

Online Book Store - BookStack

BCA399 Major Project 2021

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Signature of the HOD

Signature of the project supervisor

Acknowledgment

It is our pleasure to thank all the various people in the team who contributed directly and indirectly in the development of this project.

We express our sincere gratitude to our Project in charge and supervisor **Dr. Souvik Sengupta** for providing us the opportunity to undertake this project in our course of study and advancement of our knowledge in technology.

We also extend our sincere gratitude to our (HOD) **Dr.Sk Obaidullah** for his support and trust in the BCA students.

Lastly, we are humbled with all the problems and challenges faced during the project's development and like to express our benevolence to various sites and youtube videos that helped us in building our knowledge.

Abstract

BookStack is an E-commerce web application which has computerised the process of ordering books online. This has eased off the process of purchasing offline. An interactive web application that helps the user connect with the interface to shop and buy books.

Overall, there are only two modules. 1. Customer Module and 2. Administrator Module.

Under the Customer Module the customer has to make their online free BookStack account by giving in the required details in the SIGNUP page. Which provides the username and password of their choice. Which in turn is used to log in to the BookStack Account and start the process of browsing and buying books.

Under the Administrator module the admin is provided with a feature to add a new stock of books in case any particular book is on the verge of running out. Then the admin can request the publisher for adding more books of the same respectively.

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Introduction

1.1 Overview

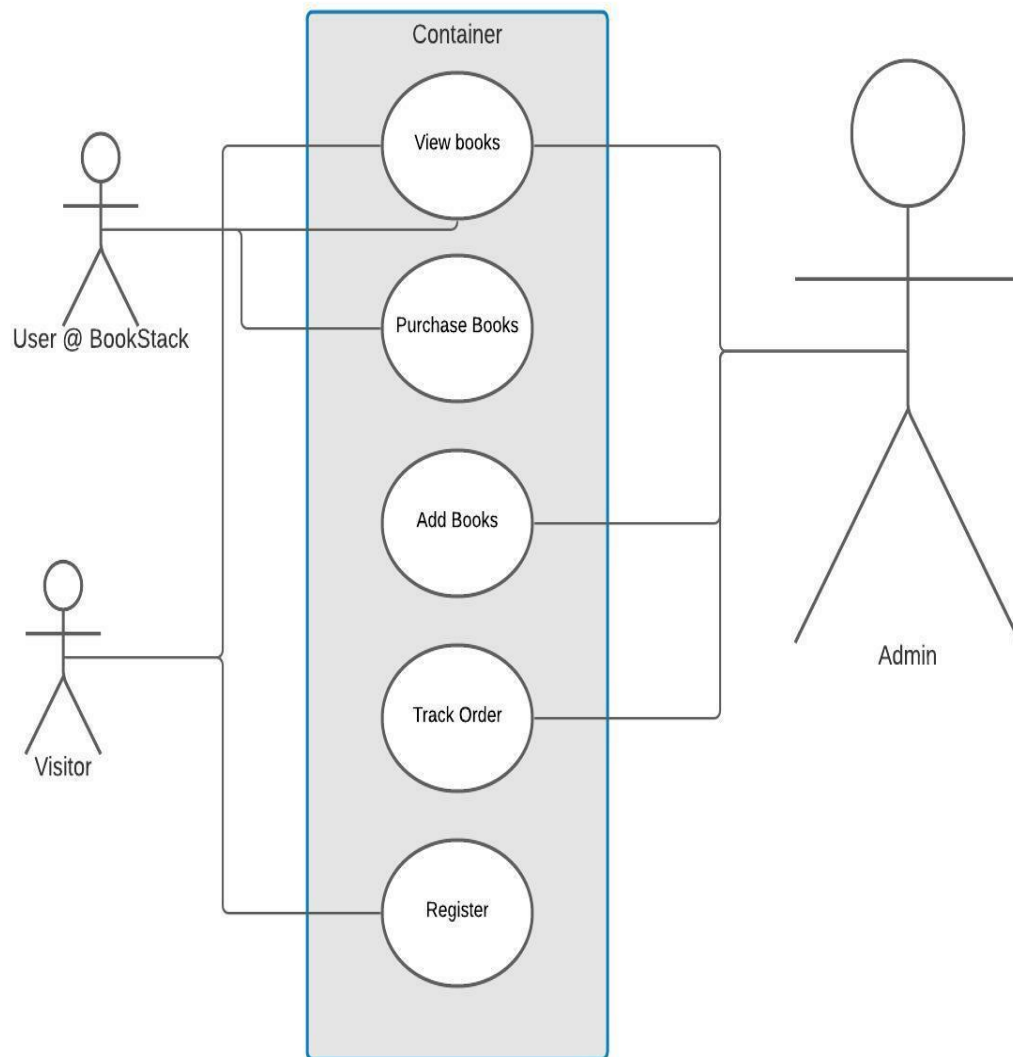
Any member can register and view available products. Only registered members can purchase multiple products regardless of quantity. Contact Us page is available to contact Admin for queries. There are three roles available: Visitor, User and Admin.

