import java.util.ArrayList;

import java.util.Iterator;

public class Hotel{

String name, hotelId, address;

static String reserved="";

//String roomId, roomType, roomNumber, roomCapacity, roomAc, roomWifi, roomCabel, roomLaundry;

//ArrayList roomList=new ArrayList();

ArrayList<Room> robj = new ArrayList<Room>();

ArrayList<Reservation> resobj = new ArrayList<Reservation>();

public void addRoom(Room rom)

{

robj.add(rom);

}

public void addreservation(Reservation res)

{

resobj.add(res);

}

public void display()

{

Iterator itr=robj.iterator();

while(itr.hasNext()==true)

{

Room st=(Room)itr.next();

System.out.println();

System.out.println();

System.out.println("Room Number :"+st.roomNumber);

System.out.println("Room Type :"+st.roomType);

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

if(st.roomAc.equals("true"))

{

System.out.println("AC");

}

if(st.roomWifi.equals("true"))

{

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

}

if(st.roomCabel.equals("true"))

{

System.out.println("Cable Connection");

}

if(st.roomLaundry.equals("true"))

{

System.out.println("Laundry");

}

}

}

public boolean Availability(String type,String cap,String ac,String wifi,String cab,String lan)

{

Boolean b=false;

int count;

Iterator itr=robj.iterator();

int itrcount=0;

while(itr.hasNext()==true)

{ count=0;

Room st=(Room)itr.next();

if(st.roomType.equals(type))

{

count=count+1;

}

if(st.roomCapacity.equals(cap))

{

count=count+1;

}

if(st.roomAc.equals(ac))

{

count=count+1;

}

if(st.roomWifi.equals(wifi))

{

count=count+1;

}

if(st.roomCabel.equals(cab))

{

count=count+1;

}

if(st.roomLaundry.equals(lan))

{

count=count+1;

}

if(count==6)

{

b=true;

this.reserved=st.roomNumber;

itr.remove();

break;

}

}

return b;

}

public void displayres()

{

Iterator itrr=resobj.iterator();

while(itrr.hasNext()==true)

{

Reservation str=(Reservation)itrr.next();

System.out.println(str.customer+" - "+str.room+" - "+str.bookingDate+" - "+str.checkInDate+" - "+str.checkOutDate);

}

}

}

import java.util.Scanner;

import java.io.\*;

public class Main {

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

// TODO Auto-generated method stub

String rrrnum="";

int space=0;

Boolean avail=false;

String resagain="";

Hotel h=new Hotel();

String aroom="yes";

BufferedReader sc=new BufferedReader(new InputStreamReader(System.in));

System.out.println("Enter the Hotel details:");

System.out.println("Enter the Hotel Name:");

String h\_name=sc.readLine();

System.out.println("Enter the Hotel ID:");

String h\_id=sc.readLine();

System.out.println("Enter the Hotel Address");

String h\_add=sc.readLine();

do

{

System.out.println("Enter the Room Details:");

System.out.println("Enter the Room Id:");

String roomid=sc.readLine();

System.out.println("Enter the Room Number:");

String roomno=sc.readLine();

System.out.println("Enter the Room Type:\n1)Normal\n2)Delux\n3)Super Delux");

String roomtype=sc.readLine();

if(roomtype.equals("1"))

{

roomtype="Normal";

}

else if(roomtype.equals("2"))

{

roomtype="Delux";

}

else if(roomtype.equals("3"))

{

roomtype="Super Delux";

}

System.out.println("Enter the Room Capacity:(1/2/3/4)");

String roomcapa=sc.readLine();

System.out.println("AC Service (true/false):");

String roomac=sc.readLine();

System.out.println("Wi-Fi Service (true/false):");

String roomwifi=sc.readLine();

System.out.println("Cable Service (true/false):");

String roomcab=sc.readLine();

System.out.println("Laundry Service (true/false):");

String roomlan=sc.readLine();

System.out.println("Do you want to add Another Room (yes/no):");

aroom=sc.readLine();

Room r=new Room(roomid,roomtype,roomno,roomcapa,roomac,roomwifi,roomcab,roomlan);

h.addRoom(r);

}

while(aroom.equals("yes"));

if(aroom.equals("no"));

