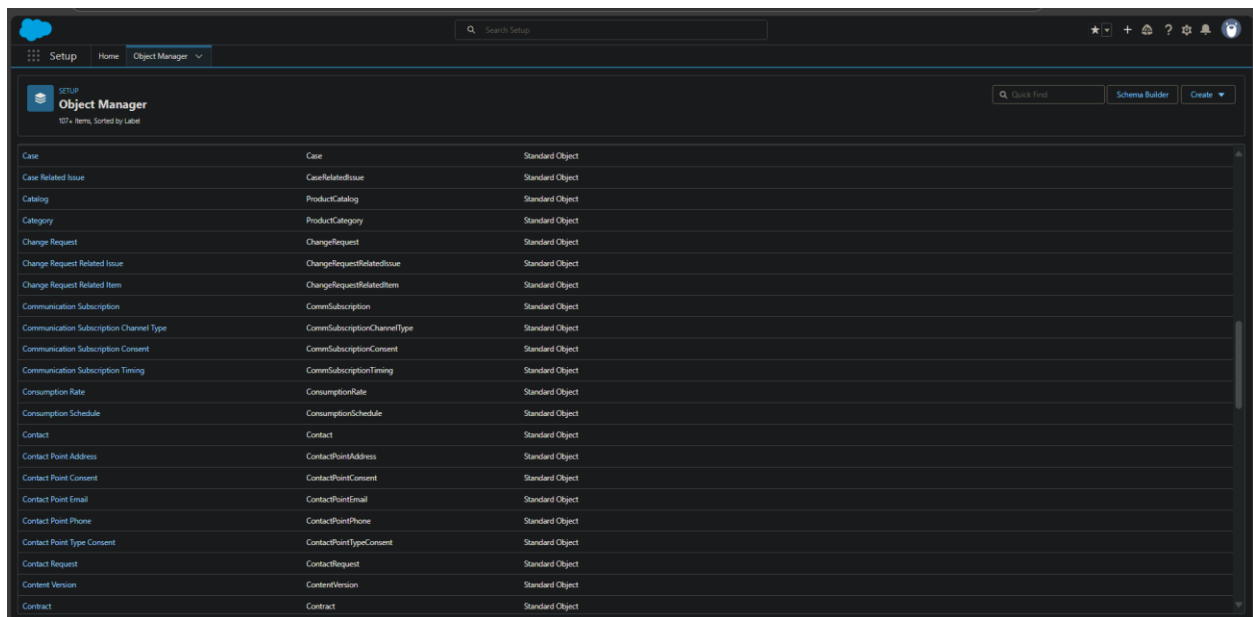


## Phase 3: Data Modeling & Relationships

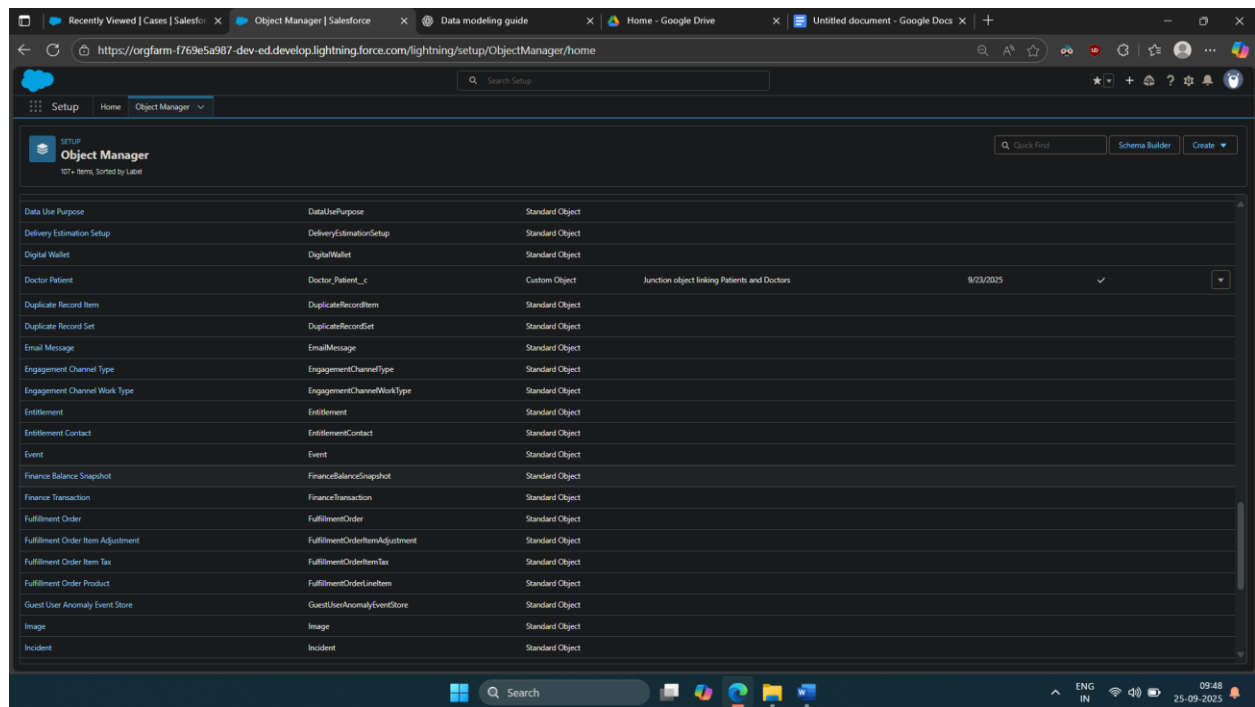
### Standard & Custom Objects

- **Standard Objects Used:**
  - **Contact** → customized as **Patient**
  - **Case** → used as **Treatment Record**
  - **Event** → used for **Appointments**
- **Custom Object Created:**
  - **DoctorPatient (Junction Object)** → connects Patients (Contacts) with Doctors (Users)



The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main header area displays 'SETUP Object Manager' and '107+ Items, Sorted by Label'. A search bar and buttons for 'Quick Find', 'Schema Builder', and 'Create' are visible. The table below lists various standard objects with their API names and object types.

Case	Case	Standard Object
Case Related Issue	CaseRelatedIssue	Standard Object
Catalog	ProductCatalog	Standard Object
Category	ProductCategory	Standard Object
Change Request	ChangeRequest	Standard Object
Change Request Related Issue	ChangeRequestRelatedIssue	Standard Object
Change Request Related Item	ChangeRequestRelatedItem	Standard Object
Communication Subscription	CommSubscription	Standard Object
Communication Subscription Channel Type	CommSubscriptionChannelType	Standard Object
