	fill all the field	filled by data	
	Account.				
7.	Update	Click the Update	Successfully	Successfully	pass
	customer	button	update	update	
	information.			information	
8.	View	Click on	View Profile	View Profile	Pass
	Profile.	Profile Menu	information	information	

9. Update	Give all the	Update successful	Update	Pass
Profile.	update		successful	
	information			
10. Customer	Write comment	Comment sent	Comment	Pass
Review.			sent	
			successfully	
11. Cart	Click selected	Cart the product	Cart the	Pass
product.	items cart button		product	
			successful	
12. Rating.	Click selected	Rating successful	Rating	Pass
	items		successful	
13. Update	Edit product list	Products update	Products	Pass
products.		successful	update	
			successful	
14. Logout.	Click on	Logged out	Logged out	Pass
	"Logout"			

Following are the test cases applied for the Users of the "Boi Ghar" website.

•Test Case 5.3.1:

Precondition: Device must be connected to the internet.

Assumption: The user has opened the website and is on the login page.

Input: The user presses the "Login" button.

Result: The user is logged into the system.

•Test Case 5.3.2:

Precondition: Device must be connected to the internet.

Assumption: The user pressed the "Registration" button to join the Boi Ghar website

Input: Give all information for registration

Result: The user is viewing the home page Boi Ghar website that is available on her screen.

•Test Case 5.3.3:

Precondition: Device must be connected to the internet.

Assumption: The user is logged in and viewing the "necessary info" page.

Input: The user's necessary info is entered and the save button pressed.

Result: User is viewing the home page, which was taken him if user registration

before.

•Test Case 5.3.4:

Precondition: Device must be connected to the internet.

Assumption: The user pressed the "Search books" button to look for available books.

Input: Type the necessary books.

Result: The user is viewing the needed books that are available.

•Test Case 5.3.5:

Precondition: Device must be connected to the internet.

Assumption: The user wants to see his profile info.

Input: The user pressed the "Profile" button. Result: The user is viewing his info.

•Test Case 5.3.6:

Precondition: Device must be connected to the internet.

Assumption: The user wants to update the profile. Users give inputs to update

information.

Input: User entered desired update section and pressed the confirmed button.

Result: New information added.

•Test Case 5.3.7:

Precondition: Device must be connected to the internet.

Assumption: The user wants to see the website info.

Input: Press the "Footer" section

Result: The user is viewing the info about the website developers.

•Test Case 5.3.8:

Precondition: Device must be connected to the internet.

Assumption: The user wants to log out.

Input: The user pressed the "log out" button. Result: User is logged out.

•Test Case 5.3.9:

Precondition: Device must be connected to the internet.

Assumption: The user pressed the "Order history" button to look for what he ordered

now.

Input: User credentials are entered, and the "Order History" button is pressed.

Result: The user is ordering history into the system and viewing the order books on

his record.

•Test Case 5.3.10:

Prerequisite: The device must be connected to the internet.

Assumption: The user wants to cart the product from his order.

Input: The user will press the "Add to Cart" button of the product of his choice.

Result: The user is successfully seeing that his product has been ordered.

•Test Case 5.3.11:

Precondition: Device must be connected to the internet.

Assumption: The user pressed the site menu bar in the header section to look for books categories available on this website.

Input: Desired books, brands, prices, and ratings are entered, and the search button is pressed.

Result: The user is viewing the desired books that are available.

•Test Case 5.3.12:

Precondition: Device must be connected to the internet.

Assumption: The user will fill in the required information for sending his product

Input: When the products are added to the cart, click the checkout button to place the

final order.

Result: The user will be able to see the shipping instructions for his product.

•Test Case 5.3.13:

Precondition: Device must be connected to the internet.

Assumption: The user will pay for his product through the media of their choice.

Input: select the required payment process.

Result: The order of his products has been a complete success.

5.4 Test Results and Reports

The test report is required for minor testing, which supplies a scope to estimate testing results rapidly. It is a paper that records data acquired out of your evaluation experiment in an organized manner, describes the environment or operating conditions, and shows the comparison of test results with test objectives. The test report is more critical than needed to understand whether the machine is prepared for implementation. We must let you know several types of testing. There are numerous types of testing. Suppose the system passes through all these types of testing. In that case, it is finally ready for implementation, so in the end, we can carry out the results as the benefits of usability testing.

Table 5.5.1: Usability testing

	Good	Bad
Usability Testing	feedback	feedback
Good Quality of		
system.	Yes	
System is easier to		
use.	Yes	
Website is rapidly		
accepted by users.	Yes	
Easy to use for the		
new users.	Yes	
Better UI for		
Interaction.	Yes	
Easily find the	Yes	
product.		
The customer live		Yes
help care support.		

