BOOK - E - SELL

A PROJECT REPORT

Submitted by

Aryan Ketanbhai Kothambia

190010116020

In partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING

in

Information Technology Department

A D Patel Institute of Technology, V.V.Nagar, Anand





Gujarat Technological University, Ahmedabad

JULY, 2022





A D PATEL INSTITUTE OF TECHNOLOG

New Vallabh Vidhyanagar, Post Box:-52, Vitthal Udyognagar-388121

CERTIFICATE

This is to certify that the project report submitted along with the project entitled **BOOK-E-SELL** has been carried out by **Aryan Ketanbhai Kothambia** (190010116020) under my guidance in partial fulfilment for the degree of Bachelor of Engineering in Information Technology, 7th Semester of Gujarat Technological University, Ahmadabad during the academic year 2022-23.

Prof. Sherin jijo

Dr. N. C. Chauhan

Internal Guide

Head of the Department



Summer Internship Certificate

Date 12/07/2022

This is to certify that Aryan Kothambia $\,$ undergone summer internship from 20^{th} June 2022 to 8^{th} July 2022. Details of the project is as under

Name of project: Book-e-Sell E-commerce web site

Technology: .net /postgres/ reactjs

We wish him/her grand success for the future.

Authorized Signatory

TatvaSoft, Ahmedabad

DECLARATION





We hereby declare that the Internship / Project report submitted along with the Internship / Project entitled **Book - E - Sell** submitted in partial fulfilment for the degree of Bachelor of Engineering in Information Technology to Gujarat Technological University, Ahmedabad, is a Bonafede record of original project work carried out by me / us at TatvaSoft under the supervision of Prof. Sherin jijo and that no part of this report has been directly copied from any students' reports or taken from any other source, without providing due reference.

Name of the Student

Sign of Student

Aryan Ketanbhai Kothambia

ACKNOWLEDGEMENT

With heart-felt gratitude, I would like to acknowledge the great support, help and guidance of God and number of persons, who helped me to reach at this pinnacle.

I consider my privilege to express deep sense of gratitude and indebtedness to my Guide **Prof. Sherin Jijo** for their valuable guidance, inspiration and constructive suggestions throughout and whole hearted support continuously, for the period of this dissertation. I express a deep sense of gratitude to **Dr. N. C. Chauhan** (H.O.D. IT Dept.) for providing guidance and support from time to time.

I owe thanks to all my classmates for providing me joyous moments, for the constructive discussions and valuable suggestions.

Last but not the least how can I fail to thank my family who has given me full support throughout my student life. It was no exception this time.

(Aryan Ketanbhai Kothambia)

•

ABSTRACT

This report is the reflection and also the journey of my three months internship period along with the highlights of what I learned through errors, work responsibilities, and the importance of internship program at TatvaSoft.

The knowledge I have gained as a new developer on web application development, new frameworks, and also how to work in an office environment is splendid. As an intern, my work was to learn and focus on web application projects.

In this report, I have focused my work territory and explained my achievements which I have got through my internship at TatvaSoft.

Fig No	List of Figures	Pg. No
Fig 4.1	TypeScript basics	18
Fig 4.2	React Hooks	19
Fig 4.3	React Formik	20
Fig 4.4	ASP.NET Core 5 Web API	21
Fig 4.5	PostgreSQL Installation	21
Fig 4.6	Registration & Login API	22
Fig 4.7	API for Category Master	23
Fig 4.8	API for Book Master	24
Fig 4.9	API for Cart Master	24
Fig 4.10	Frontend Registration module	25
Fig 4.11	Frontend Login Module	25
Fig 4.12	Frontend Book Listing module	26
Fig 4.13	Frontend Global Search module	26
Fig 4.14	Frontend Cart module	27
Fig 5.1.1	Use Case Diagram	28
Fig 5.1.2	ER Diagram	29
Fig 5.2.1	Book Table	30
Fig 5.2.2	Cart Table	31
Fig 5.2.3	Category Table	31
Fig 5.2.4	Role Table	32
Fig 5.2.5	User Table	32

LIST OF TABLES

Fig No	List of Tables	Pg. No
Table 2	Company Details	14
Table 2.3	Technologies	16
Table 3	Technologies Learned	17

