B. I'm storing occupied rooms in the singly linked lists, in fact I have 3 linked lists based on the number of beds in each room. This is a very good way to store the occupied rooms, because we store them when they are full (occupied) and we don't need to create an array of fixed size of for example 100 from the beginning. Its dynamic and we can add new rooms easily to the linked list, we don't need to worry about not having enough space or wasting too much space. Also when we want to delete a room, it's place in the memory will be deleted, so we are not wasting space.

Also, we store the list of occupied lists in a priority queue, because we want to dequeue rooms with the earlier check out date for the next day when we wan to update our system.

c. as I am using linked list, increasing number of rooms in the future is not much a concern, as much as it doesn't get all the dynamic memory space, because with linked list I don't need to worry about having fixed continuous memory (space)

D. the time complexity of most functions in my programme is eighter O(n) or O (1), I don't think I have any nested for loop or recursion calls.