Communication Subscription Consent	CommSubscriptionConsent	Standard Object
Communication Subscription Timing	CommSubscriptionTiming	Standard Object
Consumption Rate	ConsumptionRate	Standard Object
Consumption Schedule	ConsumptionSchedule	Standard Object
Contact	Contact	Standard Object
Contact Point Address	ContactPointAddress	Standard Object
Contact Point Consent	ContactPointConsent	Standard Object
Contact Point Email	ContactPointEmail	Standard Object
Contact Point Phone	ContactPointPhone	Standard Object
Contact Point Type Consent	ContactPointTypeConsent	Standard Object
Contact Request	ContactRequest	Standard Object
Content Version	ContentVersion	Standard Object
Contract	Contract	Standard Object



## Fields

- **Custom Fields in Contact (Patient):**
  - Patient ID (Auto Number)
  - Age (Number)
  - Gender (Picklist)
  - Preferred Doctor (Lookup → User)
  - Medical History (Long Text Area)
- **Custom Fields in Case (Treatment):**
  - Treatment Notes (Long Text Area)
  - Medicines Prescribed (Text Area)

- Doctor Assigned (Lookup → User)
- Follow Up Date (Date)
- **Fields in DoctorPatient (Junction Object):**
  - Patient (Lookup → Contact)
  - Doctor (Lookup → User)
  - First Visit Date (Date)
  - Notes (Long Text Area)