TERMS

FULL FORMS

CSE Computer Science and Engineering

HTML Hypertext Markup Language

CSS Cascading Style Sheets

JS JavaScript-

API Application Programming Interface

SQL Structured Query Language

ASP.NET Active Server Pages

TABLE OF CONTENTS

Acknowledgement	i
Abstract	ii
List of Figures	iii
List of Tables	iv
List of Abbreviations	v
Table of Contents	vi
Chapter 1 INTRODUCTION	12
1.1 Objective	12
1.2 Purpose	13
1.3 Technology used in Project	13
Chapter 2 COMPANY PROFILE	15
2.1 Services	15
2.2 Departments	15
2.3 Technologies	16
2.4 Working Environment	16
Chapter 3 TECHNOLOGY LEARNED	17
Chapter 4 OUTLINE OF WORK DONE	18
4.1 Day 1: React.js and TypeScript	18
4.2 Day 2: React.js with TypeScript & Hooks	19
4.3 Day 3: React Formik	20
4.4 Day 4: ASP.NET Core 5 Web API	21
4.5 Day 5: PostgreSQL	21
4.6 Day 6 & Day 7: Backend .NET Core API for Registration & Login	22
4.7 Day 8: Backend .NET Core API for Category Master	23
4.8 Day 9: Backend .NET Core API for Book Master	24
4.9 Day 10: Backend .NET Core API for Cart	24
4.10 Day 11: React.js Registration module with API Integration	25
4.11 Day 12: React.js Login module with API Integration	25
4.12 Day 13: React.js Book Listing module with API Integration	26
4.13 Day 14: React.js Global Search module with API Integration	26
4.14 Day 15: React.js Cart module with API Integration	27

Chapter 5 DEVELOPMENT PROCESS	
5.1 Project Design	28
5.1.1 Use Case Diagram	28
5.1.2 ER Diagram	29
5.2 Project Functionalities	30
5.3 Database Structure	30
Chapter 6 CONCLUSION	33
6.1 Summary	33
6.2 Future Scope	

1 - INTRODUCTION

The Bookshop Automation System is to automate all operations in a bookshop. Generally, it includes the Order Processing, Stock Management and Accounts Management. Before automating a bookshop, we have to understand the concept of automation. In automation of any operation, we make a system which do work automatically as the respective events occurs, for which it is meant. There are some common examples of the automation like that auto pilot system in the aircraft, automatic home systems (electric system, water system, fire alarm system, doors system etc.). These are best examples of the automation systems. Here we a retry to develop such type system which is provide the automation on the any type of the bookshop. That means a shop which has the type system which provides the facility to the customers of the shop to purchase the books from the shop without any complexity. For example, any customer wants to purchase any book from the shop than first of all customer just choose the stream of the book than he/she can see the more than one type of books there and then he/she can choose the specific book from there. And then purchase it by paying price on bookshop cash counter and receives its invoice.

1.1 Objective

- i. To give an outline of Tatva Soft including its products, mission, services, work environment, vision, and facilities.
- ii. Learn and get knowledge about their working style with the client and proper utilization.
- iii. The initial target to learn how to manage, coordinate, and communicate teamwork and make a profitable product.
- iv. Develop my skill, as a developer, implementation and maintenance of web app, and time management as an intern.

1.2 Purpose

Building an online book e selling website provides an alternative means of ecommerce for selling school books and vulnerable books for the students and remaining people. The system also comes with a great benefit which is that it also provides an enquiry of books and also the uploading and purchasing book with a single click on the button. It also provides the user to enquire about the books through message. The objective is to develop a fully functional online book selling website to allow seller to sell and buyer to buy books and obtain the full utilisation of the books. To further make the system complete an enquiry system is put into place to determine if a buyer or up loader wants to interact with the admin or the user and providing the confirmation regarding the book to be purchased or uploaded.

1.3 Technologies Used in Project

Frontend -React JS, TYPESCRIPT

Backend -ASP.NET

Database-Prostgre SQL

2 - COMPANY PROFILE

TatvaSoft is one of the leading global software development company with customers spanned across 36 countries and working in more than 10 industry domains.

