

Phase 3: Data Modeling & Relationships

Goal:

Design the data structure for managing Service Appointments & Warranty tracking in Salesforce.

1. Standard & Custom Objects

Standard Objects (reuse):

- Contact → Represents customers who request services.
- Case → Can be reused for service-related issues if needed.

Custom Objects:

- Product → Stores information about products purchased.

SETUP > OBJECT MANAGER

Product

Details

Fields & Relationships
8 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
Category	Category__c	Picklist (Multi-Select)		
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Product Code	Product_Code__c	Text(50)		
Product Name	Name	Text(80)		✓
Purchase Date	Purchase_Date__c	Date		
Serial Number	Serial_Number__c	Text(100)		

Object Access

- Warranty → Stores product warranty details.

SETUP > OBJECT MANAGER

Warranty

Details

Fields & Relationships
10 Items, Sorted by Field Label

Q, Quick Find New Deleted Fields Field Dependencies Set History Tracking

Created By	CreatedById	Lookup(User)		
Customer	Customer__c	Lookup(Customer)	✓	▼
End Date	End_Date__c	Date		▼
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)	✓	
Product	Product__c	Lookup(Product)	✓	▼
Start Date	Start_Date__c	Date		▼
Status	Status__c	Picklist		▼
Warranty Name	Name	Text(80)	✓	▼

Object Access

- Service Appointment → Holds appointment details for repairs/maintenance.

SETUP > OBJECT MANAGER

Service Appointment

Fields & Relationships
13 Items, Sorted by Field Label

Q Quick Find New Deleted Fields Field Dependencies Set History Tracking

Contact	Contact__c	Lookup(Contact)	✓	
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Notes	Notes__c	Long Text Area(32768)		
Owner	OwnerId	Lookup(User,Group)	✓	
Product	Product__c	Lookup(Product)	✓	
Service Appointment Name	Name	Text(80)	✓	
Status	Status__c	Picklist		
Technician	Technician__c	Lookup(Technician)	✓	

- Technician → Stores service engineer/technician information.

Setup Home Object Manager

SETUP > OBJECT MANAGER

Technician

Fields & Relationships
9 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
Created By	CreatedById	Lookup(User)		
Email	Email__c	Email		
Expertise	Expertise__c	Picklist		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Phone	Phone__c	Phone		
Picklist	Picklist__c	Picklist		
Technician Name	Technician_Name__c	Text(100)		
Technician Name	Name	Text(80)		✓

2. Fields

Product:

- Product Name
- Product Code
- Category
- Purchase Date
- Serial Number

Warranty:

- Warranty Number
- Start Date
- End Date
- Status (Active/Expired)
- Product (Lookup)

- Customer (Lookup to Contact)

Service Appointment:

- Appointment Number
- Appointment Date
- Appointment Time
- Status (Scheduled, Completed, Cancelled)
- Product (Lookup)
- Warranty (Lookup)
- Technician (Lookup)
- Customer (Lookup to Contact)

Technician:

- Technician Name
- Expertise (e.g., Electronics, Appliances)
- Email
- Phone
- Availability Status

3. Record Types

Service Appointment:

- Installation Appointment
- Repair Appointment
- Maintenance Appointment

SETUP > OBJECT MANAGER

Service Appointment

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

3 Items, Sorted by Record Type Label

RECORD TYPE LABEL

DESCRIPTION

ACTIVE

MODIFIED BY

Installation Appointment

For product installation service appointments

✓

Bhavitha Bolla, 9/18/2025, 11:12 PM

Maintenance Appointment

For Product Maintenance appointment

✓

Bhavitha Bolla, 9/18/2025, 11:15 PM

Repair Appointment

For Product Repairs appointment

✓

Bhavitha Bolla, 9/18/2025, 11:13 PM

Quick Find

New

Page Layout

New Service Appointment

Select a record type

☒ Installation Appointment

For product installation service appointments

☐ Maintenance Appointment

For Product Maintenance appointment

☐ Repair Appointment

For Product Repairs appointment

Cancel

Next

Warranty:

- Standard Warranty
- Extended Warranty

SETUP > OBJECT MANAGER

Warranty

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

2 Items, Sorted by Record Type Label

Q Quick Find New Page Layout As

RECORD TYPE LABEL	DESCRIPTION	ACTIVE	MODIFIED BY
Extended Warranty	Warranty Purchased Separately or extended coverage	✓	Bhavitha Bolla, 9/18/2025, 11:19 PM
Standard Warranty	Default manufacturer Warranty	✓	Bhavitha Bolla, 9/18/2025, 11:18 PM

New Warranty

Select a record type

☒ Standard Warranty
Default manufacturer Warranty

☐ Extended Warranty
Warranty Purchased Separately or extended coverage

Cancel Next

4. Page Layouts

- Product Page: Shows product details + related list of Warranties & Appointments.

