

PRACTICAL - 12

AIM: Data Dictionary and E-R Diagram

Suppose that as the database administrator (DBA) in a hotel, you have to set up a database to capture all the following information that the hotel needs to maintain.

- The hotel offers three types of ROOMS, including single room, double room, and triple room. Every room is Identified by its unique number.
- Every employee at the hotel is either a receptionist, a cleaning staff, or a kitchen staff. Each RECEPTIONIST is identified with her/his name, employee number and years of experience. Receptionists are responsible for ensuring the room is clean before the room is assigned to the guest. Thus, they assign a single CLEANING STAFF to clean each room every morning and/or whenever it is required. Note that the same room may need to be cleaned several times on the same day, before it gets reassigned. For each cleaning assignment, the date and the status need to be provided. The KITCHEN STAFF is characterized by their specific responsibilities, e.g. being a cook or a waiter. The cleaning staff and the kitchen staff are also uniquely identified by their employee number.
- Receptionists welcome GUESTS and upon presentation of their valid traveling documents, they allocate a unique room to each guest and specify one group of facilities which is accessible to the guest during his stay. Guests are uniquely identified with their passport number but other necessary information are also recorded about the guests, including: name, phone numbers, arrival date, departure date, and credit card number. Each FACILITY GROUP contains specific set of facilities, e.g. the bar or gym, in order to be used by the guests. The arrival and departure dates of a guest will in turn determine the occupation of a specific room.
- A guest can be accompanied with one person to have a double room or at most two people for a triple room. Each ACCOMPANYING person is identified by his/her name.

12.1: Design Data Dictionary for above problem.

Entity	Attributes	Data Type	Length	Constraint
Room	Room No.	Number	5	PrimaryKey
	Room Type	Varchar2	20	Not Null
Guest	Name	Varchar2	20	Not Null
	Details	Varchar2	30	-
	Passport No.	Number	15	PrimaryKey
	Phone No.	Number	10	Not Null
Facility	Name	Varchar2	20	Not Null
Employee	Employee No.	Number	5	Primary Key
	Name	Varchar2	20	Not Null
Receptionist	Experience	Number	2	Not Null
Cleaning staff	-	-	-	-
Kitchen Staff	Responsibilitie	Varchar	25	Not Null
	s			
Cleaning	Status	Number	2	Primary Key
	Date	Date	-	Not Null

12.2: Considering the descriptions given above, draw an ER diagram for the database, representing entities, attributes, and relationships.

