

Phase 6: User Interface Development

360-Degree Restaurant Lifecycle Management Platform

1. Introduction

After completing the core Apex logic and automation in earlier phases, the sixth phase of the project was dedicated to **User Interface (UI) development** using **Lightning Web Components (LWC)**. While Apex ensures that the backend processes run efficiently, the user interface is what determines how restaurant staff, managers, and administrators interact with the system on a daily basis.

The goal of this phase was to design and build **dynamic, user-friendly, and responsive Lightning Web Components** that make it easy for different stakeholders (customers, waiters, chefs, managers, and administrators) to navigate the system, place and manage orders, track inventory, and analyze sales performance.

In total, **eight Lightning Web Components** were developed, each serving a specific purpose within the restaurant lifecycle.

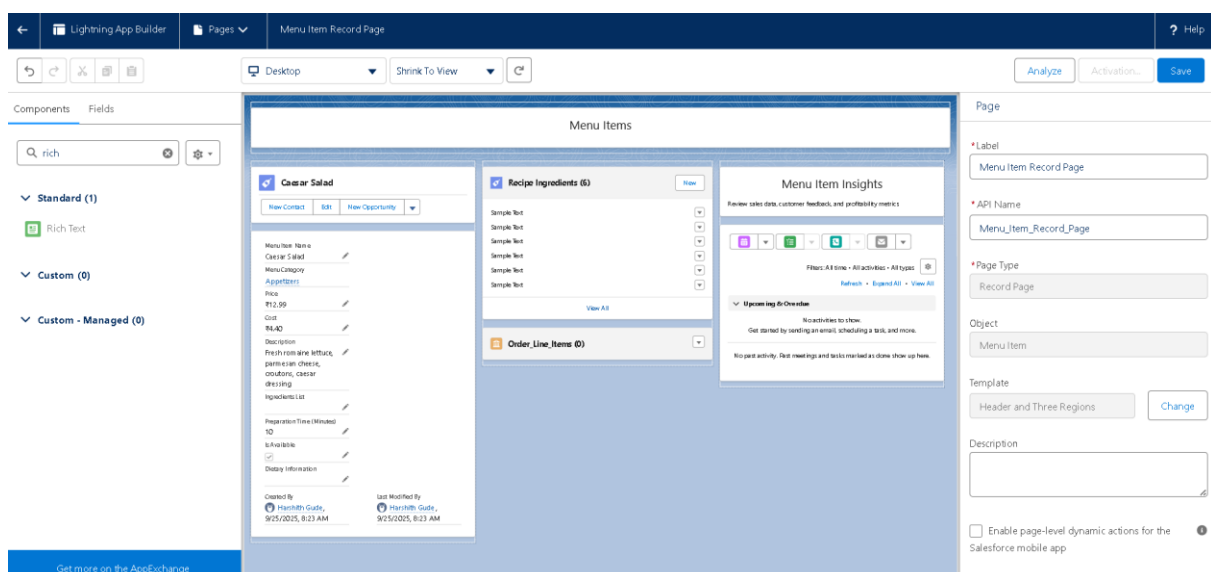
2. menuDisplay Component

The **menuDisplay** component provides a visually appealing way to browse through the restaurant's menu. Users can view all available dishes, apply filters, and perform searches.

Features:

- Displays all menu items with images, names, descriptions, and prices.
- Includes a **search bar** that allows filtering items by name or category.
- Provides filtering options such as vegetarian, non-vegetarian, beverages, and desserts.
- Integrates seamlessly with the backend so that when a new menu item is added in Salesforce, it appears instantly in the UI.

Use Case: Customers or waiters can quickly browse and suggest items to add to an order.



3. orderEntry Component

The **orderEntry** component acts as a guided, multi-step order creation tool. Rather than dumping all fields on one screen, the process is broken down into stages.

Features:

- Step 1: Customer details and table number.
- Step 2: Selection of menu items (integrates with `menuItemSelector`).
- Step 3: Quantity, special instructions, and review.
- Step 4: Final order confirmation.
- Dynamically calculates subtotals, taxes, and total amount as items are added.

Use Case: Waiters can efficiently take customer orders in a structured way without missing details.

4. stockIndicator Component

The **stockIndicator** component provides real-time visibility into inventory levels. It visually shows the stock status of key ingredients using gauges, bars, and alerts.