TatvaSoft is a CMMI Level 3 & Microsoft Gold partner Software Development Company offering software development services on diverse technology platforms, like Microsoft, Java, PHP, SharePoint, Biztalk, Open Source, Big Data, BI, & Mobile. With rich and varied experience of 18 years in software development and stringent quality standards, we offer utmost qualitative, on-time and cost-effective software solutions. We serve clientele across the industries and globe with offices in US, Canada, UK, Australia, and Development Center in India with a workforce of 810 IT professionals. We have successfully completed 1800+ projects with 700+ SMEs and Fortune 500 companies. Why TatvaSoft: -> CMMI Level 3 Software Development Company -> Microsoft Gold Partner -> World Class Development Centres -> 18 Years of IT Outsourcing Services Experience -> Intellectual Property Rights protection -> Approach to build long term relationship -> Global exposure and diverse expertise -> Onshore-offshore model -> Proper Hierarchy & Escalation path

Company Name	TatvaSoft: Software Development
	Company
Address	TatvaSoft House, Near Shivalik
	Business
	Center Sarkhej - Gandhinagar Highway,
	Rajpath Rangoli Rd, Ahmedabad,
	Gujarat
	380054
Contact Number	096014 21472
Year of Establishment	2001
Email	info@tatvasoft.com
Company Website	https://www.tatvasoft.com/

Table 2: Company Details

2.1 Services

The various services provided by TatvaSoft are:

- 1. Custom Software Development: The custom software development process encompasses designing, developing, deploying, and maintaining custom software solutions and services.
- 2. Web Application Development: Design, develop and deploy web applications to bring impactful changes within your web development projects.
- Dedicated Development Team: Optimize & scale your business delivery by hiring dedicated software developers, with freedom to screen, select and manage the extended team.
- 4. Software Product Development: TatvaSoft offers an intuitive and design-led software product development services to accelerate software products.
- 5. Ecommerce Development: TatvaSoft's capability to build flexible & resilient ecommerce platforms empowers business to provide omnichannel, mobile and personalized experience.
- 6. Mobile Apps Development: TatvaSoft is well experienced Mobile App Development Company with a proven track record of delivering effective apps.
- 7. Software Testing & QA: Experience Next-Gen software testing & Quality Assurance services with TatvaSoft.
- 8. UI/UX Design: Explore innovative digital experience by offering a blend of technology, creativity & personalization in UI & UX development services.

2.2 Departments

The various departments of TatvaSoft are:

- 1. Fintech & Insurance
- 2. Education
- 3. Energy and Utilities
- 4. Healthcare
- 5. Media & Entertainment
- 6. Oil, Gas & Mining
- 7. Retail & Ecommerce
- 8. Logistics & Distribution
- 9. Travel & Hospitality
- 10. Public Sector

2.3 Technologies

Sr. No.	Technologies	
1.	.NET	
2.	Java	
3.	Node.js	
4.	PHP	
5.	ROR	
6.	Angular	
7.	React.js	
8.	Vue Js	
9.	IOS	
10.	Android	
11.	React Native	
12.	Flutter	
13.	Xamarin	

Table 2.3: Technologies

2.4 Working Environment

As an intern, I am blessed that I get the opportunity to explore an amazing work environment at TatvaSoft. All of my colleagues are cooperative, friendly, and understanding. I never felt left out because everyone is so inspiring and optimistic.

3 - TECHNOLOGIES LEARNED

Sr No.	Titles	Description
1.	React.js	React is a free and open-source front-end JavaScript library for building user interfaces based on UI components. I used React.js for frontend development.
2.	TypeScript	It is a strict syntactical superset of JavaScript and adds optional static typing to the language.
3.	CSS	CSS was used to give styling to all the pages.
4.	ASP.NET Core 5	ASP.NET Core was used for backend to develop Web API's that could be integrated with React.js
5.	PostgreSQL	Postgres, is a free and open-source relational database management system emphasizing extensibility and SQL compliance. It was used as a database for storing all the user data.

