# PHASE -3 Data Modelling & Relationships

## 1. Standard & Custom Objects

- Create and name objects that map to business entities.
- Setup → Object Manager → New Custom Object.
- For each object set Label, Plural Label, API Name, Record Name,Deployment Status = Deployed, Allow Reports = Yes, Allow Activities = Yes, Allow Sharing = Yes.



## 2. Fields

- Setup → Object Manager → Fields & Relationships → New.
- **Patient __c:** Full_Name __c/use Contact, Date _of_ Birth __c (Date), Gender __c (Picklist), Medical _Record _Number __c (AutoNumber/Text unique), Assigned _Doctor __c (Lookup(User) or Lookup(Doctor __c)), Contact __c (Lookup(Contact) if using Contact).
- **Doctor __c:** User _Lookup __c (Lookup(User)), Specialty __c (Picklist), Registration _No __c (Text), Active __c (Checkbox).
- **Appointment__c:** Appointment_Number__c (AutoNumber), Appointment_Start__c (DateTime), Appointment_End__c (DateTime), Patient__c (Lookup/Master-Detail), Doctor__c (Lookup or use junction), Status__c (Picklist), Type__c

## 3. Record Types

- Setup → Object Manager → [Object] → Record Types → New
- Name, Assign to Profiles, choose default record type per profile, and add picklist value subsets.

- Examples: **Appointment** → In-Person, Teleconsult; **Patient** → Outpatient, Inpatient.
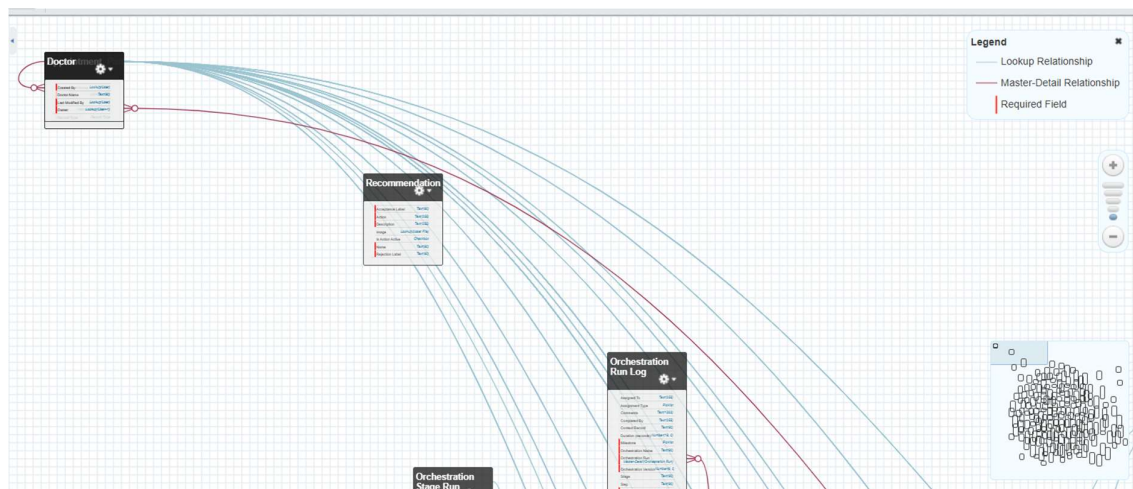
## 4. Page Layouts

- Setup → Object Manager → [Object] → Page Layouts
- Arrange sections , make required fields visible, add Related, and set field-level read-only/editable per layout
- Then assign layouts to Record Types & Profiles (Page Layout Assignment).
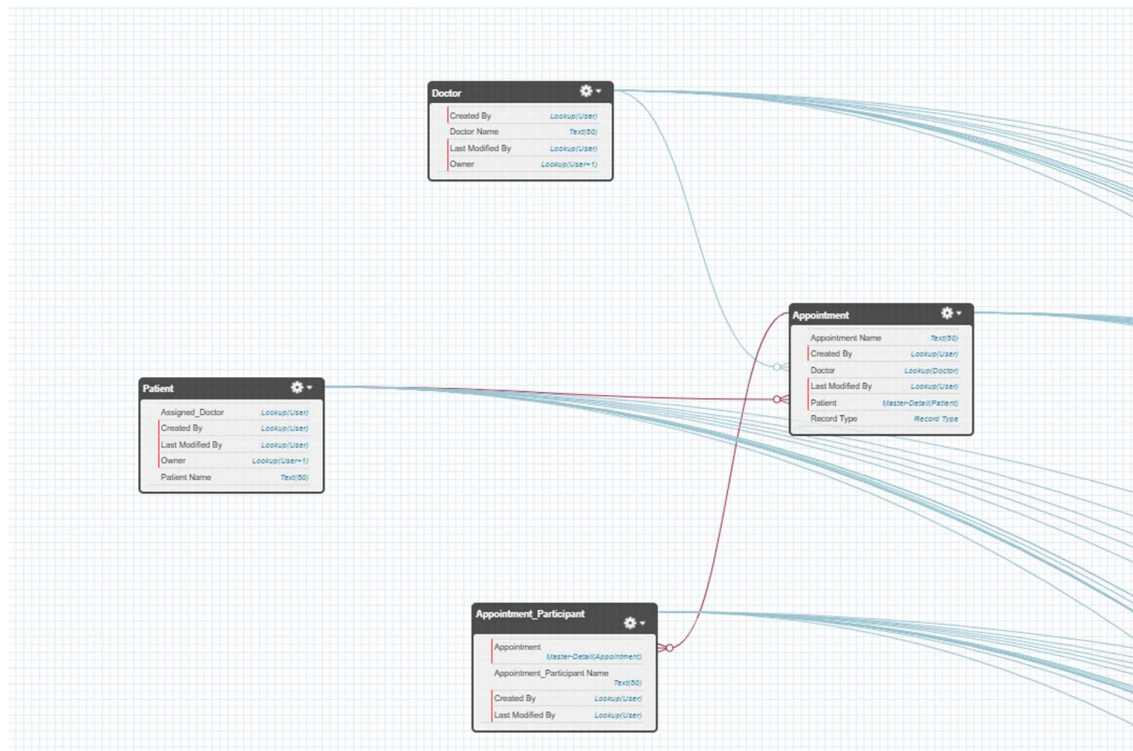
## 5. Compact Layouts

- Object Manager → [Object] → Compact Layouts
- Design compact layouts to show key fields in the highlights panel and mobile: choose 3–5 fields.
- Open record — check highlight panel shows chosen fields.

## 6. Schema Builder

- Setup → Schema Builder
- Drag objects to canvas, validate relationships, screenshot diagram. Export a field inventory (spreadsheet of Object, API Name, Type, Required, FLS).
- Ensure schema matches implementations and include screenshot in project deliverables.

**7.Lookup vs Master-Detail vs Hierarchical Relationships**

A Lookup Relationship is a loose connection where the child record can exist independently of the parent—for example, an Appointment looking up to a Doctor. A Master-Detail Relationship is a tighter link where the child record depends on the parent; the parent controls ownership, sharing, and deletion—like an Appointment that is a detail of a Patient. A Hierarchical Relationship is a special type available only on the User object, allowing one user to be related to another (such as a manager–employee structure). Choosing the right relationship type ensures proper data integrity, sharing, and reporting in the Smart Health Appointment & Patient Tracker application.