

# Salesforce Project Phase-2 :- Data Modeling & Relationships

## Title :- Dairy Management System Private Limited Using Salesforce CRM

### 1. Account Object

**Purpose:** Stores all stakeholders – Farmers, Distributors, and Customers. This is a standard Salesforce object.

**Fields:**

Field Name	Data Type	Description / Purpose
Name	Text	Name of the account, e.g., Farmer Name, Distributor Name, or Customer Name.
Account Type	Picklist	Values: Farmer, Distributor, Customer. Helps to differentiate stakeholders and assign appropriate record types.
Location	Text / Geolocation	The village, city, or region where the account is located. Useful for logistics and reporting.
Contact Number	Phone	Primary contact number for communication. Optional secondary contact can be added via related Contact object.

SETUP > OBJECT MANAGER				
Account				
Details	Fields & Relationships			
Fields & Relationships	33+ Items, Sorted by Field Label			
Page Layouts	Q Quick Find			
Lightning Record Pages	New Deleted Fields Field Dependencies Set History Tracking			
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				
	FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD INDEXED
	Account Name	Name	Name	✓
	Account Number	AccountNumber	Text(40)	
	Account Owner	OwnerId	Lookup(User)	✓
	Account Record Type	RecordTypeId	Record Type	✓
	Account Site	Site	Text(80)	
	Account Source	AccountSource	Picklist	
	Account Type	Account_Type__c	Picklist	
	Active	Active__c	Picklist	
	Annual Revenue	AnnualRevenue	Currency(18, 0)	
	Billing Address	BillingAddress	Address	
	Clean Status	CleanStatus	Picklist	✓

## Additional Notes:

- **Record Types:** Separate page layouts and business processes for Farmers, Distributors, and Customers.
- **Relationships:** Can have **child contacts**, **orders**, and **cattle** (for farmers).

## Page Layouts :-

The screenshot shows the Salesforce 'Account' page layout configuration page. The left sidebar contains navigation links: Details, Fields & Relationships, Page Layouts (selected), 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, and Scoping Rules. The main content area is titled 'Account' and includes a 'Layout Properties' section with a 'Quick Find' field and a table of fields. Below this, there's a section for 'Actions in the Salesforce Classic Publisher section' and a 'Standard Buttons' section with buttons like 'Edit', 'Change Owner', 'Change Record Type', 'Send Survey', 'Delete', 'View Account Hierarchy', 'Sharing', 'Sharing Hierarchy', 'Include Offline', 'Get Survey Invitation', 'Check for New Data', 'View Partner Scorecard', and 'Add to Cart'. The 'Fields' section shows a list of fields with their data types and sample values. The 'Custom Links' section is also visible.

Field Name	Field Type	Field Type	Field Type	Field Type	Field Type	Field Type	Field Type	Field Type	Field Type
Section	Account Owner	Account Type	Clean Status	Data.com Key	Employees	Location	Operating Hours	Rating	
Blank Space	Account Record Type	Active	Created By	Description	Fax	NAICS Code	Ownership	Shipping Address	
Account Name	Account Site	Annual Revenue	Customer Priority	D-U-N-S Number	Industry	NAICS Description	Parent Account	SIC Code	
Account Number	Account Source	Billing Address	D&B Company	Einstein Account ...	Last Modified By	Number of Locations	Phone	SIC Description	

The screenshot shows the 'Page Layout Assignment' table for the 'Account' object. The table lists various profiles and their assigned page layouts for different record types (Master, Customer, Distributor, Farmer Account). The table is titled 'Page Layout Assignment' and includes a 'Help for this Page' link. The table structure is as follows:

Profiles	Record Types	Master	Customer	Distributor	Farmer Account
Admin		Account Layout	Account Layout	Account Layout	Account Layout
Analytics Cloud Integration User		Account Layout	Account Layout	Account Layout	Account Layout
Analytics Cloud Security User		Account Layout	Account Layout	Account Layout	Account Layout
Anypoint Integration		Account Layout	Account Layout	Account Layout	Account Layout
Authenticated Website		Account Layout	Account Layout	Account Layout	Account Layout
Authenticated Website		Account Layout	Account Layout	Account Layout	Account Layout
B2B Reordering Portal Buyer Profile		Account Layout	Account Layout	Account Layout	Account Layout
Chatter External User		Account Layout	Account Layout	Account Layout	Account Layout
Chatter Free User		Account Layout	Account Layout	Account Layout	Account Layout
Chatter Moderator User		Account Layout	Account Layout	Account Layout	Account Layout
Contract Manager		Account Layout	Account Layout	Account Layout	Account Layout
Cross Org Data Proxy User		Account Layout	Account Layout	Account Layout	Account Layout
Custom: Marketing Profile		Account (Marketing) Layout	Account Layout	Account Layout	Account Layout
Custom: Sales Profile		Account (Sales) Layout	Account Layout	Account Layout	Account Layout
Custom: Support Profile		Account (Support) Layout	Account Layout	Account Layout	Account Layout
Customer		Customer Layout	Customer Layout	Customer Layout	Customer Layout
Customer Community Login User		Account Layout	Account Layout	Account Layout	Account Layout
Customer Community Plus Login User		Account Layout	Account Layout	Account Layout	Account Layout
Customer Community Plus User		Account Layout	Account Layout	Account Layout	Account Layout

