Phase 3 - Data Modeling & Relationships

This document provides a step-by-step summary of all data modeling tasks completed for Phase 3 of the Pharmacy Inventory System project, following the official project roadmap.

Standard Objects Utilized

Product Object

The standard **Product** object was designated to store all medication information.

User Object

The standard **User** object was designated to store all staff information (e.g., Pharmacists).

Contact Object

The standard **Contact** object was designated to store all patient information.

Custom Objects Created

01

Navigate to Setup

Navigated to **Setup > Object Manager > Create > Custom Object**.

02

Create Prescription Object

Created the **Prescription** custom object to be the central object of the application. The Record Name was set to an Auto-Number (RX-{0000}).

03

Launch Tab Wizard

The "Launch New Custom Tab Wizard" was used to create and display a new tab in the user interface.

Prescription

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

Details

Edit | Delete

Description

API Name
Prescription__c

Custom
✓

Singular Label
Prescription

Plural Label
Prescriptions

Enable Reports
✓

Track Activities
✓

Track Field History
✓

Deployment Status
Deployed

Help Settings
Standard salesforce.com Help Window

Fields Created on Product Object

Navigated to **Setup > Object Manager > Product > Fields & Relationships**.

Quantity_on_Hand__c

Field Type: Number

Tracks the current inventory quantity for each medication product.

Expiration_Date__c

Field Type: Date

Monitors medication expiration dates for inventory management and patient safety.

Search Setup

Setup | Home | Object Manager

SETUP > OBJECT MANAGER

Product

- 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
- Object Access
- Triggers

Fields & Relationships

21 Items, Sorted by Field Label

Quick Find | New | Deleted Fields | Field Dependencies | Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Active	IsActive	Checkbox		
Category	Category__c	Picklist		
Created By	CreatedById	Lookup(User)		
Display URL	DisplayUrl	URL(1000)		
Expiration Date	Expiration_Date__c	Date		
External Data Source	ExternalDataSourceId	Lookup(External Data Source)		
External ID	ExternalId	Text(255)		
Last Modified By	LastModifiedById	Lookup(User)		
Lot Number	Lot_Number__c	Text(255)		
Manufacturer	Manufacturer__c	Text(255)		
Product Class	ProductClass	Picklist		✓

Fields Created on Prescription Object

Navigated to **Setup > Object Manager > Prescription > Fields & Relationships**.

Status__c (Picklist)

Created a **Status__c** (Picklist) field with values: New, In Review, Dispensed.

Date_Dispensed__c (Date/Time)

Created a **Date_Dispensed__c** (Date/Time) field.

Prescription Name (Auto Number)

Created a **Name** (Auto Number) field.

Quantity_Dispensed__c (Number)

Created a Quantity_Dispensed__c (**Number**) field.

Search Setup

Setup | Home | Object Manager

SETUP > OBJECT MANAGER

Prescription

- Details
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- Object Limits
- Record Types
- Related Lookup Filters
- Restriction Rules
- Scoping Rules
- Object Access
- Triggers

Fields & Relationships

9 Items, Sorted by Field Label

Quick Find | New | Deleted Fields | Field Dependencies | Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Client	Client__c	Master-Detail(Contact)		✓
Created By	CreatedById	Lookup(User)		
Date Dispensed	Date_Dispensed__c	Date/Time		
Final Price	Final_Price__c	Currency(16, 2)		
Last Modified By	LastModifiedById	Lookup(User)		
Medication	Medication__c	Lookup(Product)		✓
Prescription Name	Name	Auto Number		✓
Quantity Dispensed	Quantity_Dispensed__c	Number(18, 0)		
Status	Status__c	Picklist		

Lookup vs Master-Detail vs Hierarchical Relationships

Action Taken: Lookup Relationships were used to connect the Prescription object to other objects. This was chosen to maintain historical prescription data even if a related record (like a Patient or a Product) is deleted.

Relationships Created on Prescription Object

1

Patient Relationship

A required Lookup Relationship to the **Contact** object, named Patient.

2

Medication Relationship

A required Lookup Relationship to the **Product** object, named Medication.

3

Pharmacist Relationship

A required Lookup Relationship to the **User** object, named Pharmacist.

Page Layouts Configuration

Action Taken: The default page layout for the Prescription object was customized for better usability.

Navigation: Setup > Object Manager > Prescription > Page Layouts.

01

Edit Layout

Clicked Edit on the "Prescription Layout".

02

Arrange Fields

Dragged and dropped fields to place the most important information (Patient, Medication, Pharmacist, Prescription_Date__c, and Status__c) at the top of the page.

03

Remove Unnecessary Fields

Removed unnecessary fields (like the standard Owner field) from the layout.

Search Setup

Setup | Home | Object Manager

SETUP > OBJECT MANAGER

Prescription

- Details
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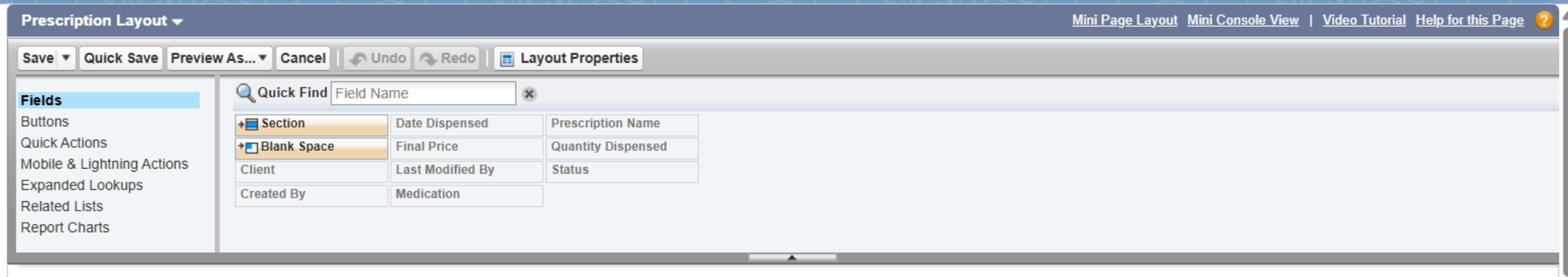


Prescription Sample

Highlights Panel

Customize the highlights panel for this page layout...

