# **Phase 3: Data Modeling & Relationships**

## 🎯 Purpose

To design the hospital data structure in Salesforce by creating custom objects (Patient, Doctor, Appointment) and defining relationships between them. This allows tracking of which doctor treats which patient and when the appointment takes place.

## ⚙️ **Step-by-Step Configuration**

### **1. Create Patient Object**

**Navigation:** Setup → Object Manager → Create → Custom Object

| Setting | Value |
| --- | --- |
| Label | Patient |
| Plural Label | Patients |
| Object Name | Patient |
| Record Name | Patient ID (Auto Number) |
| Auto Number Format | PAT-{0000} |
| Allow Reports | ✅ |
| Allow Activities | ✅ |
| Track Field History | ✅ |

### **2. Create Doctor Object**

**Navigation:** Setup → Object Manager → Create → Custom Object

| Setting | Value |
| --- | --- |
| Label | Doctor |
| Plural Label | Doctors |
| Object Name | Doctor |
| Record Name | Doctor ID (Auto Number) |
| Auto Number Format | DOC-{0000} |
| Allow Reports | ✅ |
| Allow Activities | ✅ |
| Track Field History | ✅ |
|  |  |

### **3. Create Appointment Object**

**Navigation:** Setup → Object Manager → Create → Custom Object

| Setting | Value |
| --- | --- |
| Label | Appointment |
| Plural Label | Appointments |
| Object Name | Appointment |
| Record Name | Appointment Number (Auto Number) |
| Auto Number Format | APPT-{0000} |
| Allow Reports | ✅ |
| Allow Activities | ✅ |
| Track Field History | ✅ |

## **4. Create Custom Fields**

### **Patient Fields**

| Field Label | Data Type | Example |
| --- | --- | --- |
| First Name | Text | Sita |
| Last Name | Text | Reddy |
| Date of Birth | Date | 10/02/1988 |
| Gender | Picklist (Male, Female, Other) | Female |
| Contact Number | Phone | 9876543210 |
| Email | Email | sita@hospital.com |
| Address | Text Area | Hyderabad |

### **Doctor Fields**

| Field Label | Data Type | Example |
| --- | --- | --- |
| First Name | Text | Ravi |
| Last Name | Text | Kumar |
| Department | Picklist (Cardiology, Pediatrics, General, Surgery, Dermatology) | Cardiology |
| Contact Number | Phone | 9988776655 |
| Email | Email | ravi@hospital.com |
| Room Number | Number | 102 |

### **Appointment Fields**

| Field Label | Data Type | Example |
| --- | --- | --- |
| Appointment Date | Date/Time | 12/10/2025 |
| Status | Picklist (Scheduled, Completed, Cancelled) | Scheduled |
| Notes | Long Text Area | Follow-up check |
| Patient | Lookup (Patient) | Sita Reddy |
| Doctor | Lookup (Doctor) | Dr. Ravi Kumar |

## **5. Create Relationships**

### **Patient → Appointment**

* **Type:** Lookup Relationship
* **From:** Appointment Object
* **To:** Patient Object
* **Purpose:** Each appointment links to one patient.

### **Doctor → Appointment**

* **Type:** Lookup Relationship
* **From:** Appointment Object
* **To:** Doctor Object
* **Purpose:** Each appointment links to one doctor.

**Result:** Each Appointment connects both a Patient and a Doctor, allowing many appointments per patient or doctor.

## **6. Configure Page Layouts & Related Lists (Detailed)**

### **Patient Layout**

* Add fields: Patient ID, Name, DOB, Gender, Contact, Email, Address
* Add Related List: **Appointments**
* In Appointments list, show columns: Appointment Number, Appointment Date, Doctor, Status

### **Doctor Layout**

* Add fields: Doctor ID, Name, Department, Contact, Email, Room Number
* Add Related List: **Appointments**
* In Appointments list, show columns: Appointment Number, Appointment Date, Patient, Status

### **Appointment Layout**

* Include fields: Appointment Number, Patient, Doctor, Appointment Date, Status, Notes

**Result:** - Patient records show all their appointments. - Doctor records show appointments with their patients. - Appointment records display both linked Patient and Doctor.

## **7. Verification (Sample Data)**

1. Create Doctor: Dr. Ravi Kumar (Cardiology)
2. Create Patient: Sita Reddy (Female)
3. Create Appointment: APPT-0001 (Sita Reddy with Dr. Ravi Kumar on 12 Oct 2025)

**Expected Result:** - Appointment record shows linked Patient and Doctor. - Patient and Doctor pages show related Appointment records.