## 2. Cattle Object

**Purpose:** Tracks individual cattle owned by farmers. Custom object.

Fields:

Field Name	Data Type	Description / Purpose
Cattle ID	Auto Number / Text	Unique identifier for each cattle. Helps in tracking milk production individually.
Breed	Picklist	Types like Holstein, Jersey, Gir, etc. Useful for production and quality analysis.
DOB (Date of Birth)	Date	Birthdate of the cattle. Helps in calculating age and predicting lactation cycles.
Health Status	Picklist	Values like Healthy, Sick, Recovering. Used to monitor livestock health and alert veterinary actions.

SETUP > OBJECT MANAGER

Cattle

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Restriction Rules

Scoping Rules

Object Access

Tools

Fields & Relationships

10 Items, Sorted by Field Label

Q Quick Find

New

Deleted Fields

Field Dependencies

Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Age	Age__c	Formula (Number)		
Breed	Breed__c	Picklist		
Cattle ID	Cattle_ID__c	Auto Number		
Cattle Name	Name	Text(80)		✓
Created By	CreatedById	Lookup(User)		
Date of Birth	Date_of_Birth__c	Date		
Farmer	Farmer__c	Master-Detail(Farmer)		✓
Health Status	Health_Status__c	Picklist		
Last Modified By	LastModifiedById	Lookup(User)		

Relationships:

- **Master-Detail:** Linked to Account (Farmer) – one farmer can own multiple cattle.
- **Child Object:** Milk Production is linked to Cattle.

3. Milk Production Object

**Purpose:** Records daily/periodic milk collection from cattle. Custom object.

Fields:

Field Name	Data Type	Description / Purpose
Quantity	Number (Decimal)	Liters of milk produced. Key metric for inventory and farmer payouts.

Field Name	Data Type	Description / Purpose
Collection Date	Date	Date when the milk was collected. Important for production tracking and trend analysis.
Fat %	Number (Decimal)	Fat percentage of milk. Useful for quality assessment and pricing.
Quality Grade	Picklist	Grade like A, B, C based on fat %, protein content, or contaminant tests. Helps in pricing and distribution decisions.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Cattle	Cattle_c	Lookup(Cattle)		✓
Created By	CreatedById	Lookup(User)		
Farmer	Farmer_c	Lookup(Farmer)		✓
Farmer details	Farmer_details_c	Lookup(Farmer)		✓
Fat Content (%)	Fat_Content_c	Number(16, 2)		
Last Modified By	LastModifiedById	Lookup(User)		
Milk Production Number	Name	Auto Number		✓
Owner	Ownerid	Lookup(User/Group)		✓
Production Date	Production_Date_c	Date		
Quantity	Quantity_c	Number(16, 2)		

**Relationships:**

- Lookup / Master-Detail:** Linked to Cattle (which links to Farmer Account).

**4. Online Order Object**

**Purpose:** Tracks milk/product orders by distributors or customers. Standard object with custom fields and record types.

**Fields:**

Field Name	Data Type	Description / Purpose
Order Type	Picklist	Distributor Order, Customer Order. Determines fulfillment process and pricing.
Payment Mode	Picklist	Cash, Online, UPI, Credit. Helps in accounting and payment tracking.
Discount %	Number	Discounts applied to orders. Can be standard, seasonal, or festival-based.



Field Name	Data Type	Description / Purpose
Product Name	Text	Name of the product – e.g., Cow Milk, Paneer, Ghee.
Stock Quantity	Number	Current quantity available in liters/kg. Helps manage supply chain.
Expiry Date	Date	Expiration for perishable products. Alerts for clearance or disposal.

