

1. INTRODUCTION

The website offers an online service booking system which links the customer to the company's online store. This system enables a client to browse the store and then arrange to have the goods delivered or to collect them in person at a later date.

The concept originated with the widespread adoption of digital solutions; its main aim is to facilitate the booking process and improve customer satisfaction.

Many e-commerce sites have incorporated booking systems. This can be attributed to the rapid shift online towards more convenience and automation. The goal of booking systems is to combine travel and shopping online, as a result providing users with a more streamlined experience and aiding businesses to operate more efficiently. The sectors which companies involved in are for example tourism and leisure, the health services, events and the entertainment industry, and numerous others.

2. FUNCTIONAL REQUIREMENTS

2.1 User Registration & Login

This function allows users to register a new account as a new user and login account using an existing account. The new users are required to provide their personal information such as their name and email to create a new account, while the existing users can login by using their registered username and password. Then, the system checks the user's username and password to allow secure access for successful registration or login. After a successful login, users can browse books, add items to the cart, and make purchases.

Flowchart

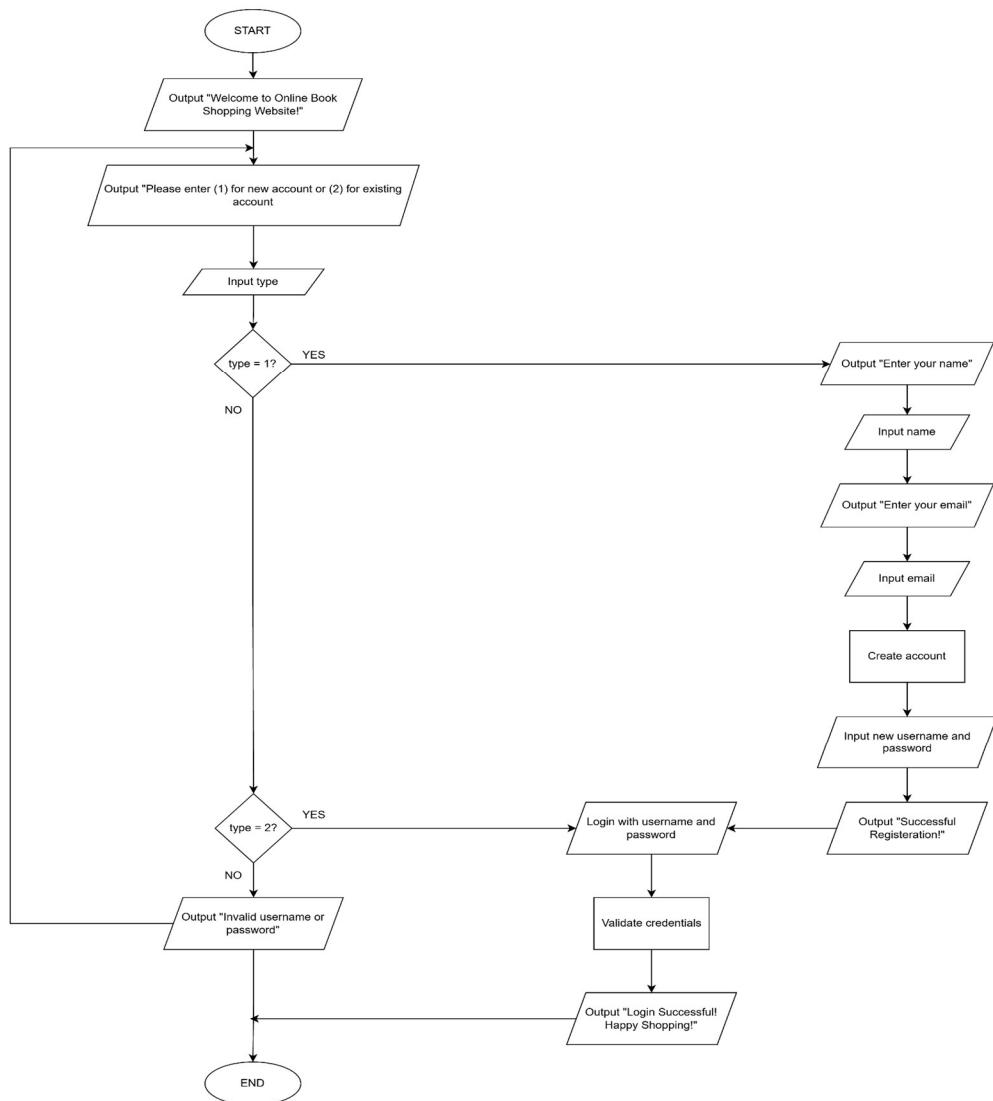


Figure 1 shows User Registration & Login

Pseudocode

