

//CAMERA RENTAL APPLICATION

```
package main;
import java.util.ArrayList;
import java.util.Scanner;
import java.util.Arrays;

class WelcomeNote {
    WelcomeNote() {
        System.out.println("+-----+");
        System.out.println("| WELCOME TO CAMERA RENTAL APP |");
        System.out.println("+-----+\n");
    }
    boolean loginPage() {
        Scanner input = new Scanner(System.in);
        System.out.print("PLEASE LOGIN TO CONTINUE - \nUSERNAME - ");
        String username = input.nextLine();
        System.out.print("PASSWORD - ");
        String password = input.nextLine();
        if (username.equals("admin") && password.equals("admin123")) {
            return true;
        } else {
            System.out.println("INCORRECT USERNAME OR PASSWORD");
            return loginPage();
        }
    }
}

package main;
import java.util.ArrayList;
import java.util.Scanner;
import java.util.Arrays;

class Camera {

    private Scanner scanner = new Scanner(System.in);
    void options() {
        String[] opt = {
            "1. ADD",
            "2. REMOVE",
            "3. VIEW MY CAMERAS",
            "4. GO TO PREVIOUS MENU"
        };
        for (String option : opt) {
            System.out.println(option);
        }
        try
        {
            String choice = scanner.nextLine();
            switch (Integer.parseInt(choice))
            {
                case 1:
                    add();
                    options();
                    break;
                case 2:
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        removeCam();
    options();
    break;
    case 3:
        viewMyCam();
    options();
    break;
    case 4:
        Main.mainMenu();
    break;
    default:
        System.out.println("INVALID OPTION");
        options();
        break;
    }
} catch (Exception e) {
    System.out.println("An error occurred. Please try again.");
}
}

void add() {
    int lastId = 0;
    if (!Main.cameraList.isEmpty()) {
        ArrayList<String> lastRow =
Main.cameraList.get(Main.cameraList.size() - 1);
        lastId = Integer.parseInt(lastRow.get(0));
    }
    ArrayList<String> row = new ArrayList<>();
    String id = String.valueOf(lastId + 1);
    System.out.print("ENTER THE CAMERA BRAND - ");
    String brand = scanner.nextLine();
    System.out.print("ENTER THE MODEL - ");
    String model = scanner.nextLine();
    System.out.print("ENTER THE PER DAY PRICE (INR) - ");
    String price = scanner.nextLine();
    String status = "Available";
    row.add(id);
    row.add(brand);
    row.add(model);
    row.add(price);
    row.add(status);
    Main.cameraList.add(row);
    System.out.println("YOUR CAMERA HAS BEEN SUCCESSFULLY ADDED TO THE
LIST.");
}

void viewMyCam()
{

System.out.println("=====
=====");
};
    System.out.println(" CAMERA ID BRAND MODEL PRICE(PER DAY) STATUS ");

System.out.println("=====
=====");
};
    for (ArrayList<String> row : Main.cameraList) {
        System.out.printf(" %-4s %-10s %-6s %-7s %-8s %n",
            row.get(0), row.get(1), row.get(2), row.get(3), row.get(4));
    }
}

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System.out.println("=====
=====");
};
}
void removeCam()
{
viewMycam();
Scanner scanner = new Scanner(System.in);
System.out.print("ENTER THE CAMERA ID TO REMOVE - ");
String idToRemove = scanner.nextLine();
boolean found = false;
for (ArrayList<String> row : Main.cameraList)
{
if (row.get(0).equals(idToRemove))
{
Main.cameraList.remove(row);
found = true;
break;
}
}
if (found) {
System.out.println("CAMERA SUCCESSFULLY REMOVED FROM THE LIST.");
}
else {
System.out.println("CAMERA ID " + idToRemove + " NOT FOUND IN THE LIST.");
}
}
}

package main;
import java.util.ArrayList;
import java.util.Scanner;
import java.util.Arrays;

public class Wallet {

    double balance;
    Wallet() {
        this.balance = 1052;
    }
    void displayBalanceAndDeposit() {
        try
        {
            Scanner input = new Scanner(System.in);
            System.out.println("YOUR CURRENT WALLET BALANCE IS - INR."+
balance);
            System.out.print("DO YOU WANT TO DEPOSIT MORE AMOUNT TO YOUR
WALLET?(1.YES 2.NO) - ");
            int choice = input.nextInt();
            if (choice==1) {
                System.out.print("ENTER THE AMOUNT (INR) - ");
                double amount = input.nextDouble();
                balance += amount;
                System.out.println("YOUR WALLET BALANCE UPDATED SUCCESSFULLY.
