

Phase 3: Data Modeling & Relationships

Step 1: Standard & Custom Objects

Main custom objects were created to store business-critical data for the Customer Support Ticket Management System:

- **Customer__c** – Stores customer information such as name, email, phone number, and account type.
- **Support_Ticket__c** – Stores all customer support tickets raised in the system.
- **Ticket_Category__c** – Stores different types of customer issues such as Technical Issue, Billing Issue, and General Query.

Steps Followed:

1. Navigated to **Setup → Object Manager → Create → Custom Object**
2. Provided **Label, Name**, and enabled **Reports/Search**
3. Saved the object and created a **Tab** for each object

The image contains two screenshots of the Salesforce Setup interface, specifically the Object Manager section. Both screenshots show the 'Customer' and 'Support Ticket' objects being configured.

Screenshot 1: Customer Object Configuration

Customer Object Details:

- API Name:** Customer__c
- Custom:** ✓
- Singular Label:** Customer
- Plural Label:** Customers

Object Settings:

- Enable Reports:** ✓
- Track Activities:** ✓
- Track Field History:** ✓
- Deployment Status:** Deployed
- Help Settings:** Standard salesforce.com Help Window

Screenshot 2: Support Ticket Object Configuration

Support Ticket Object Details:

- API Name:** Support_Ticket__c
- Custom:** ✓
- Singular Label:** Support Ticket
- Plural Label:** Support Tickets

Object Settings:

- Enable Reports:** ✓
- Track Activities:** ✓
- Track Field History:** ✓
- Deployment Status:** Deployed
- Help Settings:** Standard salesforce.com Help Window

The screenshot shows the Salesforce Setup interface with the following details:

- Header:** Includes the Salesforce logo, a search bar labeled "Search Setup", and various configuration icons.
- Breadcrumbs:** "SETUP > OBJECT MANAGER" and "Ticket Category".
- Left Sidebar:** A navigation menu with items like "Details", "Fields & Relationships", "Page Layouts", "Lightning Record Pages", "Buttons, Links, and Actions", "Compact Layouts", "Field Sets", "Object Limits", "Record Types", "Related Lookup Filters", and "Restriction Rules".
- Right Panel:** The "Details" tab for the "Ticket Category" object. It contains sections for "Description", "API Name" (Ticket_Category__c), "Custom" (selected), "Singular Label" (Ticket Category), "Plural Label" (Ticket Categories), "Enable Reports" (unchecked), "Track Activities" (unchecked), "Track Field History" (unchecked), "Deployment Status" (Deployed), and "Help Settings" (Standard salesforce.com Help Window). Buttons for "Edit" and "Delete" are at the top right.

Step 2: Fields

Customer__c

Field Label	Data Type	Notes
Name	Text	Standard Name field
Email	Email	Valid customer email
Phone	Phone	Customer contact number
Account Type	Picklist	Individual, Business

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- Breadcrumbs:** "SETUP > OBJECT MANAGER" and "Customer".
- Left Sidebar:** A navigation menu with items like "Details", "Fields & Relationships", "Page Layouts", "Lightning Record Pages", "Buttons, Links, and Actions", "Compact Layouts", "Field Sets", "Object Limits", "Record Types", "Related Lookup Filters", and "Restriction Rules".
- Right Panel:** The "Fields & Relationships" tab for the "Customer" object. It shows a table with 8 items, sorted by Field Label. The table includes columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Account Type	Account_Type__c	Picklist		
Created By	CreatedBy	Lookup(User)		
Customer Name	Name	Text(80)	✓	
Email	Email__c	Email		
Last Modified By	LastModifiedBy	Lookup(User)		
Name	Name__c	Text(20)		
Owner	OwnerId	Lookup(User,Group)	✓	
Phone	Phone__c	Phone		

 Buttons for "New", "Deleted Fields", "Field Dependencies", and "Set History Tracking" are at the top right of the table.

Support_Ticket__c

Field Label	Data Type	Notes
Customer	Lookup(Employee__c)	Links ticket to customer
Ticket Category	Lookup (Ticket_Category__c)	Issue classification
Priority	Picklist	Low, Medium, High
Status	Picklist	New, In Progress, Resolved, Closed
Description	Long Text Area	Issue details

The screenshot shows the Salesforce Object Manager interface for the 'Support Ticket' object. The left sidebar lists various setup categories like Page Layouts, Lightning Record Pages, etc. The main content area is titled 'Fields & Relationships' and contains a table of fields. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The indexed column contains checkmarks for most fields except 'Description Field'.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Customer	Customer__c	Lookup(Customer)		✓
Description Field	Description_Field__c	Long Text Area(260)		✗
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Priority	Priority__c	Picklist		✗
Status	Status__c	Picklist		✗

Ticket_Category__c

Field Label	Data Type	Notes
Category Name	Text	Technical, Billing, General
Description	Text Area	Category explanation

The screenshot shows the Salesforce Object Manager interface for the 'Ticket Category' object. The left sidebar lists various setup categories. The main content area is titled 'Fields & Relationships' and contains a table of fields. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The indexed column contains checkmarks for all fields.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Category Name	Category_Name__c	Text(80)		✓
Created By	CreatedById	Lookup(User)		
Description	Description__c	Long Text Area(32768)		✗
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Ticket Category Name	Name	Text(80)		✓

Step 4: Page Layouts

Each custom object is configured with page layouts to display relevant fields based on user roles such as support agents and managers. Page layouts help organize information and improve usability.

Examples:

Customer__c Layout:

- Name
- Email
- Phone
- Account Type

Support_Ticket__c Layout:

- Customer
- Ticket Category
- Priority
- Status
- Description
- Created Date

Ticket_Category__c Layout:

- Category Name
- Description

Step 5: Compact Layouts

Compact layouts provide a summarized view of important fields in hover cards and mobile views, enabling quick access to key information.

Examples:

Customer__c Compact Layout:

- Name
- Email
- Phone

Support_Ticket__c Compact Layout:

- Customer

- Priority
- Status

Step 6: Schema Builder

- Schema Builder is used to visually represent all custom objects and their relationships within the system. It displays object relationships, field types, and lookup connections in a single view.
- This helps stakeholders and developers understand the data structure, relationships, and overall data flow of the Customer Support Ticket Management System.

