MediCare Connect — Phase 6: User Interface Development

Introduction: This phase focuses on building an intuitive Lightning experience for different hospital roles (Doctor, Receptionist, Admin). I used Lightning App Builder, Record Pages, Tabs, Home Page Layouts, Utility Bar, a custom LWC and Apex integration to deliver a seamless UI.

1. Lightning App Builder

To provide different users with customized pages, I used Lightning App Builder to design **Appointment – Doctor View** and **Appointment – Receptionist View** record pages. Each page shows only the components relevant to that role.

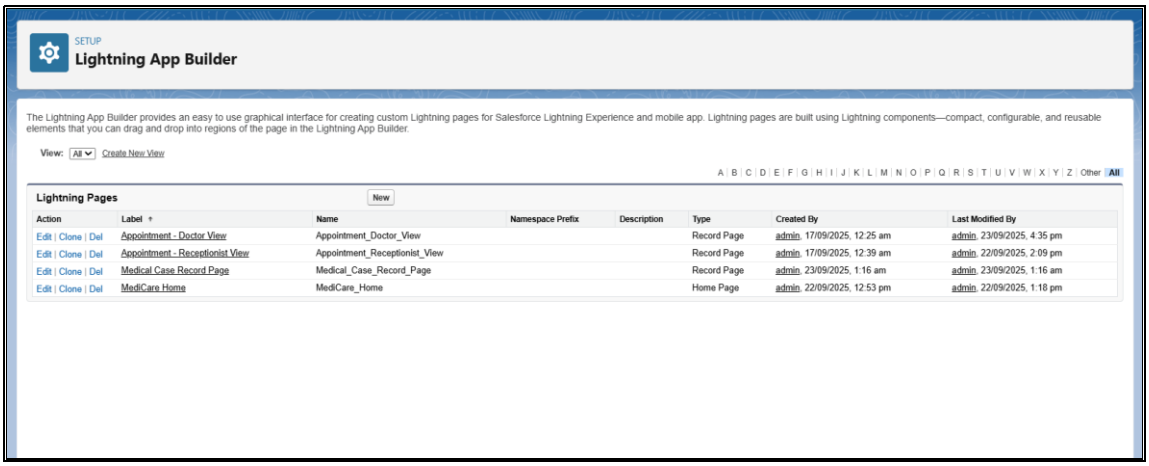

Fig-1 Lightning App Builder - Lightning Pages

2. Record Pages (Doctor & Receptionist Views)

Doctors need quick access to upcoming appointments and related Medical Cases. Receptionists need fast appointment entry. I created two record pages with appropriate components:

- **Appointment – Doctor View:** shows patient summary, related Medical Cases, and the upcoming appointments LWC.
- **Appointment – Receptionist View:** optimized for quick data entry and follow-up creation.
- Activated per profile/record type so each user sees the correct page.

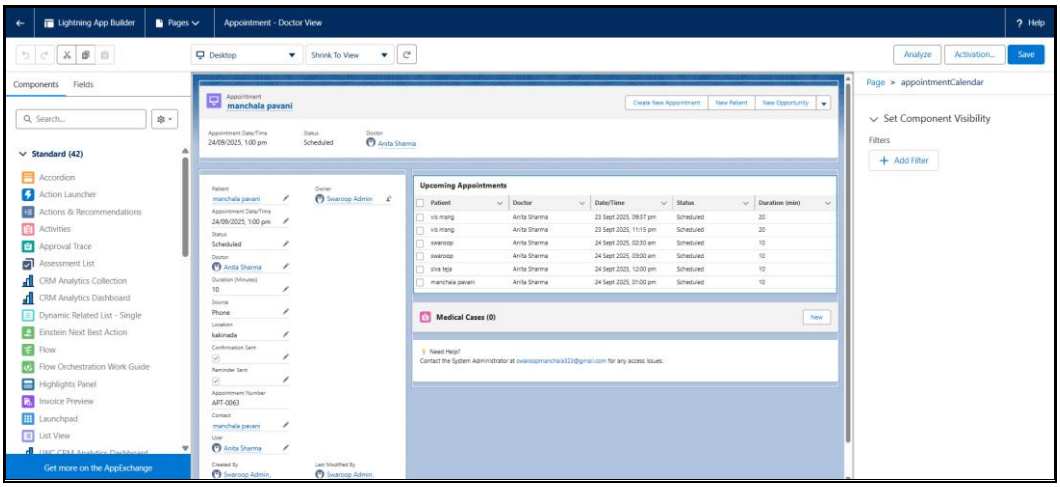

Fig-2.1 Appointment – Doctor View (Record Page)

