

# Phase 3: Data Modeling & Relationships

Project: Smart Property Portal – Real Estate Customer Engagement & Lead Conversion System

## 1. Standard & Custom Objects

The project uses a combination of Salesforce standard objects and custom objects to meet real estate-specific requirements and streamline the workflow across multiple departments:

- **Standard Objects:** Leads, Contacts, Opportunities. These objects form the backbone of the CRM, capturing initial inquiries, customer information, and potential deals.
- **Custom Objects:**
  - **Property\_\_c:** Designed to store detailed property information including location, square footage, property type (residential/commercial), pricing, availability status, and amenities.
  - **Visit\_\_c:** Tracks customer property visits, feedback, scheduling details, and follow-up reminders. This object ensures that all interactions with potential buyers are recorded and managed efficiently.
  - **Deal\_\_c:** Captures finalized deals, booking amounts, payment schedules, deal approval status, and related customer information. It is tightly integrated with Leads and Opportunities to maintain a smooth sales pipeline.

These objects are interconnected to ensure seamless data flow and reduce redundancy. Using both standard and custom objects allows leveraging Salesforce's built-in CRM functionality while addressing real estate-specific needs.

SETUP > OBJECT MANAGER  
**Agent**

Details

**Fields & Relationships**  
7 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Agent Name	Name	Text(80)		✓
Created By	CreatedById	Lookup(User)		
Email	Email__c	Email		
Experience	Experience__c	Number(18, 0)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Phone	Phone__c	Phone		

## 2. Fields & Picklists

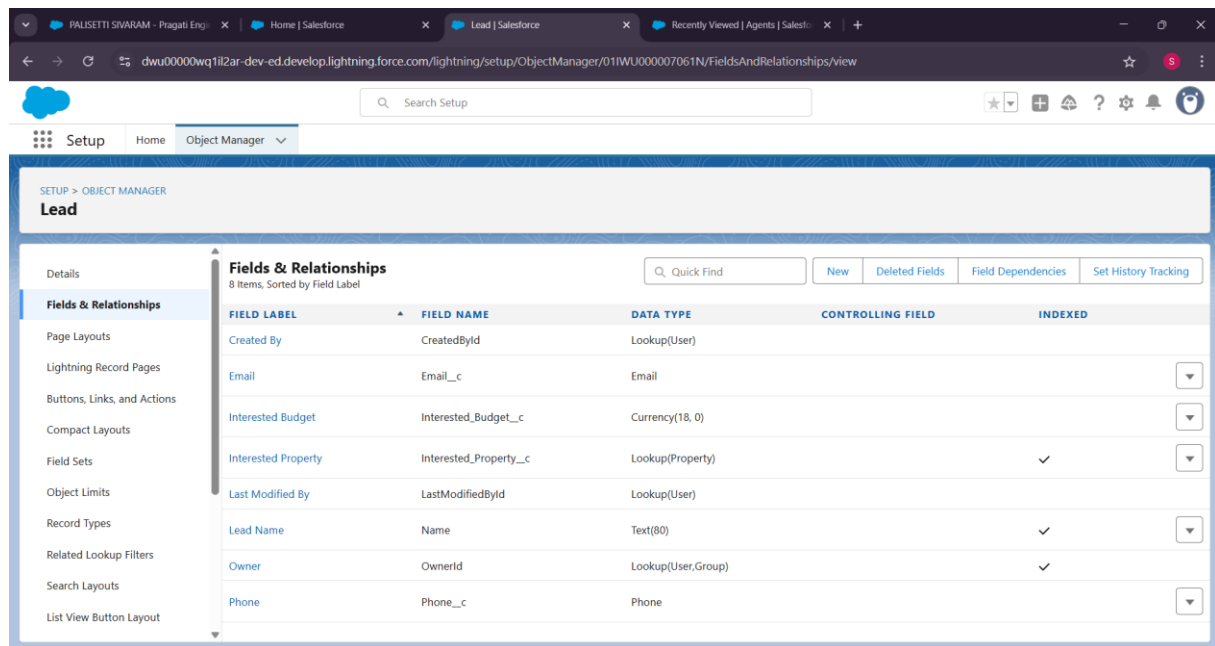
Custom fields were added to capture all necessary data with accuracy and consistency. These fields help automate processes and facilitate reporting:

SETUP > OBJECT MANAGER  
**Property**

Details

**Fields & Relationships**  
9 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Agent	Agent__c	Lookup(Agent)		✓
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Location	Location__c	Text(10)		
Owner	OwnerId	Lookup(User,Group)		✓
Price	Price__c	Currency(18, 0)		
Property Name	Name	Text(80)		✓
Property Type	Property_Type__c	Picklist		
Status	Status__c	Picklist		



- **Property\_\_c:** Fields include Location, Square Footage, Type (Residential/Commercial), Price, Status (Available, Booked, Sold), and Description.
- **Visit\_\_c:** Includes Visit Status (Scheduled, Completed, Cancelled), Customer Feedback, Scheduled Date, Visit Duration, and Assigned Agent.
- **Deal\_\_c:** Tracks Booking Amount, Negotiation Stage (Initial, Negotiation, Final), Deal Status (Closed Won, Closed Lost, Pending), and Payment Terms.

