

SMART HEALTHCARE PORTAL

Phase 6: User Interface (UI) Development

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Overview

Phase 6 focuses on building the interactive User Interface of the Smart Healthcare Portal. This phase connects backend logic (Apex classes) with Lightning Web Components (LWCs) so that Patients, Providers, and Home Page users can interact with the portal efficiently.

Key highlights of this phase: - Display upcoming appointments for Providers. - Allow Patients to book new appointments from their profile page. - Provide a global appointment view on the Home Page.

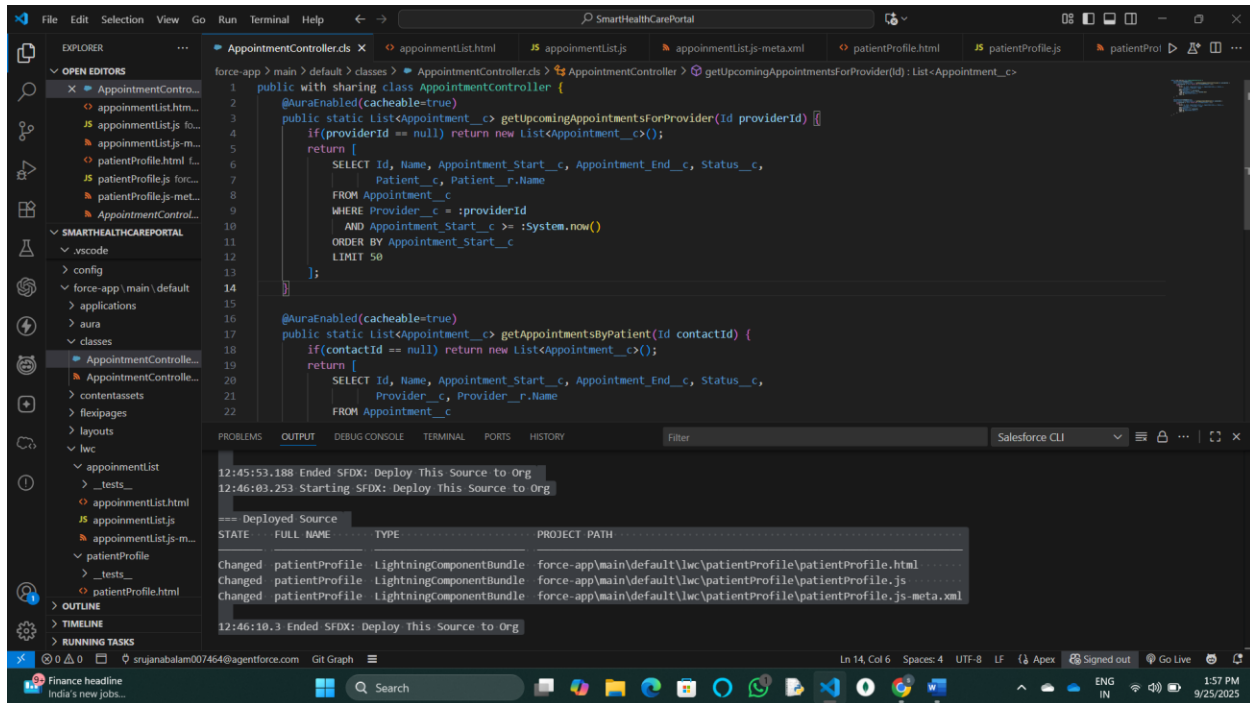
Step 1: Apex Controller – AppointmentController.cls

Purpose & Use: The Apex controller acts as the backend logic for fetching appointment data. It provides methods that LWCs call to retrieve upcoming appointments either for a provider or for a patient.

Key Functionalities: 1. `getUpcomingAppointmentsForProvider(providerId)` – Returns upcoming appointments for a provider in the future, limited to 50. 2. `getAppointmentsByPatient(contactId)` – Returns all appointments for a patient, sorted by appointment start time.

How it's used: - The `appointmentList` component uses these methods to dynamically display appointment lists for the logged-in Provider or Patient. - When a user opens their record page, the Apex controller fetches real-time data from Salesforce.

Deployment: - Deployed from VS Code using SFDX: Deploy Source to Org.

