**import** java.text.ParseException;

**import** java.text.SimpleDateFormat;

**import** java.util.ArrayList;

**import** java.util.Date;

**import** java.util.List;

**import** java.util.Scanner;

**public** **class** HotelCasereq2 {

**public** **static** **void** main(String[] args) **throws** NumberFormatException, ParseException {

List<Room>\_roomList=**new** ArrayList<Room>();

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

Scanner input=**new** Scanner(System.***in***);

String name;

name=input.nextLine();

Hotel hotel=**new** Hotel(name,\_roomList);

System.***out***.println("1.Add Room\n2.Delete Room\n3.Display Rooms\n4.Exit\nEnter your Choice");

**int** choice;

choice=Integer.*parseInt*(input.nextLine());

**while**(choice>0 && choice<4)

{

**if**(choice==1)

{

String detail;

detail=input.nextLine();

Room room=Room.*CreateRoom*(detail);

hotel.AddRoomToHotel(room);

System.***out***.println("Room Successfully added");

}

**if**(choice==2)

{

System.***out***.println("Enter the room number to be deleted");

**int** number;

number=Integer.*parseInt*(input.nextLine());

System.***out***.println( hotel.RemoveRoom(number)?"Room Successfully deleted":"Room not found in hotel");

}

**if**(choice==3)

{

hotel.DisplayRooms();

}

System.***out***.println("1.Add Room\n2.Delete Room\n3.Display Rooms\n4.Exit\nEnter your Choice");

choice=Integer.*parseInt*(input.nextLine());

}

}

}

**class** Room

{

**private** **int** \_number;

**private** **int** \_floor;

**private** String \_type;

**private** **int** \_capacity;

**private** Date \_bookedTime;

**private** **double** \_price;

**public** **int** get\_number() {

**return** \_number;

}

**public** **void** set\_number(**int** \_number) {

**this**.\_number = \_number;

}

**public** **int** get\_floor() {

**return** \_floor;

}

**public** **void** set\_floor(**int** \_floor) {

**this**.\_floor = \_floor;

}

**public** String get\_type() {

**return** \_type;

}

**public** **void** set\_type(String \_type) {

**this**.\_type = \_type;

}

**public** **int** get\_capacity() {

**return** \_capacity;

}

**public** **void** set\_capacity(**int** \_capacity) {

**this**.\_capacity = \_capacity;

}

**public** Date get\_bookedTime() {

**return** \_bookedTime;

}

**public** **void** set\_bookedTime(Date \_bookedTime) {

**this**.\_bookedTime = \_bookedTime;

}

**public** **double** get\_price() {

**return** \_price;

}

**public** **void** set\_price(**double** \_price) {

**this**.\_price = \_price;

}

**public** Room(**int** \_number, **int** \_floor, String \_type, **int** \_capacity, Date \_bookedTime, **double** \_price) {

**this**.\_number = \_number;

**this**.\_floor = \_floor;

**this**.\_type = \_type;

**this**.\_capacity = \_capacity;

**this**.\_bookedTime = \_bookedTime;

**this**.\_price = \_price;

}

**public** Room() {

}

@Override

**public** String toString() {

SimpleDateFormat df=**new** SimpleDateFormat("dd-MM-yyyy HH:mm:ss");

**return** "Number:" + \_number +"\n"+ "Floor:" + \_floor +"\n"+ "Type:" + \_type +"\n"+ "Capacity:" + \_capacity+"\n"

+"BookedTime:" + df.format(\_bookedTime) +"\n"+ "Price:" + \_price+"\n";

}

**public** **static** Room CreateRoom(String detail) **throws** NumberFormatException, ParseException

{

SimpleDateFormat df=**new** SimpleDateFormat("dd-MM-yyyy HH:mm:ss");

Room room=**new** Room(Integer.*parseInt*(detail.split(",")[0]),Integer.*parseInt*(detail.split(",")[1]),detail.split(",")[2],Integer.*parseInt*(detail.split(",")[3]),

df.parse(detail.split(",")[4]),Double.*parseDouble*(detail.split(",")[5]));

**return** room;

}

}

**class** Hotel

{

**private** String \_name;

**private** List<Room>\_roomList;

**public** String get\_name() {

**return** \_name;

}

**public** **void** set\_name(String \_name) {

**this**.\_name = \_name;

}

**public** List<Room> get\_roomList() {

**return** \_roomList;

}

**public** **void** set\_roomList(List<Room> \_roomList) {

**this**.\_roomList = \_roomList;

}

**public** Hotel() {

}

**public** Hotel(String \_name, List<Room> \_roomList) {

**super**();

**this**.\_name = \_name;

**this**.\_roomList = \_roomList;

}

**public** **void** AddRoomToHotel(Room room)

{

**this**.\_roomList.add(room);

}

**public** **boolean** RemoveRoom(**int** number)

{

**boolean** isDelete = **false**;

**for**(**int** i=0;i<\_roomList.size();i++)

{

**if**(\_roomList.get(i).get\_number()==number)

{

isDelete=**true**;

\_roomList.remove(\_roomList.get(i));

}

}

**return** isDelete;

}

**public** **void** DisplayRooms()

{

**if**(\_roomList.size()==0)

{

System.***out***.println("No Room to show");

}

**else**

{

System.***out***.println("Rooms in" +\_name);

System.***out***.println("Number\tFloor\tType\tCapacity\tBooked Time\tPrice");

**for** (Room room : \_roomList) {

SimpleDateFormat df=**new** SimpleDateFormat("dd-MM-yyyy HH:mm:ss");

System.***out***.println(room.get\_number()+" "+room.get\_floor()+" "+room.get\_type()+" "

+room.get\_capacity()+" "+df.format(room.get\_bookedTime())+" "+room.get\_price());

}

}

}

}