**Picklists:** Used extensively to maintain data uniformity. Examples include Deal Status, Negotiation Stage, Property Type, and Visit Status. These picklists prevent inconsistent data entry and facilitate reporting and automation.

By carefully designing fields and picklists, we ensured the CRM captures all necessary details while maintaining high data quality standards.

### 3. Record Types & Page Layouts

Different record types were created to cater to the needs of various property categories and deal stages:

- **Residential vs Commercial Properties:** Record types allow customized page layouts that show only relevant fields to agents. This minimizes clutter and improves usability.
- **Deal Record Types:** Separate layouts for negotiation and closure stages, including sections for booking amount, manager approvals, and linked

customer details.

Record types combined with page layouts provide a user-friendly interface, ensuring agents access the right information without unnecessary fields, improving operational efficiency.

#### 4. Relationships

Establishing relationships between objects ensures proper data flow and supports automation and reporting:

The screenshot shows the Salesforce 'New Agent' form. The form is titled 'New Agent' and includes a legend indicating that an asterisk (\*) denotes required information. The 'Information' section contains the following fields: 'Agent Name' (required, text input), 'Phone' (text input), 'Email' (text input), and 'Experience' (text input). The 'Owner' field is a picklist showing 'sivaram paliseti'. At the bottom of the form are three buttons: 'Cancel', 'Save & New', and 'Save'. The background shows the Salesforce interface with the 'Agents' tab selected and a 'Recently Viewed' list.

The screenshot shows the Salesforce 'New Property' form. The form is titled 'New Property' and includes a legend indicating that an asterisk (\*) denotes required information. The 'Information' section contains the following fields: 'Property Name' (required, text input), 'Property Type' (picklist with '--None--' selected), 'Price' (text input), 'Location' (text input), 'Status' (picklist with '--None--' selected), and 'Agent' (picklist with a search bar). The 'Owner' field is a picklist showing 'sivaram paliseti'. At the bottom of the form are three buttons: 'Cancel', 'Save & New', and 'Save'. The background shows the Salesforce interface with the 'Properties' tab selected and a 'Recently Viewed' list.

- Lookup Relationship: Property\_\_c → Visit\_\_c, allowing one property to be linked to multiple visits. This relationship enables agents to track all interactions for a particular property.
- Master-Detail Relationship: Deal\_\_c → Lead, linking finalized deals directly to the originating lead. This maintains data integrity and allows roll-up summaries.
- Junction Object: Assignment\_\_c, linking Agents and Properties, allows multiple agents to be associated with a property for collaborative sales efforts.

The careful design of relationships ensures all data is connected logically, facilitating accurate reporting and automation workflows in later phases.

## 5. Schema Builder

Schema Builder was utilized extensively to visualize objects, fields, and relationships:

- Provides a drag-and-drop interface for designing and reviewing the CRM data model.
- Helps identify potential gaps or redundant fields before development.
- Supports planning for automation, reporting, and integration by showing how objects relate to each other in real-time.

Using Schema Builder, we verified the correctness of relationships, field types, and picklist values, ensuring the data model supports the business process seamlessly.

## 6. Data Quality & Validation Considerations

Although primarily covered in Phase 4, initial validation rules and field requirements were considered while designing the data model:

- Required fields for critical objects like Deal\_\_c Booking Amount, Property\_\_c Status, and Visit\_\_c Scheduled Date were marked mandatory.
- Standardization of picklists ensures consistent data for reporting and automation.

- Relationship rules prevent orphan records and maintain referential integrity.

This approach lays the foundation for high data quality in the Salesforce org.

## 7. Summary

Phase 3 focused on designing a robust and flexible data model for the Smart Property Portal:

- Developed custom objects aligned with real estate operations.
- Created comprehensive fields, picklists, and record types for efficient data entry.
- Established lookup, master-detail, and junction relationships to interconnect objects logically.
- Used Schema Builder to visualize the model and validate relationships.
- Considered initial data quality measures to support automation and reporting.

This data model is a critical foundation, enabling subsequent phases such as automation, Apex development, and integration with external services to function efficiently.