

CMPS202 – Introduction to Database Systems

Hotel Database Management System

Final Report

Team Number: 26

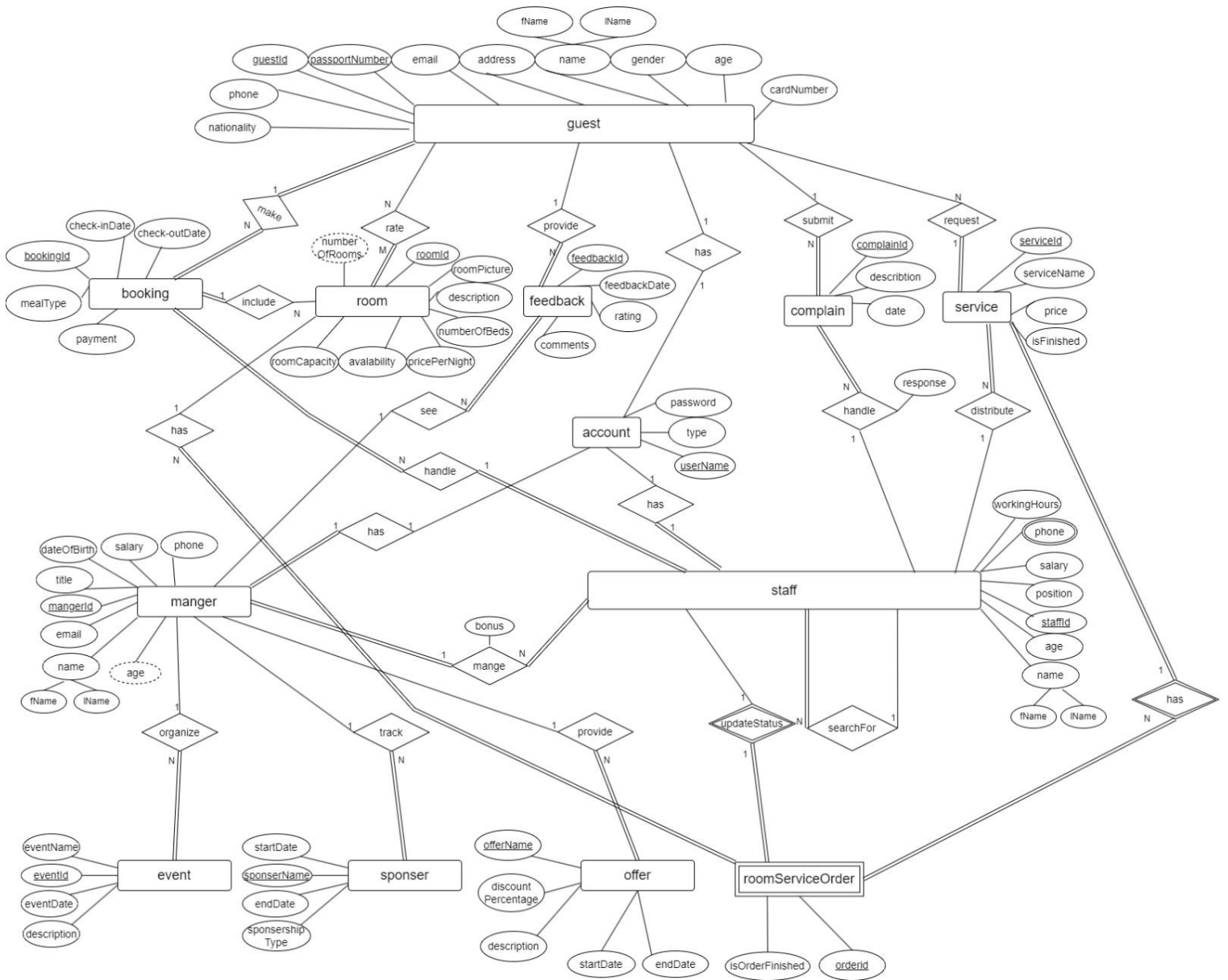
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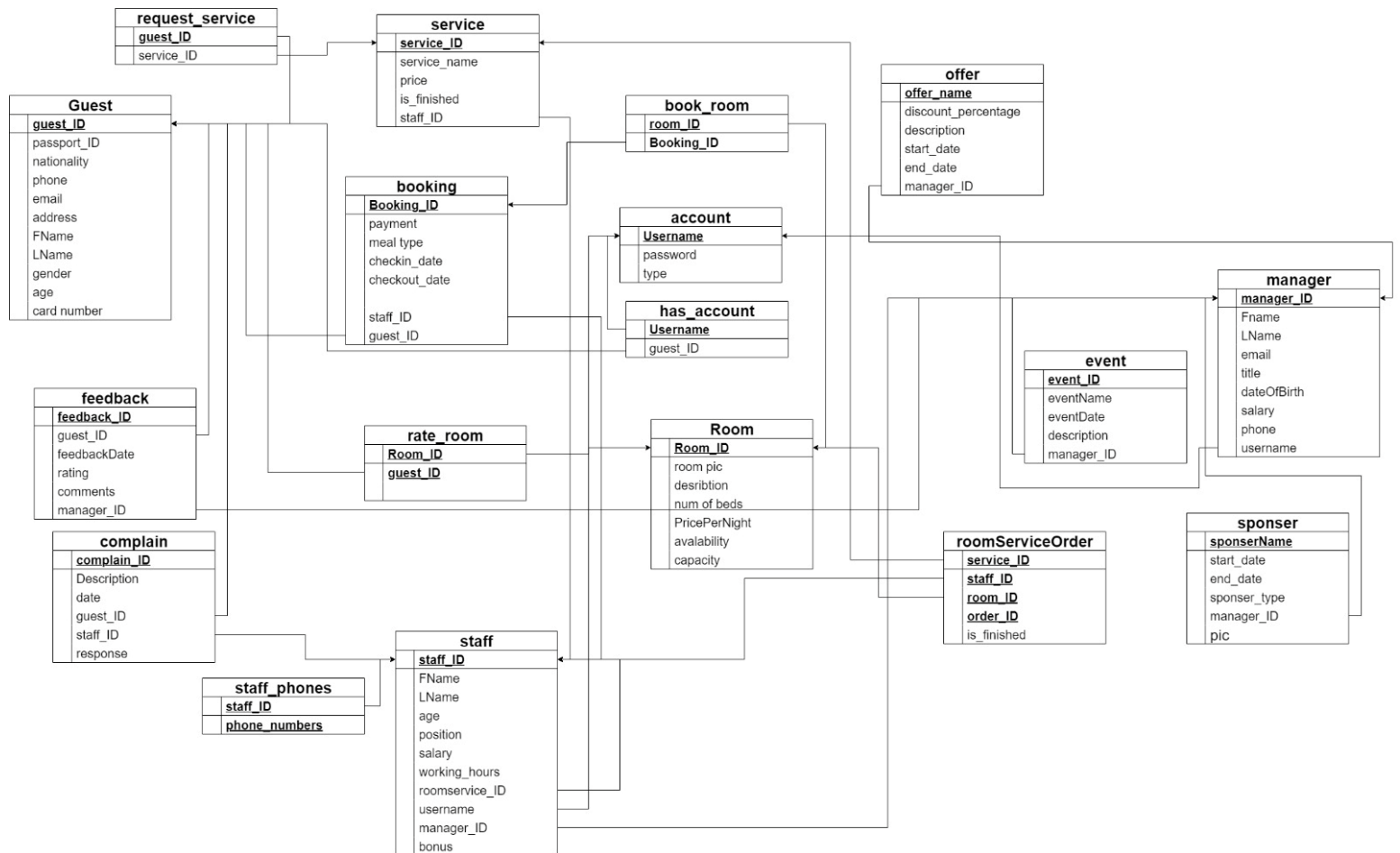
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Modified ERD