Save Quick Save Preview As... Cancel Undo Redo Layout Properties

Fields

Buttons
Quick Actions
Mobile & Lightning Actions
Expanded Lookups
Related Lists
Report Charts

Quick Find Field Name

Section	Last Modified By	Purchase Date
Blank Space	Owner	Serial Number
	Product Code	
	Product Name	

Information section

Information (Header visible on edit only)

Product Name	Sample Text	Owner	Sample Text
		Product Code	Sample Text
		Category	Sample Text
		Purchase Date	9/19/2025
		Serial Number	Sample Text

System Information (Header visible on edit only)

Created By	Sample Text	Last Modified By	Sample Text
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Custom Links (Header visible on edit only)

- Warranty Page: Warranty details + related Product and Customer + Service Appointments.

SETUP > OBJECT MANAGER

Warranty

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

Save Quick Save Preview As... Label Activity History Layout Properties

This item is currently in use (click to locate)

Activity History Groups Service Appointments

Approval History Notes & Attachments

Content Deliveries Open Activities

Files Related Content

Service Appointments

Service Appointment Name

Sample Text

Open Activities

Subject	Name	Task	Due Date	Status	Priority	Assignee
Sample Text	Sample Text	✓	9/19/2025, 3:21 AM	Sample Text	Sample Text	Sarah Si

Activity History

Subject	Name	Task	Due Date	Assigned To	Last Modified Date/Time
Sample Text	Sample Text	✓	9/19/2025, 3:21 AM	Sarah Sample	9/19/2025, 3:21 AM

- Service Appointment Page: Appointment details + related Warranty, Product, Technician, and Customer.

SETUP > OBJECT MANAGER

Service Appointment

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

Save Quick Save Preview As... Cancel Undo Redo Layout Properties

Quick Find
Related List Name

Fields
Buttons
Quick Actions
Mobile & Lightning
Actions
Expanded Lookups
Related Lists
Report Charts

Activity History
Approval History
Content Deliveries
Files
Groups
Notes & Attachments
Open Activities
Related Content

Information (Header visible on edit only)

Service Appointment Name
Sample Text

Appointment Required
GEN-2004-001234

Appointment Date
9/19/2025

Appointment Time
9/19/2025, 3:27 AM

Status
Sample Text

Product
Sample Text

Warranty
Sample Text

Contact
Sample Text

Notes
Sample Text

Technician
Sample Text

Owner
Sample Text

System Information (Header visible on edit only)

Created By
Sample Text

Last Modified By
Sample Text

- Technician Page: Technician details + related list of assigned Service Appointments.

SETUP > OBJECT MANAGER

Technician

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
Triggers
Flow Triggers
Validation Rules
Conditional Field Formatting

Save Quick Save Preview As... Cancel Undo Redo Layout Properties

Quick Find
Related List Name

Fields
Buttons
Quick Actions
Mobile & Lightning
Actions
Expanded Lookups
Related Lists
Report Charts

Activity History
Approval History
Content Deliveries
Files
Groups
Notes & Attachments
Open Activities
Related Content

Information (Header visible on edit only)

Technician Name
Sample Text

Technician Name
Sample Text

Expertise
Sample Text

Email
sarah.sample@company.com

Phone
1-415-555-1212

Picklist
Sample Text

Owner
Sample Text

System Information (Header visible on edit only)

Created By
Sample Text

Last Modified By
Sample Text

Custom Links (Header visible on edit only)

Mobile Cards (Salesforce mobile only)

Drag expanded lookups and mobile-enabled Visualforce pages here to display them as mobile cards.

Related Lists

Service Appointments

Service Appointment Name
Sample Text

5. Compact Layouts

- Product Compact Layout: Product Name, Product Code, Purchase Date, Serial Number.

SetupHomeObject Manager

SETUP > OBJECT MANAGER

Product

DetailsFields & RelationshipsPage LayoutsLightning Record PagesButtons, Links, and ActionsCompact LayoutsField SetsObject LimitsRecord TypesRelated Lookup FiltersRestriction RulesScoping Rules

Product Compact Layout

Product Compact Layout

« Back to Product

Compact Layout Detail

EditCloneDeleteCompact Layout Assignment

Label	Product Compact Layout	Object Name	Product
API Name	Product_Compact_Layout		
Included Fields	Product Name Product Code Purchase Date Serial Number		
Created By	Bhavitha Bolla, 9/19/2025, 3:44 AM	Modified By	Bhavitha Bolla, 9/19/2025, 3:44 AM

EditCloneDeleteCompact Layout Assignment

- Warranty Compact Layout: Warranty Number, Status, End Date.

Warranty

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

Warranty Compact Layout

[Help for this Page](#) ?