CHAPTER 6

IMPACT ON SOCIETY, ENVIRONMENT AND SUSTAINABILITY

6.1 Impact On Society

Since childhood, we have been able to create almost all of our analog systems, and now with the help of technology, nearly all of us can do that digital method. If we want to move our country and society forward, we must move forward with the help of technology. So we can improve the community a lot by using new technology methods. We've been buying books from the library since we were kids, but now using technology, we can buy books online at home if we want. But, our science and technology have advanced so much that gadgets like smartphones have become highly affordable. So almost everyone has the opportunity to use the phone quickly. There to send our book room website. Websites that anyone can access from the Internet. All the books in our libraries are not available at the right time. You can see if you want to buy those books from us if you can find them anywhere through our library website. To collect the book online, our society needs to combine technology in a new way so that all the people in the community can adapt to our technology. In other words, the people of our society can quickly solve the problem of the wanderer.

6.2 Impact On Environment

We use only eco-friendly materials for our website. However, it can have some effects on the environment. For example, we need a smart device (smartphone/laptop) to use our website. These phones/computers later generated e-waste. If these e-wastes are not reused properly, mobile phones could cause environmental pollution. So, if someone brings an electronic device (mobile, computer, tab) to use our website and does not reuse it, it can affect the environment.

Moreover, we are also helping the environment through our website. Because when we didn't have the means to run a library website before, people had to go to the library to buy books, and we used paper books. If you want to book, you must use paper. Also, our website will have a digital version of the book (PDF) system, which is

environmentally friendly. So, our website will help save thousands of trees and make this world beautiful.

6.3 Ethical Aspects

The ethical issues that manifest in the e-commerce business are in the storage and processing of data. Data security and protection is one of the most commonly discussed ethical issues in e-commerce. Companies that fail to protect their data can be held liable for information security breaches. Consumers may become disgruntled and cancel their accounts, opting to take their business to competitors. Companies' major ethical issues when doing business related to e-commerce are privacy, security, trust, intellectual property rights, and some environmental issues.

Our website Our "Boi Ghar" website has been created considering the ethical aspects of everyone. Because we are only using it for personal use for an organization, there will be no unethical action regarding our application. The website should be used by everyone for their study, personal and business purposes and hopefully, all the users will benefit a lot. Moreover, we will ensure that there will be no immoral acts on our website. In addition, the application is open-source, so it will not harm anyone personally or financially.

6.4 Sustainability Plan

We will update our website regularly when needed, and we will bring new features and security measures to our website. With the framework and technology that we used in our project, the website will get updates if needed. We've built our application using the latest technology available at this time. If there is a significant update version, we can update our application again and use the website we need. Our application will be open source so that everyone can use the website for any need. And with any update to our website, the updated version will reach all our users, and web users will be encouraged to use our application. Later we will be able to add new features to our application.

CHAPTER 7

CONCLUSION AND FUTURE SCOPE

7.1 Discussion and Conclusion

We consider the "Boi Ghar" system to be a helpful, supportable, comfortable, most straightforward integration. This system is suitable for customers who can buy and sell from it. Anyone can visit this site to check the new items available and read books. We believe that the "Boi Ghar" system reduces the time, cost, effort, and potential required in physical shopping processes. The "Boi Ghar" system gains access to many well-established communications, lots of technology and facilities, and the practical goals of the e-commerce site process. It will be a comprehensive, integrated information system, especially for educators at all levels. We think it's a user-friendly website system. Anyone can quickly visit this site. We've created a very efficient and easy "Boi Ghar" website for the general public. We think this system will work well for users and administrators. The e-commerce business is now one of the most famous businesses in the world. Day by day, people use online platforms to buy the things they need. The "Boi Ghar" platform benefits both our customers and sellers.

7.2 Scope for Further Developments

The name of our website is "Boi Ghar." We have already created our website, and our website system will be able to collect all the necessary books through our website. We are still working on our "Boi Ghar" website. We have a lot of plans for the website "Boi Ghar." We will gradually update our website so that we can get more benefits from our website. Work on our project will proceed slowly. Our "Boi Ghar" website is online-based. We will update our website framework day by day and make it easier to use later. Later we will add more features so that both sellers and buyers will benefit from it. While we already have a lot of features, there is always room for improvement. So, we can try to create an iOS version of our application. Transforming an Android application. Add more exciting features—increase system performance accuracy. Since our website "Boi Ghar" will be open source, their contribution would be welcomed if anyone has any other interesting idea that could enhance its features. We will further strengthen the "Boi Ghar" application on our website with the latest and greatest technology.

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