**HOTEL MANAGEMENT SYSTEM**

### **PREPARED FOR**

JEE Cloud Training Program

Capgemini Technology Services

### **PREPARED BY**

Devang Singh

Navya Likhita

Surya

**Class and Methods Description:**

We have made a few assumptions with respect to the application, which are:

1. Admin and User are different classes, and Admin class extends User class.
2. Every passenger needs to enter a Unique login ID which is of length 10.
3. The User Password is String of length 10.

The application will consist of the following classes, the utility of which have been described below:

1. **User:** This class stores the details of user:

Attributes:

userId: String

userName: String

userEmail: String

userDob: String

userPhone: String

Methods: -

*logIn()*: User will login if credentials are correct.

*logOut()*: Removes all the session related information of a user.

makeBooking(Hotel,Date,Room): Will return the booking ID.

*getBookingId(User user):* Will return the booking ID as Long.

The following methods will only be allowed for user type:

1. **Administrator**. :- This class extends user class.

*addHotel(Hotel):* Adds a hotel.

*removeHotel(Hotel):* Removes a hotel.

*updateHotel(Hotel):* Updates a hotel.

*addRoom(Room):* Adds a Room.

*updateRoom(Room):* Updates room

*deleteRoom(Room):* Deletes room

Flow:

1. Admin class extends user class and has special methods of its own.
2. Booking Management class has list of hotels. Hotels has a list of rooms(hashmap).
3. User selects room and after admin gives permission for booking, Customer object is created.
4. After Admin authorization, and successful payment room is booked.

Validations

* The checkout date should be greater than the checkin date.
* The checkin date should be greater thang the booking date.
* The userId and userName should not be null.
* The user must be at least 18 year old.
* The Hotel address must contain a pincode and must have a phone number.
* The booking date must be greater than the current date.