Warranty Compact Layout

[« Back to Warranty](#)

Compact Layout Detail

Edit

Clone

Delete

Compact Layout Assignment

Label	Warranty Compact Layout	Object Name	<u>Warranty</u>
API Name	Warranty_Compact_Layout		
Included Fields	Warranty Number Status End Date		
Created By	<u>Bhavitha Bolla</u> , 9/19/2025, 3:48 AM	Modified By	<u>Bhavitha Bolla</u> , 9/19/2025, 3:48 AM

Edit

Clone

Delete

Compact Layout Assignment

- Service Appointment Compact Layout: Appointment Number, Date, Status, Technician.

Service Appointment

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

Service Appointment Compact Layout

[Help for this Page](#) ?

Service Appointment Compact Layout

[« Back to Service Appointment](#)

Compact Layout Detail

Edit

Clone

Delete

Compact Layout Assignment

Label	Service Appointment Compact Layout	Object Name	Service Appointment
API Name	Service_Appointment_Compact_Layout		
Included Fields	Appointment Number Appointment Date Status Technician		
Created By	Bhavitha Bolla , 9/19/2025, 3:51 AM		Modified By Bhavitha Bolla , 9/19/2025, 3:51 AM

Edit

Clone

Delete

Compact Layout Assignment

- Technician Compact Layout: Name, Expertise, Phone, Email.

Technician

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

Technician Compact Layout

Technician Compact Layout

[Help for this Page](#) ?

[« Back to Technician](#)

Compact Layout Detail

Edit

Clone

Delete

Compact Layout Assignment

Label	Technician Compact Layout	Object Name	Technician
API Name	Technician_Compact_Layout		
Included Fields	Technician Name Expertise Phone Email		
Created By	Bhavitha Bolla , 9/19/2025, 3:53 AM	Modified By	Bhavitha Bolla , 9/19/2025, 3:53 AM

Edit

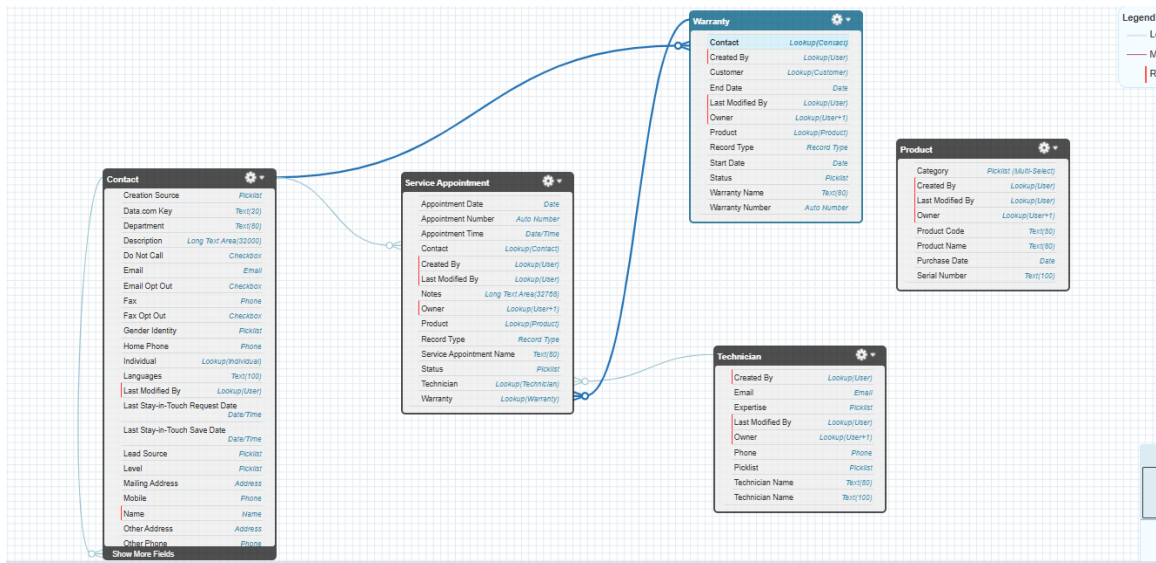
Clone

Delete

Compact Layout Assignment

6. Schema Builder (Relationships)

- Warranty → Product (Lookup)
- Warranty → Contact (Lookup)
- Service Appointment → Product (Lookup)
- Service Appointment → Warranty (Lookup)
- Service Appointment → Technician (Lookup)
- Service Appointment → Contact (Lookup)



7. Lookup vs Master-Detail vs Hierarchical

- Service Appointment ↔ Product: Lookup
- Service Appointment ↔ Warranty: Lookup
- Warranty ↔ Product: Lookup
- Technician ↔ Service Appointment: Lookup
- Hierarchical: Not used (only applies to User object)

8. Junction Objects

Not required in the current scope.

In future, if one appointment can involve multiple technicians, a junction object (e.g., Appointment_Assignment) will be needed.

9. External Objects

Not used at present.

Could be used later to integrate with manufacturer databases or external service vendor systems for warranty validation.