1.2 Background Study

The project was initially divided into 6 modules

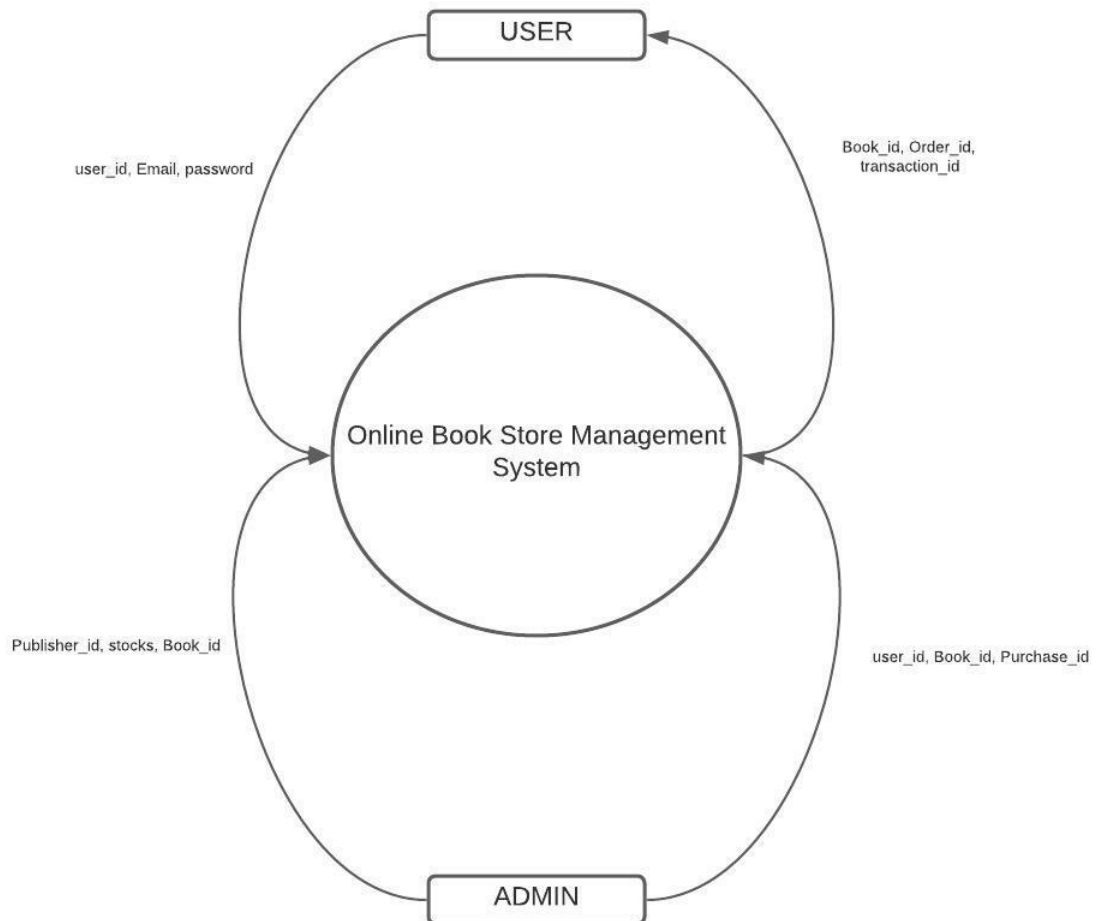
- 1.Registration & Login Module : To make an online presence at the BookStack
2. Administrator Module : For the administrator to track total order, book availability, etc
3. User Module : Functionalities of browsing,adding, purchasing.
4. Sales and purchase Module : Manages the Sales and purchase in the database
- 5.Inventory Module : Managed by the administrator module to edit the stocks of books available
6. Payment Module : Managed by the administrator module

