**1.LoginMain:**

package loginapp;

import java.util.Scanner;

import exception.LoginException;

public class LoginMain {

public static void main(String[] args) throws LoginException {

// TODO Auto-generated method stub

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

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

System.out.println();

System.out.println("| Please Login to continue |");

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

Scanner sc=new Scanner(System.in);

System.out.println("Enter your Username: ");

String username=sc.next();

System.out.println("Enter your Password: ");

String password=sc.next();

if(username.equals("Logesh") && password.equals("Logesh2001")) {

CameraOperations.InitializeList();

mainMenu();

}

else {

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

System.out.println("| Invalid Username And Password |");

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

//throw new LoginException();

}

}

public static void subMenu() {

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

System.out.println("\n 1.ADD \n 2.REMOVE \n 3.VIEW MY CAMERA \n 4.GO TO PREVIOUS MENU ");

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

Scanner sc=new Scanner(System.in);

int choice=sc.nextInt();

//nested switch

switch(choice) {

case 1://add

CameraOperations.addCamera();

subMenu();

break;

case 2: //remove

CameraOperations.displayAllCameras();

System.out.println("Enter Camera id to delete");

int id=sc.nextInt();

CameraOperations.remove(id);

subMenu();

break;

case 3://view my camera

CameraOperations.displayAllCameras();

subMenu();

break;

case 4://go back to previous menu

mainMenu();

break;

}

}

public static void mainMenu() {

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

System.out.println("\n 1.MY CAMERA \n 2.RENT A CAMERA \n 3.VIEW ALL CAMERA \n 4.MY WALLET \n 5.EXIT");

System.out.println("Enter your option from 1-5:");

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

Scanner sc=new Scanner(System.in);

int option=sc.nextInt();

switch(option) {

case 1:

subMenu();

break;

case 2:

CameraOperations.rentCamera();

mainMenu();

break;

case 3:

ViewAllCameras.view();

mainMenu();

break;

case 4:

Wallet.manageWallet();

mainMenu();

break;

case 5:

System.exit(0);

default:

System.out.println("Invalid option choosen");

System.out.println("choose a range between 1-5");

mainMenu();

}

}

}

**2.CameraOperations:**

package loginapp;

import java.util.ArrayList;

import java.util.List;

import java.util.Scanner;

public class CameraOperations {

public int cameraId;

public String Brand;

public String Model;

public double PricePerDay;

public boolean isRented;

public CameraOperations(int cameraId,String brand, String model, double pricePerDay) {

super();

this.cameraId=cameraId;

Brand = brand;

Model = model;

PricePerDay = pricePerDay;

this.isRented = false;

}

public static List<CameraOperations> cameraList = new ArrayList<>();

public static void InitializeList() {

cameraList.add(new CameraOperations(1,"Sony", "Dsl234", 5000));

}

public int getCameraId() {

return cameraId;

}

public void setCameraId(int cameraId) {

this.cameraId = cameraId;

}

public String getBrand() {

return Brand;

}

public String getModel() {

return Model;

}

public double getPricePerDay() {

return PricePerDay;

}

public boolean isRented() {

return isRented;

}

public void setRented(boolean isRented) {

this.isRented = isRented;

}

@Override

public String toString() {

return "CameraOperations [Brand=" + Brand + ", Model=" + Model + ", PricePerDay=" + PricePerDay + ", isRented="

+ isRented + "]";

}

public static void remove(int cameraId) {

// TODO Auto-generated method stub

if(cameraId>=0 && cameraId<=cameraList.size()) {

cameraList.remove(cameraId);

System.out.println("Camera successfully removed from the list.");

}

else {

System.out.println("CameraId not found");

}

}

public static void displayAllCameras() {

// TODO Auto-generated method stub

if(cameraList.isEmpty()) {

System.out.println("Your Camera list is empty");

}

else {

System.out.printf("%-10s %-10s %-10s %-10s %-10s\n","CAMERA ID", "BRAND", "MODEL", "PRICE", "STATUS");

int id=1;

for(CameraOperations camera:cameraList) {

System.out.printf("%-10s %-10s %-10s %-10.2f %-10s\n",id++, camera.getBrand(), camera.getModel(),

camera.getPricePerDay(), camera.isRented() ? "Rented" : "Available");

