Hospital Management System - Phase 3 Document

Goal

Implement data modeling and relationships within Salesforce for the Hospital Management System. This phase focuses on building the data structure—custom objects, relationships, record types, page layouts, and ensuring that the schema supports future automation and reporting.

Data Modeling & Relationships

- Use **Object Manager** to create and refine data model.
- Ensure relationships between Doctor, Patient, and Appointment objects are properly set.
- Add any additional objects required, such as Billing or Treatment if needed.

Standard & Custom Objects

Existing custom objects: **Doctor**, **Patient**, **Appointment**.

Consider using Standard objects if applicable:

- **Contact**: Could store patient or doctor contact details if you prefer standard CRM fields.
- **User**: Represents staff logging in.

New optional custom objects:

- **Billing**: Invoice Number, Date, Amount, Status.
- **Treatment Record**: Diagnosis, Prescription, Doctor Lookup, Patient Lookup.

Fields & Data Types

- **Doctor**: Name (Text), Specialty (Picklist), Contact Info (Phone/Email), Availability (Checkbox), Experience (Number).
- **Patient**: Name (Text), DOB (Date), Gender (Picklist), Contact Info (Phone/Email), Medical History (Long Text), Emergency Contact (Text).
- **Appointment**: Date/Time, Status (Picklist: Scheduled, Completed, Cancelled), Doctor (Lookup), Patient (Lookup), Notes (Long Text).
- **Billing** (optional): Invoice No. (Auto Number), Patient (Lookup), Amount (Currency), Payment Status (Picklist).

Relationships

- **Doctor ↔ Appointment**: Lookup (a doctor can have many appointments).
- **Patient ↔ Appointment**: Lookup (a patient can have many appointments).
- **Patient ↔ Billing**: Lookup (one patient can have multiple bills).
- Use **Master-Detail** only where deletion of parent should remove child (e.g., Patient \rightarrow Treatment Record).

Record Types & Page Layouts

- Create record types for Appointment if different visit types are needed (e.g., General Check-up, Emergency).

- Adjust page layouts to display fields relevant to each record type.
- Customize Doctor and Patient layouts with related lists of appointments and billing info.

Schema Builder

Use the **Schema Builder** to visually confirm and adjust relationships between objects.

- Drag and drop to create new fields.
- Validate that lookups and master-detail relationships are correctly linked.

Data Management & Sample Data

- Prepare sample records for Doctors, Patients, and Appointments to test relationships.
- Use Data Import Wizard for bulk creation of sample patients or appointments.
- Test record visibility according to roles and profiles defined in Phase-2.

Outcome

By the end of Phase-3, the Hospital Management System will have a fully defined data model with custom objects, fields, relationships, and record types. This schema will support process automation, reporting, and security configurations in upcoming phases.