1.3 Use Case Diagram

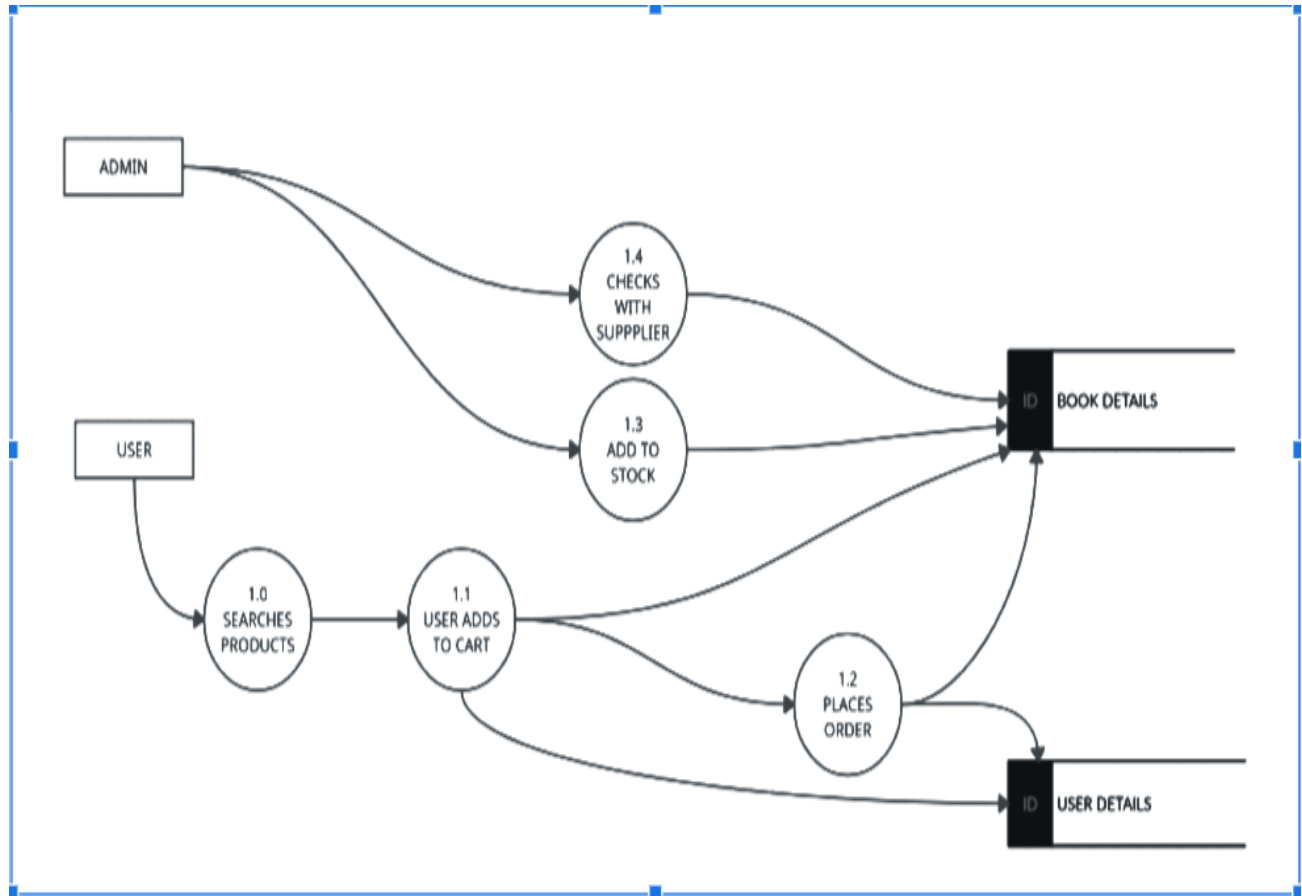


2. System Design

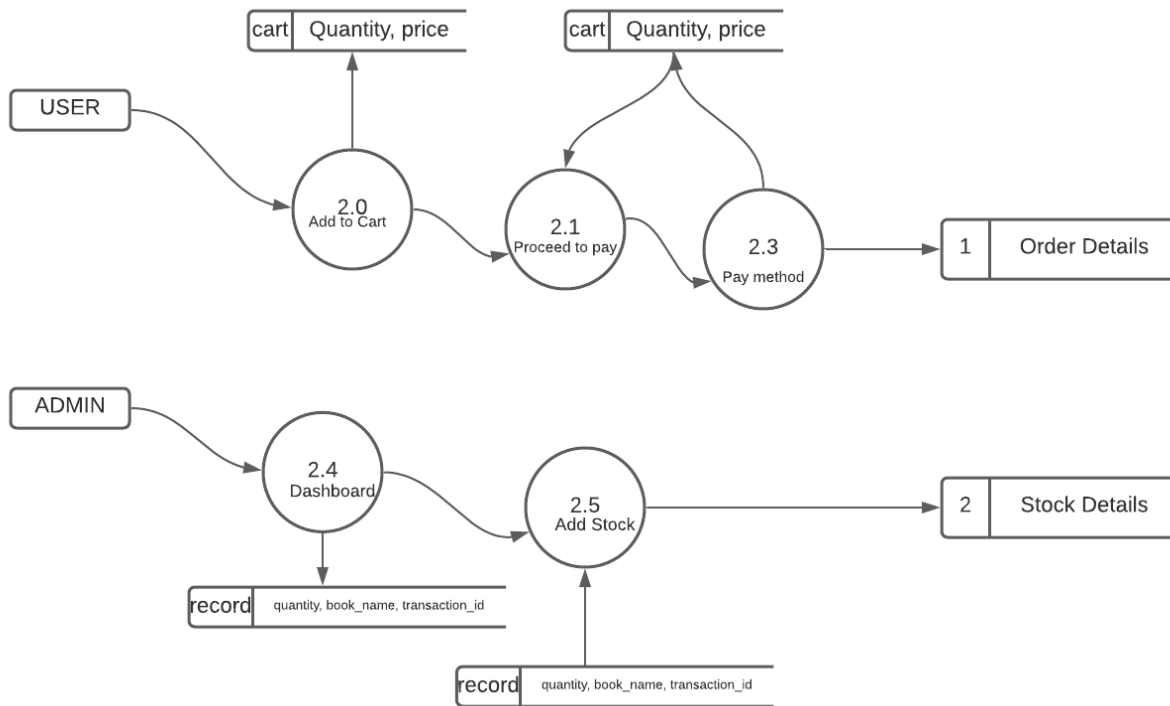
2.1 Context Level Data Flow Diagram



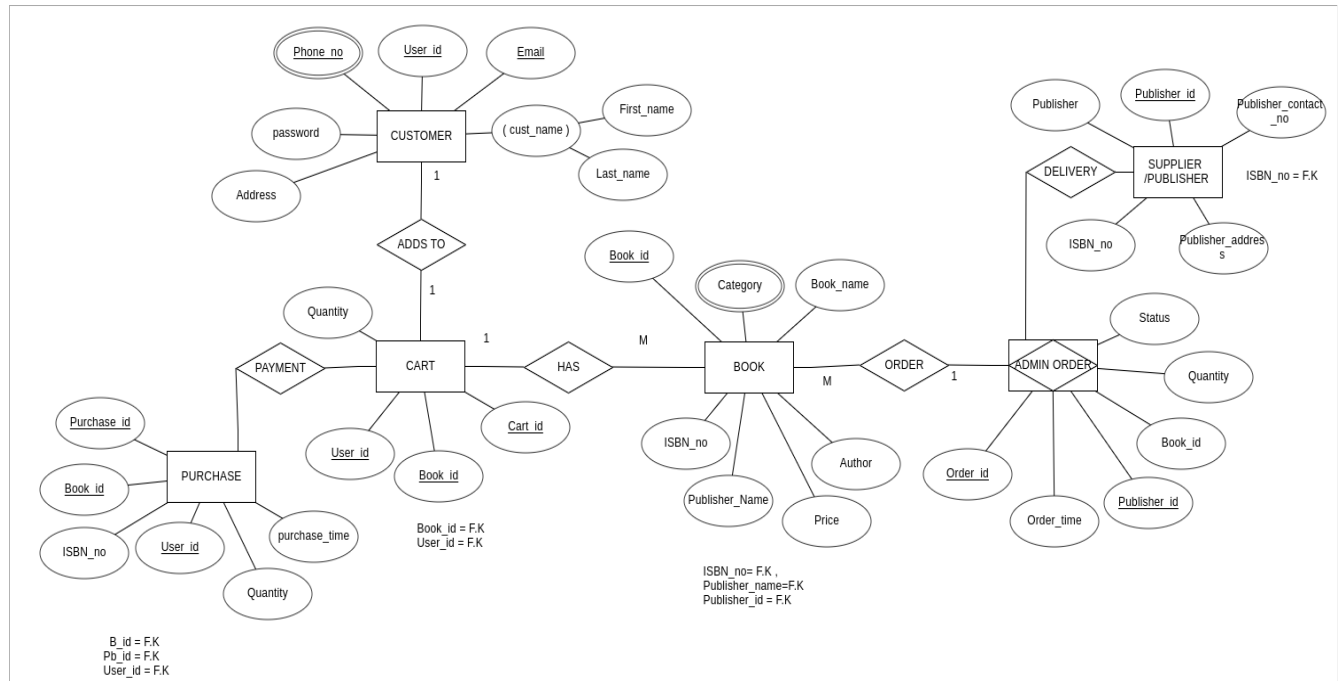
2.2 Level 1 Data flow diagram



2.3 Level 2 Data flow diagram



2.3 Entity relationship diagram



3. Hardware and Software requirements

Hardware requirements :

Desktop with

- ✓ 2GB RAM or above
- ✓ Intel Corei3 processor or above

Software requirements :

System with

- ✓ Windows OS or MacOS or Linux
- ✓ Windows OS : server setup can be WAMP or XAMPP
- ✓ MacOS : server setup using XAMPP
- ✓ Linux : server setup using LAMPP or XAMPP
- ✓ Compatible Browsers : Chrome, FireFox, Brave, Safari.
- ✓ Apache, PhpMyAdmin, MySQL

4. Problem Description

4.1 What the problem is

Buying books is not a daily necessity.

Where the availability of books, travelling to get the items, extra costs on miscellaneous becomes the problem. As one customer has to get his/her desired books has to search for it in a selected marketplace which also raises another problem statement which is the availability of the required item at the marketplace . That consumes time and makes the process slow.

Problems are :

- *Commute risks*
- *Miscellaneous costs*
- *Availability of the item*
- *Time, Slow process*
- *Security issues*

The purpose of any e-commerce website is to help customers narrow down their broad ideas and enable them to finalize the products

4.2 How BookStack solves the above problems

BookStack has approached the problem statement with the idea of an E-commerce application and making it come online.

Which minimizes a customer's travelling risks, cuts down the costs on travelling, packing etc. Readily shows the books of the choice online in its page. Smoothes the process of adding multiple books to their cart and choosing their preference of payment and getting it delivered at the doorstep. BookStack solves the availability of books at the Admin section. Where a new trending publisher/book can be added.

5. Solution Approach

5.1 Solving the problem

BookStack provides solutions to the aforesaid problems by :

- ✓ Digitizing the process of buying books online
- ✓ Cutting the risks and costs of travelling miscellaneous
- ✓ Prior information on availability of Books
- ✓ Easy purchasing
- ✓ Fast process
- ✓ Saves time
- ✓ Security issues