SETUP > OBJECT MANAGER				
Inventory				
Details	Fields & Relationships 8 Items, Sorted by Field Label			
Fields & Relationships	FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD
Page Layouts	Created By	CreatedById	Lookup(User)	
Lightning Record Pages	Inventory Name	Name	Text(80)	✓
Buttons, Links, and Actions	Last Modified By	LastModifiedById	Lookup(User)	
Compact Layouts	Owner	OwnerId	Lookup(User,Group)	✓
Field Sets	Product Name	Product_Name__c	Picklist	
Object Limits	Quantity Available	Quantity_Available__c	Number(18, 0)	
Record Types	Unit Price	Unit_Price__c	Currency(18, 0)	
Related Lookup Filters	Warehouse Location	Warehouse_Location__c	Text(25)	
Restriction Rules				
Scoping Rules				
Object Access				

## Relationships:

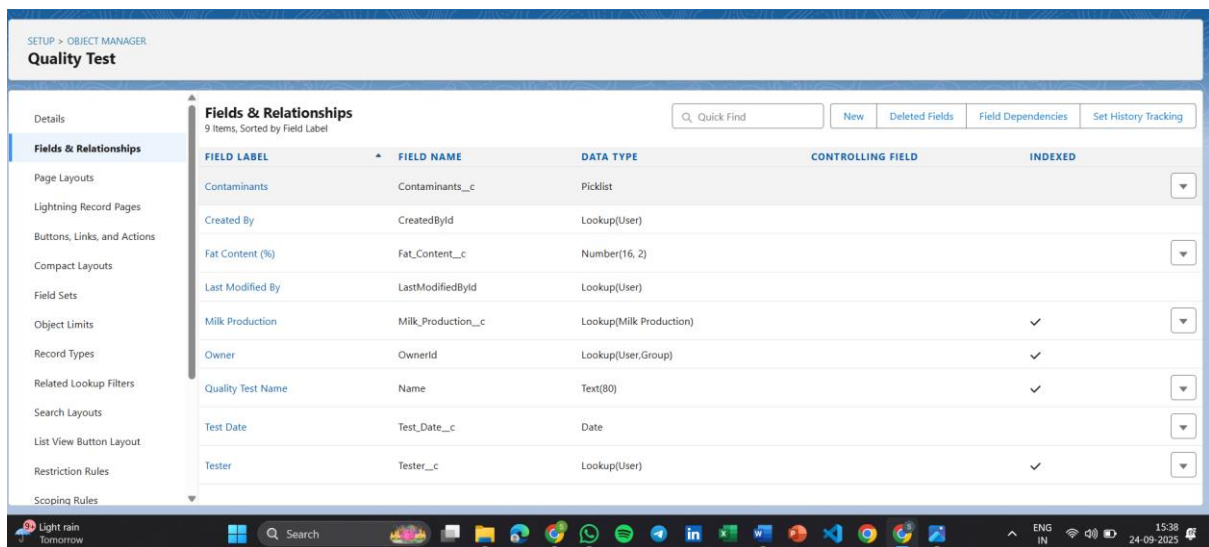
- **Lookup:** Can link to Orders to track which products were sold.

## 6. Quality Test Object

**Purpose:** Records tests for milk quality and contamination. Custom object.

### Fields:

Field Name	Data Type	Description / Purpose
Test Date	Date	Date of testing milk or dairy product.
Fat %	Number	Fat content measured during testing.
Contaminants	Text / Picklist	Any contaminants found – e.g., Antibiotics, Bacteria.
Tester	Lookup (User/Employee)	Person who performed the quality test.



### Relationships:

- Linked to **Milk Production** or **Inventory** to ensure quality compliance.

## 7. Festival Offer Object

**Purpose:** Tracks promotional offers during festivals or seasonal campaigns. Custom object.

**Fields:**

Field Name	Data Type	Description / Purpose
Offer Name	Text	Name of the promotion – e.g., Diwali Discount, Holi Special.
Discount %	Number	Discount applied to product or order.
Validity	Date Range / Date	Start and end date of the offer. Helps manage marketing campaigns.

### Relationships:

- Can link to **Orders** or **Inventory** to apply promotions automatically.

