PHASE-6

Lightning Web Component

PatientAppointments

Purpose / Use Case:

The *PatientAppointments* LWC provides front-desk staff, care coordinators, and managers with a quick **view of a patient's upcoming appointments directly on the Patient (Contact) record page**.
This aligns with our Phase 2 use case (Appointment Scheduling + Patient Management) by:

- Displaying the patient's next 10 appointments.
- Showing key details like appointment date, status, doctor name, and clinic.
-
- Helping hospital staff quickly check if a patient already has appointments before scheduling new ones.

Implementation Details:

Apex Controller (AppointmentController) retrieves appointments using SOQL.

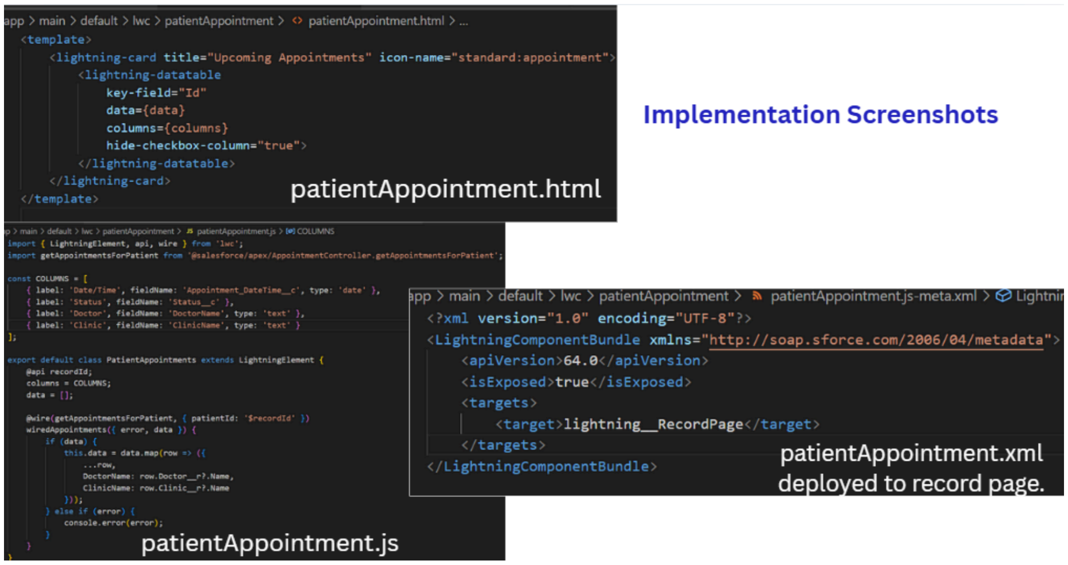
LWC (PatientAppointments) wires to the Apex method.

Built entirely with **Lightning Base Components** from the **Lightning Design System (SLDS) library**, including:

- lightning-card (for container UI)
- lightning-datatable (for tabular appointment display)

This approach ensures a **consistent Salesforce look and feel**, reduces custom styling needs, and accelerates development.

Placement: Added to the **Patient Record Page** in Lightning App Builder.



Implementation Screenshots

app > main > default > lwc > patientAppointment > patientAppointment.html > ...

```html
<template>
    <lightning-card title="Upcoming Appointments" icon-name="standard:appointment">
        <lightning-datatable
            key-field="Id"
            data={data}
            columns={columns}
            hide-checkbox-column="true">
        </lightning-datatable>
    </lightning-card>
</template>
```