Table 3: Technologies Learned

4 – OUTLINE OF WORK DONE

4.1 Day 1: Learned about React.js and

TypeScript Learned about the following:

- Learned about what is react.js.
- O Learned about React.js Component Structure
- O TypeScript basics

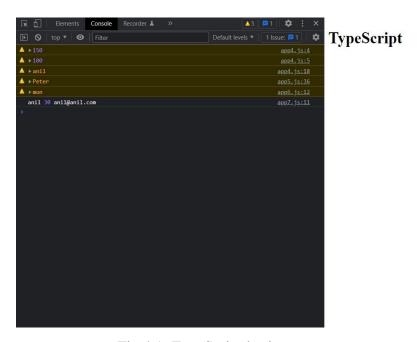


Fig 4.1: TypeScript basics

4.2 Day 2: Learned about React.js with TypeScript and React Hooks

• Learned about React Hooks and how to use React.js with TypeScript.

• Created a typescript app and created various react.js components in typescript. Welcome Guest BruceWayne ClarkKent PrincessDiana Loading... Placeholder text Oscar goes to Leonardo Discpario! **Welcome Guest** CLick Login Logout User is logged in | Login | Logout | | User name is Vishwas | User email is vishwas@abc.com Login Logout
User name is Vishwas
User email is vishwas@abc.com Private Profile component. Name is Rahul 10 positive Window Width: 1920

4.3 Day 3: Learned about React Formik

Learned about React Formik library by creating a login form and applying validation rules.

Name	
Name Required	
E-mail	
Email Required	
Channel	
Channel Required	
lame	
ramesh	
-mail	
ramesh@gmail.com	
hannel rameshvines	
hannel	

Fig 4.3: React Fromik

4.4 Day 4: ASP.NET Core 5 Web API

Created API's for performing mathematical operations.

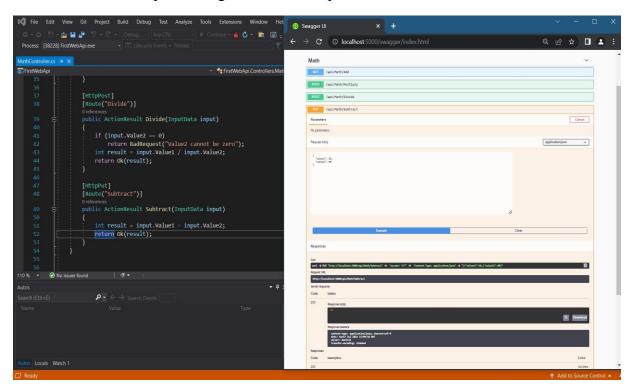


Fig 4.4 ASP.NET Core 5 Web API

4.5 Day 5: Installed PostgreSQL

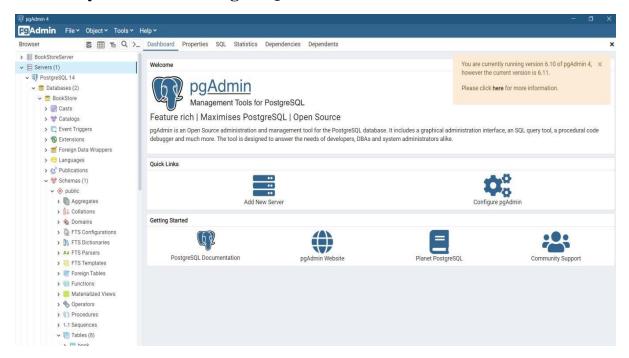


Fig 4.5: PostgreSQL Installation

 $4.6\ Day\ 6\ \&\ Day\ 7:$ Created Backend .NET Core API for Registration & Login

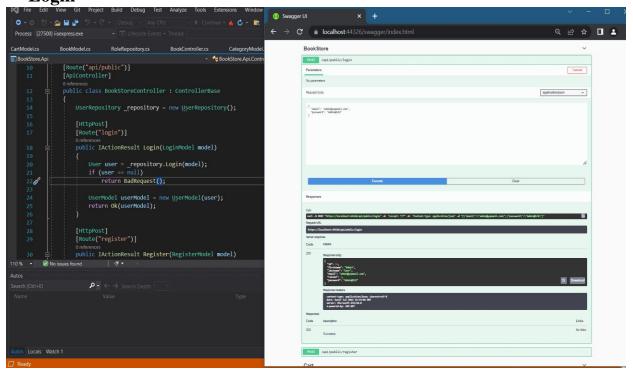


Fig 4.6: Registration & Login API

4.7 Day 8: Created Backend .NET Core API for Category

Master Created Category API's to fetch, add, update and delete categories.