}

}

}

public static void addCamera() {

// TODO Auto-generated method stub

Scanner scan=new Scanner(System.in);

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

String brand=scan.next();

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

String model=scan.next();

System.out.println("Enter Price/day (INR): ");

double PricePerDay=scan.nextDouble();

CameraOperations temp=cameraList.get(cameraList.size()-1);

int newCamId=temp.getCameraId()+1;

CameraOperations newCamera=new CameraOperations(newCamId,brand,model,PricePerDay);

cameraList.add(newCamera);

System.out.println("Your camera has been successfully added to the list.");

}

public static void rentCamera() {

Scanner sc=new Scanner(System.in);

displayAllCameras();

if(cameraList.isEmpty()) {

System.out.println("Now,No camera available for rent");

return;

}

System.out.println("Enter the camera id you want to rent");

int cameraId=sc.nextInt();

if(cameraId>=0 && cameraId<cameraList.size()) {

CameraOperations camera=cameraList.get(cameraId);

if(camera.isRented()) {

System.out.println("Already rented");

}

else {

if(Wallet.getBalance()>=camera.getPricePerDay()) {

Wallet.withdraw(camera.getPricePerDay());

camera.setRented(true);

String output="Your Transaction for camera"+camera.getBrand() +" "+camera.getModel()+" With RENT INR." +camera.getPricePerDay()+"HAS SUCCESSFULLY COMPLETED";

System.out.println(output);

}

else {

System.out.println("Insufficient wallet balance,please refill your wallet");

}

}

}

else {

System.out.println("Invalid Camera id");

}

}

}

**3.ViewAllCameras:**

package loginapp;

public class ViewAllCameras{

public static void view(){

System.out.println("List of All Available Camera: ");

if(CameraOperations.cameraList.isEmpty()) {

System.out.println("No Cameras available at the moment");

}

else {

System.out.printf("%-10s %-10s %-10s %-10s %-10s\n","CAMERA ID", "BRAND", "MODEL", "PRICE", "STATUS");

for(CameraOperations camera:CameraOperations.cameraList) {

System.out.printf("%-10s %-10s %-10s %-10.2f %-10s\n",camera.getCameraId(), camera.getBrand(), camera.getModel(),

camera.getPricePerDay(), camera.isRented() ? "Rented" : "Available");

}

}

}

}

**4.Wallet:**

package loginapp;

import java.util.Scanner;

import exception.InvalidDecision;

public class Wallet {

public static double balance=5500;

public Wallet(double balance) {

this.balance = balance;

}

public static double getBalance() {

return balance;

}

public void setBalance(double balance) {

this.balance = balance;

}

public static void deposit(double amount) {

balance += amount;

}

public static boolean withdraw(double amount) {

if (amount <= balance) {

balance -= amount;

return true;

}

return false;

}

public static void manageWallet() {

Scanner sc=new Scanner(System.in);

System.out.println("\n My Wallet\n");

System.out.println("Your current wallet balance is INR \n"+Wallet.getBalance());

System.out.println("Do you want to add more");

System.out.println("\\n 1.Yes \\n 2.No");

int decide=sc.nextInt();

switch(decide) {

case 1:

System.out.println("Enter the amount(In INR)");

double amount=sc.nextDouble();

Wallet.deposit(amount);

System.out.println("Your wallet balance updated successfully"+"\n"+" Your current balance:INR %.2f\n "+Wallet.getBalance());

break;

case 2:

break;

default:

//throw new InvalidDecision();

System.out.println("Invalid Decision");

}

}

}

**exception:**

**1.Invalid:**

package exception;

public class InvalidDecision extends Exception {

@Override

public String toString() {

return "Invalid decision Choose only deposit or not";

}

}

**2.Login:**

package exception;

public class LoginException extends Exception {

@Override

public String toString() {

return "You Entered Wrong Login Details";

}

}