patientAppointment.html

p > main > default > lwc > patientAppointment > patientAppointment.js > COLUMNS

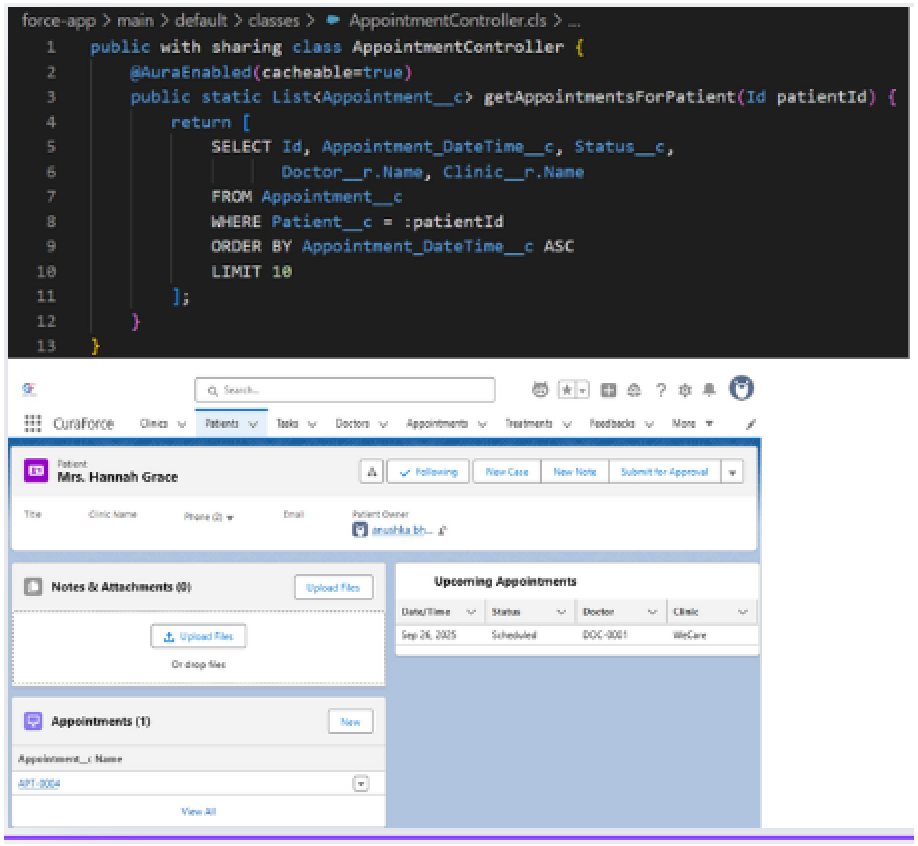
```javascript
import { LightningElement, api, wire } from 'lwc';
import getAppointmentsForPatient from '@salesforce/apex/AppointmentController.getAppointmentsForPatient';

const COLUMNS = [
    { label: 'Date/Time', fieldName: 'Appointment_DateTime__c', type: 'date' },
    { label: 'Status', fieldName: 'Status__c' },
    { label: 'Doctor', fieldName: 'DoctorName', type: 'text' },
    { label: 'Clinic', fieldName: 'ClinicName', type: 'text' }
];

export default class PatientAppointments extends LightningElement {
    @api recordId;
    columns = COLUMNS;
    data = [];

    @wire(getAppointmentsForPatient, { patientId: '$recordId' })
    wiredAppointments({ error, data }) {
        if (data) {
            this.data = data.map(row => ({
                ...row,
                DoctorName: row.Doctor__r?.Name,
                ClinicName: row.Clinic__r?.Name
            }));
        } else if (error) {
            console.error(error);
        }
    }
}
```

patientAppointment.js

app > main > default > lwc > patientAppointment > patientAppointment.js-meta.xml > Lightnir

```xml
<?xml version="1.0" encoding="UTF-8"?>
<LightningComponentBundle xmlns="http://soap.sforce.com/2006/04/metadata">
    <apiVersion>64.0</apiVersion>
    <isExposed>true</isExposed>
    <targets>
        <target>lightning__RecordPage</target>
    </targets>
</LightningComponentBundle>
```

patientAppointment.xml
deployed to record page.



force-app > main > default > classes > AppointmentController.cls > ...

```apex
public with sharing class AppointmentController {
    @AuraEnabled(cacheable=true)
    public static List<Appointment__c> getAppointmentsForPatient(Id patientId) {
        return [
            SELECT Id, Appointment_DateTime__c, Status__c,
                   Doctor__r.Name, Clinic__r.Name
            FROM Appointment__c
            WHERE Patient__c = :patientId
            ORDER BY Appointment_DateTime__c ASC
            LIMIT 10
        ];
    }
}
```

Patient
Mrs. Hannah Grace

Title | Clinic Name | Phone (2) | Email | Patient Owner: anushka bh...

Notes & Attachments (0)

Appointments (1)

Appointment__c Name
APT-0004

Upcoming Appointments

Date/Time	Status	Doctor	Clinic
Sep 26, 2025	Scheduled	DOC-0001	WeCare

DoctorAvailability

Purpose / Use Case:

The *DoctorAvailability* LWC provides staff and managers with a **real-time view of all doctors in the hospital, their specialties, and their availability status**.