Features:

- Displays stock levels of all ingredients.
- Highlights **low-stock items** with a warning color.
- Shows **out-of-stock items** in red with a system-generated alert.
- Can trigger automatic notifications to managers when levels drop below the threshold.

Use Case: Kitchen staff and managers use this dashboard to check ingredient availability before confirming large or special orders.

5. kitchenDashboard Component

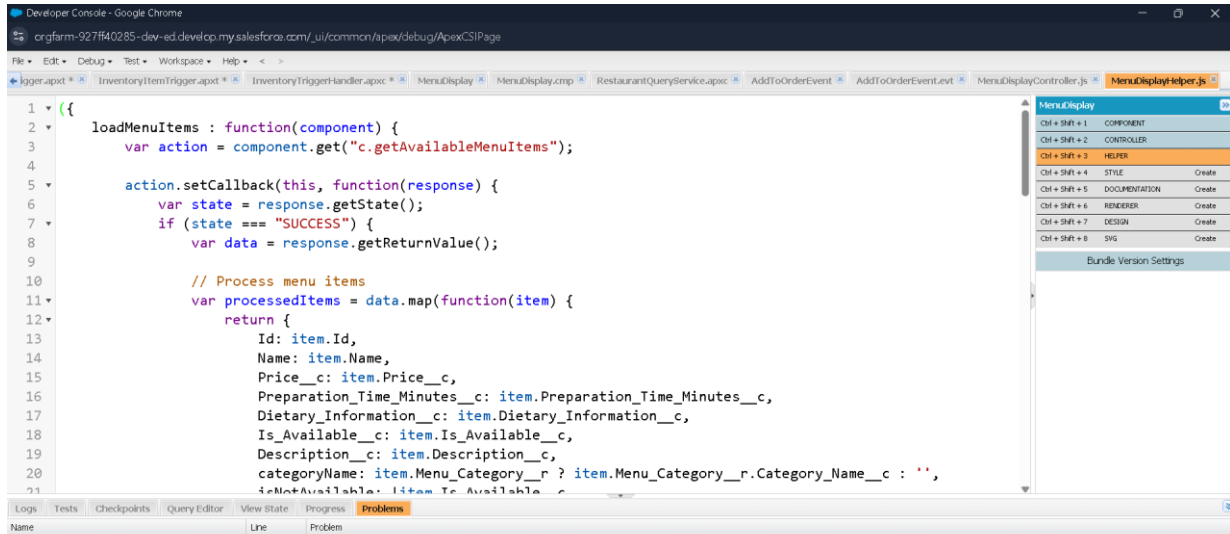
The **kitchenDashboard** is designed specifically for chefs and kitchen staff to track real-time orders.

Features:

- Displays a live feed of all confirmed orders.
- Orders are categorized into statuses such as “In Preparation,” “Ready to Serve,” and “Completed.”
- Each order card displays table number, items requested, and any special cooking instructions.
- The dashboard refreshes in real-time, ensuring no delays between order confirmation and kitchen preparation.

Use Case: The kitchen team uses this as their primary workflow screen to ensure timely food preparation.

Open Lightning Resources	
Name	Format
▲ c:\MenuDisplay	
COMPONENT	XML
CONTROLLER	JS
HELPER	JS
▲ c:\AddToOrderEvent	
EVENT	XML
▲ c:\OrderEntryComponent	
COMPONENT	XML
CONTROLLER	JS
HELPER	JS
STYLE	CSS
▲ c:\InventoryStockIndicator	
COMPONENT	XML
CONTROLLER	JS
HELPER	JS
STYLE	CSS
▲ c:\KitchenDashboardController	
COMPONENT	XML
CONTROLLER	JS
HELPER	JS
STYLE	CSS
Open Selected	Filter



menuItemSelector and menuItemList Components

The **menuItemSelector** and **menuItemList** components were designed as **parent-child communicating LWCs**.

menuItemList displays the available menu items. When a user selects an item, it communicates the selection back to the **menuItemSelector** (the parent component), which adds it to the current order.