CURRENT WALLET BALANCE - INR."+balance);
            } else {
                System.out.println("No money deposited.");
            }
        } catch (Exception e) {

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        System.out.println("An error occurred. Please try again.");
    }
}

boolean hasEnoughBalance(double amount) {
    return balance >= amount;
}
}

package main;
import java.util.ArrayList;
import java.util.Scanner;
import java.util.Arrays;

class CameraRental
{
    void displayAvailableCameras() {
        System.out.println("FOLLOWING IS THE LIST OF AVAILABLE CAMERA(S) - ");

        System.out.println("=====
        =====");
    };
    System.out.printf("%-5s %-15s %-15s %-10s %-8s\n", "ID", "Brand", "Model",
    "Price", "Status");

    System.out.println("=====
    =====");
    };
    for (ArrayList<String> camera : Main.cameraList) {
        String status = camera.get(4);
        if (status.equals("Available")) {
            System.out.printf("%-5s %-15s %-15s %-10s %-8s\n",
            camera.get(0), camera.get(1), camera.get(2), camera.get(3),
            camera.get(4));
        }
    }

    System.out.println("=====
    =====");
    };
    }
    void rentCamera(Wallet wallet_obj)
    {
        displayAvailableCameras();
        Scanner input = new Scanner(System.in);
        //MyWallet wallet_ob = new MyWallet();
        System.out.print("ENTER THE CAMERA ID YOU WANT TO RENT - ");
        String id = input.nextLine();
        boolean found = false;
        for (ArrayList<String> camera : Main.cameraList) {
            if (camera.get(0).equals(id) && camera.get(4).equals("Available")) {
                double price = Double.parseDouble(camera.get(3));
                if (wallet_obj.hasEnoughBalance(price))
                {
                    camera.set(4, "Rented");
                    found = true;
                    System.out.println("YOUR TRANSACTION FOR CAMERA -"+camera.get(1)+ " WITH
                    RENT " + price + " HAS SUCCESSFULLY COMPLETED.");
                    wallet_obj.balance -= price;
                    break;
                }
            }
            else
            {

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        found = true;
        System.out.println("ERROR : TRANSACTION FAILED DUE TO INSUFFICIENT WALLET
BALANCE. PLEASE DEPOSIT THE AMOUNT TO YOUR WALLET. ");
        break;
    }
}
}
if (!found) {
    System.out.println("CAMERA WITH ID " + id + " IS NOT FOUND.");
}
}
}
}
package main;

```

```

import java.util.ArrayList;
import java.util.Scanner;
import java.util.Arrays;
public class Main {
    private static boolean loginStatus = false;
    private static Camera optObj = new Camera();
    private static CameraRental rent_obj = new CameraRental();
    private static Wallet wallet_obj = new Wallet();
    private static ArrayList<ArrayList<String>> cameraList = new ArrayList<>(
        Arrays.asList(
            new ArrayList<>(Arrays.asList("1", "Samsung", "DS123", "500.0",
            "Rented")),
            new ArrayList<>(Arrays.asList("2", "Sony", "HD214", "500.0",
            "Available")),
            new ArrayList<>(Arrays.asList("3", "Panasonic", "XC", "700.0", "Rented")),
            new ArrayList<>(Arrays.asList("4", "Canon", "XLR", "1000.0",
            "Available")),
            new ArrayList<>(Arrays.asList("5", "Nikon", "2030", "500.0", "Available"))
        )
    );
    public static void main(String[] args) {

        Main obj = new Main();
        WelcomeNote loginObj = new WelcomeNote();
        if (!loginStatus) {
            loginStatus = loginObj.loginPage();
        }
        obj.mainMenu();
    }
    static void mainMenu() {
        String[] mainMenu = {
            "1. MY CAMERA",
            "2. RENT A CAMERA",
            "3. VIEW ALL CAMERAS",
            "4. MY WALLET",
            "5. EXIT"
        };
        for (String option : mainMenu) {
            System.out.println(option);
        }
        try {
            Scanner input = new Scanner(System.in);
            int opt = input.nextInt();

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    switch (opt)
    {
        case 1:
            optObj.options();
        break;
        case 2:
            rent_obj.rentCamera(wallet_obj);
            mainMenu();
        break;
        case 3:
            optObj.viewMycam();
            mainMenu();
        break;
        case 4:
            wallet_obj.displayBalanceAndDeposit();
            mainMenu();
        break;
        case 5:
            break;
        default:
            System.out.println("INVALID OPTION..!");
            mainMenu();
            break;
    }
} catch (Exception e) {
    System.out.println("An error occurred. Please try again.");
}

}
}

```

```
@ Javadoc Declaration Console × Coverage
<terminated> RentalCameraApp (1) [Java Application] C:\Users\user\.p2\pool\plugins\org.eclipse.justj.o

+-----+
| WELCOME TO CAMERA RENTAL APP |
+-----+

PLEASE LOGIN TO CONTINUE -
USERNAME - admin
PASSWORD - admin123
1. MY CAMERA
2. RENT A CAMERA
3. VIEW ALL CAMERAS
4. MY WALLET
5. EXIT
1
1. ADD
2. REMOVE
3. VIEW MY CAMERAS
4. GO TO PREVIOUS MENU
1
ENTER THE CAMERA BRAND - canon
ENTER THE MODEL - 5050
ENTER THE PER DAY PRICE (INR) - 5000
YOUR CAMERA HAS BEEN SUCCESSFULLY ADDED TO THE LIST.