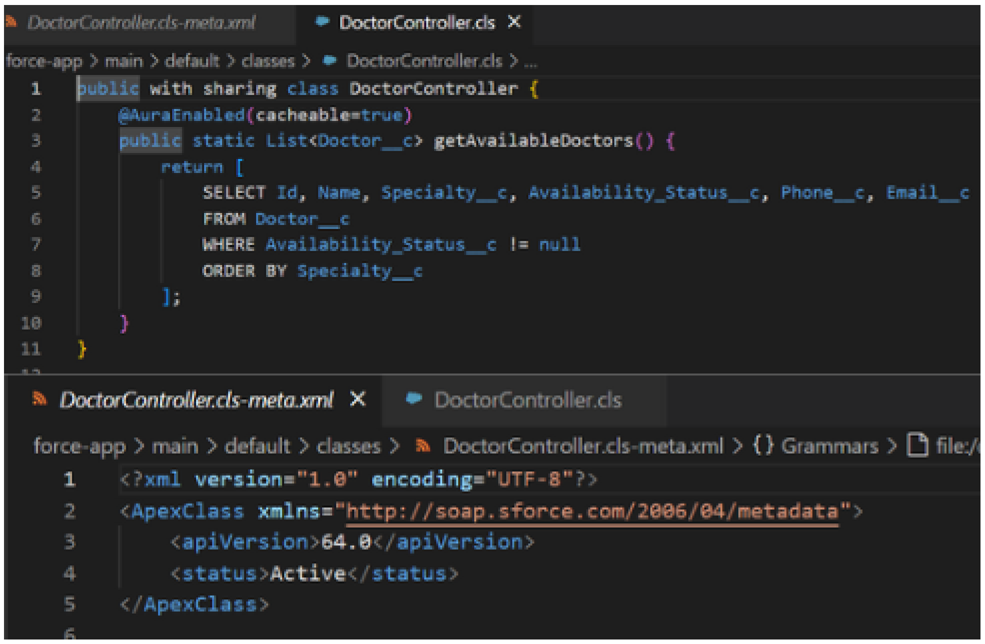
This aligns with our project's Appointment Scheduling & Resource Management requirement by:

- Allowing front desk staff to quickly see which doctors are *Available*, *On Leave*, or *Booked*.
- Helping managers oversee doctor distribution across departments.
- Reducing the time spent searching manually before creating appointments.

Implementation Details:

- Apex Controller (DoctorController) queries doctor records (Doctor__c) with fields: Name, Specialty, Availability_Status, Phone, and Email.
- LWC (DoctorAvailability) wires to this Apex method and displays the results dynamically.
- The UI leverages Lightning Base Components from the Salesforce Lightning Design System (SLDS), including:
- lightning-card for modular, mobile-friendly cards.
- A grid layout (slds-grid) to display doctors in a tiled, responsive format.
- Exposed on Home Page / App Page via Lightning App Builder for quick access.

Screenshots of Implementation

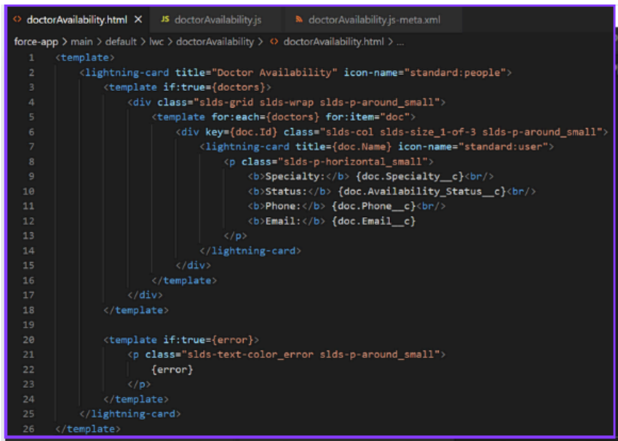


DoctorController.cls-meta.xml   DoctorController.cls
force-app > main > default > classes > DoctorController.cls > ...