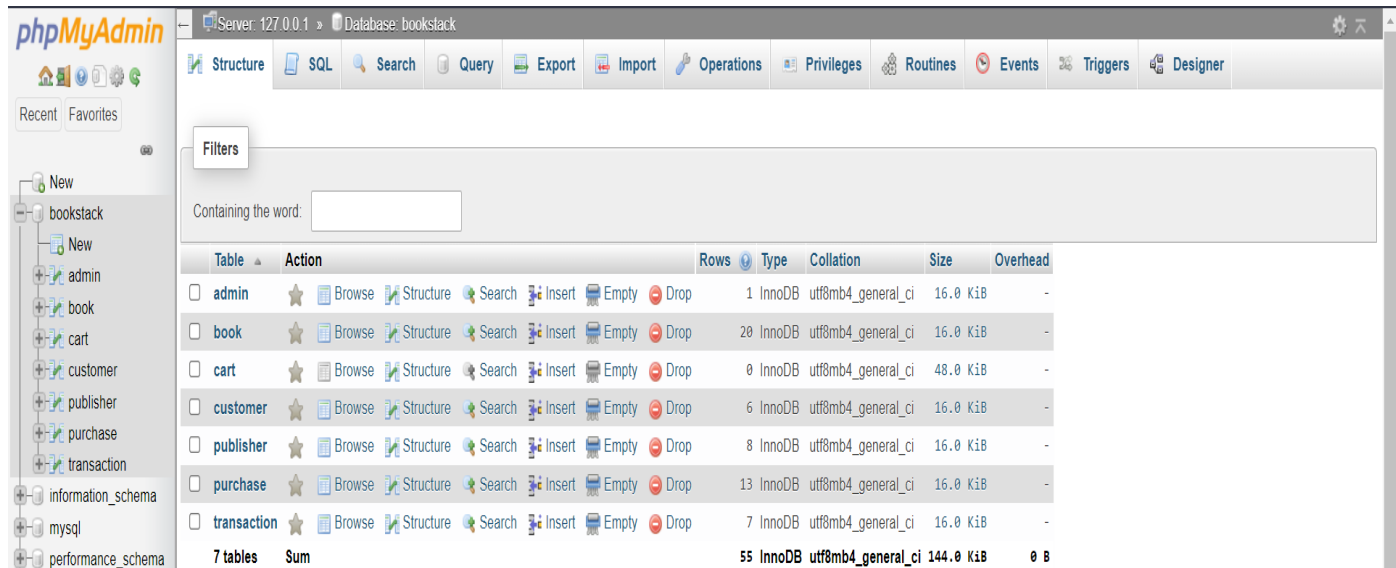
Approach to processes

Ecommerce website development is a lengthy and task-intensive project, with goals and hurdles that change along the way. Therefore it is very important to partner with an actual customer who follows agile processes that are continuously adapted and improved on the journey to suit the changing needs. Due diligence for quality assurance in processes also helps deliver predictable outcomes and more bang for your buck. The solution approach is basically to act out like a customer in terms of scalability of books, requirements of the client and it's user experience.

6. Database Design

6.1 Relational Schema

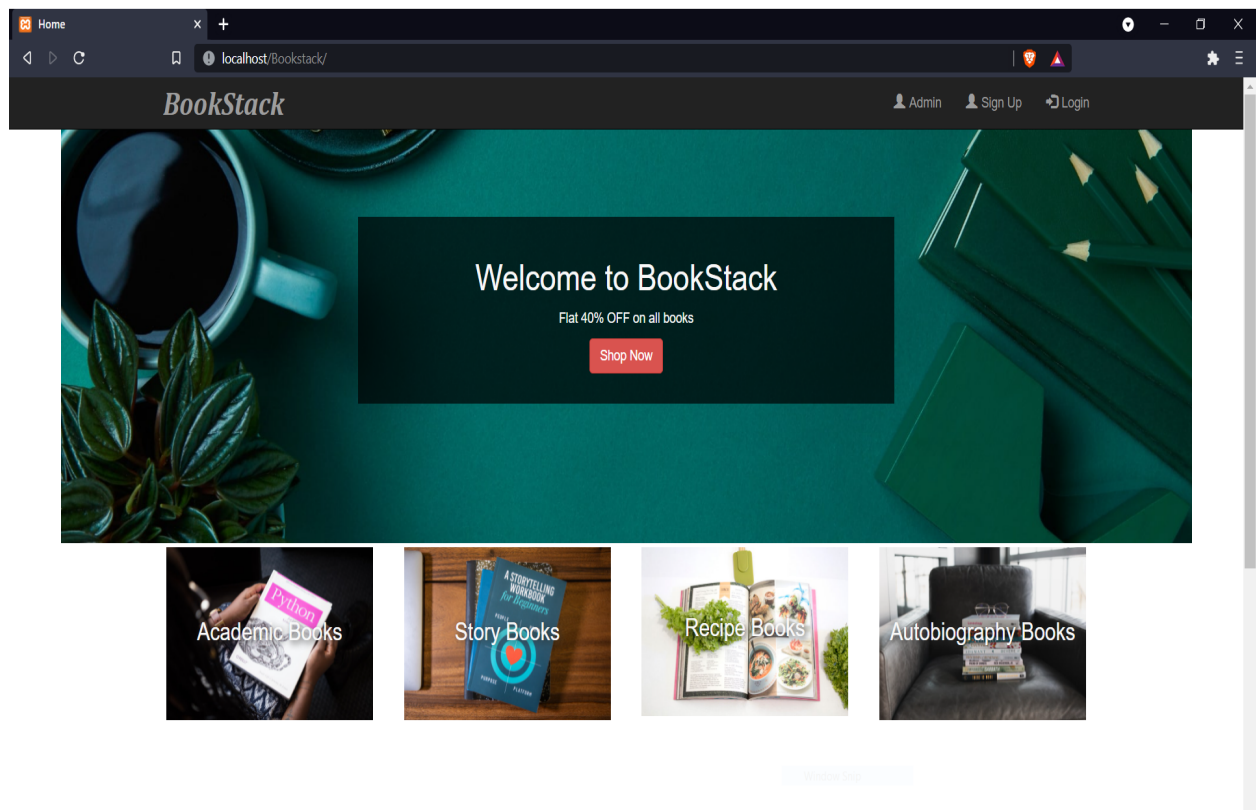
1. customer (**User_id**, First_name, Last_name, Email, Password)
2. book (**Book_id**, Book_name, ISBN_no, Author, category, Publisher, Price)
3. cart (**Cart_id**, **User_id**, Book_id, Quantity, Total_price, status)
4. publisher (**Publisher_id**, Publisher_name, Publisher_contact, Publisher address)
5. purchase (**Purchase_id**, **Book_id**, **user_id**, Quantity, Total_Price)
6. transaction (**Transaction_id**, **Purchase_id**, Card_number, Pay_method, Total_Price, Billing_Address, Transaction_timestamp)
7. Admin (**Admin_id**, Password)



