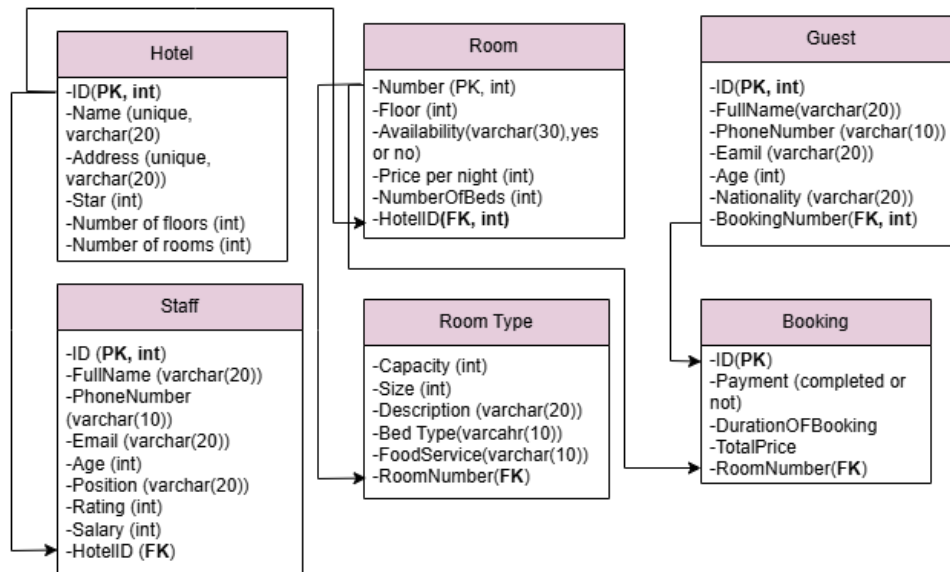


Hotel Management System



The **Hotel Management System** is a comprehensive database solution for managing hotel operations, including hotels, rooms, staff, bookings, and guests. The system efficiently tracks essential data, ensures consistency, and facilitates seamless CRUD operations for all entities.

1. Hotel:

○ Attributes:

- id (Primary Key): Unique identifier for each hotel.
- name (Unique): The name of the hotel.
- address (Unique): The location of the hotel.
- star: Number of stars (rating) the hotel has, restricted to a range of 1 to 5.
- numberOfFloors: The total number of floors, must be 5 or more.
- numberOfRooms: Total rooms available in the hotel, must be 5 or more.
- numberOfStaff: Total staff in the hotel, must be 3 or more.

2. Room:

○ Attributes:

- number (Primary Key): Unique room number.
- floor: The floor the room is located on.
- availability: Indicates if the room is available, restricted to "yes" or "no".
- pricePerNight: Cost per night, must be at least 20.
- numberOfBeds: Number of beds in the room, must be 1 or more.
- hotelID (Foreign Key): References id in the hotel table.

3. Booking:

○ Attributes:

- id (Primary Key): Unique booking identifier.
- payment: Status of payment, restricted to "completed" or "incomplete".
- durationOfBooking: Length of stay (in days), must not be null.
- totalPrice: Total cost of the booking, must be positive.
- roomNumber (Foreign Key): References number in the room table.

4. Guest:

○ Attributes:

- id (Primary Key): Unique identifier for each guest.
- fullName: Full name of the guest, cannot be null.
- phoneNumber: Phone number of the guest, must be exactly 10 characters.
- email: Guest email, cannot be null.
- age: Guest age, cannot be null.
- nationality: Nationality of the guest.
- bookingNumber (Foreign Key): References id in the booking table.

5. Staff:

○ Attributes:

- id (Primary Key): Unique staff identifier.
- fullName: Full name of the staff, cannot be null.
- phoneNumber: Phone number of the staff, must be exactly 10 characters.
- email: Staff email, cannot be null.
- age: Age of the staff, must be 20 or above.
- position: Job role, restricted to "manager", "reception", "cleaner", or "room service".
- rating: Performance rating, restricted to a range of 1 to 10.
- salary: Staff salary, cannot be null.
- hotelID (Foreign Key): References id in the hotel table.

6. Room Type:

○ Attributes:

- capacity: Maximum occupancy of the room, must not be null.
- size: Room size, must not be null.
- description: Room description.
- bedType: Type of bed, restricted to "single", "double", or "queen".
- foodService: Type of food service available, restricted to "breakfast", "lunch", or "dinner".
- roomNumber (Foreign Key): References number in the room table.