

```
package Phase1Projects;
```

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

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

```
class Camera {
```

```
    private String model;
```

```
    private boolean available;
```

```
    public Camera(String model) {
```

```
        this.model = model;
```

```
        this.available = true;
```

```
    }
```

```
    public String getModel() {
```

```
        return model;
```

```
    }
```

```
    public boolean isAvailable() {
```

```
        return available;
```

```
    }
```

```
    public void setAvailable(boolean available) {
```

```
        this.available = available;
```

```
    }
```

```
}
```

```
class CameraRentalSystem {
```

```
    private ArrayList<Camera> cameraInventory = new ArrayList<>();
```

```
    public CameraRentalSystem() {
```

```

        initializeInventory();
    }

    private void initializeInventory() {
        cameraInventory.add(new Camera("Monitech"));
        cameraInventory.add(new Camera("Canon"));
        cameraInventory.add(new Camera("Wikico"));
        cameraInventory.add(new Camera("Nikon"));
        cameraInventory.add(new Camera("Vjianger"));
        cameraInventory.add(new Camera("Sony"));
        cameraInventory.add(new Camera("Kodak"));
        cameraInventory.add(new Camera("Saneen"));
        cameraInventory.add(new Camera("G-Anica"));
        // Add more cameras as needed
    }

    public void displayMenu() {
        System.out.println("\n1. Display Available Cameras for the Rental Purpose");
        System.out.println("2. Camera for Rent");
        System.out.println("3. Return a Camera that have been rented");
        System.out.println("4. Display Rented Cameras");
        System.out.println("5. Exit from the purchase");
        System.out.print("Enter your choice to purchase or rent or return camera: ");
    }

    public int getChoice() {
        Scanner scanner = new Scanner(System.in);
        return scanner.nextInt();
    }

    public void displayAvailableCameras() {

```

```

System.out.println("\n--- Available Cameras for the rental purpose ---");
for (Camera camera : cameraInventory) {
    if (camera.isAvailable()) {
        System.out.println(camera.getModel());
    }
}
}

```

```

public void rentCamera() {

```

```

    Scanner scanner = new Scanner(System.in);

```

```

    System.out.print("Enter the model of the camera to rent: ");

```

```

    String model = scanner.nextLine().trim(); // Trim to remove leading and trailing spaces

```

```

    boolean found = false;

```

```

    for (Camera camera : cameraInventory) {

```

```

        if (camera.getModel().equalsIgnoreCase(model)) {

```

```

            if (camera.isAvailable()) {

```

```

                camera.setAvailable(false);

```

```

                System.out.println("Successfully rented the camera: " + model);

```

```

                found = true;

```

```

                break;

```

```

            } else {

```

```

                System.out.println("The camera " + model + " is already rented. Please choose another camera.");

```

```

                return;

```

```

            }

```

```

        }

```

```

    }

```

```
    if (!found) {  
        System.out.println("The model " + model + " is not available or not found. Please try again.");  
    }  
}
```

```
public void returnCamera() {  
    Scanner scanner = new Scanner(System.in);  
  
    System.out.print("Enter the model of the camera to be returned: ");  
    String model = scanner.nextLine();  
  
    for (Camera camera : cameraInventory) {  
        if (camera.getModel().equalsIgnoreCase(model) && !camera.isAvailable()) {  
            camera.setAvailable(true);  
            System.out.println("Successfully you have returned camera!");  
            return;  
        }  
        else  
        {  
            System.out.println("The model you have entered is not available or not found. Please try  
again.");  
        }  
    }  
}
```

```
public void displayRentedCameras() {  
    System.out.println("\n--- Cameras that are rented ---");  
    for (Camera camera : cameraInventory) {
```

```
        if (!camera.isAvailable()) {  
            System.out.println(camera.getModel());  
        }  
    }  
}  
}
```

```
public class CameraRentPurchase {  
    public static void main(String[] args) {  
        CameraRentalSystem rentalSystem = new CameraRentalSystem();  
  
        while (true) {  
            rentalSystem.displayMenu();  
            int choice = rentalSystem.getChoice();  
  
            switch (choice) {  
                case 1:  
                    rentalSystem.displayAvailableCameras();  
                    break;  
                case 2:  
                    rentalSystem.rentCamera();  
                    break;  
                case 3:  
                    rentalSystem.returnCamera();  
                    break;  
                case 4:  
                    rentalSystem.displayRentedCameras();  
                    break;  
                case 5:  
                    System.out.println("Exiting from the purchase. Thank you!");  
                    System.exit(0);  
            }  
        }  
    }  
}
```

```
        break;
    default:
        System.out.println("you have entered an invalid choice. Please try again.");
    }
}
}
}
```