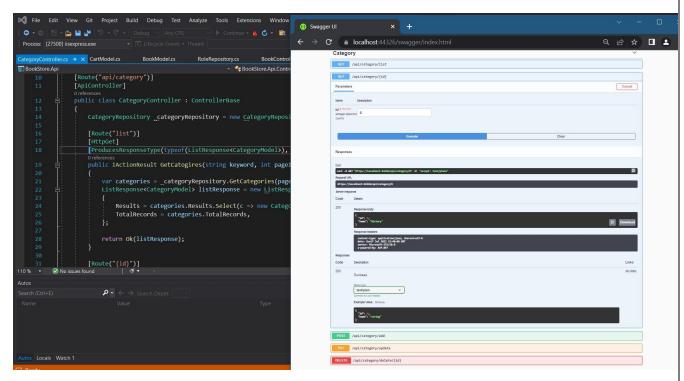


Fig 4.7: API for Category Master

4.8 Day 9: Created Backend .NET Core API for Book

Master Created Book API's to fetch, add, update and delete books.

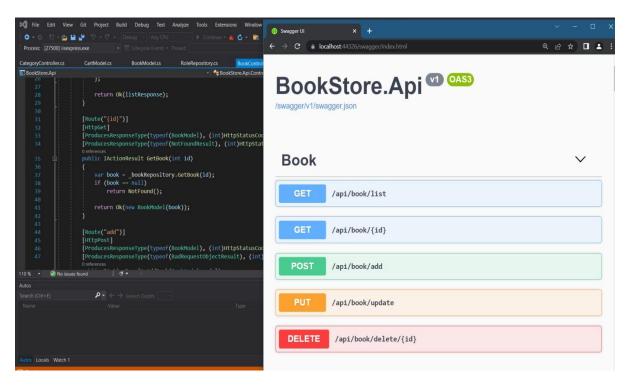


Fig 4.8: API for Book Master

4.9 Day 10: Created Backend .NET Core API for Cart

Created Cart API's to fetch books from cart, add book to cart, update cart items & delete cart item.

