Interviewee Role

Receptionist of Bronx Family Dental

Scenario with Interviewee Role

As a Systems Analyst, I am conducting a detailed interview with the Receptionist at Bronx Family Dental. In the Dental Clinic, they are responsible for the handling of patients registrations, appointments and cancellations. They insight into the daily processes when it comes to patient management.

Mini-World Scenario: Bronx Family Dental Management System

Interview Questions and Answers

Q1:How are new patients able to get registered at the clinic?

- **A1:** When new patients come in, we give them a registration form to fill out. On the form, they have to answer, their name, date of birth, address and phone number. After we get this info, we put it in the system and they are given a unique patient ID and then we put in their insurance info as well.

Q2: So what dental services does this clinic provide?

- **A2:** Like any regular dental clinic, we have many different services that we do like, teeth cleaning, routine check ups, root canals. Fillings and any dental services needed. Each different service has a different price and time that it takes to do them.

Q3: When it comes to appointments, how do you do it?

- **A3:** When a patient wants to schedule an appointment, We put in that patient ID, the dentist who will be performing the procedure's ID, what type of service they want, the appointment date and time. And after the appointment is done, we update the status.

Q4: Can patients cancel and reschedule their appointments if they want to. How will that work?

- **A4:** Yes they can cancel or reschedule their appointment. All we have to do is note why they are cancelling and then change the date for the appointment if they want to reschedule and cancel if they want to cancel.

Q5:If they miss their appointments what happens?

- **A5:** The system will flag any missed appointments and a reminder will be sent to the patient that they missed their appointment and to reschedule.

Q6: Is there a limit to the number of appointments a patient can make at a time?

- **A6:** I think they can make up to two at a time so they don't get mixed up or forgotten.

Q7: What info do you take from each dentist to be able to know who and what each of them do?

- **A7:** So for each of our dentists, we keep in record their name, specialty, contact info, their license number ,years of service, Dentist ID, address, email, phone number. And this is how we are able to track what they do in the hospital..

Q8: What info is recorded when a treatment is given to a patient?

- **A8:** For any treatment given, we document the treatment ID, the date of the treatment, what type of treatment, and the appointment ID. And if there are any notes from the dentist we put that as well.

Q9: How are patients' personal data protected?

- **A9:** All our patients and employee's data are encrypted. And the system only allows access of restricted data to only the clinic staff. And with that each staff has an access number they need to enter the system.

Analysis

Entities and Attributes:

Patients:

- **Attributes:**
  - Name (String)
  - Address (String)
  - Patient ID (Primary Key, String)
  - Email (String)
  - DOB (Date)
  - PhoneNum (String)
  - InsuranceInfo (String)

Dentists:

- **Attributes:**
  - Dentist ID (Primary Key, String)
  - Name (String)
  - Address (String)
  - PhoneNum (String)
  - Email (String)
  - Speciality (String)
  - License Num (String)
  - YearOfExperience (integer)

Appointments:

- **Attributes:**
  - AppointmentID (Primary Key, String)
  - DentistID (Foreign Key, String)
  - PatientID (Foreign Key, String)
  - AppointmentDate (Date)
  - Time (Time)
  - ServiceType (String)
  - AppointmentStatus (Cancelled, completed, scheduled)

Treatments:

- **Attributes:**
  - TreatmentID (Primary Key, String)

- PatientID (Foreign Key, String)
- AppointmentID (Foreign Key, String)
- DentistID (Foreign Key, String)
- TreatmentDate (Date)
- TreatmentDescription (String)
- DentistNotes(String)

Relationships and Cardinality:

1. **Schedules:** (Between Appointments and Patients)

   Cardinality: A patient can schedule up to 2 appointments at any time.

   Attributes:

   - AppointmentDate (Date)
   - AppointmentStatus (Cancelled, completed, scheduled)
   - Time (Time)

2. **Performs :** (Between Dentists and Treatments)

   Cardinality: A dentist can perform many treatments, but each treatment is associated with one dentist.

   Attributes:

   - TreatmentDate (Date)
   - DentistNotes (Cancelled, completed, scheduled)

3. **Assigns:** (Between Dentists and Patients)

   Cardinality: A dentist can be assigned multiple patients, and a patient can be assigned to multiple dentists.

   Attributes: N/A

4. **ER Diagram Structure (Chen Style):**

    1. **Entities** are represented as rectangles labeled with entity names.

    2. **Attributes** are listed within ovals and connected to their respective entities.

    3. **Relationships** are depicted as diamonds with lines connecting them to the involved entities.

    4. **Cardinality** is noted at the ends of the relationship lines, specifying the limits of the relationships.

insert into Patients (PatientID, Name, Address, Email, DOB, PhoneNum, InsuranceInfo)

values ('80073381', 'Anna Brown', '478 intropect St', 'AnnaB234@gmail.com', '1999-06-15', '789-975-2435', 'Insurance beta'),

('6891328', 'Henry Bells', '193 prospect St', 'HenryB90@gmail.com', '1985-01-21', '153-4864-7890', 'Insurance now'),

('6704268', 'Laws Knowls', '406 brown St', ' KnowlsL342@gmail.com', '2001-01-30', '987-654-3210', 'Insurance loan');

Insert into Dentists (DentistID, Name, Address, PhoneNum, Email, Speciality, LicenseNum, YearsOfExperience)

VALUES ('6582269', 'Abel Cook', '783 James St', '354-987-2401', 'AbelCook79@gmail.com', 'Orthodontics', '654389038', 10);

INSERT INTO Appointments (AppointmentID, PatientID, DentistID, AppointmentDate, Time, ServiceType, AppointmentStatus)

VALUES ('2893456', '6801328', '6582269', '2025-03-28', '10:00:00', 'Teeth Cleaning', 'Scheduled');

INSERT INTO Treatments (TreatmentID, PatientID, DentistID, TreatmentDate, TreatmentDescription, DentistNotes)

VALUES ('6943200', '6704268', '6582268', '2025-03-28', 'Teeth Cleaning', 'Routine Cleaning');

SELECT * FROM Patients;

SELECT * FROM Dentists;

SELECT * FROM Appointments;

SELECT * FROM Treatments;