Phase 3: Data Modeling & Relationships

1. Standard & Custom Objects

Standard Objects Used:

- User \rightarrow Stores doctor, receptionist, and admin login details.
- Account / Contact → Optional, for hospital/patient organizational data.

Custom Objects Created:

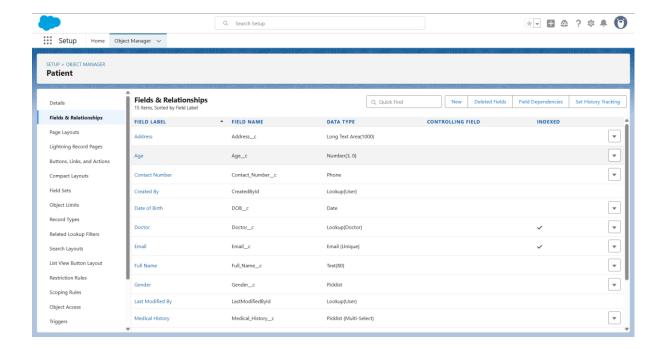
- 1. **Patient** \rightarrow Stores patient details.
- 2. **Doctor** \rightarrow Stores doctor details and specialty.
- 3. **Appointment** → Stores appointment details (date, time, mode, status).
- 4. **Prescription** \rightarrow Stores prescriptions linked to appointments.

2. Fields

Key Custom Fields for Objects:

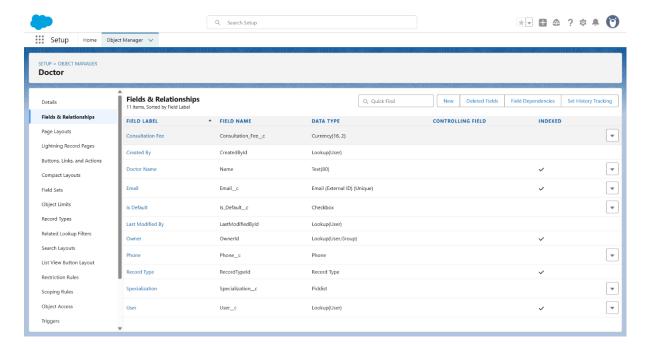
Patient:

- Name (Standard)
- Email
- Phone
- Age
- Gender
- Primary Doctor (Lookup to Doctor)



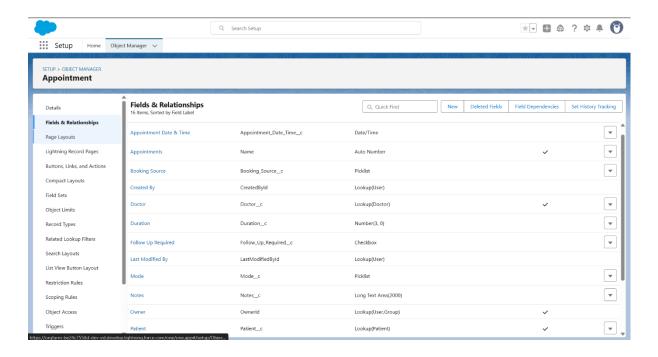
Doctor:

- Name (Standard)
- Email
- Phone
- Specialty



Appointment:

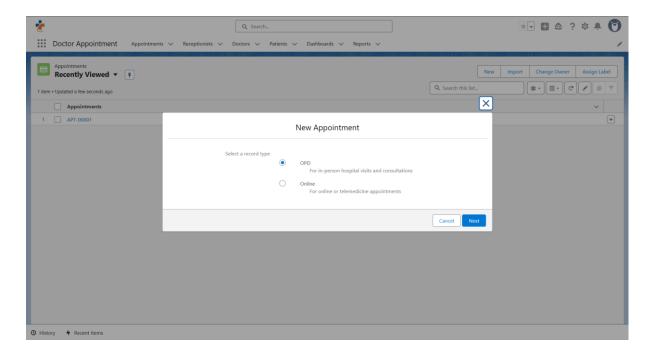
- Appointment Date Time
- Mode (Picklist: Online, In-Person)
- Status (Picklist: Scheduled, Completed, Cancelled)
- Patient (Lookup to Patient)
- Doctor (Lookup to Doctor)



3. Record Types

Appointment Record Types:

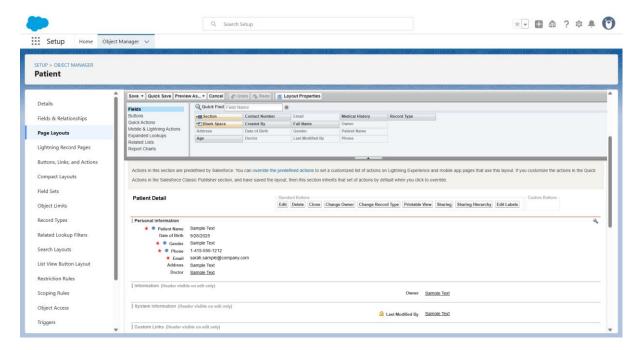
- **In-Person Appointment** → Fields: Room Number, Visit Type
- Online Appointment → Fields: Video Call Link, Platform