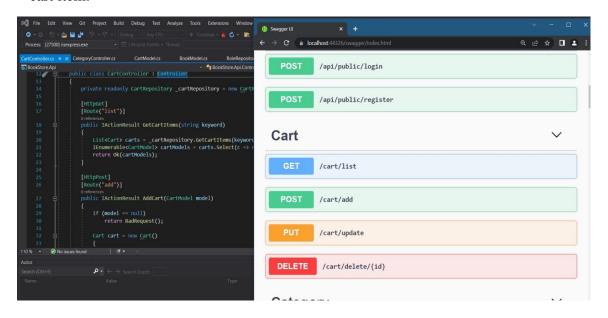


Fig 4.9: API for Cart

4.10 Day 11: Frontend React.js Registration module with API Integration

Created Frontend of Registration form and integrated it with Registration API

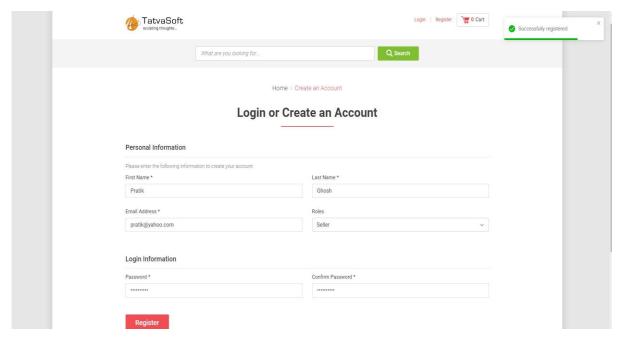


Fig 4.10: Frontend Registration module

4.11 Day 12: Frontend React.js Login module with API Integration

Created Frontend of Login form and integrated it with Login API

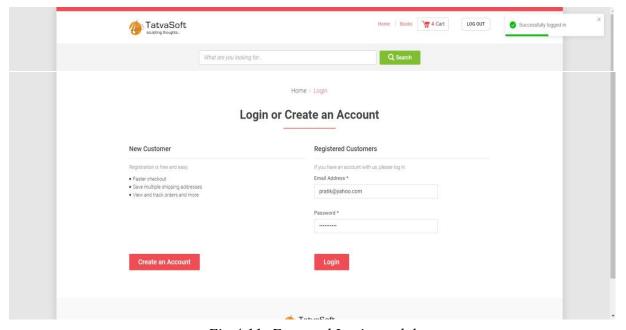


Fig 4.11: Frontend Login module

4.12 Day 13: Frontend React.js Book Listing module with API Integration

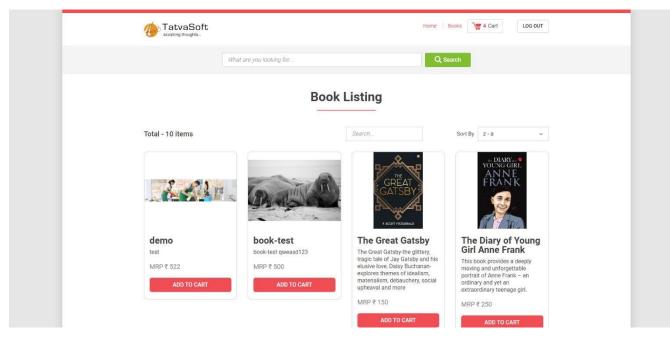


Fig 4.12: Frontend Book Listing module

4.13 Day 14: Frontend React.js Global Search module with API Integration

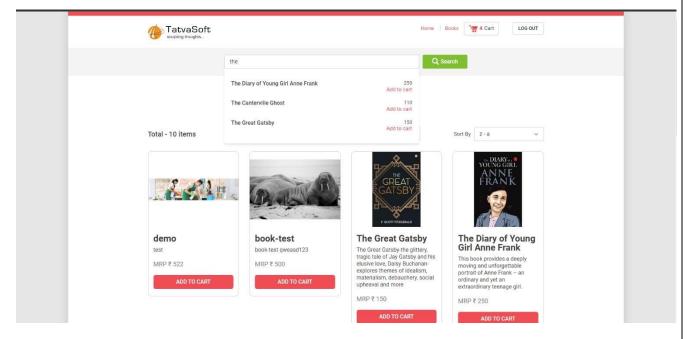


Fig 4.13: Frontend Global Search module

4.14 Day 15: Frontend React.js Cart module with API Integration

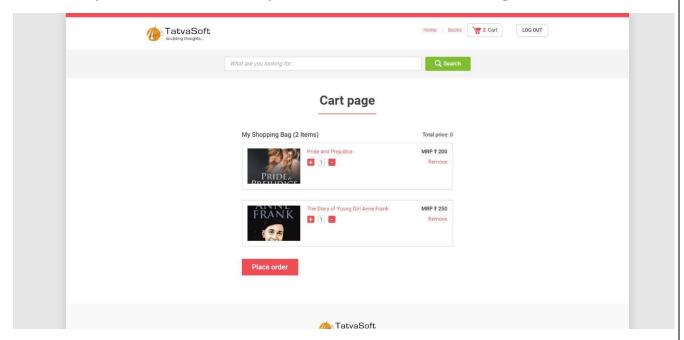


Fig 4.14: Frontend Cart module

5 – DEVELOPMENT PROCESS

5.1 Project Design

A good project plan and design makes any project a lot easier. Project design is an initial stage of the project. When I joined TatvaSoft's internship, my work was to build a website by making it fast, dynamic, and responsive and it is tough. I worked day and night to accomplish this task by using React JS, a cutting-edge technology. In this section, we give full concern towards the use-case diagram of my internship project and that will be described in the portion of 5.1.1. After completing that, we will give focus on the ER diagram and represent it in section 5.1.2. and Project functionalities in section 5.2, and Database structure in section 4.3.