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Account Name	AccountId	Lookup(Account)		✓
Age	Age_c	Number(1, 0)		
Assistant	AssistantName	Text(40)		
Asst. Phone	AssistantPhone	Phone		
Birthdate	Birthdate	Date		
Buyer Attributes	BuyerAttributes	Picklist (Multi-Select)		
Clean Status	CleanStatus	Picklist		✓
Contact Owner	OwnerId	Lookup(User)		✓
Created By	CreatedById	Lookup(User)		
Creation Source	ContactSource	Picklist		
Data.com Key	Jigsaw	Text(20)		
Department	Department	Text(30)		
Description	Description	Long Text Area(1000)		
Do Not Call	DoNotCall	Checkbox		
Email	Email	Email		✓
Email Opt Out	HasOptedOutOfEmail	Checkbox		
Fax	Fax	Phone		
Fax Opt Out	HasOptedOutOfFax	Checkbox		
Gender	Gender_c	Picklist		

Recently Viewed | Cases | Salesforce | Data modeling guide | Home - Google Drive | Untitled document - Google Docs

https://orgfarm-f769e5a987-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/Case/FieldsAndRelationships/view

Setup Home Object Manager Case

Details Fields & Relationships 35+ Items, Sorted by Field Label

Quick Find New Deleted Fields Field Dependencies Set History Tracking

Description	Description	Long Text Area(32000)
Doctor Assigned	Doctor_Assigned__c	Lookup(User) ✓
Engineering Req Number	EngineeringReqNumber__c	Text(12) ✓
Entitlement Name	EntitlementId	Lookup(Entitlement) ✓
Entitlement Process End Time	SlaEndDate	Date/Time
Entitlement Process Start Time	SlaStartDate	Date/Time
Escalated	IsEscalated	Checkbox
Follow Up Date	Follow_Up_Date__c	Date ✓
Internal Comments	Comments	Text Area(4000)
Last Modified By	LastModifiedById	Lookup(User)
Medicines Prescribed	Medicines_Prescribed__c	Text Area(255) ✓
Milestone Status	MilestoneStatus	Text(30)

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Setup Home Object Manager Doctor Patient

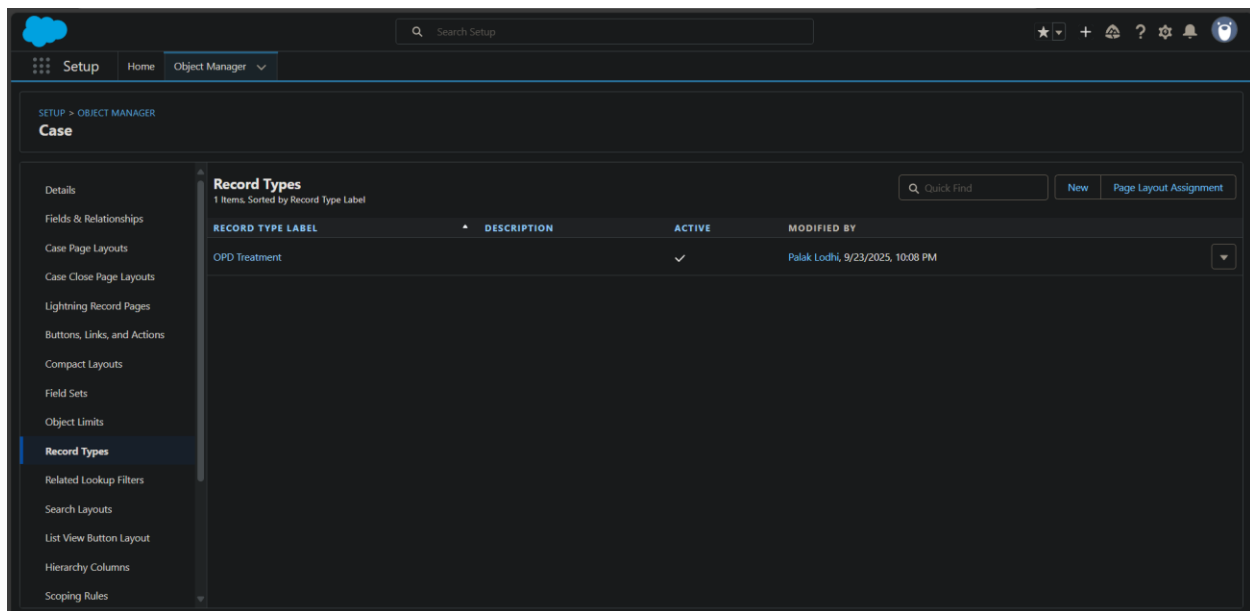
Details Fields & Relationships 8 Items, Sorted by Field Label