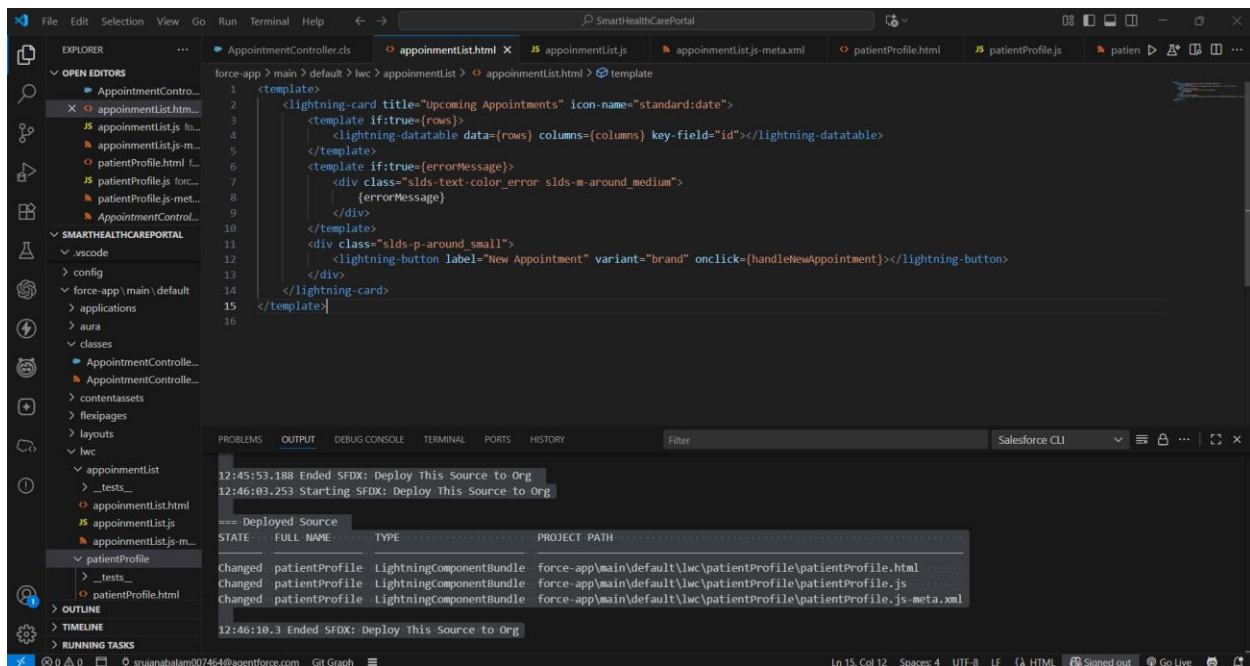


Step 2: LWC – appointmentList

Purpose & Use: This component shows a list of appointments in a table format and allows users to create new appointments directly from the page. It is used in Provider record pages, Patient record pages, and the Home Page.

Features: - Displays columns like Patient, Provider, Start Time, End Time, and Status. - Shows error messages if data cannot be fetched. - New Appointment button opens a modal with prefilled patient or provider.

How it works: - Calls the Apex controller based on record type (Provider or Contact). - Formats returned data for the datatable. - Uses NavigationMixin to navigate to new appointment page with default values.