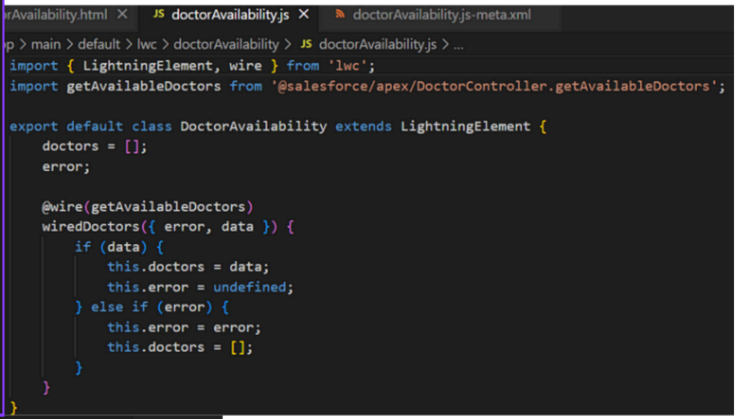
```
public with sharing class DoctorController {
    @AuraEnabled(cacheable=true)
    public static List<Doctor__c> getAvailableDoctors() {
        return [
            SELECT Id, Name, Specialty__c, Availability_Status__c, Phone__c, Email__c
            FROM Doctor__c
            WHERE Availability_Status__c != null
            ORDER BY Specialty__c
        ];
    }
}
```

DoctorController.cls-meta.xml   DoctorController.cls
force-app > main > default > classes > DoctorController.cls-meta.xml > {} Grammars > file:/

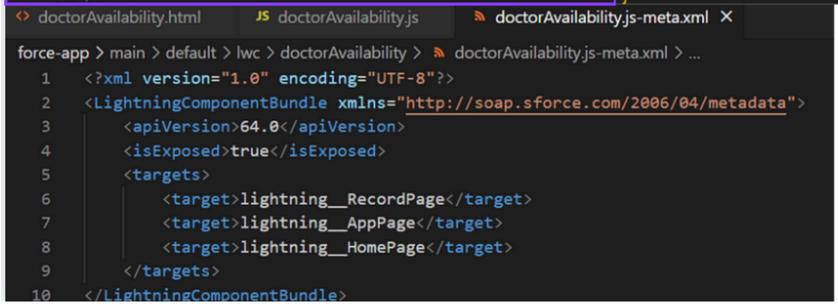
```
<?xml version="1.0" encoding="UTF-8"?>
<ApexClass xmlns="http://soap.sforce.com/2006/04/metadata">
    <apiVersion>64.0</apiVersion>
    <status>Active</status>
</ApexClass>
```


doctorAvailability.html
doctorAvailability.js
doctorAvailability.js-meta.xml
force-app > main > default > lwc > doctorAvailability > doctorAvailability.html > ...

```html
<template>
    <lightning-card title="Doctor Availability" icon-name="standard:people">
        <template if:true={doctors}>
            <div class="slds-grid slds-wrap slds-p-around_small">
                <template for:each={doctors} for:item="doc">
                    <div key={doc.Id} class="slds-col slds-size_1-of-3 slds-p-around_small">
                        <lightning-card title={doc.Name} icon-name="standard:user">
                            <p class="slds-p-horizontal_small">
                                <b>Specialty:</b> {doc.Specialty__c}<br/>
                                <b>Status:</b> {doc.Availability_Status__c}<br/>
                                <b>Phone:</b> {doc.Phone__c}<br/>
                                <b>Email:</b> {doc.Email__c}
                            </p>
                        </lightning-card>
                    </div>
                </template>
            </div>
        </template>

        <template if:true={error}>
            <p class="slds-text-color_error slds-p-around_small">
                {error}
            </p>
        </template>
    </lightning-card>
</template>
```


rAvailability.html
doctorAvailability.js
doctorAvailability.js-meta.xml
p > main > default > lwc > doctorAvailability > doctorAvailability.js > ...

```javascript
import { LightningElement, wire } from 'lwc';
import getAvailableDoctors from '@salesforce/apex/DoctorController.getAvailableDoctors';

export default class DoctorAvailability extends LightningElement {
    doctors = [];
    error;

    @wire(getAvailableDoctors)
    wiredDoctors({ error, data }) {
        if (data) {
            this.doctors = data;
            this.error = undefined;
        } else if (error) {
            this.error = error;
            this.doctors = [];
        }
    }
}
```