SETUP > OBJECT MANAGER

### Festival Offer

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

Rule Name: 
Active: ☒
Description:

**Error Condition Formula**

Example: `Discount_Percent__c > 0.30` [More Examples...](#)  
Display an error if Discount is more than 30%  
If this formula expression is **true**, display the text defined in the Error Message area

`OR (Discount__c >= 0, Discount__c < 100)`

No errors found

**Functions**  
-- All Function Categories --  
ABS  
ACOS  
ADDMONTHS  
AND  
ASCII  
ASIN  
Insert Selected Function  
ABS(number)  
Returns the absolute value of a number, a number without its sign  
[Help on this function](#)

**Error Message**

Quick Tips  
• Operators & Functions

## 8. Customer Object

Field Name	Data Type	Description
Name	Text	Customer's full name
Account Type	Picklist	Customer (Record Type: Customer)
Location	Text	Customer's address (city/village/region)
Contact Number	Phone	Mobile number of the customer
Email	Email	Email ID of the customer
Preferred Product	Picklist	Type of product usually purchased (Milk, Ghee, Curd, etc.)
Order History	Lookup (Order)	Past orders placed by the customer
Festival Offers Availed	Lookup (Festival Offer)	Offers applied to customer orders
Loyalty Points	Number	Optional field for rewards/points
Active Status	Checkbox	Whether customer is active or not



<div> <div>SETUP &gt; OBJECT MANAGER</div> <div>Customer</div> </div>				
Details	<div> <div>Fields &amp; Relationships</div> <div>16 Items, Sorted by Field Label</div> <div> <div>Q Quick Find</div> <div>New</div> <div>Deleted Fields</div> <div>Field Dependencies</div> <div>Set History Tracking</div> </div> </div>			
Fields & Relationships	FIELD LABEL	FIELD NAME	DATA TYPE	INDEXED
Page Layouts	Address	Address__c	Text Area(255)	
Lightning Record Pages	Created By	CreatedById	Lookup(User)	✓
Buttons, Links, and Actions	Created Date	CreatedDate	Date/Time	✓
Compact Layouts	Customer ID	Customer_ID__c	Auto Number	
Field Sets	Customer Name	Customer_Name__c	Text(50)	
Object Limits	Customer Status Type	CustomerStatusType	Picklist	
Record Types	Customer type	Customer_type__c	Picklist	
Related Lookup Filters	Email ID	Email_ID__c	Email	
Search Layouts	Last Modified By	LastModifiedById	Lookup(User)	
List View Button Layout	Last Modified Date	LastModifiedDate	Date/Time	
Object Access				

Relationships:

- Customer → Orders (1-to-Many)
- Customer → Festival Offers (via Orders)
- Customer → Payment (via Orders)

9. Distributor Object

Field Name	Data Type	Description
Name	Text	Distributor’s name / business name
Account Type	Picklist	Distributor (Record Type: Distributor)
Location	Text	Distributor’s office/warehouse location
Contact Number	Phone	Distributor’s mobile/landline number
Email	Email	Distributor’s email address
License/ID Number	Text	Registration or license ID of distributor
Stock Supplied	Lookup (Inventory)	Stock provided by farmer to distributor
Orders Managed	Lookup (Order)	Orders handled by distributor
Customer Accounts	Lookup (Account)	Customers linked to this distributor
Active Status	Checkbox	Whether distributor is active

SETUP > OBJECT MANAGER

### Distributor

Details	<b>Fields &amp; Relationships</b>	Q Quick Find	New	Deleted Fields	Field Dependencies	Set History Tracking
Fields & Relationships	9 Items, Sorted by Field Label					
Page Layouts						
Lightning Record Pages						
Buttons, Links, and Actions						
Compact Layouts						
Field Sets						
Object Limits						
Record Types						
Related Lookup Filters						
Restriction Rules						
Scoping Rules						
Object Access						
Triggers						

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Assigned Inventory	Assigned_Inventory__c	Lookup(Inventory)		✓
Created By	CreatedById	Lookup(User)		
Delivery Area	Delivery_Area__c	Text(50)		
Distributor ID	Distributor_ID__c	Auto Number		
Distributor Name	Name	Text(80)		✓
Email ID	Email_ID__c	Email		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Phone	Phone__c	Phone		

## Relationships:

- Distributor → Inventory (1-to-Many)
- Distributor → Orders (1-to-Many, mostly bulk orders)
- Distributor → Customers (1-to-Many, via Account hierarchy or related field)

### Online Order Field-Level Security for profile

## Distributor

[Help for this Page](#) ?

