Apartment Management: Database Design and Documentation

Narrative

ABC is a property management company which leases apartments in Florida. The XYZ is one of the new apartments under this management. The company is building a database for its new apartment.

It has 60 units in its apartment with different number of Bedrooms and Bathrooms. Each unit is equipped with a refrigerator, laundry, and other amenities. Unit is tracked by its unique number, area, and its type.

Units should be leased for at least 1 year by the resident. Lease is tracked by its sequential ID, Lease Date, Start and End Date, Monthly Rent, Security Deposit if any, and unit no and the residents associated with it. The resident can have multiple occupants. Each Resident is tracked by their Name, Email, phone number, and their unit number. The occupants in the unit are tracked by their names. And each occupant is tracked by the Occupant Number and their names. Each unit has parking which is tracked by the unique parking number. The lease payment is made on a monthly basis. It contains the payment of the rented unit and the number of parking spaces associated with it.

Units are repaired and maintained when the residents make a complaint if anything in their units gets broken and needs to be repaired. The maintenance is tracked by its unique sequential ID, type, Report Date, Description, StartDate and time of Repairment, Completion Date and time and the unit that is getting repaired. Different parts may be required for repair and maintenance. The management has different parts at hand. The management also keeps track of the parts that are used during the maintenance. There can be one or many parts that can be used during the repair and maintenance. The parts that are not available are procured from the suppliers. Suppliers are tracked by their unique sequential ID, Name, Address.

The apartment management has many employees who are assigned for repair and maintenance purposes. Each employee is tracked by their ID, Position, Name, and Addresses. Similar to the tracking of the parts, the management also keeps track of which employees were assigned to which maintenance. One or many employees can work for maintenance purposes.

Entities/Actors

- Resident
- Occupant
- Unit
- Parking
- Maintenance
- Parts
- Suppliers
- Employees

Roles

Residents: Residents lease the apartment units.

Occupants: Occupants are additional members who have not leased the apartment but stay with the residents.

Unit: Units are leased by the Resident.

Parking: Each unit has parking where residents can park their vehicles.

Maintenance: Any maintenance works to be performed in the unit.

Parts: The parts required for the maintenance purpose.

Suppliers: Suppliers supply parts ordered by the apartment management

Employees: Employees under the management.