| Table | Action | Rows | Type | Collation | Size | Overhead |
|--------------|---|------|--------|--------------------|-----------|----------|
| admin | Browse Structure Search Insert Empty Drop | 1 | InnoDB | utf8mb4_general_ci | 16.0 KiB | - |
| book | Browse Structure Search Insert Empty Drop | 20 | InnoDB | utf8mb4_general_ci | 16.0 KiB | - |
| cart | Browse Structure Search Insert Empty Drop | 0 | InnoDB | utf8mb4_general_ci | 48.0 KiB | - |
| customer | Browse Structure Search Insert Empty Drop | 6 | InnoDB | utf8mb4_general_ci | 16.0 KiB | - |
| publisher | Browse Structure Search Insert Empty Drop | 8 | InnoDB | utf8mb4_general_ci | 16.0 KiB | - |
| purchase | Browse Structure Search Insert Empty Drop | 13 | InnoDB | utf8mb4_general_ci | 16.0 KiB | - |
| transaction | Browse Structure Search Insert Empty Drop | 7 | InnoDB | utf8mb4_general_ci | 16.0 KiB | - |
| 7 tables Sum | | 55 | InnoDB | utf8mb4_general_ci | 144.0 KiB | 0 B |

7. Screenshots

7.1 HomePage → Sign Up



7.2 Sign Up → Login

The screenshot displays a web browser window with the address bar showing `localhost/Bookstack/signup.php`. The page header is dark with the *BookStack* logo on the left and navigation links for [Admin](#), [Sign Up](#), and [Login](#) on the right. The main content area is white and contains a 'SIGN UP' form. The form has a blue header with the text 'SIGN UP' in white. Below this, there are six input fields: 'Name' (containing 'John'), 'Surname' (containing 'Doe'), 'Email' (containing 'johndoe@gmail.com'), 'Password' (containing '*****'), 'Date of Birth' (containing '9191919191'), and 'Address' (containing '4 Gas Street'). A blue 'Submit' button is located at the bottom of the form. The footer is dark and contains the text: 'Copyright © BookStack. All Rights Reserved/Contact Us: +91 90000 00000'.

SIGN UP

Name: John

Surname: Doe

Email: johndoe@gmail.com

Password: *****

Date of Birth: 9191919191

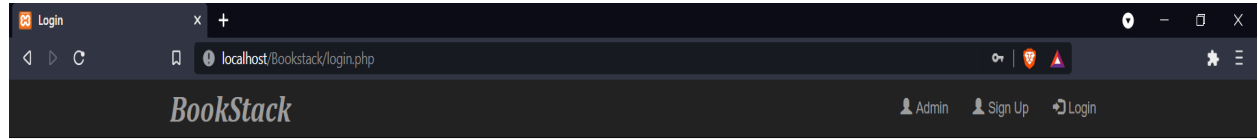
Address: 4 Gas Street

[Submit](#)

Copyright © BookStack. All Rights Reserved/Contact Us: +91 90000 00000

[Window Sign](#)

7.3 Login → Shop Now



LOGIN

Login to make a purchase

Don't have an account? [Register](#)

7.4 Shop Now → Add to Cart

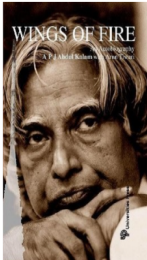
All Products

localhost/Bookstack/products.php


BookStack

Cart Logout

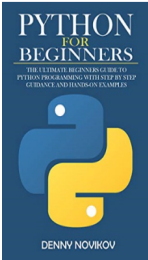
Books On 40% OFF




Wings Of Fire
Rs.499.00
Select Quantity
[Add to cart](#)



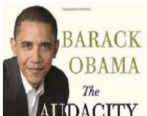
Paleo Baking at Home
Rs.250.00
Select Quantity
[Add to cart](#)




Python For Beginners
Rs.799.00
Select Quantity
[Add to cart](#)




The Story Of Cinderella
Rs.599.00
Select Quantity
[Add to cart](#)