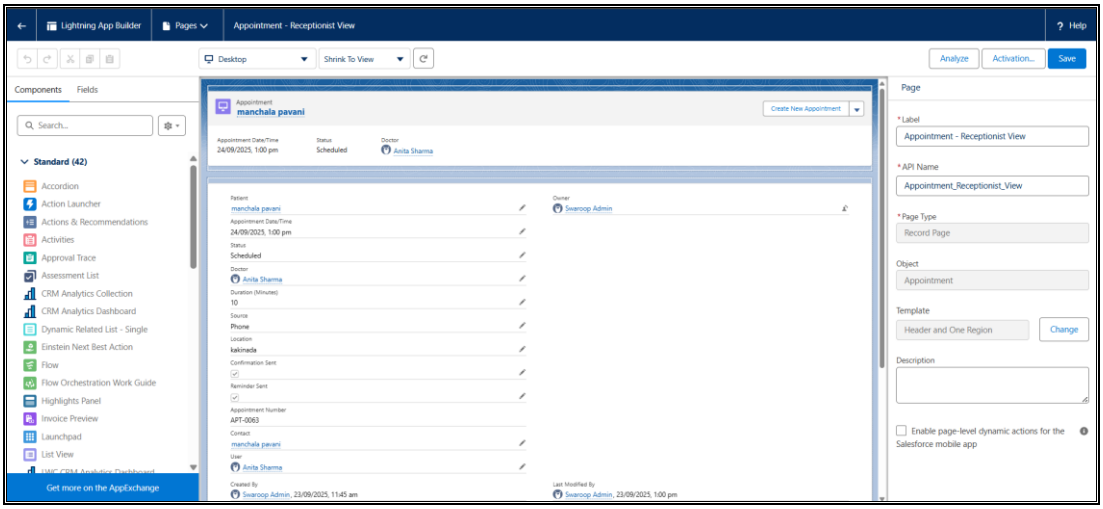

Fig-2.2 Appointment – Receptionist View (Record Page)

3. Tabs

I exposed all major objects (Patients, Appointments, Medical Cases) as tabs in the MediCare Lightning app so staff can navigate quickly.

Fig-3 Tabs in App

4. Home Page Layouts

I built a custom **MediCare Home Page** that displays a dashboard component (Upcoming Appointments, Recent Appointments & Medical cases, Upcoming Appointments Report Chart) for a real-time view.

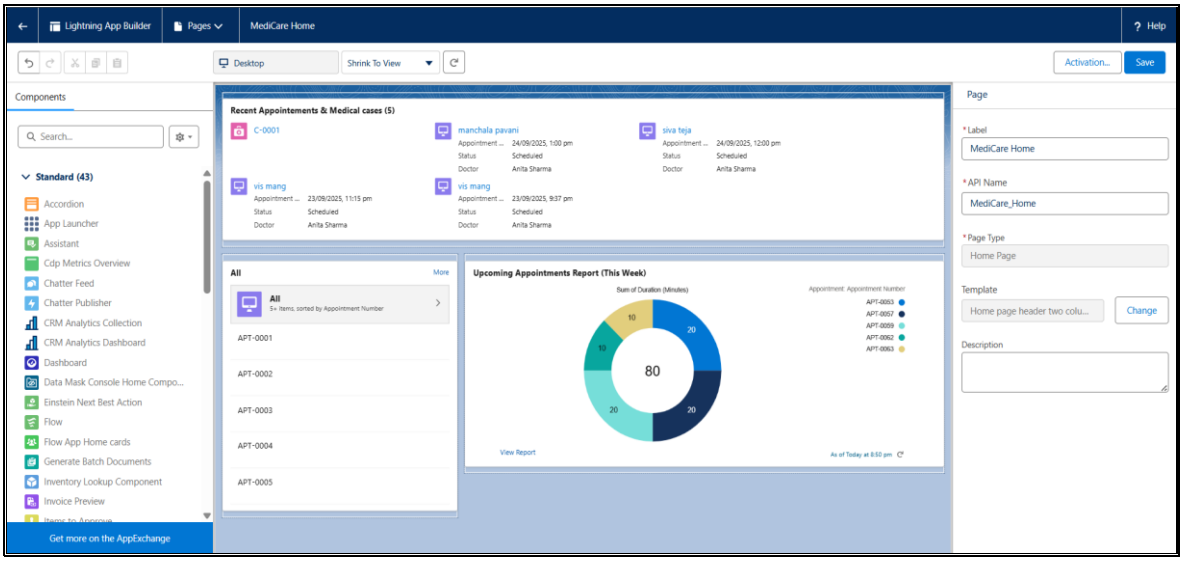

Fig-4 MediCare Home Page Layout

5. Utility Bar

I added Reports/Dashboards and Quick Actions to the Utility Bar to give staff one-click access from anywhere in the app.