5.1.1 Use Case Diagram

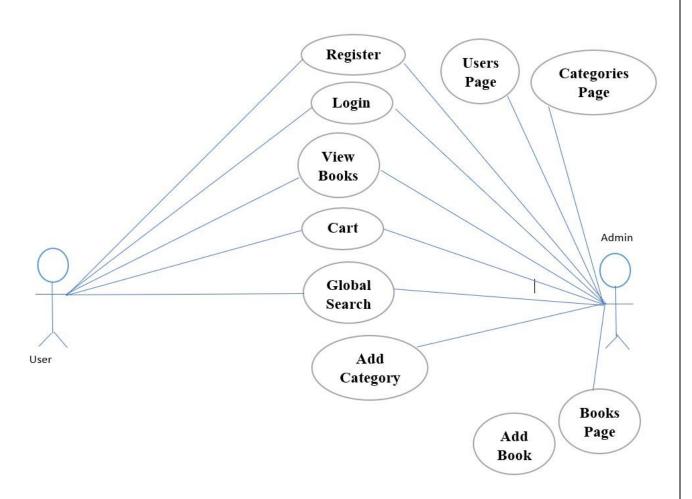


Fig 5.1.1: Use Case Diagram

5.1.2 ER Diagram

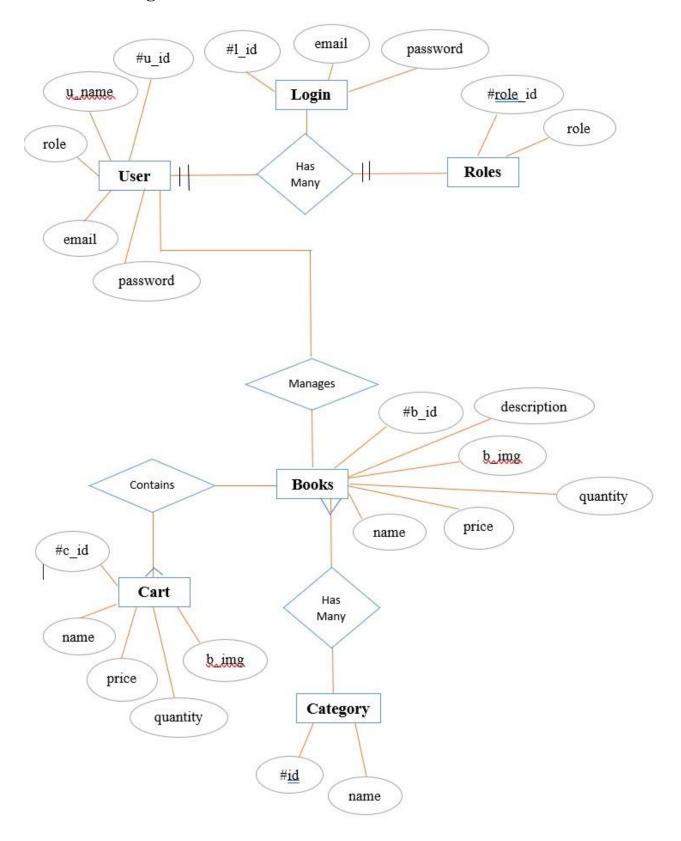


Fig 5.1.2: ER Diagram

5.2 Project Functionalities

- A user can register to the website.
- An existing user can log in.
- **O** A user can view all products.
- A user can search for all books by applying filters like sorting from a-z & z-a.
- A user can add any book to the cart.
- A user can place an order.