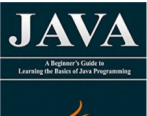
**BARACK OBAMA
The AUDACITY**



C PROGRAMMING





ITALIAN COOKING



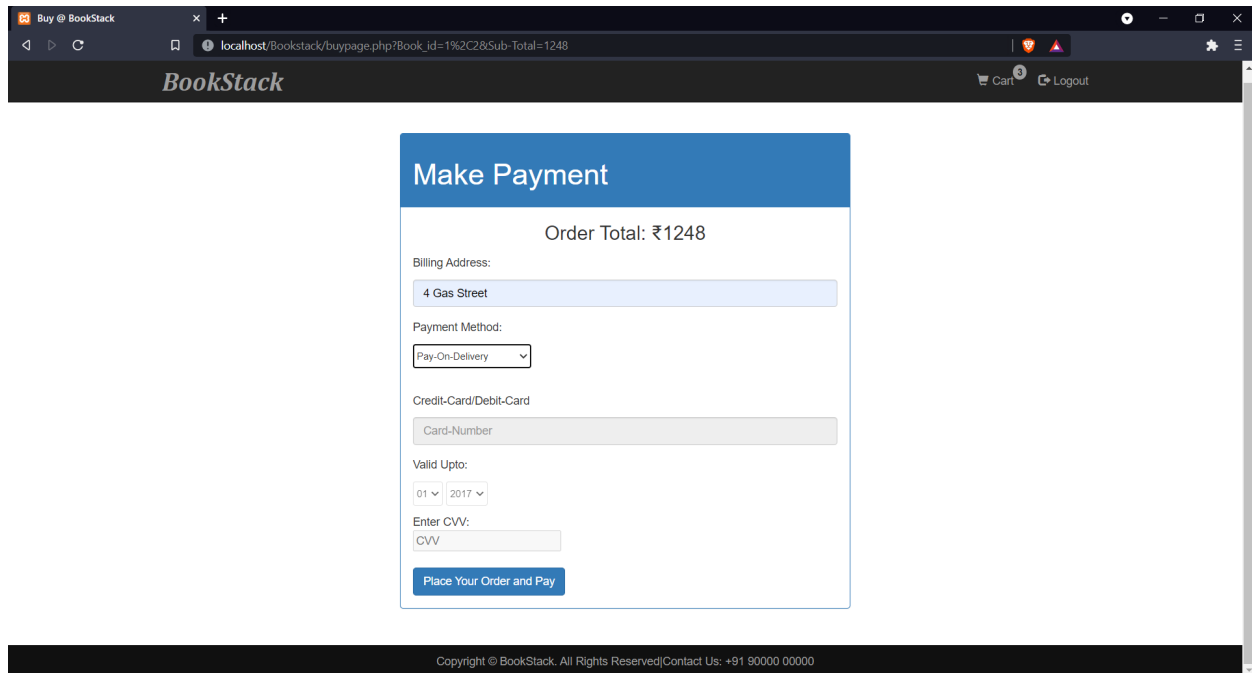
JAVA
A Beginner's Guide to
Learning the Basics of Java Programming

7.4 Cart → Proceed to Pay



| Item | Item | Item | Quantity | Total | |
|---|-------------------------------|-----------|----------|--------|--------------------------------|
| Name | Price | | | | |
|  | Wings Of Fire | Rs 499 | 2 | 998 | Remove |
|  | Paleo Baking at Home | Rs 250 | 1 | 250 | Remove |
| Sub Total | | | | Rs1248 | Proceed to Buy |

7.5 Proceed to pay → Payment Page → Choice of payment



The screenshot shows a web browser window with the BookStack logo and navigation links. The main content area is a 'Make Payment' form. The form includes a blue header with the title 'Make Payment'. Below the header, the 'Order Total' is displayed as ₹1248. The 'Billing Address' field contains '4 Gas Street'. The 'Payment Method' dropdown is set to 'Pay-On-Delivery'. The 'Credit-Card/Debit-Card' section has a 'Card-Number' field. The 'Valid Upto' section shows '01' for the month and '2017' for the year. The 'Enter CVV' field is empty. A blue button labeled 'Place Your Order and Pay' is at the bottom of the form. The footer contains copyright information and contact details.

Buy @ BookStack

localhost/Bookstack/buypage.php?Book_id=1%2C2&Sub-Total=1248

BookStack

Cart Logout

Make Payment

Order Total: ₹1248

Billing Address:

4 Gas Street

Payment Method:

Pay-On-Delivery

Credit-Card/Debit-Card

Card-Number

Valid Upto:

01 2017

Enter CVV:

CVV

Place Your Order and Pay

Copyright © BookStack. All Rights Reserved|Contact Us: +91 90000 00000

7.6 Choice of Payment (debit card) → Success page

The screenshot shows a web browser window with the BookStack logo and navigation links (Cart, Logout) in the header. The main content area displays a 'Make Payment' form. The form includes the following fields and elements:

- Order Total:** ₹1248
- Billing Address:** 4 Gas Street
- Payment Method:** Debit Card/Credit Card (dropdown menu)
- Credit-Card/Debit-Card:** 1234567890123456
- Valid Upto:** 02 / 2022 (dropdown menus)
- Enter CVV:** 123
- Place Your Order and Pay** (button)

The footer contains the text: Copyright © BookStack. All Rights Reserved | Contact Us: +91 90000 00000

7.7 Success Page



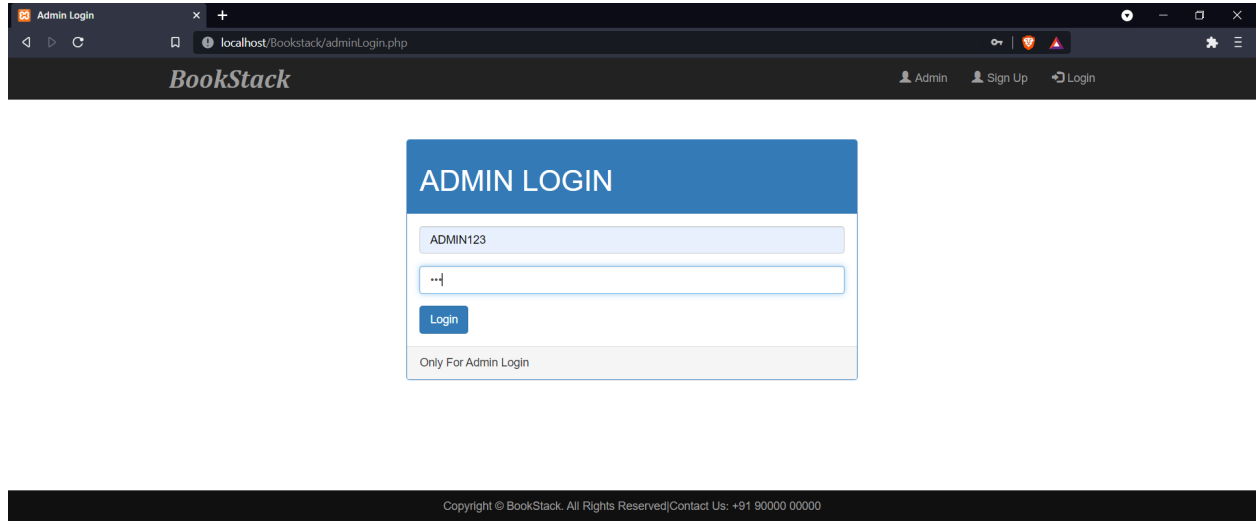
Your Order is Confirmed and Your Transaction is Successful!