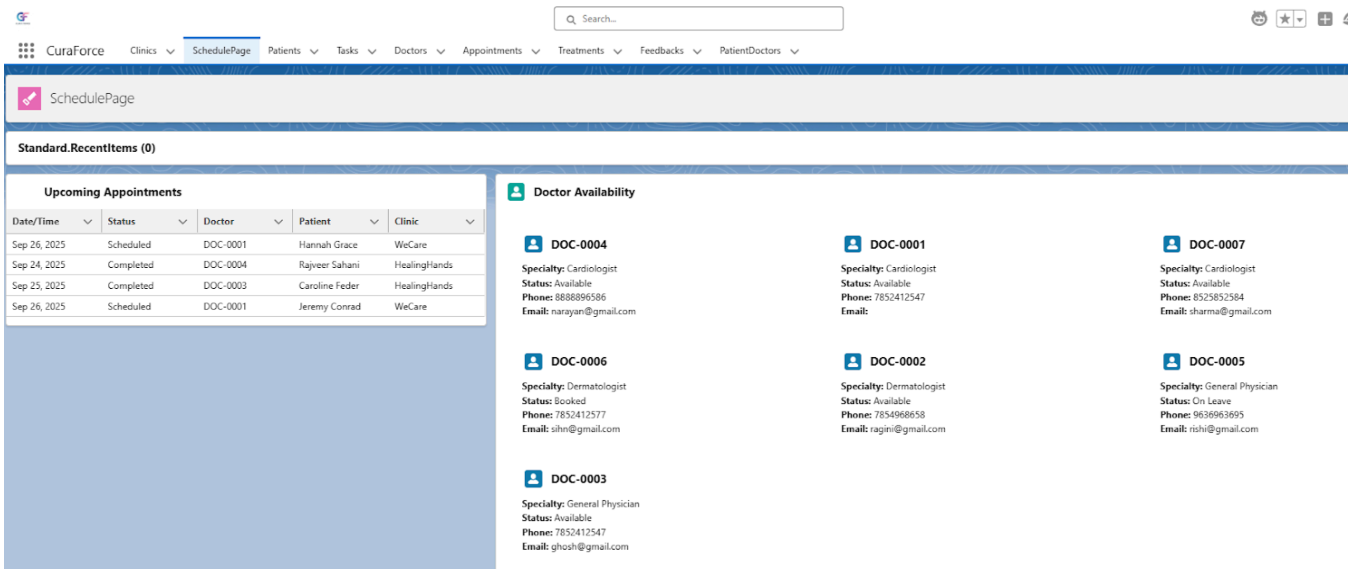

doctorAvailability.html
doctorAvailability.js
doctorAvailability.js-meta.xml
force-app > main > default > lwc > doctorAvailability > doctorAvailability.js-meta.xml > ...

```xml
<?xml version="1.0" encoding="UTF-8"?>
<LightningComponentBundle xmlns="http://soap.sforce.com/2006/04/metadata">
    <apiVersion>64.0</apiVersion>
    <isExposed>true</isExposed>
    <targets>
        <target>lightning__RecordPage</target>
        <target>lightning__AppPage</target>
        <target>lightning__HomePage</target>
    </targets>
</LightningComponentBundle>
```

App Page: Schedule Dashboard

Purpose / Use Case:

The *Schedule Dashboard* is a custom Lightning App Page created in Salesforce Lightning App Builder. Its purpose is to serve as a **central scheduling hub** for hospital staff and managers by displaying key components related to appointments and doctor availability in one place.



CuraForce | Clinics | SchedulePage | Patients | Tasks | Doctors | Appointments | Treatments | Feedbacks | PatientDoctors

SchedulePage

Standard.RecentItems (0)

Upcoming Appointments

Date/Time	Status	Doctor	Patient	Clinic
Sep 26, 2025	Scheduled	DOC-0001	Hannah Grace	WeCare
Sep 24, 2025	Completed	DOC-0004	Rajveer Sahani	HealingHands
Sep 25, 2025	Completed	DOC-0003	Caroline Feder	HealingHands
Sep 26, 2025	Scheduled	DOC-0001	Jeremy Conrad	WeCare

Doctor Availability

DOC-0004
Specialty: Cardiologist
Status: Available
Phone: 8888896586
Email: narayan@gmail.com

DOC-0001
Specialty: Cardiologist
Status: Available
Phone: 7852412547
Email:

DOC-0007
Specialty: Cardiologist
Status: Available
Phone: 8525852584
Email: sharma@gmail.com