<a href="#">Edit</a> <a href="#">Back to Profile</a>			
Field Name	Field Type	Read Access	Edit Access
Created By	Lookup	✓	<input type="checkbox"/>
Customer	Lookup	✓	✓
Delivery Date	Date	✓	✓
Delivery Status	Picklist	✓	✓
Distributor	Lookup	✓	✓
Last Modified By	Lookup	✓	<input type="checkbox"/>
Online Order Name	Text	✓	✓
Online Order Number	Auto Number	✓	<input type="checkbox"/>
Order Date	Date/Time	✓	✓
Order ID	Auto Number	✓	<input type="checkbox"/>
Owner	Lookup	✓	✓
Payment Status	Picklist	✓	✓
Product	Lookup	✓	✓
Quantity	Number	✓	✓

## 10. Farmer Object

Field Name	Data Type	Description
Name	Text	Farmer's full name / farm name
Account Type	Picklist	Farmer (Record Type: Farmer)
Location	Text	Farmer's village, city, or region
Contact Number	Phone	Mobile number of the farmer
Email	Email	Farmer's email (optional)
Farm Size	Number	Size of farmland (acres/hectares)
No. of Cattle	Number	Total cattle owned by farmer
Cattle IDs	Lookup (Cattle)	Links to individual cattle records
Milk Production	Lookup (Milk Production)	Links to farmer's milk production records
Inventory Supplied	Lookup (Inventory)	Products supplied to distributor/customer

SETUP > OBJECT MANAGER  
**Farmer**

Details

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

Q Quick Find    New   Deleted Fields   Field Dependencies   Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address__c	Text Area(255)		
Created By	CreatedById	Lookup(User)		
Email	Email__c	Email		
Farm Location	Farm_Location__c	Geolocation		
Farmer ID	Farmer_ID__c	Auto Number		
Farmer Name	Name	Text(80)		✓
Farmer Status	Farmer_Status__c	Picklist		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Phone Number	Phone_Number__c	Phone		







## Schema Builder

Steps:

1. Setup → enter Schema Builder in Quick Find → Schema Builder.

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- The screenshot displays the Schema Builder application. On the left, there is a sidebar with a 'Select from' dropdown set to 'All Objects' and a 'Quick Find' search bar. Below this is a list of filters, many of which are checked, including 'Account', 'Activation Target', 'Activity', 'Address', 'Alternative Payment Method', 'Appointment Category', 'Appointment Invitation', 'Appointment Invitee', 'Appointment Topic Time Slot', 'Approval Submission', 'Approval Submission Detail', 'Approval Work Item', 'Asset', 'Asset Action', 'Asset Action Source', 'Asset Relationship', 'Asset State Period', and 'Assigned Resource'. The main area shows a dense network of entity-relationship diagrams. Entities are represented as boxes with various attributes and relationships are shown as lines connecting them. A legend in the top right corner identifies line types: blue for 'Lookup Relationship', red for 'Master-Detail Relationship', and a red box for 'Required Field'. The diagram includes numerous entities such as 'Problem', 'Incident', 'Shipment Item', 'Plan Rate', 'Delivery Estimation Setup', 'Work Step Template', 'Store Catalog', 'Buyer Group', 'Consumption Rate', 'Data Kit Deployment', 'Store Buyer Group', 'Custom Library', 'User Provisioning Request', 'Location Group', 'Query', 'Incident Related Item', 'Problem Related Item', 'Privacy RTBF Request', 'Solution', 'Approval Submission Detail', 'Store', 'Shipment Item', 'Change Request Related Issue', 'Price Book Entry', 'Case Related Issue', 'Web Store Inventory Source', 'Fulfillment Order Product', 'Idea', and 'Quick Test'. The interface is clean and professional, with a light gray background and clear, legible text.

- Steps: 1. Setup → Quick Find → Tabs → New (Custom Object Tabs).
2. Select Farmer → Choose tab style → Next → Add to desired Apps → Save.
3. Repeat for all the objects

Custom Object Tabs			
		New	<a href="#">What Is This?</a>
Action	Label	Tab Style	
<a href="#">Edit</a>   <a href="#">Del</a>	<a href="#">Cattles</a>	 Leaf	
<a href="#">Edit</a>   <a href="#">Del</a>	<a href="#">Distributors</a>	 Truck	
<a href="#">Edit</a>   <a href="#">Del</a>	<a href="#">Farmers</a>	 People	
<a href="#">Edit</a>   <a href="#">Del</a>	<a href="#">Inventories</a>	 Star	
<a href="#">Edit</a>   <a href="#">Del</a>	<a href="#">Milk Productions</a>	 Bottle	
<a href="#">Edit</a>   <a href="#">Del</a>	<a href="#">Online Orders</a>	 Laptop	