

B. I am using array for Rooms because we know total rooms in the Hotel, so using arrays is good for this and I use link list for Customers because we don't know the total customers we are attending. So, the customers can be easily added and remove from the list and there is no memory wastage when I use the link list. So, I am adding customers and assign a room to a customer if available and show the message if not.

C. If growing the hotel with rooms of more beds is a possibility in the future, the can use the dynamic arrays for the rooms and so we can resize the rooms and delete the rooms easily and add new rooms with requested beds.

D. I use arrays rooms of 180 and singly link list to add customers and assign rooms according to the requested beds.

Complexity of constructors and destructors and getter, setter functions are constant and addCustomers have constant complexity and assigned customers have $O(n)$ complexity and remove customers also have constant complexity.