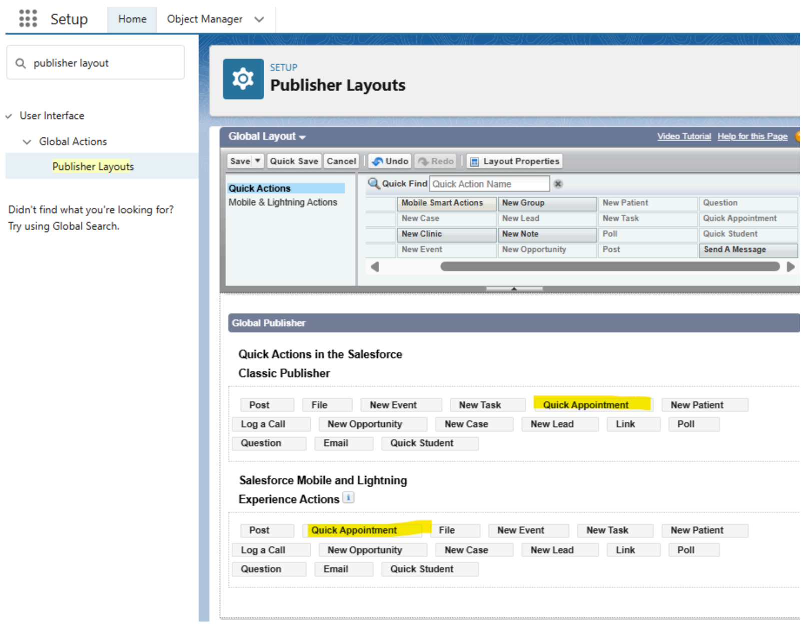
DOC-0006
Specialty: Dermatologist
Status: Booked
Phone: 7852412577
Email: sihn@gmail.com

DOC-0002
Specialty: Dermatologist
Status: Available
Phone: 7854968658
Email: ragini@gmail.com

DOC-0005
Specialty: General Physician
Status: On Leave
Phone: 9636963695
Email: rishi@gmail.com

DOC-0003
Specialty: General Physician
Status: Available
Phone: 7852412547
Email: ghosh@gmail.com

To ease out admin I also created a golbal action that once a user see this scehuele App page can also make quick Appointment record with global action.



Setup | Home | Object Manager

publisher layout

User Interface
Global Actions
Publisher Layouts

Didn't find what you're looking for? Try using Global Search.

SETUP
Publisher Layouts

Global Layout | Video Tutorial | Help for this Page

Save | Quick Save | Cancel | Undo | Redo | Layout Properties

Quick Actions
Mobile & Lightning Actions

Quick Find: Quick Action Name

Mobile Smart Actions	New Group	New Patient	Question
New Case	New Lead	New Task	Quick Appointment
New Clinic	New Note	Poll	Quick Student
New Event	New Opportunity	Post	Send A Message

Global Publisher

Quick Actions in the Salesforce Classic Publisher

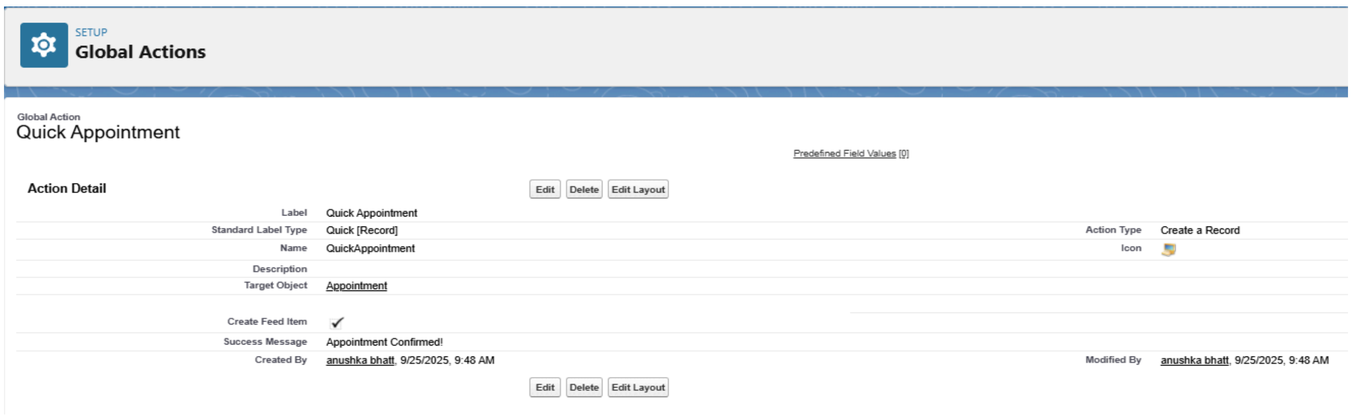
Post | File | New Event | New Task | Quick Appointment | New Patient
Log a Call | New Opportunity | New Case | New Lead | Link | Poll
Question | Email | Quick Student