{

System.out.println("Thank you for booking !!");

System.out.println("The rooms Details in "+h\_name +" :");

System.out.println("Hotel Name:"+h\_name+".");

System.out.println("Hotel ID:"+h\_id+".");

System.out.println("Hotel Address:"+h\_add+".");

System.out.println();

System.out.println();

System.out.println("Room Details:");

h.display();

do

{

System.out.println("Reservation\n\n");

System.out.println("Customer Registration:\n\n");

System.out.println("Enter the customer details:");

System.out.println("Enter the first name:");

String fname=sc.readLine();

System.out.println("Enter the last name:");

String lname=sc.readLine();

System.out.println("Enter the contact number:");

String cnum=sc.readLine();

System.out.println("Enter the e-mail id:");

String email=sc.readLine();

System.out.println("Enter the proof type:");

String ptype=sc.readLine();

System.out.println("Enter the proof id:");

String pid=sc.readLine();

if(space !=0)

{

System.out.println();System.out.println();

}

System.out.println("The customer details are as follows");

System.out.println("The customer details are:");

System.out.println("First Name : "+fname);

System.out.println("Last Name : "+lname);

System.out.println("Contact Number : "+cnum);

System.out.println("E-Mail : "+email);

System.out.println("Proof Type : "+ptype);

System.out.println("Proof ID : "+pid);

System.out.println();System.out.println();

do

{

System.out.println("Enter the room requirements:");

System.out.println("Enter the Room Type:\n1)Normal\n2)Delux\n3)Super Delux");

String rrtype=sc.readLine();

if(rrtype.equals("1"))

{

rrtype="Normal";

}

else if(rrtype.equals("2"))

{

rrtype="Delux";

}

else if(rrtype.equals("3"))

{

rrtype="Super Delux";

}

System.out.println("Enter the Room Capacity:(1/2/3/4)");

String rrcap=sc.readLine();

System.out.println("AC Service (true/false):");

String rrac=sc.readLine();

System.out.println("Wi-Fi Service (true/false):");

String rrwifi=sc.readLine();

System.out.println("Cable Service (true/false):");

String rrcab=sc.readLine();

System.out.println("Laundry Service (true/false):");

String rrlan=sc.readLine();

avail=h.Availability(rrtype, rrcap, rrac, rrwifi, rrcab,rrlan);

if(avail==true)

{

System.out.println("Please take room number "+h.reserved);System.out.println();

rrrnum=h.reserved;

}

else

{

System.out.println("No rooms of specified requirements\nPlease re-enter\n\n\n\n");

}

}

while(avail==false);

System.out.println();

System.out.println("Enter the Booking date");

String bdate=sc.readLine();

System.out.println("Enter the check-in date");

String cindate=sc.readLine();

System.out.println("Enter the check-out date");

String coutdate=sc.readLine();

Reservation rres=new Reservation(fname,rrrnum,cindate,coutdate,bdate);

h.addreservation(rres);

System.out.println("Do you want to perform another reservation?(y/n)");

space=space+1;

resagain=sc.readLine();

}

while(resagain.equals("y"));

if(resagain.equals("n"));

{

System.out.println("The reservation details are as follows:\n\n");

h.displayres();

}

}

}

}

**public** **class** Reservation {

String customer, room, checkInDate, checkOutDate,bookingDate;

**public** Reservation(String cus,String room,String checkin,String checkout,String booking)

{

**this**.customer=cus;

**this**.room=room;

**this**.checkInDate=checkin;

**this**.checkOutDate=checkout;

**this**.bookingDate=booking;

}

}

**public** **class** Room {

String roomId, roomType, roomNumber, roomCapacity, roomAc, roomWifi, roomCabel, roomLaundry;

**public** Room(String roomId, String roomType, String roomNumber, String roomCapacity, String roomAc, String roomWifi, String roomCabel, String roomLaundry)

{

**this**.roomId=roomId;

**this**.roomType=roomType;

**this**.roomNumber=roomNumber;

**this**.roomCapacity=roomCapacity;

**this**.roomAc=roomAc;

**this**.roomWifi=roomWifi;

**this**.roomCabel=roomCabel;

**this**.roomLaundry=roomLaundry;

}

}