Quick Find New Deleted Fields Field Dependencies Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Doctor	Doctor__c	Lookup(User)		✓
Doctor Patient Name	Name	Auto Number		✓
First Visit Date	First_Visit_Date__c	Date		
Last Modified By	LastModifiedById	Lookup(User)		
Notes	Notes__c	Long Text Area(32768)		
Owner	OwnerId	Lookup(User,Group)		✓
Patient	Patient__c	Lookup(Contact)		✓

## Record Types

- **Case Record Types:**
  - Created **OPD Treatment** record type for outpatient treatments.
  - Assign proper page layout (with custom fields) to this record type.



## Page Layouts

- **Contact Layout (Patient):**
  - **Sections Added:**
    - Patient Details → Patient ID, Age, Gender
    - Medical Info → Medical History, Preferred Doctor
  - **Related Lists:** Cases (Treatments), DoctorPatient



Setup

Home

Object Manager

Search Setup

Setup > OBJECT MANAGER

Case

Details

Fields & Relationships

Case Page Layouts

Case Close Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Search Layouts

List View Button Layout

Hierarchy Columns

Scoping Rules

SaveQuick SavePreview ActionsCancelUndoRedoLayout Properties

Quick FindField Name

Action	Billboard Hours	Case Reason	Contact Email	Contact Phone	Description	Enrollment Proc...	Internal Comments	Milestone Status...
Blank Space	Case Number	Case Reason Type	Contact Fax	Created By	Doctor Assigned	Enrollment Proc...	Last Modified By	Patient Case
Account Name	Case Origin	Case Source	Contact Mobile	Date/Time Closed	Engineering Req N...	Escalated	Medicines Prescribed	Potential Liability
Asset	Case Owner	Closed When Created	Contact Name	Date/Time Opened	Enrollment Status	Follow Up Date	Milestone Status	Priority

Potential Liability

Sample Text

SLA Violation

Sample Text

System Information (Header visible on edit only)

Created BySample Text

Last Modified BySample Text

Description Information (Header visible on edit only)

SubjectSample Text

DescriptionSample Text

Internal CommentsSample Text

Treatment Details

Treatment NotesSample Text

Medicines PrescribedSample Text

Doctor AssignedSample Text

Follow Up Date9/24/2025

Custom Links (Header not visible)

Up-sell / Cross-sell Opportunity

Mobile Cards (Salesforce mobile only)

Setup

Home

Object Manager

Search Setup

Setup > OBJECT MANAGER

Doctor Patient

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Search Layouts

List View Button Layout

Restriction Rules

Scoping Rules

Object Access

SaveQuick SavePreview ActionsCancelUndoRedoLayout Properties

Quick FindField Name

Action	Doctor Patient Name	Owner
Blank Space	First Visit Date	Patient
Created By	Last Modified By	
Doctor	Notes	

Salesforce Mobile and Lightning Experience Actions

Actions in this section are predefined by Salesforce. You can override the predefined actions to set a customized list of actions on Lightning Experience and mobile app pages that use this layout. If you customize the actions in the Quick Actions in the Salesforce Classic Publisher section, and have saved the layout, then this section inherits that set of actions by default when you click to override.

Doctor Patient Detail

Standard Buttons

EditDeleteCloneChange OwnerChange Record TypePrintable ViewSharingSharing HierarchyEdit Labels

Custom Buttons

Information (Header visible on edit only)

Doctor Patient NameGEN-2004-001234

OwnerSample Text

PatientSample Text

DoctorSample Text

First Visit Date9/24/2025

NotesSample Text

System Information (Header visible on edit only)

