# Hotel Reservation System User Document

Release 1

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**Project Goals:**

The goals for this project are to implement a functional hotel reservation system that can easily be scaled to much larger hotels by changing a few numbers in the code of the initial source code. The initial source code includes basic functionality described more in depth in the Implemented functionality section of this document. The following uses cases are currently implemented:

1. Changing the room status from Vacant to Occupied
2. Changing the room status from Open to Closed
3. Checking Available rooms
4. Checking Closed Rooms
5. Checking Occupied Rooms

Rooms are assigned to guests by name and the names are printed out in the console when the Occupied Room list function is run.

The source code is split into three separate classes: Hotel, Room, and Main. The Hotel class contains the methods that make up the implemented use cases. Room holds the data structure for the rooms. Rooms are made up of the room number, whether the room is vacant or not, if the room is open, and the Guest name if any. The main class is made of functions that are required for the users to login to the program.

**Potential Users:**

Hotel staff are able to check in guests using the program, and are able to check vacancies and occupied rooms, as well as closing certain rooms.

Guests are able to check for vacant rooms.

**Implemented Functionalities:**

1. Hotel employees are able to check guests in by changing the status of the rooms to occupied. This includes entering in the room number they would like to check a guest into. If the room is not taken, the employee can then enter in the name of the guest staying in the room, changing the room to occupied. If the room is occupied, then the guest will be checked out, changing the room to vacant, and allowing a new guest to be checked in.

2. Hotel Employees are able to close and open rooms. Whether a room is open or closed depends on whether services are done in a room, such as room cleaning or repairs. Once the services are complete, the employee can then open the room again, making it available for new occupancy. If the room is closed, it would not be available.

3. Hotel Employees are able to run reports that print out a list of all available rooms matching the conditions the room is open, and the room is not occupied. If either of the conditions fails the room is considered closed and is not available to be reserved. Employees are also able to run a report to return if the room is closed due to service, or if the room is occupied. The room occupation report prints out a list of all occupied rooms and lists the room number with the name of the occupant.

4. Hotel employees are able to get the names of guests occupying rooms. This prints a list of all occupied rooms and the names of the guests staying in them.

5. Hotel guests are able to run checks that print out a list of all available rooms matching the conditions the room is open, and the room is not occupied. If either of the conditions fails the room is considered closed and is not available to be reserved.