Quick Actions in the Salesforce Classic Publisher

Actions in this section are currently inherited from the global publisher layout. You can override the global publisher layout to set a customized list of actions for the publisher on pages that use this layout.

Salesforce Mobile and Lightning Experience Actions

Actions in this section are predefined by Salesforce. You can override the predefined actions to set a customized list of actions on Lightning Experience and mobile app pages that use this layout. If you customize the actions in the Quick Actions in the Salesforce Classic Publisher section, and have saved the layout, then this section inherits that set of actions by default when you click to override.

Compact Layouts & Schema Builder

Compact Layouts

Action Taken: A custom compact layout was created to control the "at-a-glance" summary for prescriptions.

Navigation: Setup > Object Manager > Prescription > Compact Layouts.

- Clicked New to create a layout named Prescription Highlights.
- Added the Patient, Medication, Pharmacist, and Status__c fields to the layout.
- Used the Compact Layout Assignment button to set this new layout as the primary one for the object.

Schema Builder

Action Taken: The Schema Builder was used as a final verification tool to visualize the entire data model.

Navigation: Setup > Schema Builder.

- Cleared the canvas of all default objects.
- Selected the User, Product, and Prescription objects.
- Used the Auto-Layout feature to generate a clear diagram, confirming that all relationships were correctly established with the Prescription object at the center.

Schema Builder

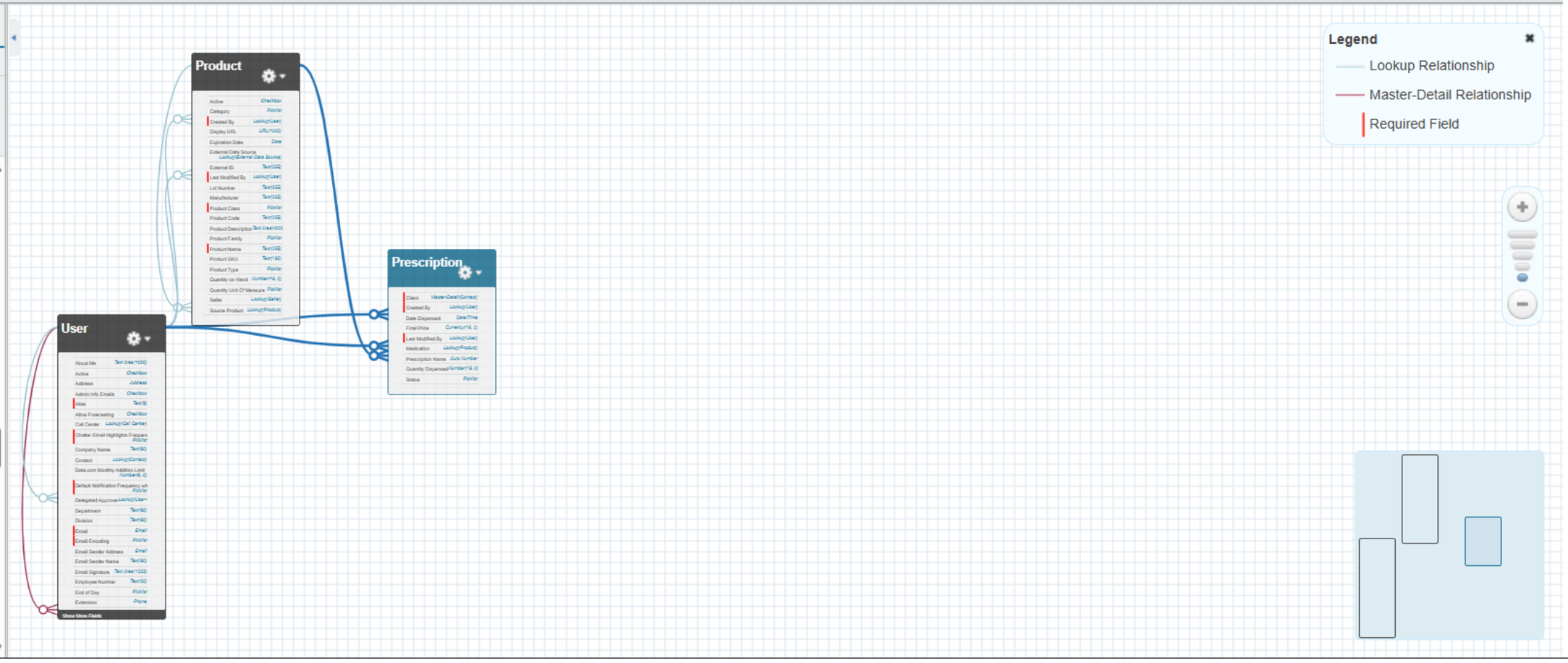
Help for this Page

Close | Auto-Layout | View Options

Elements | Objects

Select objects to display on the builder.

Select from All Objects

Quick Find...

- Opportunity Product
- Orchestration Run
- Orchestration Run Log
- Orchestration Stage Run
- Orchestration Step Run
- Orchestration Work Item
- Order
- Order Product
- Party Consent
- Payment
- Payment Authorization
- Payment Authorization Adjustment
- Payment Gateway
- Payment Group
- Payment Line Invoice
- Payment Method
- [x] Prescription
- Price Book
- Price Book Entry