Thank you for shopping with Bookstak. [Click here](#) to purchase any other item.

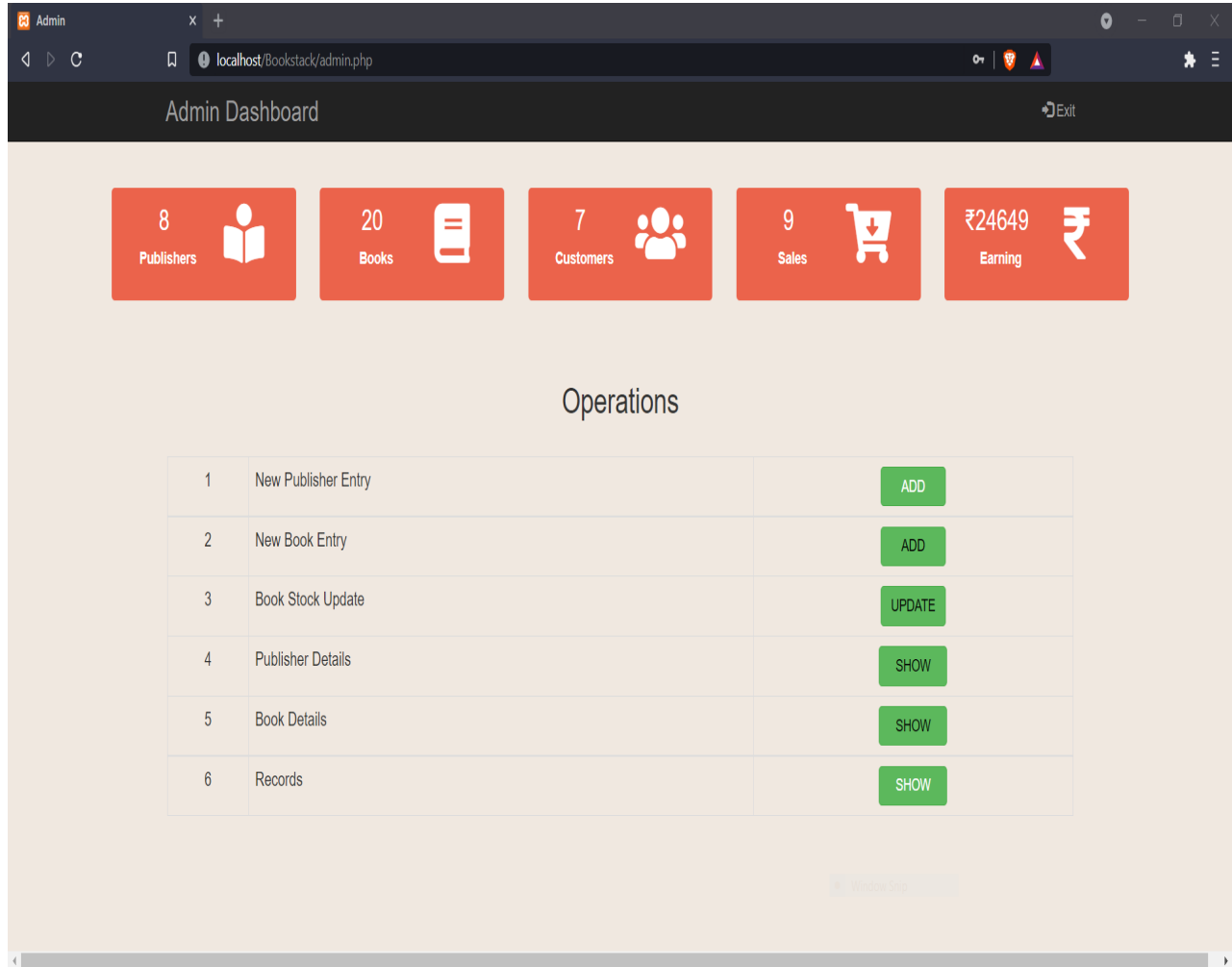
Your Order Details

| | |
|-------------------------|------------------------|
| Customer Name | John Doe |
| Billing Address | |
| Purchase Id | PID611cbde0b9f60 |
| Transaction Id | BSTK611cbde17b7de |
| Payment Method | Debit Card/Credit Card |
| Total Price | 1248 |
| Ordered Date | 18 - Aug - 2021 |
| Estimated Delivery Date | 23 - Aug - 2021 |

7.8 Admin Login → Admin Dashboard



7.8 Dashboard



8. Conclusion

We have successfully implemented the site BookStack as a major project in software engineering.

In the future BookStack can be hosted on the web. We have enhanced the user experience quality and properly maintained the needs of the administrator. Finally we hope that this will go a long way in popularizing.

For its maintenance the database is to be regulated from time to time, all redundancy in the table must be improved. Newer version of php and MySQL can be used for upgradation of the website