Last Resort Hotels ERD

message_record

messageId	PK
guestId	FK
staffRecorded	FK
messageText	
messageDateTime	
deliverStatus	
isConfidential	

hotel

hotelId	PK
hotelName	
address	

staff

staffId	PK
buildingId	FK
firstName	
lastName	
role	
email	
phoneNumber	

wing

wingId	PK
buildingId	FK
wingDesignation	
wingName	

building

buildingId	PK
hotelId	FK
buildingName	

maintenance_request

requestId	PK
roomId	FK
dateRequested	
dateCompleted	
staffId	
status	

room

roomId	PK
wingId	FK
floorNumber	
roomNumber	
roomType	
capacity	
baseRate	
canSmoke	

event_room_usage

eventId	PK, FK
roomId	PK, FK
usageStart	
usageEnd	
usageType	
rateCharged	

event

eventId	PK
billedPartyId	FK
eventName	
startDateTime	
endDateTime	
estimatedAttendance	

billing_third_party

thirdPartyBillingId	PK
firstName	
partyLastName	
representedOrgName	
contactInfo	

service

serviceId	PK
staffId	FK
guestId	FK
chargeId	FK
serviceType	
expectedCharge	
authorizedCharge	
serviceDate	

card

cardId	PK
roomId	FK
pin	
expiryDateTIme	
lastUsed	

billing

billingId	PK
reservationId	PK, FK
guestId	FK
thirdPartyBillingId	FK
billingSplitId	FK
status	
paymentType	

card_assignment

cardId	PK, FK
guestId	PK, FK
staffId	PK, FK

room_feature

roomFeatureId	PK
featureName	
description	

reservation

reservationId	PK
billedPartyId	FK
plannedCheckIn	
plannedCheckOut	
requireDeposit	
bedPreference	
smokingPreference	

room_reservation

reservationId	PK, FK
roomId	PK, FK
wingDesignation	
actualCheckIn	
actualCheckOut	
lateCheckoutFee	

billing_split

billingSplitId	PK
splitRate	
firstName	
lastName	
contactInfo	

room_feature_assignment

roomId	PK, FK
roomFeatureId	PK, FK
quantity	

room_adjacency

roomId1	PK, FK
roomId2	PK, FK

reservation_guest

reservationId	PK, FK
guestId	PK, FK

guest

guestId	PK
fullName	
contactInfo	

charge

chargeId	PK
billedPartyId	FK
guestId	FK
chargeDateTime	
amount	
description	

Assumptions:

Buildings:
- A hotel may have more than one building

Room number:
- A room number consists of one or two digits designating the floor or level, followed by two digits designating the room number on the floor
- Courtyard and pool patio also has roomNumber to assign, and is treated as meeting rooms.

Room base rate:
- Sleeping room rental rates are allocated on a daily basis from 4 P.M. until 12 noon the next day; with up to 2h extensions
- For meeting rooms, each non eating usage is charged at the half rate of eating times with discounts for multiple non eating uses.

Room adjacency:
- A sleeping room may be adjacent to at most one meeting room; A meeting room may have one or two adjacent sleeping rooms.

Reservations:
- Reservations are made up to two years in advance (or more for major functions) for meeting and sleeping rooms.

Room assignments:
- Specific room assignments may not be made until the date draws close in time.
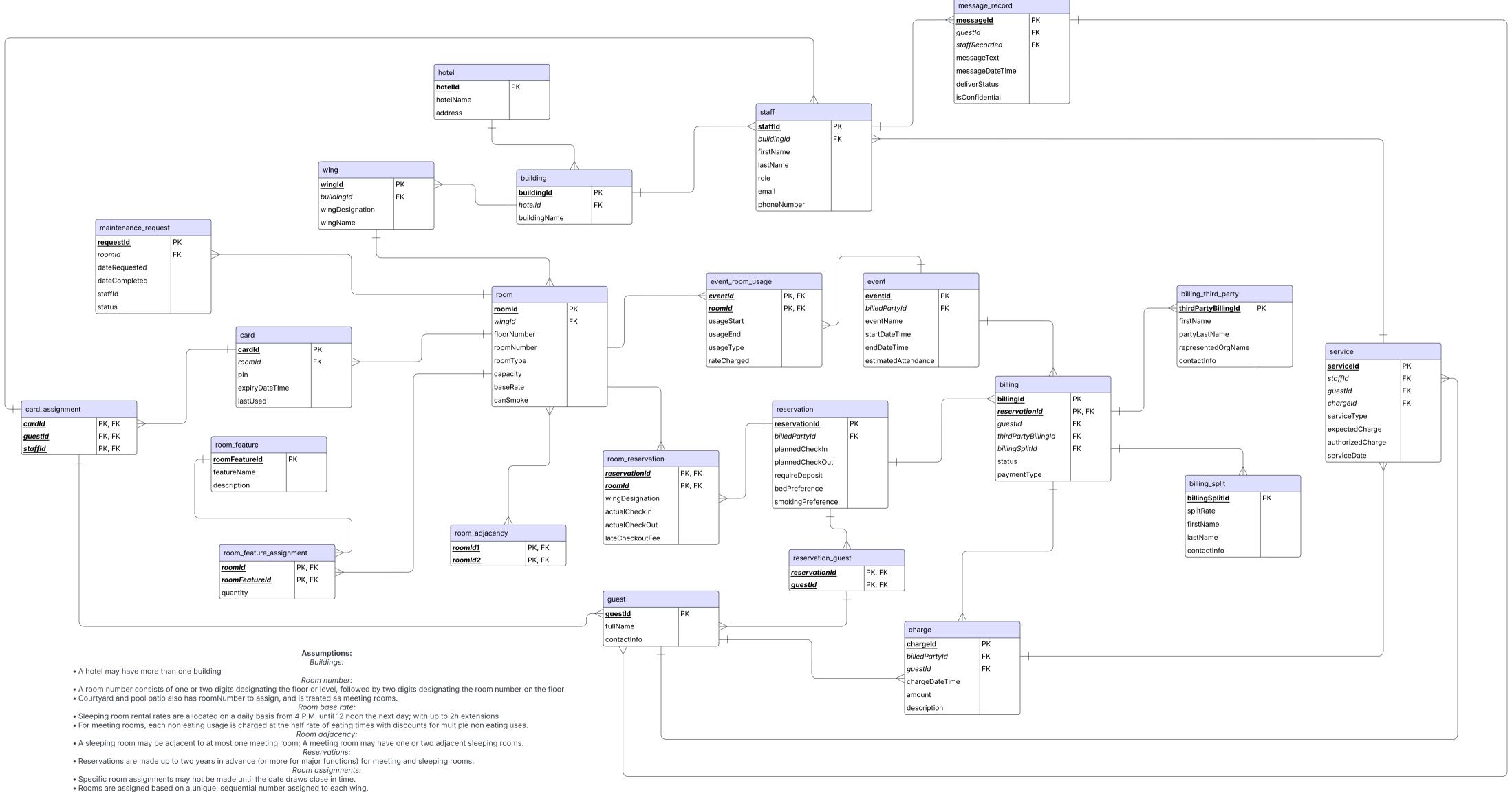- Rooms are assigned based on a unique, sequential number assigned to each wing.
- Reservations are filled with the lowest numbered wing(s) and the lowest available room number(s) that meets the guests' stated requirements.