1. START
2. DISPLAY “Welcome to Online Book Shopping Website!”
3. DISPLAY “Please enter (1) for new account or (2) for existing account”
4. INPUT type
5. IF type = 1 THEN
 - DISPLAY “Enter your name”
 - INPUT name
 - DISPLAY “Enter your email”
 - INPUT email
 - Create account
 - INPUT username and password
 - DISPLAY “Successful Registration!”
7. END IF
6. IF type = 2 THEN
 - Login with username and password
 - Validate Credentials
 - DISPLAY “Login Successful! Happy Shopping!”
8. ELSE
 - DISPLAY “Invalid username or password”
9. END IF
10. END

2.2 Browse Book Catalogue

The Browse Book Catalogue feature allows users to explore all of the collection of books that is available in the system. It will display detailed information for each book such as book title, category and price so that it will help users to compare and select books easily. This feature also includes search and filtering options that enable users to quickly locate specific books based on keywords and categories making the browsing process more efficient and user-friendly.

Flowchart

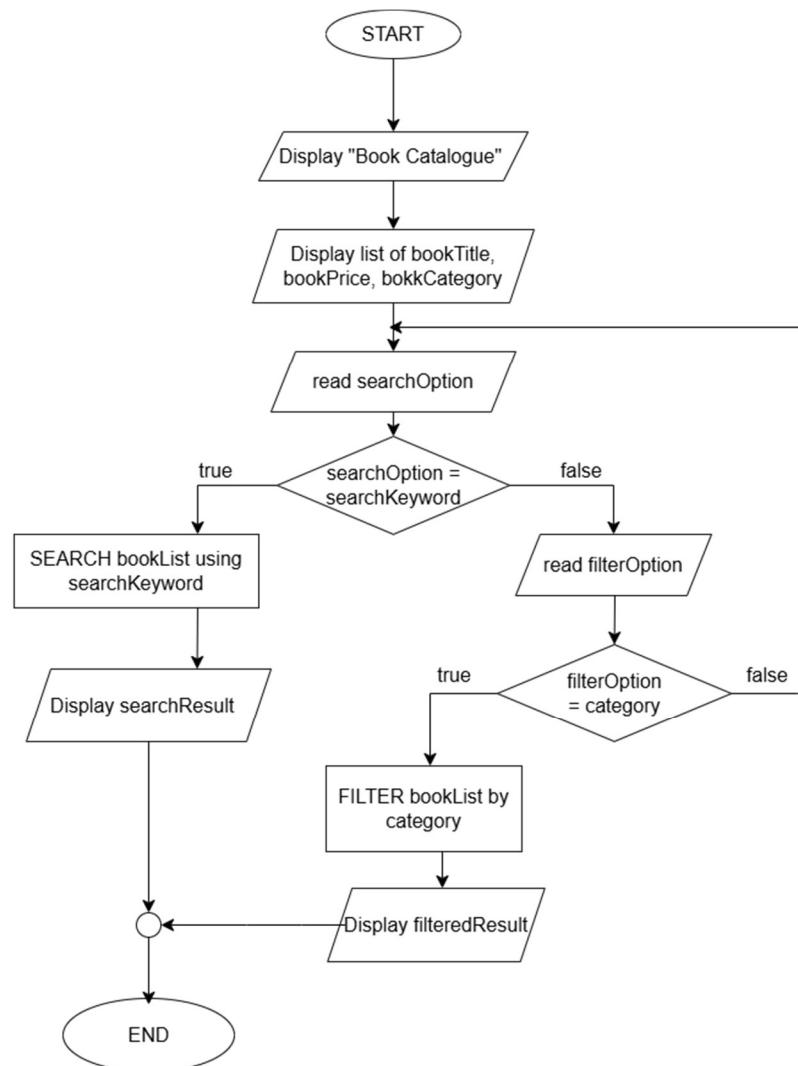


Figure 2 shows Browse Book Catalogue

Pseudocode

1. START
2. Display “Book Catalogue”
3. Display list of books
4. FOR each book in bookList DO
 - Display bookTitle
 - Display bookPrice
 - Display bookCategory
5. END FOR
6. Display searchOption
7. Display filterOption
8. IF searchOption = searchKeyword THEN
 - SEARCH bookList using searchKeyword
 - Display searchResult
9. END IF
10. IF filterOption = category THEN
 - FILTER bookList by category
 - Display filteredResult
11. END IF
12. END