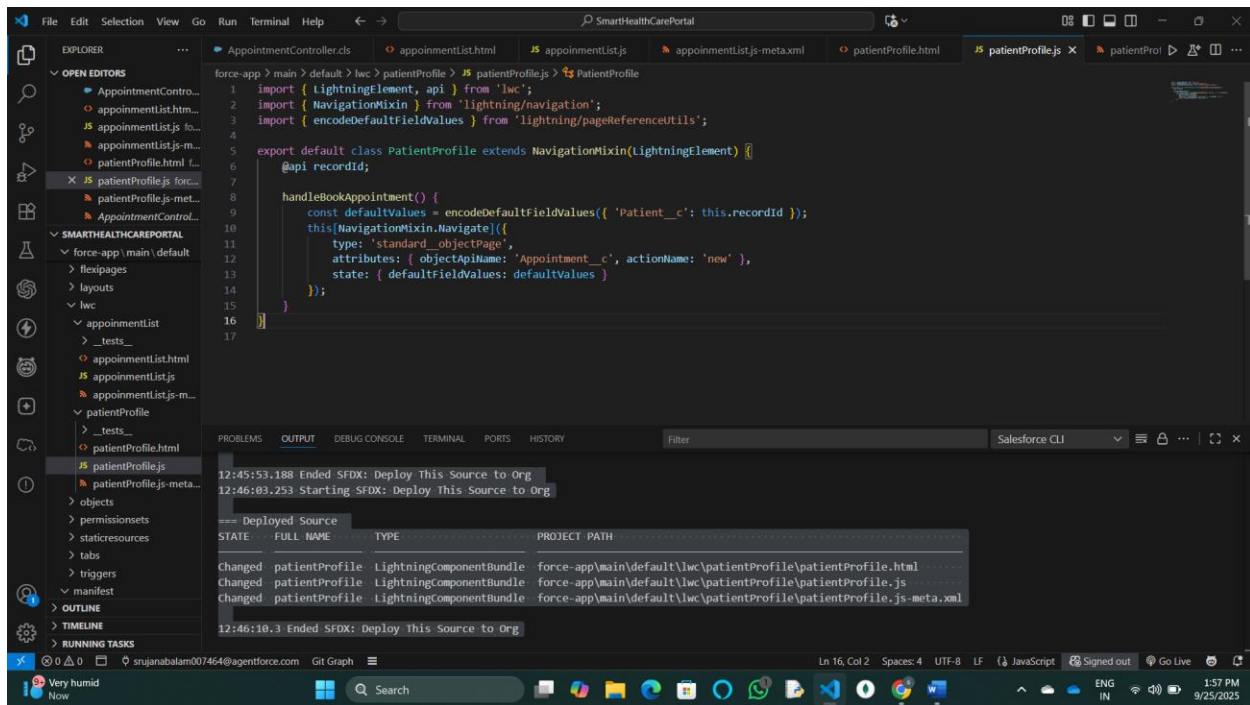


Step 3: LWC – patientProfile

Purpose & Use: The patientProfile component is a quick action panel on the Contact page. It allows Patients to book a new appointment without navigating to a separate page.

Features: - Displays a Book Appointment button. - Uses NavigationMixin and encodeDefaultFieldValues to prefill the Patient field in the new appointment modal.

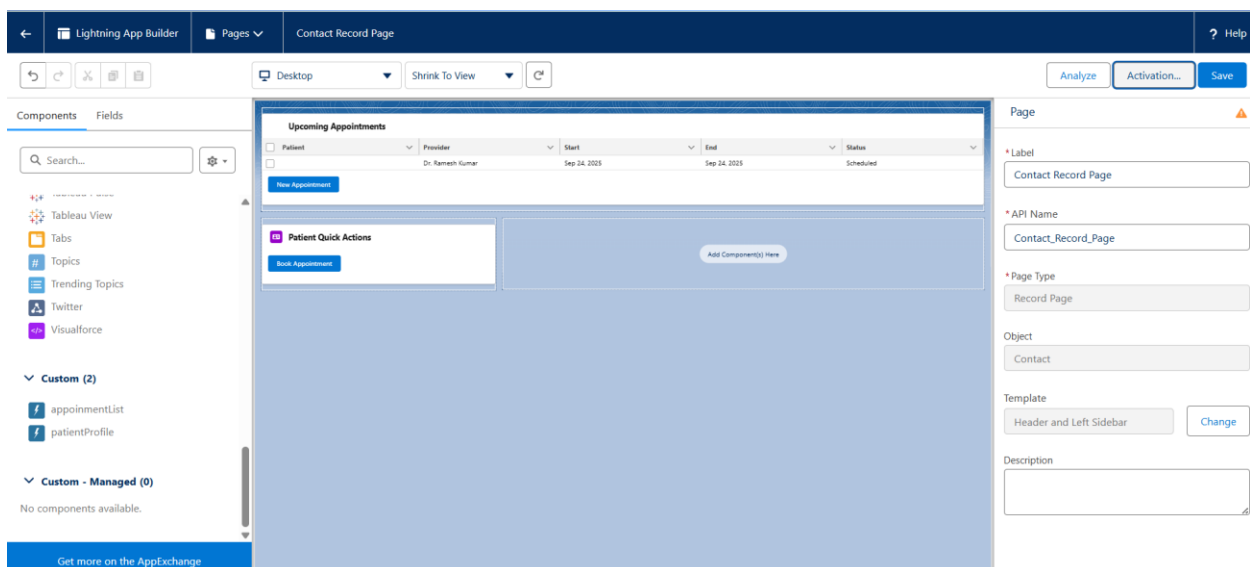
How it works: - Appears in sidebar on patient record page. - Clicking the button opens the Appointment creation page with Patient field prefilled.