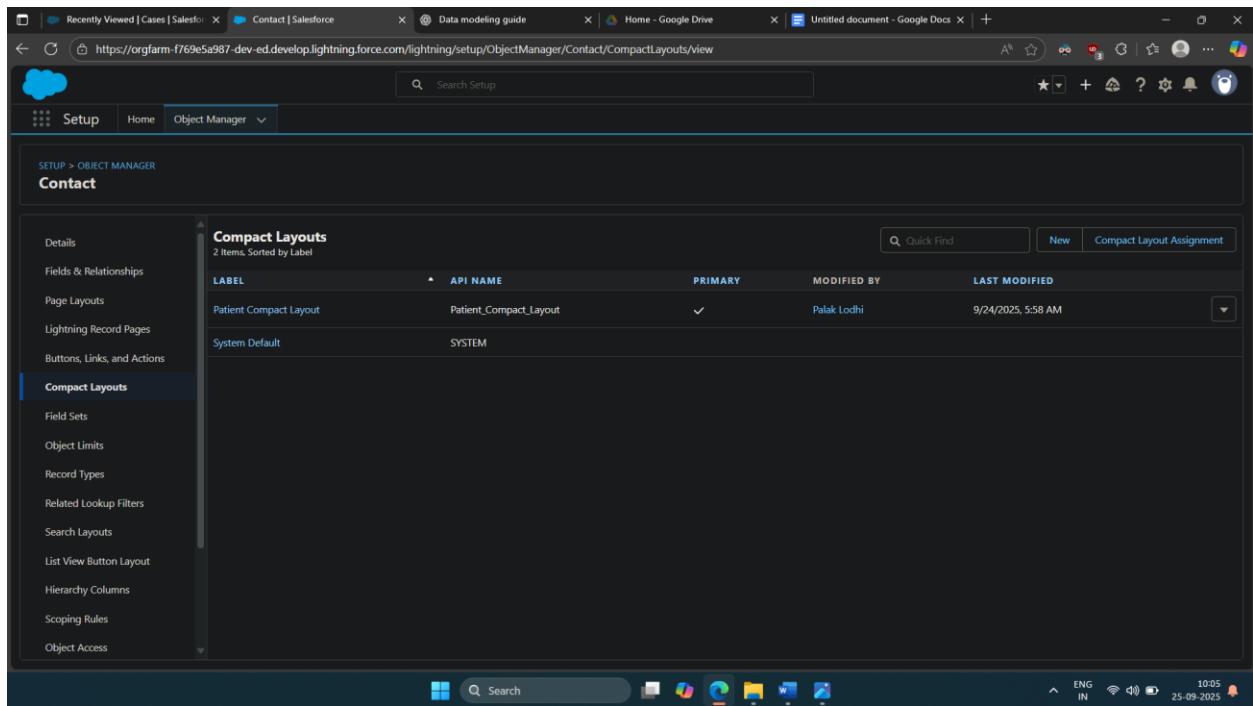
Created BySample Text

Last Modified BySample Text

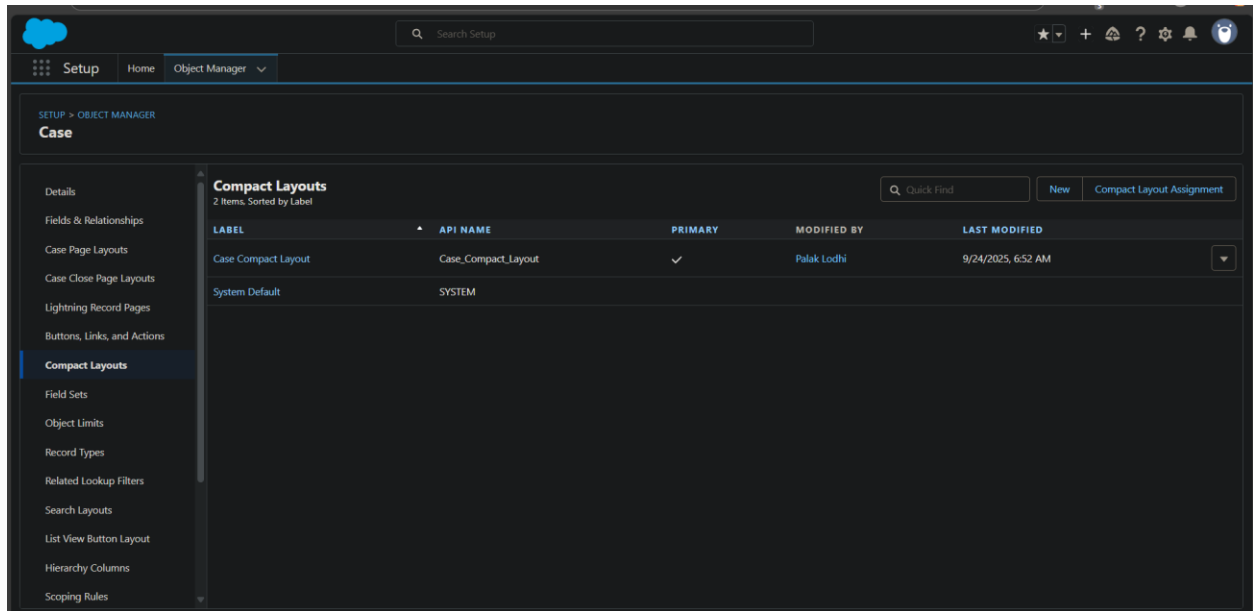
Custom Links (Header visible on edit only)

