

Phase 6: User Interface Development

Creating a professional and custom user experience for the Pharmacy Inventory System, combining declarative tools with custom code development.

Two-Pronged Development Approach

Declarative UI

Clicks, Not Code

Building core application interfaces using Salesforce's built-in tools and Lightning App Builder for rapid development.

Programmatic UI

Custom Code with LWC

Developing Lightning Web Components to add advanced functionality beyond standard declarative capabilities.

Building the Pharmacy Console App

Navigate to Setup

Access **Setup > App Manager** to begin creating the new Lightning application.

Create Lightning App

Build new app named "**MediNest**" with standard navigation style for horizontal tab display.

Configure Navigation

Add essential tabs: Home, Prescriptions, Products, and Patients (Contacts) for comprehensive pharmacy management.

Assign Profiles

Grant access to Pharmacist and System Administrator profiles for proper security and user management.

Lightning App Builder

App Settings

Pages

MediNest

Help

App Settings

App Details & Branding

App Options

Utility Items (Desktop Only)

Navigation Items

User Profiles

App Details

App Branding

App Launcher Preview

* App Name ⓘ

MediNest

* Developer Name ⓘ

MediNest

Description ⓘ

Enter a description...

Image ⓘ

MediNest PHARMA

Clear

Primary Color Hex Value ⓘ

#0070D2

Org Theme Options

☒ Use the app's image and color instead of the org's custom theme

App Launcher Preview

MediNest PHARMA MediNest

Cancel Save

Lightning App Builder

App Settings

Pages

MediNest

Help

App Settings

App Details & Branding

App Options

Utility Items (Desktop Only)

Navigation Items

User Profiles

Navigation Items

Available Items

Selected Items

Choose the items to include in the app, and arrange the order in which they appear. Users can personalize the navigation to add or move items, but users can't remove or rename the items that you add. Some navigation items are available only for phone or only for desktop. These items are dropped from the navigation bar when the app is viewed in a format that the item doesn't support.

Type to filter list...

Accounts

Activation Targets

Activations

All Sites

Alternative Payment Methods

Analytics

App Launcher

Appointment Categories

Home

Prescriptions

Products

Lightning App Builder

App Settings

Pages

MediNest

Help

Settings

App Details & Branding

App Options

Utility Items (Desktop Only)

Navigation Items

User Profiles

User Profiles

Available Profiles

Selected Profiles

Choose the user profiles that can access this app.

Type to filter list...

