

Candidate Number: 97610

Application/Website/Service:

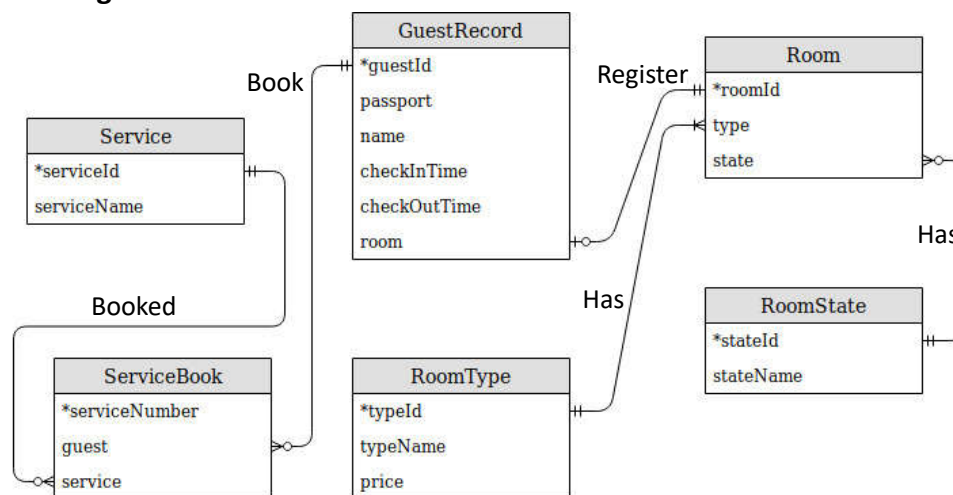
Holiday Inn: <https://www.holidayinn.com>

Description:

Holiday Inn is a hotel.

1. A **guest** is a person who order a room at Holiday Inn. A guest has a guest ID, Passport Number, name, check-in time, check-out time, room ID.
2. A **room** in the hotel has a room ID, room type, room state (booked or not).
3. **Room type** only has single, double, triple and related prices.
4. **Room state** can be booked or empty.
5. Hotel has **services** provided, service-guest is many to many relationships.
6. Guests can book rooms and reside in. There are several rooms per room type. Empty/Booked rooms vary in number (one to many). One guest can only book one room and one room can be booked by only one guest.

E-R Diagram:



Use Cases

1. Viewing the services booked from a room. '?' represent a room Id.

```
SELECT r.roomId, t.serviceName
FROM Room r
JOIN
(SELECT s.serviceName, gr.room
FROM Service s
INNER JOIN ServiceBook sb ON s.serviceId = sb.service
INNER JOIN GuestRecord gr ON sb.guest = gr.guestId) AS t
ON r.roomId = t.room
WHERE r.roomId = ?;
```

2. Viewing the number of empty rooms of a room type. '?' represent a room type name

```
SELECT COUNT(*)  
FROM RoomType rt  
INNER JOIN Room r ON rt.typeId = r.type  
INNER JOIN RoomState rs ON rs.stateId = r.state  
WHERE rt.typeName = ? AND rs.stateName = 'Empty';
```