## Compact Layouts

- **Contact Compact Layout (Patient Compact Layout):**
  - Fields: Name, Patient ID, Age, Preferred Doctor
- **Case Compact Layout (OPD Treatment):**
  - Fields: Case Number, Subject, Doctor Assigned, Follow Up Date

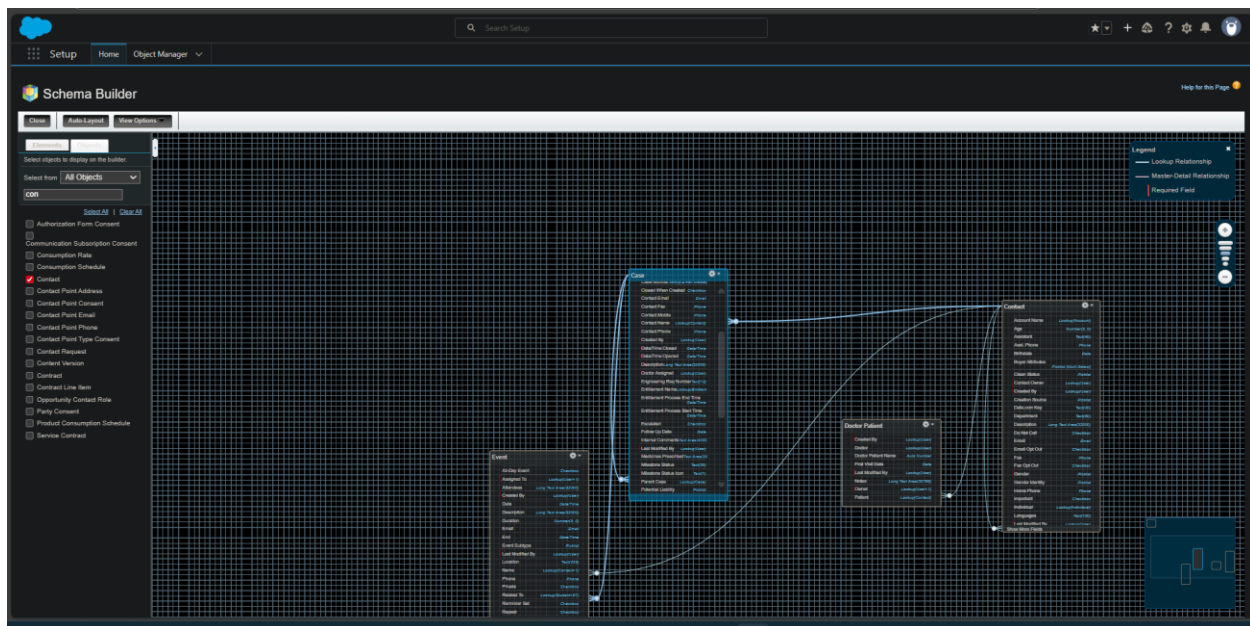






## Schema Builder

- Objects Selected: **Contact, Case, Event, DoctorPatient**
- Shows relationships:
  - Contact ↔ Case (standard lookup)
  - Contact ↔ DoctorPatient (lookup)
  - Doctor ↔ DoctorPatient (lookup)
  - Event ↔ Contact (standard relationship for appointments)

