**SOURCE CODE**

Developer\_Name: **Naveen G**

**LOGINin:**

package LoginScreen;

import java.util.Scanner;

import Exception.LoginException;

public class Login {

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

System.out.println("Developed by Naveen G");

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

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

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

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

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("admin") && password.equals("admin123")) {

mainMenu();

}

else {

throw new LoginException();

}

}

Public static void mainMenu() {

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:");

Scanner scanner=new Scanner(System.in);

int option=scanner.nextInt();

switch(option) {

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

int choice=scanner.nextInt();

//nested switch

switch(choice) {

case 1: //adding in row

CameraOperations.addCamera();

mainMenu();

break;

case 2: //deleting row

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

int id=scanner.nextInt();

CameraOperations.remove(id);

mainMenu();

break;

case 3: //view my camera

CameraOperations.displayAllCameras();

mainMenu();

break;

case 4://go back to previous menu

mainMenu();

break;

}

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();

}

}

}

**CAMERA OPERATIONS:**

package LoginScreen;

import java.util.ArrayList;

import java.util.List;

import java.util.Scanner;

public class CameraOperations {

private String Brand;

private String Model;

private double PricePerDay;

private boolean isRented;

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

super();

Brand = brand;

Model = model;

PricePerDay = pricePerDay;

this.isRented = false;

}

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

public void previouslist() {

CameraOperations cam=new CameraOperations("canon", "d700", 6000);

cameraList.add(cam);

}

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 id) {

// TODO Auto-generated method stub

Scanner scanner=new Scanner(System.in);

displayAllCameras();

System.out.print("Enter the camera ID to remove: ");

int cameraId =scanner.nextInt();

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 = 0;

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 camera=new CameraOperations(brand, model, PricePerDay);

cameraList.add(camera);

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");

}

}

}

**VIEWALLCAMERAS:**

package LoginScreen;

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.println("+====================================================+");

System.out.printf( "| %%-10s %-10s %-8s %-7s\n","CAMERAID", "BRAND", "MODEL", "PRICE", "STATUS|");

System.out.println("+====================================================+");

int id = 1;

for(CameraOperations camera:CameraOperations.cameraList) {

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

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

}

}

}

}

**WALLET:**

package LoginScreen;

import java.util.Scanner;

import Exception.InvalidDecision;

public class Wallet {

private static double balance=2500;

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 scanner=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(1. Yes/2. No)");

int decide=scanner.nextInt();

switch(decide) {

case 1:

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

double amount=scanner.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:**

**INVALIDDECISION:**

package Exception;

public class InvalidDecision extends Exception{

@Override

public String toString() {

return "Invalid decision Choose only deposit or not";

}

}

**LOGINEXCEPTION:**

package Exception;

public class LoginException extends Exception{

@Override

public String toString() {

return "You have Entered Wrong Login Details";

}

}