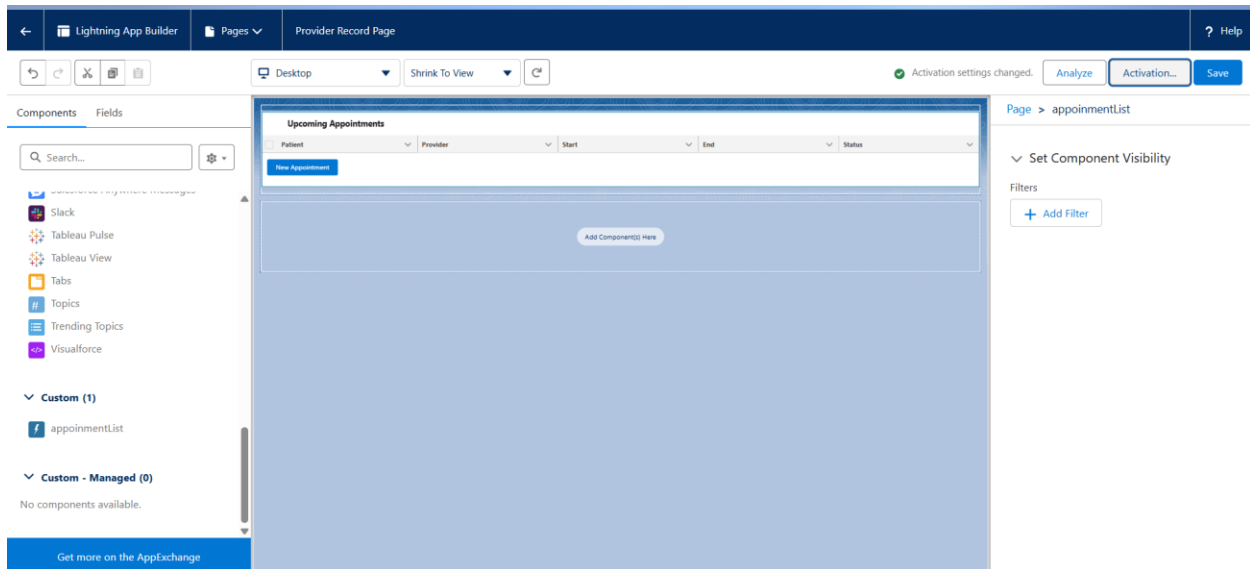


Step 4: Adding Components to Pages

Purpose & Use: The LWCs are added to Salesforce pages using the Lightning App Builder, so users can see and interact with them directly on the record pages or Home Page.

Steps & Usage: 1. Contact Page – Sidebar: patientProfile, Main section: appointmentList. 2. Provider Page – Main section: appointmentList. 3. Home Page – Displays appointmentList globally.

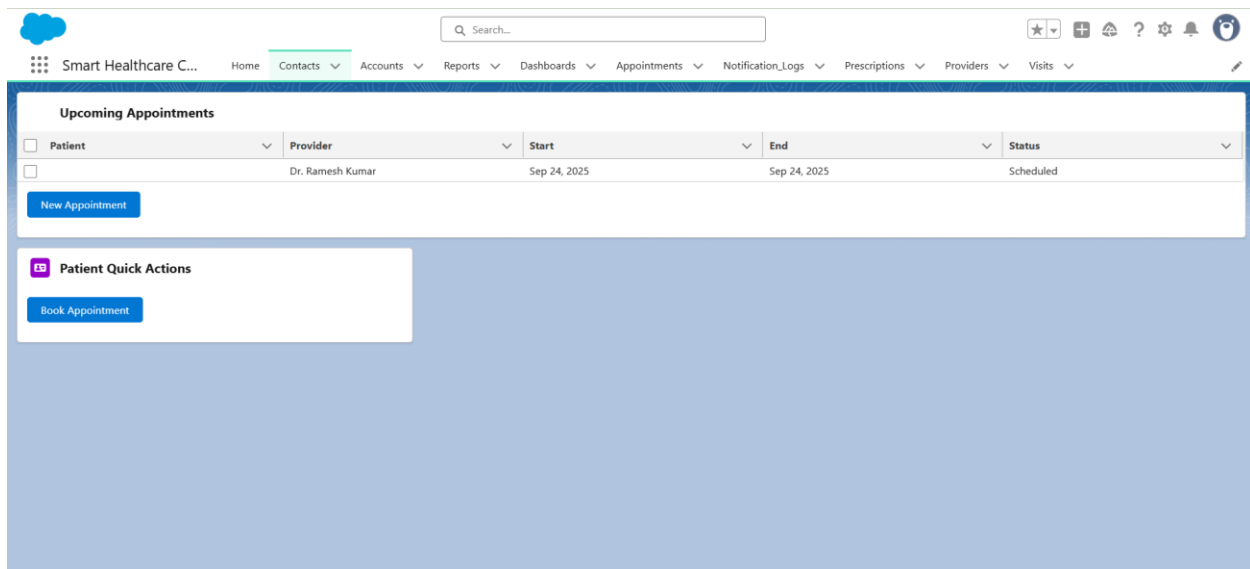




Step 5: Testing the UI

Purpose & Use: Ensures all components are working as intended and users can interact with appointments efficiently.

Testing Steps: 1. Open a Patient record → Book Appointment button appears → opens prefilled new appointment page. 2. Open a Provider record → sees upcoming appointments → can create new appointment using button. 3. Open Home Page → global appointment list is visible. 4. Check modal opens with correct prefilled fields.





Upcoming Appointments

<input type="checkbox"/>	Patient ▾	Provider ▾	Start ▾	End ▾	Status ▾
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New Appointment