4. Page Layouts

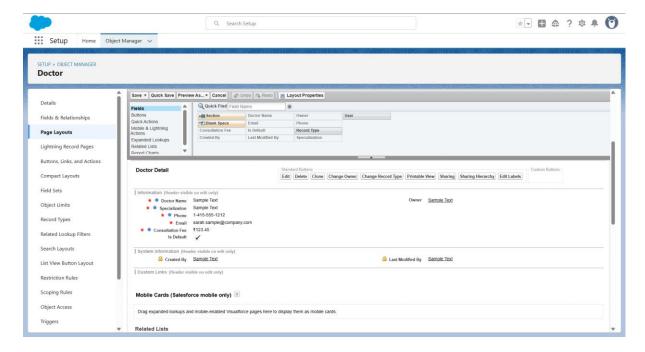
Patient Page Layout:

- Personal Info (Name, Age, Gender, Contact)
- Primary Doctor
- Recent Appointments (Related List)



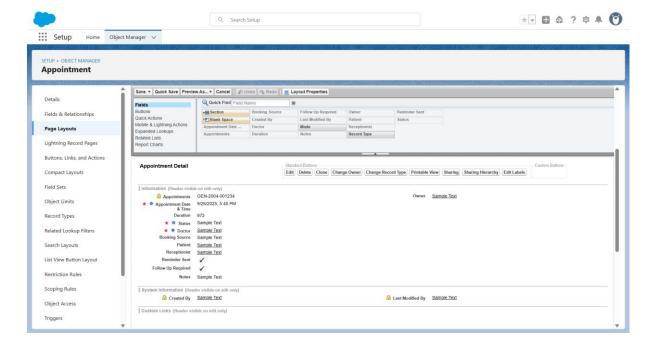
Doctor Page Layout:

- Personal Info, Specialty
- Assigned Patients
- Upcoming Appointments (Related List)



Appointment Page Layout:

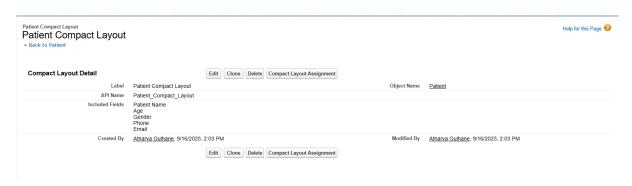
- Appointment Date/Time, Mode, Status
- Linked Patient & Doctor
- Related Prescriptions



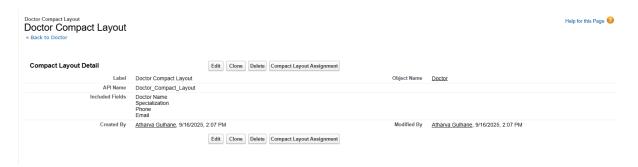
5. Compact Layouts

Purpose: Show critical info in **Lightning record highlights** and mobile views.

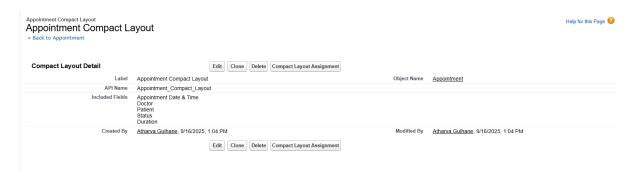
• Patient Compact Layout: Name, Age, Gender, Phone, Email



• Doctor Compact Layout: Name, Specialty, Phone, Email



• Appointment Compact Layout: Date/Time, Status, Patient Name



6. Schema Builder

- Used to visualize objects and relationships.
- Shows how **Patients**, **Doctors**, **Appointments**, and **Prescriptions** are connected.
- Helpful for admins & developers to quickly understand the data model.



7. Lookup vs Master-Detail vs Hierarchical Relationships

Lookup Relationship:

Patient → Doctor → Optional; patient can exist without doctor assigned.

Master-Detail Relationship:

• **Prescription** → **Appointment** → Prescription cannot exist without an appointment.

Hierarchical Relationship:

• Not needed in this project (used mainly for User-to-User relationships).

8. Junction Objects

Use Case:

- If a patient can have multiple doctors and a doctor can have multiple patients (many-to-many), we can create a **Patient Doctor junction object**.
- Fields:
 - o Patient (Lookup)
 - Doctor (Lookup)
- Tracks multiple doctor assignments per patient.