2.3 Add Book to Cart

Add Book to Cart is a system function where it enables users to add selected books to a shopping cart while browsing the catalogue. The cart temporarily stores the chosen items, allowing users to review their selections at any time. At this point, this selection can be checked such as the titles appear alongside key information like amount and cost. This function also should shift preferences, deleting an item is possible without delay. Instead of buying immediately, people gather options first. Efficiency improves when decisions are reviewed ahead of payment steps.

Flowchart

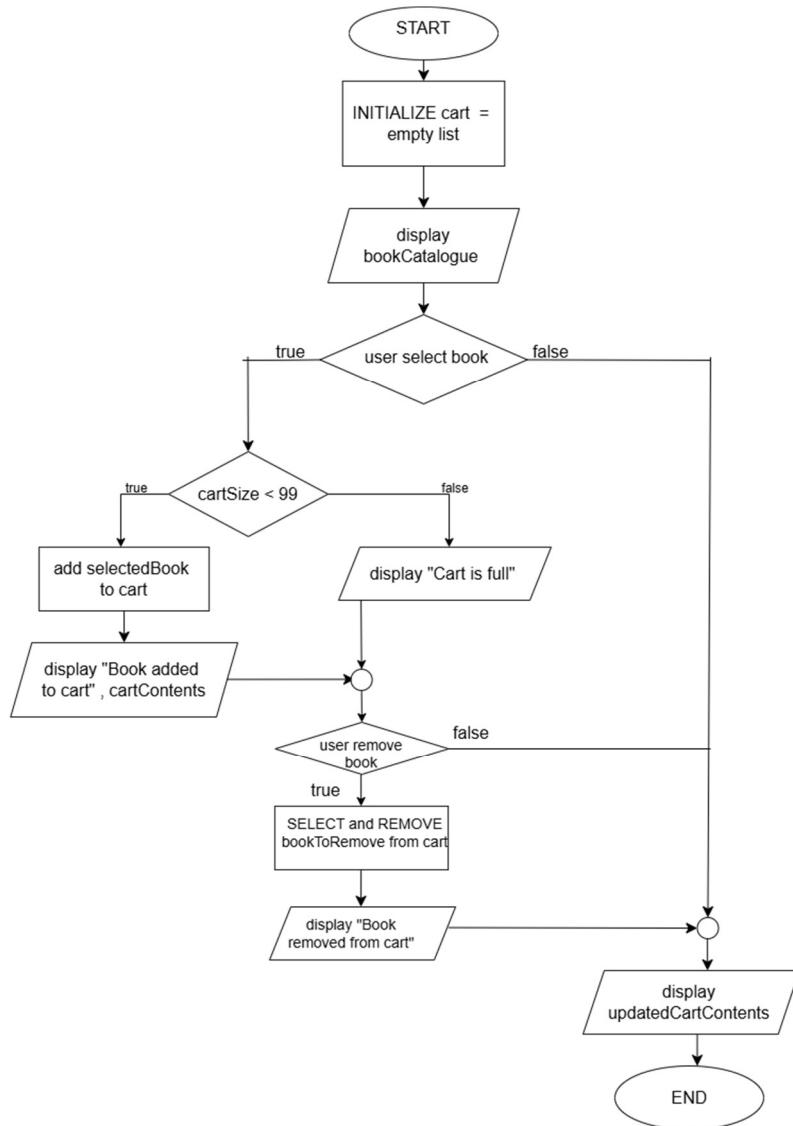


Figure 3 shows Add Book to Cart

Pseudocode

1. START
2. INITIALIZE cart as empty list
3. Display bookCatalogue
4. Display selectedBook
5. IF user selects a book THEN
 - IF cartSize < 99 THEN
 - ADD selectedBook to cart
 - Display “Book added to cart”
 - END IF
6. END IF
7. Display cartContents
8. IF user chooses to remove a book THEN
 - SELECT bookToRemove
 - REMOVE bookToRemove from cart
 - Display “Book removed from cart”
9. END IF
10. Display updatedCartContents
11. END