Schema



Database Constraints

- Table 'account':
 - Primary Key(s): username
 - NOT NULL: username, password, type
- Table 'booking':
 - Primary Key(s): Booking_ID
 - Foreign Key(s): staff_ID (table staff), guest_ID (table guest)
- Table 'book_room':
 - Primary Key(s): Room_ID
 - Foreign Key(s): Room_ID (table room), Booking_ID (table booking)
- Table 'complain':
 - Primary Key(s): complain_ID
 - Foreign Key(s): staff_ID (table staff), guest_ID (table guest)
- Table 'event':
 - Primary Key(s): event_ID
 - Foreign Key(s): manager_ID (table manager)

- NOT NULL: manager_ID (table manager)
- Table 'feedback':
 - Primary Key(s): feedback_ID
 - Foreign Key(s): manager_ID (table manager), guest_ID (table guest)
 - NOT NULL: manager_ID (table manager)
- Table 'guest':
 - Primary Key(s): guest_ID
 - Unique: passport_ID
- Table 'has_account':
 - Primary Key(s): username
 - Foreign Key(s): username (table account), guest_ID (table guest)
 - NOT NULL: guest_ID (table guest)
- Table 'manager':
 - Primary Key(s): manager_ID
 - Foreign Key(s): username (table account)
- Table 'offer':
 - Primary Key(s): offer_name
 - Foreign Key(s): manager_ID (table manager)
 - NOT NULL: manager_ID (table manager)
- Table 'rate_room':
 - Primary Key(s): Room_ID, guest_ID
 - Foreign Key(s): Room_ID(table room), guest_ID (table guest)
- Table 'request_service':
 - Primary Key(s): guest_ID
 - Foreign Key(s): guest_ID (table guest), service_ID (table service)
- Table 'room':
 - Primary Key(s): room_ID
 - NOT NULL: num of beds, PricePerNight, availability
- Table 'roomserviceorder':
 - Primary Key(s): order_ID, room_ID, guest_ID, staff_ID
 - Foreign Key(s): guest_ID (table guest), service_ID (table service), Room_ID (table room)
 - NOT NULL: is_finished
- Table 'service':
 - Primary Key(s): service_ID
- Table 'sponsor':
 - Primary Key(s): sponsor_ID
 - Foreign Key(s): manager_ID (table manager)
 - NOT NULL: manager_ID (table manager)
- Table 'manager':
 - Primary Key(s): staff_ID
 - Foreign Key(s): manager_ID (table manager)
 - NOT NULL: manager_ID (table manager), username (table account)

On Delete On Update

- All foreign keys are set as: ON DELETE CASCADE ON UPDATE CASCADE, except for staff_ID in table complain: ON DELETE SET NULL ON UPDATE CASCADE

Constants

- Number of rooms: 8
- Number of Managers: 1