Fig-5.1 Utility Bar

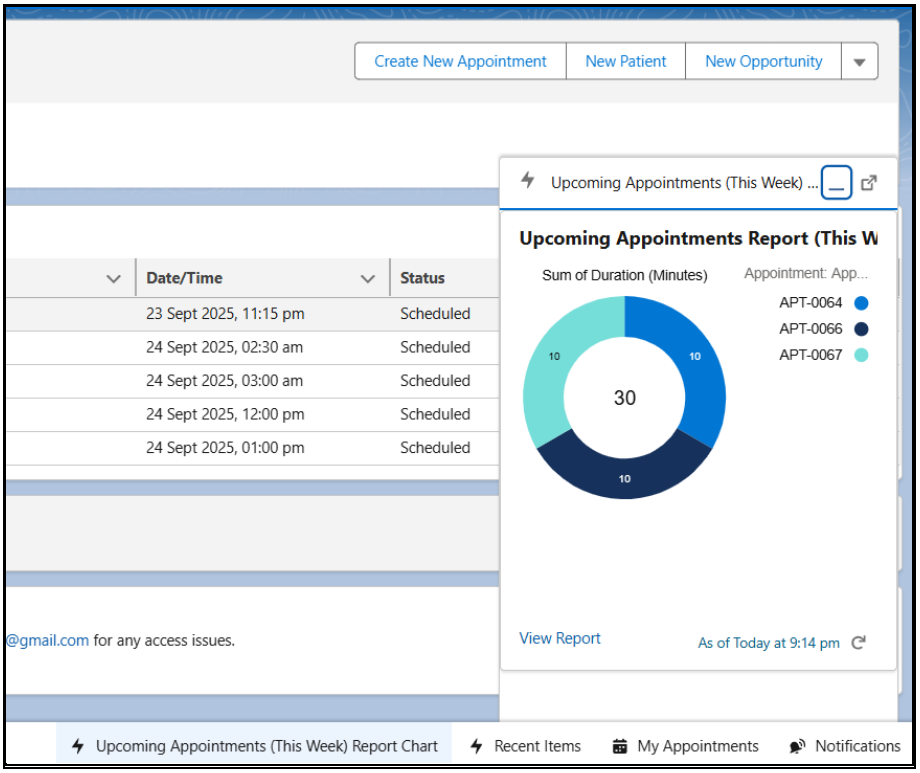

Fig-5.2 Testing Utility Bar

6. Lightning Web Component (LWC) – "Upcoming Appointments"

- A custom LWC appointmentCalendar built and deployed.
- It queries all upcoming appointments and displays Patient, Doctor, Date/Time, Status, Duration in a datatable.
- Dropped into the Appointment – Doctor View page so the doctor can instantly see upcoming appointments.