Features:

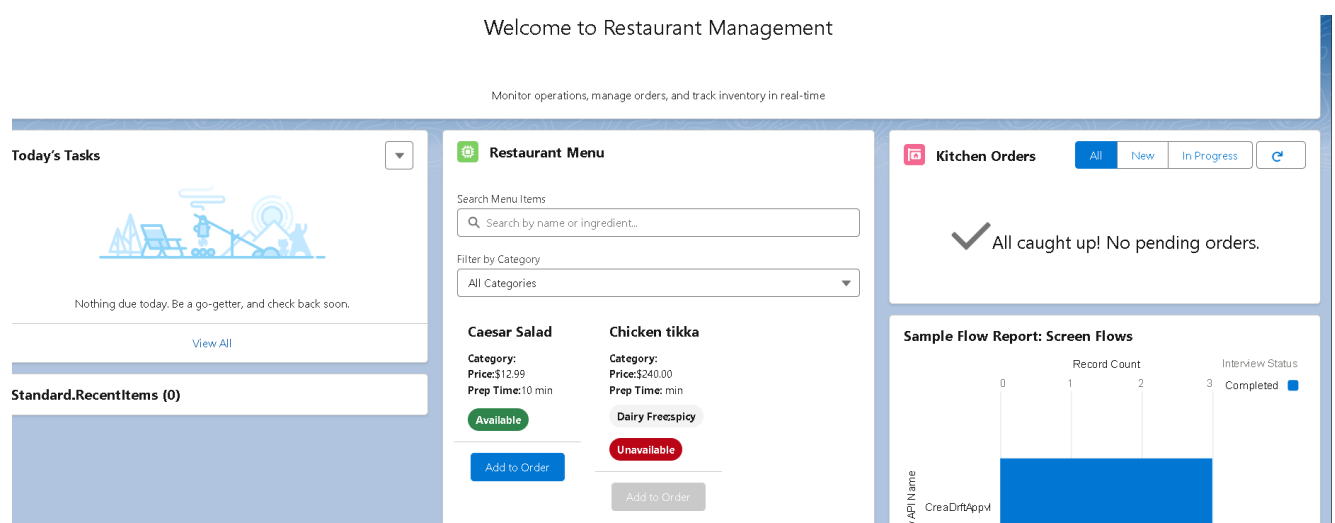
- Demonstrates event-driven programming between LWCs.
- Ensures reusability of the components in different parts of the application.
- Provides a flexible, scalable way to handle dynamic data passing.

Use Case: Integrated into the orderEntry process, this allows staff to build an order interactively.

Design Considerations

While developing these eight LWCs, the focus was on:

- **User-friendliness:** Components are designed for restaurant staff who may not be technically trained.
- **Scalability:** Components can handle hundreds of menu items, orders, and inventory records without performance issues.
- **Consistency:** Standard layouts, colors, and navigation patterns were used across components for familiarity.
- **Real-time updates:** Order status and inventory levels update instantly without requiring manual refresh.





SETUP

Lightning App Builder

The Lightning App Builder provides an easy to use graphical interface for creating custom Lightning pages for Salesforce Lightning Experience and mobile app. Lightning pages are built using Lightning components—compact, configurable, and reusable elements that you can drag and drop into regions of the page in the Lightning App Builder.

View: All [Create New View](#)

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z
Other All

Lightning Pages

New

Action	Label ↑	Name	Namespace Prefix	De
Edit Clone Del	Inventory Item Record Page	Inventory_Item_Record_Page		
Edit Clone Del	Menu Item Record Page	Menu_Item_Record_Page		
Edit Clone Del	Restaurant Order Record Page	Restaurant_Order_Record_Page		

Restaurant Order

Order

ORD-00003

[New Contact](#) [Edit](#) [New Opportunity](#)

Order Line Items (0)

[New](#)

Order Name

ORD-00003

Customer

[HARSHITH GUDE](#)

Order Date

10/2/2025, 12:00 PM

Order Type

Dine In

Order Status

In Preparation

Table Number

16

Server

Owner

Harshith Gude

✓

✓

In Preparation

Ready

Served

Completed

Cancelled

Order Status: In Preparation

[Mark Order Status as Complete](#)

New Event

New Task

Log a Call

Email

Filters: All time • All activities • All types

[Refresh](#) • [Expand All](#) • [View All](#)

Upcoming & Overdue

No activities to show.
Get started by sending an email, scheduling a task, and more.

No past activity. Past meetings and tasks marked as done show up here.

Add kitchen preparation notes

Rich Text

Recent Items