2.4 Checkout & Payment

The system allows users to proceed to checkout after adding items to the shopping cart. Users can review cart details, enter payment information, and confirm the order. The system validates payment details before completing the transaction. The checkout and payment process ensures that users can complete transactions securely and accurately, which is a critical component of an online shopping system (Laudon & Laudon, 2020).

Flowchart

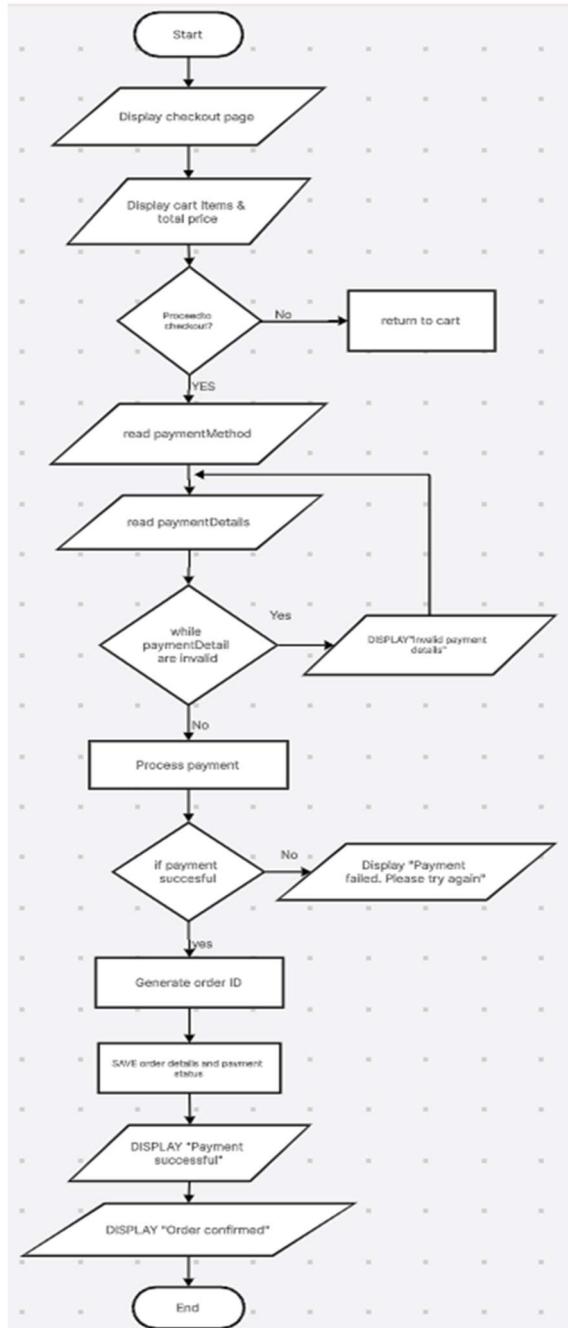


Figure 4 shows Checkout & Payment

Pseudocode

1. START
2. Display "Checkout Page"
3. Display cart items
4. Calculate total price
5. Display total price
6. Display "Proceed to checkout? (Yes/No)"
7. read userChoice
8. If userChoice = No Then
9. return to shopping cart
10. else
11. Display "Select Payment Method"
12. Display "1. Credit/Debit Card"
13. Display "2. Online Banking"
14. Input paymentMethod
15. Input paymentDetails
16. While paymentDetails are invalid
17. Display "Invalid payment details"
18. Input paymentDetails
19. End while
20. Calculate payment
21. If payment successful
22. Generate order ID
23. Save order details and payment status
24. Clear shopping cart
25. Display "Payment successful"
26. Display "Order confirmed"
27. Else
28. Display "Payment failed. Please try again"
29. End if
30. END

2.5 Order History / Order Tracking

The system allow user to view their previous orders and track the current status of each order, such as processing, shipped, or delivered. Order history and tracking allow users to monitor their purchases and immediately improve system transparency (Sommerville, 2016).