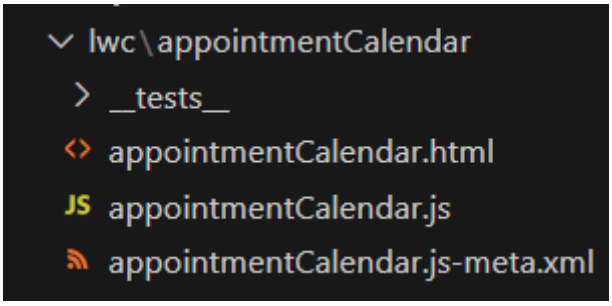

Fig-6.1 LWC Files Structure

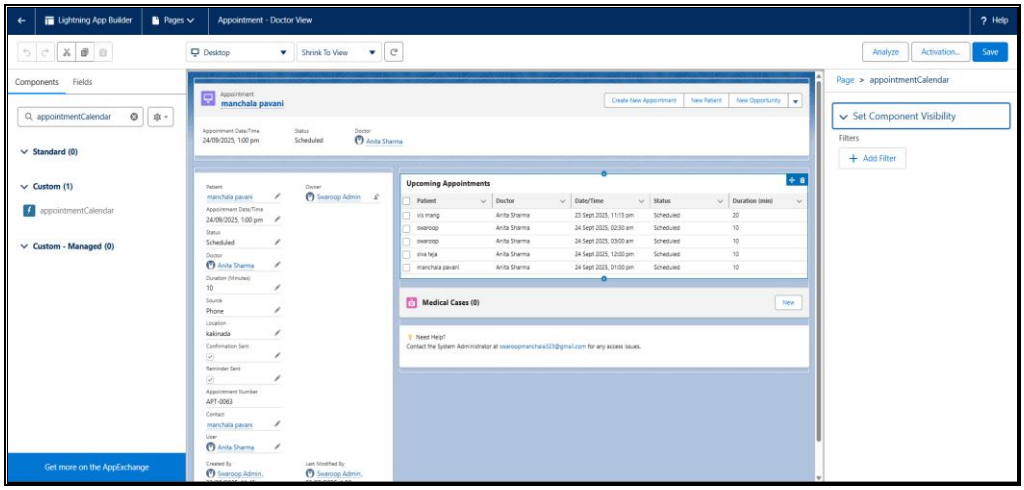

Fig-6.2 LWC_AppBuilder

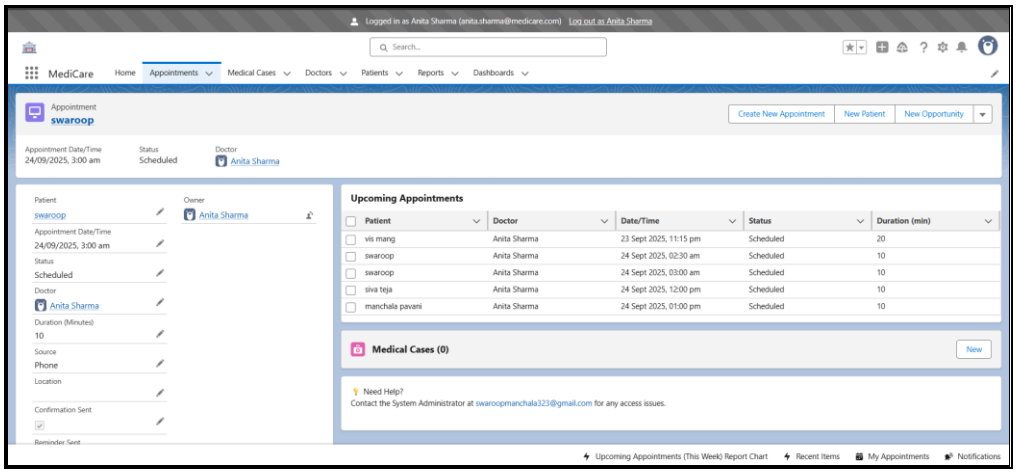

Fig-6.3 LWC_DoctorView

7. Apex with LWC

The LWC calls the Apex class AppointmentController using a wire adapter to fetch upcoming appointments server-side.
This ensures the doctor always sees real-time appointment data without page refresh**.**

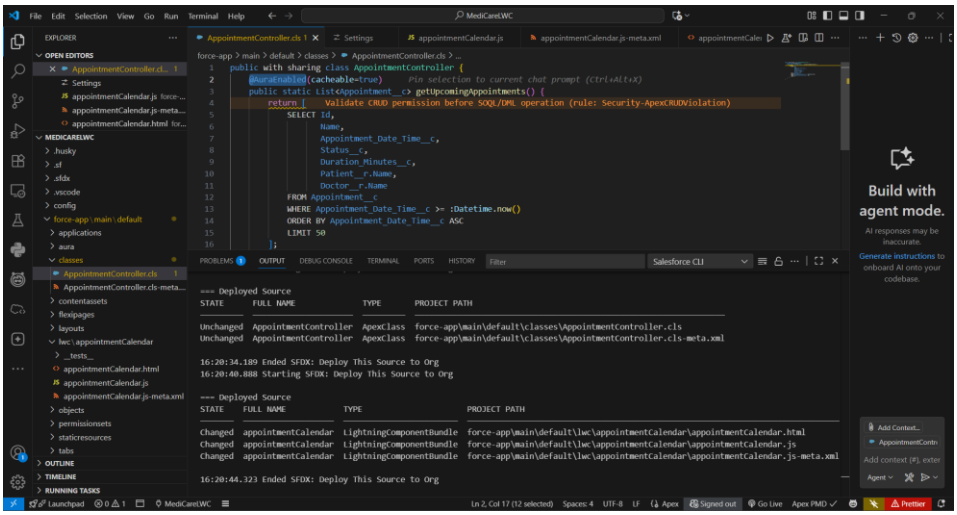

Fig-7 Apex With LWC

8. Wire Adapters

I used a **@wire** adapter in the LWC to call the Apex method automatically and refresh when the data changes.
This keeps the appointments list up-to-date without manual refresh.

Fig-8 @wire adapter in LWC

9. Results / Observations

- **Doctors** now see a live list of **upcoming appointments** directly on their **Appointment** page.
- **Receptionists** can quickly create and manage appointments without leaving their view.
- The **MediCare Home** Page provides a real-time snapshot of the hospital's activities (appointments and cases).
- **Utility Bar** ensures quick access to **reports**, **dashboards** and **actions** from anywhere in the app.
- The **LWC** with **Apex integration** makes the **UI dynamic** and responsive, reducing page refreshes.