1. ADD
2. REMOVE
3. VIEW MY CAMERAS
4. GO TO PREVIOUS MENU
2
=====
CAMERA ID    BRAND      MODEL    PRICE(PER DAY)    STATUS
=====
1            Samsung    DS123    500.0             Rented
2            Sony       HD214    500.0             Available
3            Panasonic  XC       700.0             Rented
4            Canon      XLR      1000.0            Available
5            Nikon      2030     500.0             Available
6            canon      5050     5000              Available
=====
ENTER THE CAMERA ID TO REMOVE - 4
CAMERA SUCCESSFULLY REMOVED FROM THE LIST.
```

```
@ Javadoc Declaration Console × Coverage
<terminated> RentalCameraApp (1) [Java Application] C:\Users\user\.p2\pool\plugins\org.eclipse.justj.openjdk.ho

1. ADD
2. REMOVE
3. VIEW MY CAMERAS
4. GO TO PREVIOUS MENU
3
=====
CAMERA ID      BRAND      MODEL      PRICE(PER DAY)  STATUS
=====
1             Samsung    DS123      500.0           Rented
2             Sony       HD214      500.0           Available
3             Panasonic  XC         700.0           Rented
5             Nikon      2030      500.0           Available
6             canon      5050      5000            Available
=====

1. ADD
2. REMOVE
3. VIEW MY CAMERAS
4. GO TO PREVIOUS MENU
4
1. MY CAMERA
2. RENT A CAMERA
3. VIEW ALL CAMERAS
4. MY WALLET
5. EXIT
2
FOLLOWING IS THE LIST OF AVAILABLE CAMERA(S) -
=====
ID      Brand      Model      Price      Status
=====
2       Sony       HD214      500.0      Available
5       Nikon      2030      500.0      Available
6       canon      5050      5000       Available
=====

ENTER THE CAMERA ID YOU WANT TO RENT - 5
YOUR TRANSACTION FOR CAMERA - Nikon WITH RENT 500.0 HAS SUCCESSFULLY COMPLETED.
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@ Javadoc Declaration Console × Coverage
<terminated> RentalCameraApp (1) [Java Application] C:\Users\user\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.
1. MY CAMERA
2. RENT A CAMERA
3. VIEW ALL CAMERAS
4. MY WALLET
5. EXIT
3
=====
CAMERA ID      BRAND      MODEL      PRICE(PER DAY)  STATUS
=====
1              Samsung    DS123       500.0           Rented
2              Sony       HD214       500.0           Available
3              Panasonic  XC          700.0           Rented
5              Nikon      2030       500.0           Rented
6              canon      5050       5000            Available
=====
1. MY CAMERA
2. RENT A CAMERA
3. VIEW ALL CAMERAS
4. MY WALLET
5. EXIT
4
YOUR CURRENT WALLET BALANCE IS - INR.552.0
DO YOU WANT TO DEPOSIT MORE AMOUNT TO YOUR WALLET?(1.YES 2.NO) - 1
ENTER THE AMOUNT (INR) - 2000
YOUR WALLET BALANCE UPDATED SUCCESSFULLY. CURRENT WALLET BALANCE - INR.2552.0
1. MY CAMERA
2. RENT A CAMERA
3. VIEW ALL CAMERAS
4. MY WALLET
5. EXIT
2
FOLLOWING IS THE LIST OF AVAILABLE CAMERA(S) -
=====
ID      Brand      Model      Price      Status
=====
2       Sony       HD214       500.0      Available
6       canon      5050       5000      Available
=====
ENTER THE CAMERA ID YOU WANT TO RENT - 6
ERROR : TRANSACTION FAILED DUE TO INSUFFICIENT WALLET BALANCE. PLEASE DEPOSIT THE AMOUNT TO YOUR WALLET.
```

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@ Javadoc Declaration Console × Coverage
<terminated> RentalCameraApp (1) [Java Application] C:\Users\user\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.
ENTER THE CAMERA ID YOU WANT TO RENT - 6
ERROR : TRANSACTION FAILED DUE TO INSUFFICIENT WALLET BALANCE. PLEASE DEPOSIT THE AMOUNT TO YOUR WALLET.
1. MY CAMERA
2. RENT A CAMERA
3. VIEW ALL CAMERAS
4. MY WALLET
5. EXIT
5
|
```