Flowchart

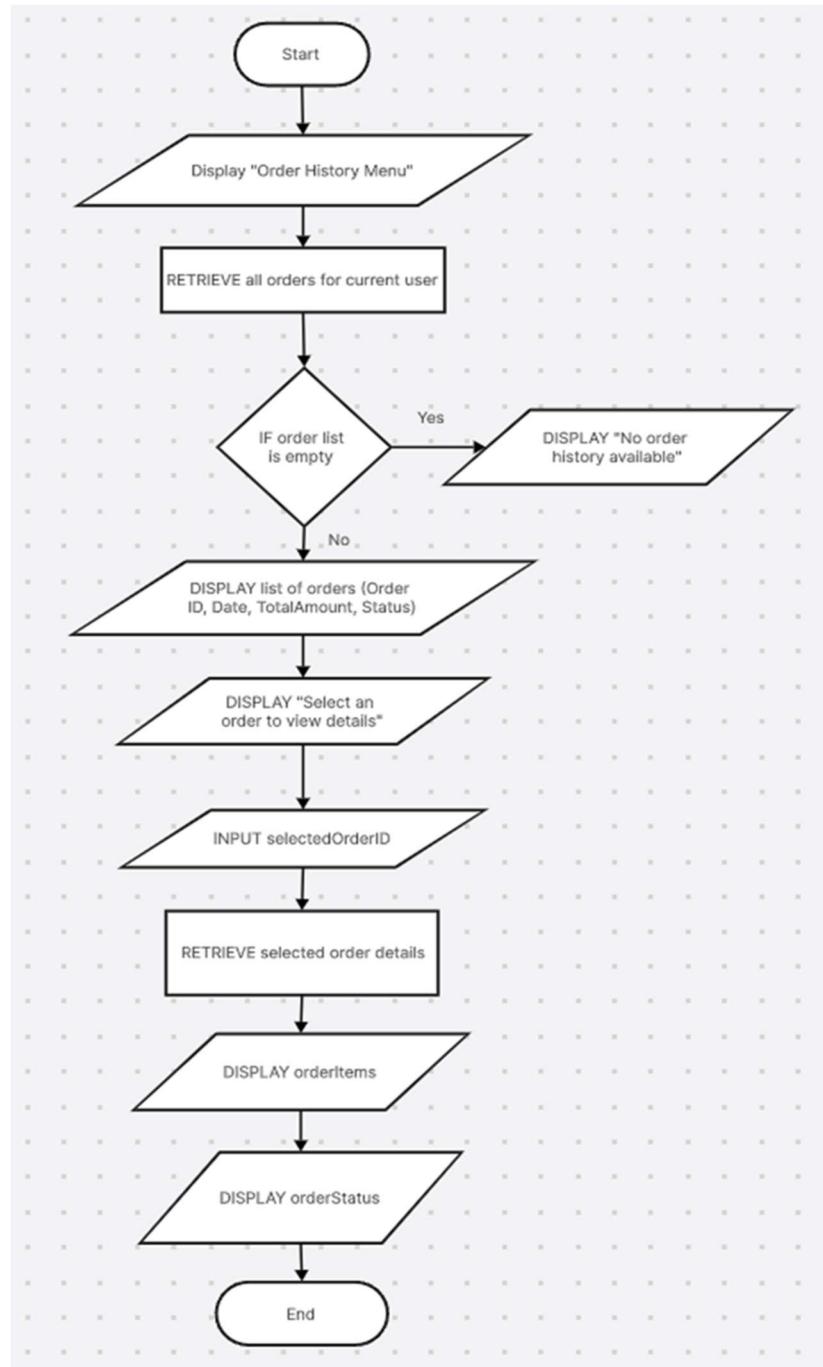


Figure 5 shows Order History or Order

Pseudocode

1. START
2. DISPLAY "Order History Menu"
3. RETRIEVE all orders for current user
4. IF order list is empty
5. DISPLAY "No order history available"
6. ELSE
7. DISPLAY list of orders (Order ID, Date, Total Amount, Status)
8. DISPLAY "Select an order to view details"
9. INPUT selectedOrderID
10. RETRIEVE selected order details
11. DISPLAY orderItems
12. DISPLAY orderStatus
13. END IF
14. END

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