

```
package Java;

import java.util.*;

class Camera {

    private int id;

    private String brand;

    private String model;

    private double rentAmount;

    private boolean isRented;

    public Camera(int id, String brand, String model, double rentAmount) {

        this.id = id;

        this.brand = brand;

        this.model = model;

        this.rentAmount = rentAmount;

        this.isRented = false;

    }

    public int getId() {

        return id;

    }

    public String getBrand() {

        return brand;

    }

    public String getModel() {

        return model;

    }

    public double getRentAmount() {

        return rentAmount;

    }

    public boolean isRented() {

        return isRented;

    }

}
```

```

public void setRented(boolean rented) {
    isRented = rented;
}

class User {
    private String username;
    private String password;
    public User(String username, String password) {
        this.username = username;
        this.password = password;
    }
    public String getUsername() {
        return username;
    }
    public String getPassword() {
        return password;
    }
}

public class CameraRentalApp {
    private static List<Camera> cameraList = new ArrayList<>();
    private static User currentUser;
    private static double walletBalance = 0;
    private static Scanner scanner = new Scanner(System.in);
    public static void main(String[] args) {
        initializeCameras();
        login();
        if (currentUser != null) {
            showMainMenu();
        }
    }

    private static void initializeCameras() {

```

```

System.out.println("----- Camera Rental App -----");
System.out.println("Developer: Navya");
System.out.println("Welcome to mycam.io\n");
System.out.println("Enter the number of cameras to add: ");
int numCameras = scanner.nextInt();
scanner.nextLine(); // Consume the newline character
for (int i = 0; i < numCameras; i++) {
System.out.println("Enter camera ID: ");
int id = scanner.nextInt();
scanner.nextLine(); // Consume the newline character
System.out.println("Enter camera brand: ");
String brand = scanner.nextLine();
System.out.println("Enter camera model: ");
String model = scanner.nextLine();
System.out.println("Enter per-day rental amount: ");
double rentAmount = scanner.nextDouble();
scanner.nextLine(); // Consume the newline character
Camera camera = new Camera(id, brand, model, rentAmount);
cameraList.add(camera);
}
sortCameraList();
}

private static void sortCameraList() {
cameraList.sort(Comparator.comparingInt(Camera::getId));
}

private static void login() {
System.out.println("\n----- Login -----");
System.out.println("Enter username: ");
String username = scanner.nextLine();
System.out.println("Enter password: ");
String password = scanner.nextLine();

```

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User user = new User("admin", "password"); // Change the credentials as per your requirement
```

```
if (username.equals(user.getUsername()) &&  
password.equals(user.getPassword())) {  
    currentUser = user;  
    System.out.println("Login successful!\n");  
} else {  
    System.out.println("Invalid credentials. Login failed!\n");  
}  
}
```

```
private static void showMainMenu() {  
    int choice;  
  
    do {  
        System.out.println("----- Main Menu -----");  
        System.out.println("1. List cameras");  
        System.out.println("2. Rent a camera");  
        System.out.println("3. Add/view wallet balance");  
        System.out.println("4. Exit");  
        System.out.println("Enter your choice: ");  
        choice = scanner.nextInt();  
  
        switch (choice) {  
  
            case 1:  
                listCameras();  
                break;  
  
            case 2:  
                rentCamera();  
                break;  
  
            case 3:  
                walletMenu();  
                break;  
  
            case 4:
```

```

System.out.println("Exiting the application...");

break;

default:

System.out.println("Invalid choice. Please try again.");

}

} while (choice != 4);

}

private static void listCameras() {

if (cameraList.isEmpty()) {

System.out.println("No Data Present at This Moment.");

} else {

System.out.println("----- Camera List -----");

System.out.println("ID Brand Model Rent Amount Status");

System.out.println("-----");

System.out.println("-----");

for (Camera camera : cameraList) {

String status = camera.isRented() ? "Rented" : "Available";

System.out.printf("%-6d%-12s%-12s%-15.2f%s%n", camera.getId(),

camera.getBrand(), camera.getModel(), camera.getRentAmount(), status);

}

System.out.println("-----");

System.out.println("-----");

}

}

private static void rentCamera() {

if (cameraList.isEmpty()) {

System.out.println("No cameras available for rent.");

```

```

    return;
}

if (walletBalance <= 0) {
    System.out.println("Insufficient balance in the wallet. Cannot rent a camera.");

    return;
}

System.out.println("Enter camera ID to rent: ");

int cameraId = scanner.nextInt();

Camera selectedCamera = null;

for (Camera camera : cameraList) {
    if (camera.getId() == cameraId) {
        selectedCamera = camera;
        break;
    }
}

if (selectedCamera != null) {
    if (selectedCamera.isRented()) {
        System.out.println("Camera is already rented.");
    } else {
        System.out.println("Camera rented successfully!");
        selectedCamera.setRented(true);
        walletBalance -= selectedCamera.getRentAmount();
    }
} else {
    System.out.println("Invalid camera ID.");
}

}

private static void walletMenu() {
    int choice;
    do {

```

```
System.out.println("----- Wallet Menu -----");
System.out.println("1. View wallet balance");
System.out.println("2. Add amount to wallet");
System.out.println("3. Go back");
System.out.println("Enter your choice: ");
choice = scanner.nextInt();
switch (choice) {
    case 1:
        System.out.printf("Wallet balance: %.2f%n", walletBalance);
        break;
    case 2:
        System.out.println("Enter amount to add: ");
        double amount = scanner.nextDouble();
        walletBalance += amount;
        System.out.println("Amount added successfully!");
        break;
    case 3:
        System.out.println("Going back to the main menu...");
        break;
    default:
        System.out.println("Invalid choice. Please try again.");
}
} while (choice != 3);
}
```