package com.mycompany.javareport;

import java.util.Scanner;

class InvalidAgeException extends Exception {

int x = 0;

InvalidAgeException(int x) {

super("Invalid Age Exception: ");

this.x = x;

}

String printMessage() {

if (x == 1) {

return ("Age cannot be a negative number");

}

return ("");

}

}

class InvalidNumberException extends Exception {

int x = 0;

InvalidNumberException(int x) {

super("Invalid Number Exception: ");

this.x = x;

}

String printMessage() {

if (x == 1) {

return ("Mobile Number should be of 10 digits");

}

return ("");

}

}

class InvalidMailException extends Exception {

int x = 0;

InvalidMailException(int x) {

super("Invalid Mail Id Exception: ");

this.x = x;

}

String printMessage() {

if (x == 1) {

return ("Enter a valid Email id");

}

return ("");

}

}

class customerDetails {

String name;

int age;

long contactNumber;

String email;

int noOfDays;

customerDetails(String name, int age, long contactNumber, String email, int noOfDays) {

this.name = name;

this.age = age;

this.contactNumber = contactNumber;

this.email = email;

this.noOfDays = noOfDays;

}

}

interface rooms {

long[] deluxeRoom = new long[5]; // Rs 8000 per day

long[] luxuryRoom = new long[5]; // Rs 10000 per day

public void chooseRoom(long mobile); // a customer is tracked using mobile number

}

class room1 implements rooms {

static int k1 = 0;

static int k2 = 0;

Scanner sc = new Scanner(System.in);

public void chooseRoom(long mobile) {

System.out.println("\n\nChoose your room:\nEnter 1: Deluxe Room\nEnter 2: Luxury Room\n\nEnter your choice: ");

int choice = sc.nextInt();

while (true) {

if (choice == 1) {

deluxeRoom[k1] = mobile;

break;

} else if (choice == 2) {

luxuryRoom[k2] = mobile;

break;

} else {

System.out.println("Invalid choice\nEnter again");

choice = sc.nextInt();

}

}

}

}

public class JavaReport {

public static void isAgeValid(int age) throws InvalidAgeException {

if (age <= 0) {

throw new InvalidAgeException(1);

}

}

public static void isMobileValid(long mobile) throws InvalidNumberException {

String m1 = Long.toString(mobile);

if (m1.length() < 10 || m1.length() > 10) {

throw new InvalidNumberException(1);

}

}

public static void isMailValid(String mail) throws InvalidMailException {

if (!(mail.contains("@") && mail.contains("."))) {

throw new InvalidMailException(1);

}

}

public static void main(String[] args) {

customerDetails[] cd = new customerDetails[10];

int k = 0;

Scanner sc = new Scanner(System.in);

int flag = 0;

while (flag == 0) {

int choice;

long mobile = 0;

int age = 0, noOfDays = 0;

String name = "", mail = "";

System.out.println("Enter 1: New Booking\nEnter 2: Room Service\nEnter 3: To Generate Bill\n\nEnter your choice: ");

choice = sc.nextInt();

if (choice == 1) {

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

sc.nextLine();

name = sc.nextLine();

try {

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

age = sc.nextInt();

isAgeValid(age);

} catch (InvalidAgeException e1) {

System.out.println(e1.getMessage() + e1.printMessage());

System.out.println("Enter your age");

age = sc.nextInt();

}

try {

System.out.println("Enter your mobile number");

mobile = sc.nextLong();

isMobileValid(mobile);

} catch (InvalidNumberException e2) {

System.out.println(e2.getMessage() + e2.printMessage());

System.out.println("Enter your mobile number");

mobile = sc.nextLong();

}

try {

System.out.println("Enter your email id");

sc.nextLine();

mail = sc.nextLine();

isMailValid(mail);

} catch (InvalidMailException e3) {

System.out.println(e3.getMessage() + e3.printMessage());

System.out.println("Enter your email id");

sc.nextLine();

mail = sc.nextLine();

}

System.out.println("Enter the number of days of your stay: ");

noOfDays = sc.nextInt();

cd[k] = new customerDetails(name, age, mobile, mail, noOfDays);

k++;

room1 r = new room1();

r.chooseRoom(mobile);

} else if (choice == 2) {

System.out.println("Room services:\n1.House Keeping \n2.Room essentials\n3.Laundary\n4.Order Food\n5.Emergency Dials\n6.Help Desk");

// Getting the preferred service from the customer

System.out.println("Enter the room service you prefer");

int N = sc.nextInt();

switch (N) {

case 1:

System.out.println("House Keeping");

System.out.println("Press 11 for :Cleanliness duties of the room\nPress 12 for :Regarding issues in furnitures,fittings or fixtures\nPress 13 for :To control pests\nPress 14 for :Others");

int a = sc.nextInt();

if (a == 11) {

System.out.println("Cleanliness duties shall be carried out shortly");

} else if (a == 12) {

System.out.println("The furnishing issues shall be resolved shortly");

} else if (a == 13) {

System.out.println("Action shall be taken to control pests");

} else if (a == 14) {

System.out.println("Pls notify us your issue to this number");

} else {

break;

}

System.out.println("Call 235");

break;

case 2:

System.out.println("Room essentials");

System.out.println("Press 21 for :Air conditioner issues\nPress 22 for :Blackout curtains\nPress 23 for :Toiletries\nPress 24 for :Wifi");

int b = sc.nextInt();

if (b == 21) {

System.out.println("Air Conditioner problem shall be settled shortly");

} else if (b == 22) {

System.out.println("Blackout curtains shall be provided shortly");

} else if (b == 23) {

System.out.println("The claimed toiletries shall be provided shortly");

} else if (b == 24) {

System.out.println(" Wifi login details shall be provided");

} else {

break;

}

System.out.println("Call 236");

break;

case 3:

System.out.println("Laundry");

System.out.println("Press 31 for :Washing \nPress 32 for :Dry Cleaning");

int c = sc.nextInt();

if (c == 31) {

System.out.println("Your laundary by washing shall be done");

} else if (c == 32) {

System.out.println("Your laundary by dry cleaning shall be done");

} else {

break;

}

System.out.println("Call 237");

break;

case 4:

System.out.println("Order Food:");

System.out.println("Press 41 for :Breakfast\nPress 42 for :Lunch\nPress 43 for :Evening snacks\nPress 44 for :Dinner");

int d = sc.nextInt();

if (d == 41) {

System.out.println("Breakfast shall be provided shortly");

} else if (d == 42) {

System.out.println("Lunch shall be provided shortly");

} else if (d == 43) {

System.out.println("Evening snacks shall be provided shortly");

} else if (d == 44) {

System.out.println("Dinner shall be provided shortly");

}

System.out.println("Call 250");

case 5:

System.out.println("Emergency Desk");

System.out.println("Any emergency report to this number");

System.out.println("Call 300");

break;

case 6:

System.out.println("Help Desk");

System.out.println("To reach out for help pls contact us");

System.out.println("Call 400");

break;

}

} else if (choice == 3) {

System.out.println("Enter your Mobile Number: ");

System.out.println("Enter 1: For Deluxe Room\nEnter 2: For Luxury Room");

int ch = sc.nextInt();

double bill = 0;

if (ch == 1) {

bill = noOfDays \* 8000;

}

if (ch == 2) {

bill = noOfDays \* 10000;

}

System.out.println("The bill amount is: " + bill);

}

System.out.println("\nEnter 1 to exit and 0 to continue");

flag = sc.nextInt();

}

}

}