Analytics Cloud Integration User

Analytics Cloud Security User

Anypoint Integration

Authenticated Website

Authenticated Website

B2B Reordering Portal Buyer Profile

Contract Manager

Custom: Marketing Profile

Custom: Sales Profile

System Administrator

Pharmacy Owner

Pharmacist

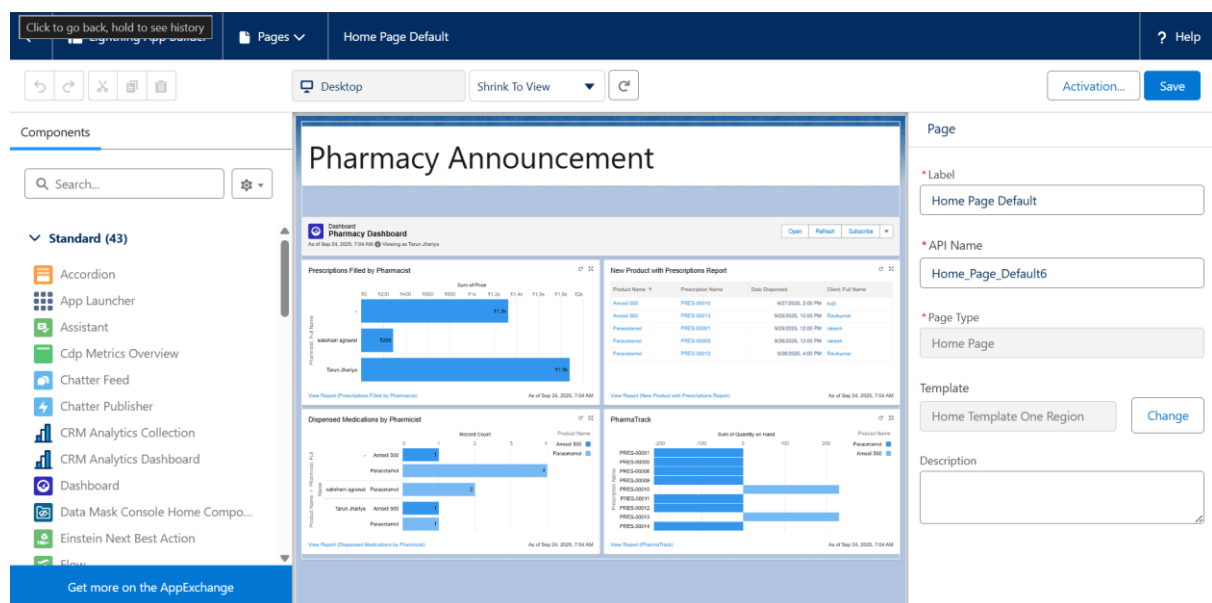
Designing the Custom Dashboard

Dashboard Layout Strategy

Using Lightning App Builder's **"Header and Three Regions"** template to create a balanced and functional pharmacy dashboard.

- **Header Region:** Rich Text component displaying "Pharmacy Dashboard" title
- **Middle Column:** Today's Prescriptions list view for immediate visibility
- **Side Columns:** Low-stock alerts and daily tasks for operational efficiency

The dashboard provides pharmacists with instant access to critical daily information, streamlining workflow and improving patient service.



Today's Prescriptions List View

Custom List View Creation

Built specialized **"Today's Prescriptions"** view on the Prescription object with intelligent filtering.

Smart Filtering Logic

Configured automatic filter: **Prescription Date = TODAY** to show only current day's prescriptions for focused workflow management.

Dashboard Integration

Seamlessly integrated the list view component into the middle column of the dashboard for immediate visibility and access.

Transitioning to Custom Development

Beyond Declarative Limitations

While declarative tools provide excellent foundation capabilities, advanced pharmacy operations require custom functionality that goes beyond standard components.

Declarative Foundation

Standard components and layouts

Custom Enhancement

Lightning Web Components for advanced features

Seamless Integration

Combined solution for optimal user experience

Building the Apex Controller

ProductSearchController Development

Created a robust Apex class to power the medication search functionality with enterprise-grade performance.

Key Features:

- Static @AuraEnabled method for Lightning compatibility
- Cacheable=true for optimal performance
- SOQL query optimization for name and product code searches

```
@AuraEnabled(cacheable=true)

public static List<Product__c> findProducts(String searchKey) {

    // SOQL query implementation

    return [SELECT Id, Name, Product_Code__c

    FROM Product__c

    WHERE Name LIKE :searchKey

    OR Product_Code__c LIKE :searchKey];

}
```

Lightning Web Component Architecture

HTML Structure

medicationSearch.html

- Lightning-card container
- Lightning-input search box
- Dynamic results table

JavaScript Logic

medicationSearch.js

- @wire service integration
- Reactive search key handling
- Apex method imports

Configuration

medicationSearch.js-meta.xml

- Component exposure settings
- Home Page availability
- App Page compatibility

Component Integration & Deployment

Development Phase

Built and tested the **medicationSearch** component in Visual Studio Code with full functionality.

Deployment

Successfully deployed the complete LWC bundle to the Salesforce org using modern development tools.

Dashboard Integration

Added the custom component to the Pharmacy Dashboard using Lightning App Builder's drag-and-drop interface.

Activation

Saved and activated the enhanced dashboard, making the search functionality immediately available to pharmacy staff.

Phase 6 Success: Complete UI Solution

Comprehensive User Experience Achievement

Phase 6 successfully delivered a **professional, custom user experience** that combines the best of both declarative and programmatic development approaches.

Pharmacy Inventory System

Complete navigation solution with essential tabs

Custom Dashboard

Three-region layout with today's prescriptions and alerts

Lightning Web Component

Advanced medication search with real-time results

The Pharmacy Inventory System now provides pharmacists with an intuitive, efficient interface that streamlines daily operations while maintaining the flexibility for future enhancements.