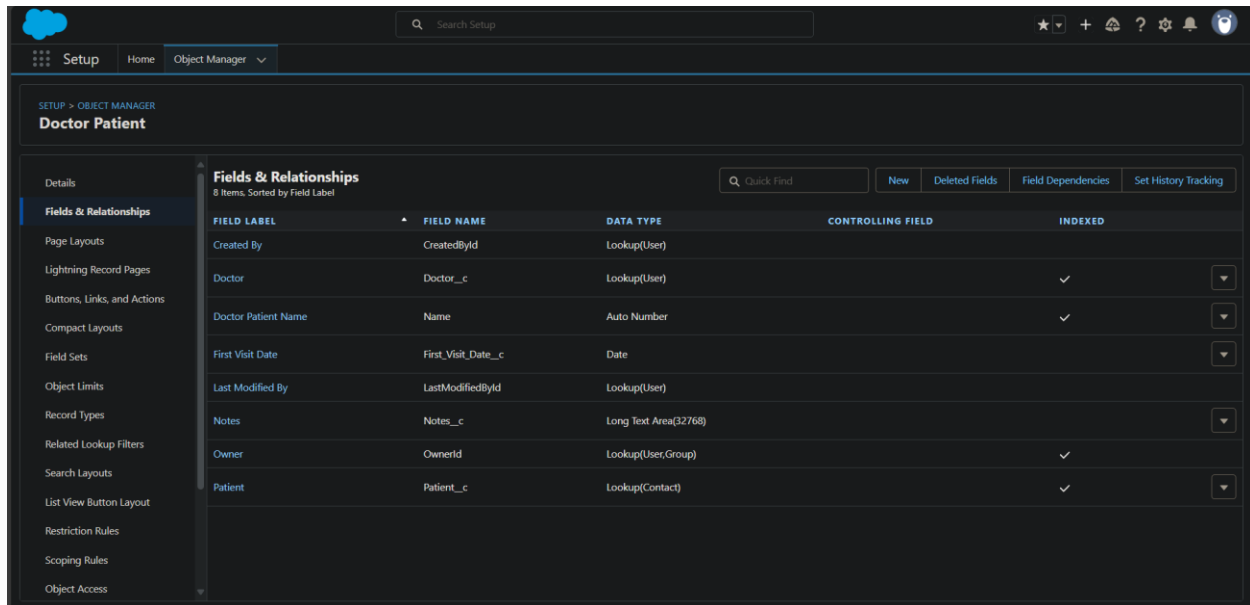


## Lookup vs Master-Detail vs Hierarchical Relationships

- **Lookup Relationship:** Used in this project.
  - Example: Contact (Patient) ↔ DoctorPatient
- **Master-Detail Relationship:** Not used (because we didn't want parent record deletion to delete related records).
- **Hierarchical Relationship:** Only possible for User object → not required here.

## Junction Object

- **DoctorPatient** created to link multiple doctors with multiple patients.
- Without this, one patient could only be assigned to one doctor.



The screenshot shows the Salesforce Setup interface for the 'Doctor Patient' object. The left sidebar contains a navigation menu with options like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, Restriction Rules, Scoping Rules, and Object Access. The main content area is titled 'Fields & Relationships' and shows a list of 8 items, sorted by Field Label. The table below represents the data shown in the screenshot.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Doctor	Doctor__c	Lookup(User)		✓
Doctor Patient Name	Name	Auto Number		✓
First Visit Date	First_Visit_Date__c	Date		
Last Modified By	LastModifiedById	Lookup(User)		
Notes	Notes__c	Long Text Area(32768)		
Owner	OwnerId	Lookup(User,Group)		✓
Patient	Patient__c	Lookup(Contact)		✓

## External Objects

In Salesforce, **External Objects** are similar to custom objects, but they are used to connect Salesforce with data that exists **outside of Salesforce** (for example, in another database or system). Instead of storing the data inside Salesforce, external objects **reference data stored in external systems** through Salesforce Connect.

### Why We Did Not Use External Objects in This Project:

- Our hospital management project focuses only on **internal data** stored in Salesforce (Patients, Doctors, Appointments, Treatments).
- We are not connecting to any **external systems** like laboratory software, billing systems, or third-party databases.
- Therefore, **External Objects are not required** for this project.

