package com.Camerarentalapplication;

import java.util.ArrayList;

import java.util.List;

import java.util.Scanner;

class Camera {

private String brand;

private String model;

private double rentalAmount;

public Camera(String brand, String model, double rentalAmount) {

this.brand = brand;

this.model = model;

this.rentalAmount = rentalAmount;

}

public String getBrand() {

return brand;

}

public String getModel() {

return model;

}

public double getRentalAmount() {

return rentalAmount;

}

}

class Wallet {

private double balance;

public Wallet() {

this.balance = 0.0;

}

public double getBalance() {

return balance;

}

public void deposit(double amount) {

balance += amount;

}

public boolean deductAmount(double amount) {

if (balance >= amount) {

balance -= amount;

return true;

} else {

return false;

}

}

}

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 camerarental1 {

private static List<Camera> cameraList = new ArrayList<>();

private static Wallet wallet = new Wallet();

private static User currentUser;

public static void main(String[] args) {

System.out.println("Welcome to the Camera Rental App!");

// Login process

boolean loginSuccess = login();

if (!loginSuccess) {

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

return;

}

while (true) {

displayMainMenu();

int choice = getUserChoice();

switch (choice) {

case 1:

addCamera();

break;

case 2:

listCameras();

break;

case 3:

rentCamera();

break;

case 4:

viewWalletBalance();

break;

case 5:

depositToWallet();

break;

case 6:

System.out.println("Thank you for using the Camera Rental App. Goodbye!");

return;

default:

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

}

}

}

private static boolean login() {

Scanner scanner = new Scanner(System.in);

System.out.println("Please enter your login credentials.");

System.out.print("Username: ");

String username = scanner.nextLine();

System.out.print("Password: ");

String password = scanner.nextLine();

if (!username.isEmpty() && !password.isEmpty()) {

currentUser = new User(username, password);

return true;

}

return false;

}

private static void displayMainMenu() {

System.out.println("\n----- Main Menu -----");

System.out.println("1. Add a camera");

System.out.println("2. List available cameras");

System.out.println("3. Rent a camera");

System.out.println("4. View wallet balance");

System.out.println("5. Deposit to wallet");

System.out.println("6. Close the application");

System.out.print("Enter your choice: ");

}

private static int getUserChoice() {

Scanner scanner = new Scanner(System.in);

return scanner.nextInt();

}

private static void addCamera() {

Scanner scanner = new Scanner(System.in);

System.out.print("Enter the brand of the camera: ");

String brand = scanner.nextLine();

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

String model = scanner.nextLine();

System.out.print("Enter the per-day rental amount: ");

double rentalAmount = scanner.nextDouble();

Camera camera = new Camera(brand, model, rentalAmount);

cameraList.add(camera);

System.out.println("Camera added successfully!");

}

private static void listCameras() {

if (cameraList.isEmpty()) {

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

} else {

System.out.println("Available Cameras:");

for (Camera camera : cameraList) {

System.out.println("Brand: " + camera.getBrand() +

", Model: " + camera.getModel() +

", Rental Amount (per day): $" + camera.getRentalAmount());

}

}

}

private static void rentCamera() {

if (cameraList.isEmpty()) {

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

return;

}

Scanner scanner = new Scanner(System.in);

System.out.print("Enter the index of the camera you want to rent: ");

int index = scanner.nextInt();

if (index < 0 || index >= cameraList.size()) {

System.out.println("Invalid camera index.");

return;

}

Camera camera = cameraList.get(index);

double rentalAmount = camera.getRentalAmount();

if (wallet.deductAmount(rentalAmount)) {

System.out.println("Camera rented successfully!");

} else {

System.out.println("Insufficient wallet balance. Cannot rent the camera.");

}

}

private static void viewWalletBalance() {

System.out.println("Wallet Balance: $" + wallet.getBalance());

}

private static void depositToWallet() {

Scanner scanner = new Scanner(System.in);

System.out.print("Enter the amount to deposit: ");

double amount = scanner.nextDouble();

wallet.deposit(amount);

System.out.println("Deposit successful!");

}

}