5.3 Database Structure

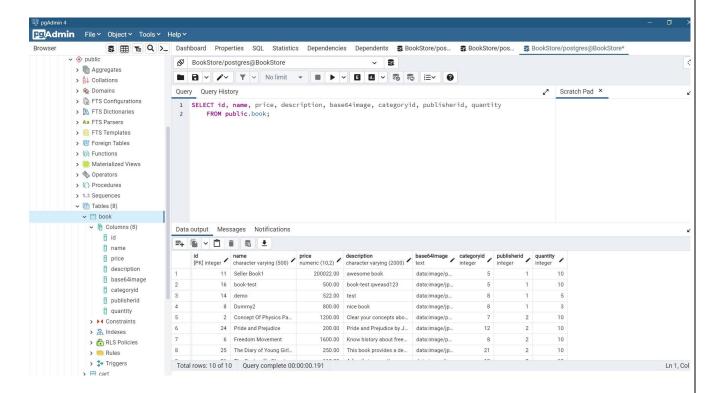


Fig 5.2.1: Book Table

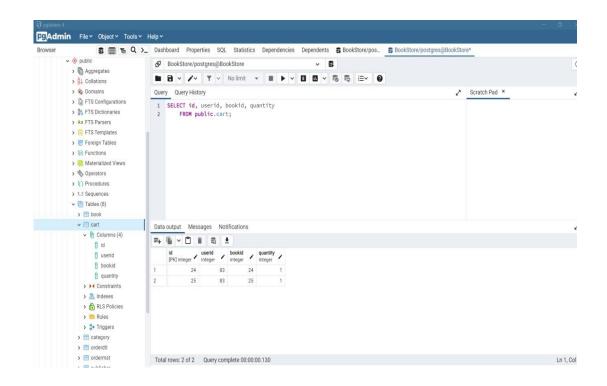


Fig 5.2.2: Cart Table

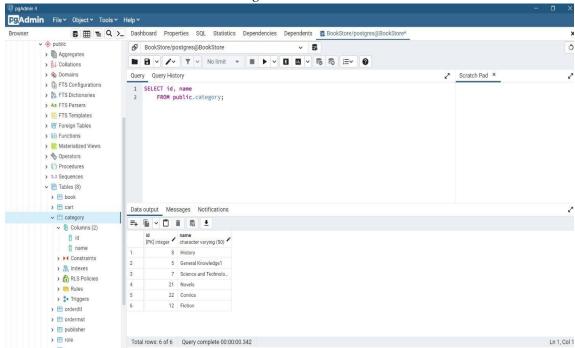


Fig 5.2.3: Category Table

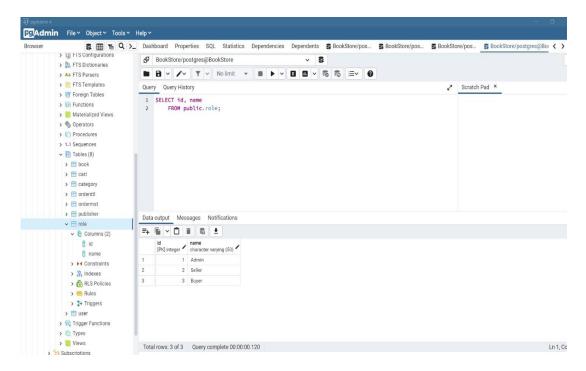


Fig 5.2.4: Role Table

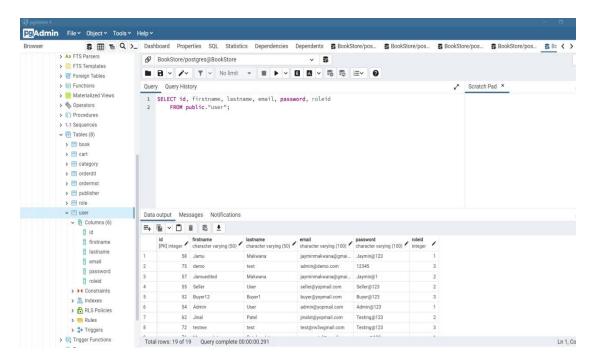


Fig 5.2.5: User Table

6 – CONCLUSION

6.1 Summary

The system was design in such a way that future modification can be done easily. The following conclusions can be deduced from the development of the project:

- Automation of the entire system improves the efficiency.
- It provides a friendly graphical user interface which probes to be better when compared to the existing system.
- It gives appropriate access to the authorised users depending on their permissions.
- It effectively overcomes the delay in communication.
- Updating of information becomes so easier.
- System security, data security and reliability are the striking features.
- The system has adequate scope for modification in future if it is necessary.

6.2 Future Scope

- The development of this project surely prompts many new areas of investigations.
- This project has wide scope to implement it in any ecommerce websites.
- This project covers all functionalities related to Book Selling. Hence it can be implemented anywhere else after minute in a click.
- The sharing facility will be available only to the logged in users.

We are also planning to provide the user with the facility to define different themes of the apps and provide online chat system.