Phase 3: Data Modeling & Relationships

Clinic Appointment Booking System Industry: Healthcare

Project Type: B2C Healthcare CRM Implementation

Target Users: Clinical Managers, Doctors, Administrative Staff

3.1 Standard Objects Usage

1. **Account Object → Healthcare Organization/Clinic**
   - o **Purpose**: Represent clinic branches, partner hospitals, and insurance companies
   - o **Record Types**:
     - Clinic Branch
     - Insurance Provider
     - Partner Hospital
2. **Contact Object → Patients**
   - o **Purpose**: Store all patient information
   - o **Record Types**:
     - Active Patient
     - Prospective Patient
     - Inactive Patient
3. **Case Object → Medical Cases**
   - o **Purpose**: Manage medical consultations, treatments, and follow-ups
   - o **Record Types**:
     - Consultation
     - Treatment
     - Emergency
     - Follow-up
4. **Event Object → Appointments**
   - o **Purpose**: Capture scheduled appointments
   - o **Integration**: Salesforce Scheduler

3.2 Custom Objects Creation

3.2.1 Doctor Object

- **Object Label**: Doctor
- **Object Name**: Doctor

- **Plural Label**: Doctors
- **Record Name**: Doctor Number (Auto Number: DOC-{0000})

Custom Fields:

1. Doctor_Name__c (Text, 50) – Required
2. Specialization__c (Picklist) – Required
   - Values: *Cardiology, Dermatology, Neurology, Pediatrics, General Medicine, Orthopedics*
3. License_Number__c (Text, 20) – Required, Unique
4. Phone__c (Phone)
5. Email__c (Email) – Required
6. Years_of_Experience__c (Number, 2, 0)
7. Consultation_Fee__c (Currency, 10, 2) – Required
8. Available_Days__c (Multi-Select Picklist)
   - Values: *Monday–Sunday*
9. Start_Time__c (Time)
10. End_Time__c (Time)
11. Status__c (Picklist) – Required
    - Values: *Active, Inactive, On Leave*
12. User__c (Lookup → User)

3.2.2 Appointment Object

- **Object Label**: Appointment
- **Record Name**: Appointment Number (Auto Number: APT-{00000})

Custom Fields:

1. Patient__c (Master-Detail → Contact) – Required
2. Doctor__c (Master-Detail → Doctor) – Required
3. Appointment_Date__c (Date) – Required
4. Appointment_Time__c (Time) – Required
5. Duration_Minutes__c (Number, 3, 0; Default 30)
6. Appointment_Type__c (Picklist) – Required
   - Values: *Regular Consultation, Follow-up, Emergency, Specialist Consultation*
7. Status__c (Picklist) – Required
   - Values: *Scheduled, Confirmed, In Progress, Completed, Cancelled, No Show*
8. Reason_for_Visit__c (Text Area, 500)
9. Notes__c (Long Text Area, 1000)
10. Reminder_Sent__c (Checkbox)
11. Created_Via__c (Picklist: *Phone, Online, Walk-in, System*)

3.2.3 Medical Case Object

- **Object Label**: Medical Case
- **Record Name**: Case Number (Auto Number: MED-{00000})

Custom Fields:

1. Patient__c (Master-Detail → Contact) – Required
2. Doctor__c (Lookup → Doctor) – Required
3. Related_Appointment__c (Lookup → Appointment)
4. Case_Type__c (Picklist) – Required
   - Values: *Diagnosis, Treatment, Surgery, Therapy, Prescription*
5. Chief_Complaint__c (Text Area, 500) – Required
6. Diagnosis__c (Text Area, 1000)
7. Treatment_Plan__c (Long Text Area, 2000)
8. Prescription__c (Long Text Area, 1000)
9. Case_Priority__c (Picklist: *Low, Medium, High, Critical*)
10. Case_Status__c (Picklist) – Required
    - Values: *Open, In Treatment, Under Review, Resolved, Closed*
11. Follow_Up_Required__c (Checkbox)
12. Follow_Up_Date__c (Date)
13. Case_Date__c (Date; Default Today)

3.2.4 Bill Information Object

- **Object Label**: Bill Information
- **Record Name**: Bill Number (Auto Number: BILL-{00000})

Custom Fields:

1. Patient__c (Master-Detail → Contact) – Required
2. Related_Case__c (Lookup → Medical Case)
3. Related_Appointment__c (Lookup → Appointment)
4. Doctor__c (Lookup → Doctor)
5. Bill_Date__c (Date; Default Today, Required)
6. Consultation_Fee__c (Currency, 10, 2)
7. Additional_Charges__c (Currency, 10, 2)
8. Discount_Amount__c (Currency, 10, 2)
9. Total_Amount__c (Formula: Consultation_Fee + Additional_Charges – Discount_Amount)
10. Amount_Paid__c (Currency, 10, 2)
11. Balance_Amount__c (Formula: Total_Amount – Amount_Paid)
12. Payment_Status__c (Picklist: *Pending, Partial, Paid, Overdue*)
13. Payment_Method__c (Picklist: *Cash, Card, Online Transfer, Insurance, Cheque*)

14. Insurance_Claim_Number__c (Text, 30)
15. Bill_Status__c (Picklist: *Draft, Sent, Paid, Cancelled*)

3.3 Relationships Configuration

- **Master-Detail Relationships**
    - Patient (Contact) → Appointments (1:M)
    - Patient (Contact) → Medical Cases (1:M)
    - Patient (Contact) → Bills (1:M)
    - Doctor → Appointments (1:M)
- **Lookup Relationships**
    - Doctor → Medical Cases
    - Doctor → Bills
    - Appointment → Medical Cases
    - Appointment → Bills
    - Medical Case → Bills

3.4 Record Types & Page Layouts

3.4.1 Contact (Patient) Record Types

1. **Active Patient**
    - **Page Layout Sections:**
        - Personal Information
        - Medical History
        - Emergency Contact
        - Insurance Information
        - Related Lists: Appointments, Medical Cases, Bills
2. **Prospective Patient**
    - **Page Layout:** Limited fields for inquiry stage
3. **Inactive Patient**
    - For historical records and non-active patients

3.4.2 Appointment Record Types

1. **Regular Appointment**
    - Standard consultation appointment
    - Basic appointment details only
2. **Emergency Appointment**

- o For urgent medical situations
- o Requires priority and immediate attention flag

Schema Builder