Class Hotel

```
java.lang.Object
  └─Hotel
```

```
public class Hotel
extends java.lang.Object
```

This class represents a hotel with a list of available rooms and a list of reserved rooms.

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Author:
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Constructor Summary

Hotel() Construct a hotel with an empty list of available rooms and and empty list of reserved rooms.
Hotel(java.util.ArrayList<Room> availableRooms, java.util.ArrayList<Room> reservedRooms) Construct a hotel with an input list of available rooms and an input list of reserved rooms.

Method Summary

boolean	**addNewRoom**(Room room) Adds a room to the list of available rooms if it has a room number not already listed in the hotel.
java.util.ArrayList<Room>	**getAllAvailableRooms**() Returns the list of available rooms.
java.util.ArrayList<Room>	**getAllReservedRooms**() Returns the list of reserved rooms..
Room	**getAvailableRoomByRoomNumber**(int roomNumber) Returns the room associated with the input room number, as long as it is available.
java.util.ArrayList<Room>	**getAvailableRooms**(int floor, View view, int maxCapacity, boolean kitchenette) Returns a list of the available rooms matching the input criteria.
Room	**getReservedRoomByRoomNumber**(int roomNumber) Returns the room associated with the input room number, as long as it is reserved.
boolean	**makeRoomAvailable**(int roomNumber) If the room with the input room number is reserved, makes the room availabe and returns true.
boolean	**reserveRoom**(int roomNumber) If the room with the input room number is availble, reserves the room and returns true.

java.lang.String	**toString**()
	Returns a list of the avaialbe room descriptions followed by reserved room descriptions.

Methods inherited from class java.lang.Object
clone, equals, finalize, getClass, hashCode, notify, notifyAll, wait, wait, wait

Constructor Detail

Hotel

`public **Hotel**()`

Construct a hotel with an empty list of available rooms and and empty list of reserved rooms.

Hotel

`public **Hotel**(java.util.ArrayList<Room> availableRooms,`
`              java.util.ArrayList<Room> reservedRooms)`

Construct a hotel with an input list of available rooms and an input list of reserved rooms.

Parameters:
   `availableRooms` - The list of available rooms.
   `reservedRooms` - The list of reserved rooms.

Method Detail

addNewRoom

`public boolean **addNewRoom**(Room room)`

Adds a room to the list of available rooms if it has a room number not already listed in the hotel. Room is added so room numbers are in increasing numerical order in the list of available rooms.

Parameters:
   `room` - The room to add to the hotel.
Returns:
   True if the room number is not already listed in the hotel and false otherwise.

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getAllAvailableRooms

`public java.util.ArrayList<Room> **getAllAvailableRooms**()`

Returns the list of available rooms.

Returns:
   The list of available rooms.

getAllReservedRooms

```
public java.util.ArrayList<Room> getAllReservedRooms()
```

Returns the list of reserved rooms..

Returns:
    The list of reserved rooms.

getAvailableRoomByRoomNumber

```
public Room getAvailableRoomByRoomNumber(int roomNumber)
```

Returns the room associated with the input room number, as long as it is available.

Parameters:
    `roomNumber` - The requested room number.
Returns:
    The room associated with the input room number or null if the room is not available.

getAvailableRooms

```
public java.util.ArrayList<Room> getAvailableRooms(int floor,
                                                   View view,
                                                   int maxCapacity,
                                                   boolean kitchenette)
```

Returns a list of the available rooms matching the input criteria. Rooms on or above the floor requested are considered, as well as rooms with at least the maximum capacity.

Parameters:
    `floor` - The lowest requested floor on which the room can be located.
    `view` - The requested view from the room.
    `maxCapacity` - The lowest maximum capacity requested.
    `kitchenette` - True if a kitchenette is requested and false otherwise.
Returns:
    A list of the available rooms matching the input criteria.

getReservedRoomByRoomNumber

```
public Room getReservedRoomByRoomNumber(int roomNumber)
```

Returns the room associated with the input room number, as long as it is reserved.

Parameters:
    `roomNumber` - The requested room number.
Returns:
    The room associated with the input room number or null if the room is not reserved.

makeRoomAvailable

`public boolean` **`makeRoomAvailable`**`(int roomNumber)`

If the room with the input room number is reserved, makes the room availabe and returns true. Otherwise, returns false.

Parameters:
`roomNumber` - The requested room number to be made available.
Returns:
True if the room is successfully made available and false otherwise.

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reserveRoom

`public boolean` **`reserveRoom`**`(int roomNumber)`

If the room with the input room number is availble, reserves the room and returns true. Otherwise, returns false. Reserved room is added so room numbers are in increasing numerical order in the list of reserved rooms.

Parameters:
`roomNumber` - The requested room number to be reserved.
Returns:
True if the room is successfully reserved and false otherwise.

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toString

`public java.lang.String` **`toString`**`()`

Returns a list of the avaialbe room descriptions followed by reserved room descriptions.

Overrides:
`toString` in class `java.lang.Object`

Returns:
A list of the avaialbe room descriptions followed by reserved room descriptions.