

MINI PROJECT

ONLINE BOOK STORE

Aim:

To construct a database for the Airline Reservation system and connect it with my SQL using java.

Algorithm:

1. User Registration/Login:
 - User creates an account or logs in.
2. Browse/Search Books:
 - User searches and views books by category, title, or author.
3. Add to Cart:
 - User selects books and adds them to the shopping cart.
4. Checkout:
 - User provides delivery and payment information.
5. Payment Processing:
 - Process the payment securely via a payment gateway.
6. Order Confirmation and Shipping:
 - Confirm order, update inventory, and ship the order with tracking info.

PROGRAM:

```
import java.util.ArrayList;
import java.util.Scanner;

public class OnlineBookstore {

    // Book class to store details of a book
    static class Book {
        private String title;
        private String author;
        private double price;
        private int stock;

        public Book(String title, String author, double price, int stock) {
            this.title = title;
            this.author = author;
            this.price = price;
            this.stock = stock;
        }

        public String getTitle() {
            return title;
        }

        public String getAuthor() {
            return author;
        }

        public double getPrice() {
```

```

return price;
    }

    public int getStock() {
        return stock;
    }

    public void reduceStock() {
        if (stock > 0) {
            stock--;
        }
    }

    public String toString() {
        return title + " by " + author + " - $" + price + " (Stock: " + stock + ")";
    }
}

// Cart class to manage user's shopping cart
static class Cart {
    private ArrayList<Book> cartItems;

    public Cart() {
        cartItems = new ArrayList<>();
    }

    public void addBookToCart(Book book) {
        cartItems.add(book);
    }

    public void displayCart() {
        if (cartItems.isEmpty()) {
            System.out.println("Your cart is empty!");
            return;
        }
        double total = 0;
        System.out.println("Your Cart:");
        for (Book book : cartItems) {
            System.out.println(book);
            total += book.getPrice();
        }
        System.out.println("Total: $" + total);
    }

    public double checkout() {
        double total = 0;
        for (Book book : cartItems) {
            total += book.getPrice();
        }
        cartItems.clear();
        return total;
    }
}

```

```
// Store class to manage the available books in the bookstore
```

```
static class Store {  
    private ArrayList<Book> availableBooks;  
  
    public Store() {  
        availableBooks = new ArrayList<>();  
        // Adding some books to the store  
        availableBooks.add(new Book("The Great Gatsby", "F. Scott Fitzgerald", 10.99, 5));  
        availableBooks.add(new Book("1984", "George Orwell", 8.99, 3));  
        availableBooks.add(new Book("Moby Dick", "Herman Melville", 12.99, 4));  
        availableBooks.add(new Book("To Kill a Mockingbird", "Harper Lee", 14.99, 2));  
    }  
  
    public void displayBooks() {  
        System.out.println("Available Books:");  
        for (Book book : availableBooks) {  
            System.out.println(book);  
        }  
    }  
  
    public Book getBookByTitle(String title) {  
        for (Book book : availableBooks) {  
            if (book.getTitle().equalsIgnoreCase(title)) {  
                return book;  
            }  
        }  
        return null;  
    }  
}
```

```
// Main class to simulate the bookstore interaction
```

```
public static void main(String[] args) {  
    Scanner scanner = new Scanner(System.in);  
    Store store = new Store();  
    Cart cart = new Cart();  
  
    System.out.println("Welcome to the Online Bookstore!");  
  
    while (true) {  
        store.displayBooks();  
        System.out.println("Enter the book title to add to your cart or 'exit' to finish:");  
        String input = scanner.nextLine();  
  
        if (input.equalsIgnoreCase("exit")) {  
            break;  
        }  
  
        Book book = store.getBookByTitle(input);  
        if (book != null && book.getStock() > 0) {  
            cart.addBookToCart(book);  
            book.reduceStock();  
            System.out.println("Added " + book.getTitle() + " to your cart.");  
        } else {
```

```
System.out.println("Sorry, that book is either out of stock or doesn't exist.");
    }
}

cart.displayCart();

System.out.println("Proceeding to checkout...");
double totalAmount = cart.checkout();
System.out.println("Your total is: $" + totalAmount);
System.out.println("Thank you for shopping with us!");
}
}
```

OUTPUT:

```
Welcome to the Online Bookstore!
Available Books:
The Great Gatsby by F. Scott Fitzgerald - $10.99 (Stock: 5)
1984 by George Orwell - $8.99 (Stock: 3)
Moby Dick by Herman Melville - $12.99 (Stock: 4)
To Kill a Mockingbird by Harper Lee - $14.99 (Stock: 2)
Enter the book title to add to your cart or 'exit' to finish:
1984

Added 1984 to your cart.
Available Books:
The Great Gatsby by F. Scott Fitzgerald - $10.99 (Stock: 5)
1984 by George Orwell - $8.99 (Stock: 2)
Moby Dick by Herman Melville - $12.99 (Stock: 4)
To Kill a Mockingbird by Harper Lee - $14.99 (Stock: 2)
Enter the book title to add to your cart or 'exit' to finish:
Moby Dick
```

Added Moby Dick to your cart.

Available Books:

The Great Gatsby by F. Scott Fitzgerald - \$10.99 (Stock: 5)

1984 by George Orwell - \$8.99 (Stock: 2)

Moby Dick by Herman Melville - \$12.99 (Stock: 3)

To Kill a Mockingbird by Harper Lee - \$14.99 (Stock: 2)

Enter the book title to add to your cart or 'exit' to finish:

To Kill a Mockingbird

Added To Kill a Mockingbird to your cart.

Available Books:

The Great Gatsby by F. Scott Fitzgerald - \$10.99 (Stock: 5)

1984 by George Orwell - \$8.99 (Stock: 2)

Moby Dick by Herman Melville - \$12.99 (Stock: 3)

To Kill a Mockingbird by Harper Lee - \$14.99 (Stock: 1)

Enter the book title to add to your cart or 'exit' to finish:

exit

Your Cart:

1984 by George Orwell - \$8.99 (Stock: 2)

Moby Dick by Herman Melville - \$12.99 (Stock: 3)

To Kill a Mockingbird by Harper Lee - \$14.99 (Stock: 1)

Total: \$36.97

Proceeding to checkout...

Your total is: \$36.97

Thank you for shopping with us!

RESULT:

The database construction for the Online book store has been successfully complected and connected with mySQL using java.