Salesforce Mobile and Lightning Experience Actions

Post | Quick Appointment | File | New Event | New Task | New Patient
Log a Call | New Opportunity | New Case | New Lead | Link | Poll
Question | Email | Quick Student

Steps followed

- Setup -> global action
- Target object as appointment
- Type: quick record
- Then designed its action layout
- Then finally added the action to the global publisher layout



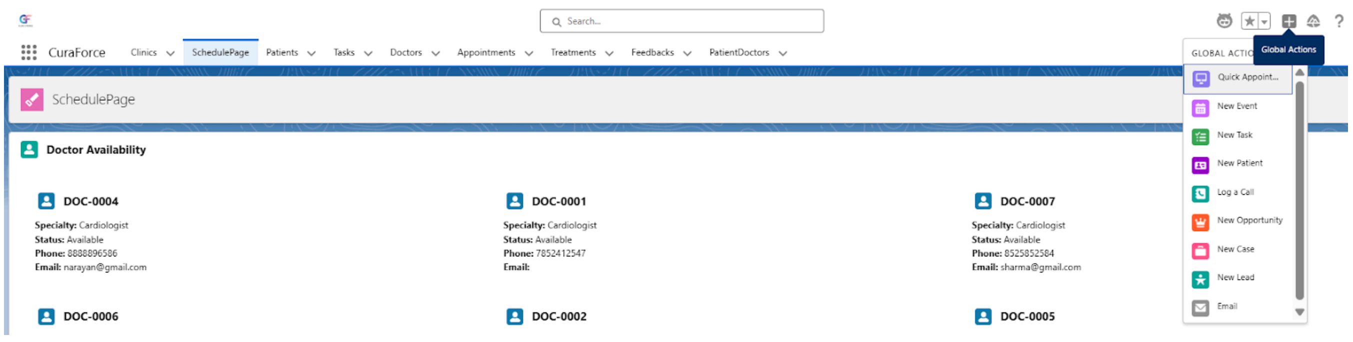
SETUP
Global Actions

Global Action
Quick Appointment

Predefined Field Values [0]

Action Detail

Label	Quick Appointment		
Standard Label Type	Quick [Record]	Action Type	Create a Record
Name	QuickAppointment	Icon	
Description			
Target Object	Appointment		
Create Feed Item	✓		
Success Message	Appointment Confirmed!		
Created By	anushka bhatt, 9/25/2025, 9:48 AM	Modified By	anushka bhatt, 9/25/2025, 9:48 AM



Doctor Availability

DOC-0004
Specialty: Cardiologist
Status: Available
Phone: 8888896586
Email: narayan@gmail.com

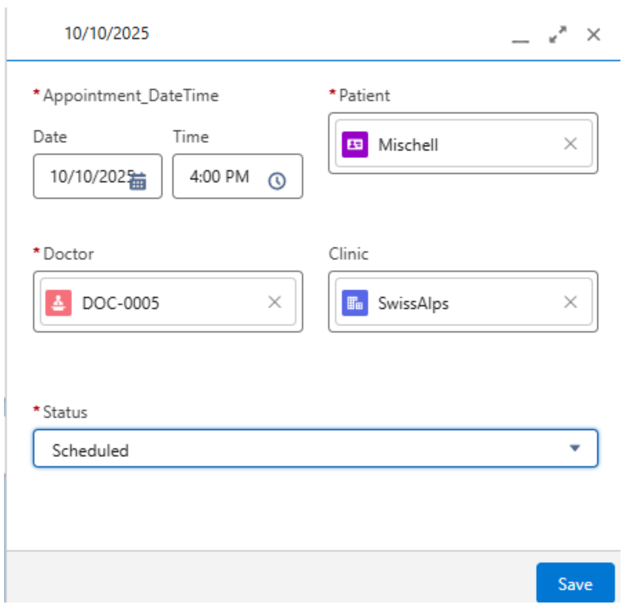
DOC-0001
Specialty: Cardiologist
Status: Available
Phone: 7852412547
Email:

DOC-0007
Specialty: Cardiologist
Status: Available
Phone: 8525852584
Email: sharma@gmail.com

DOC-0006

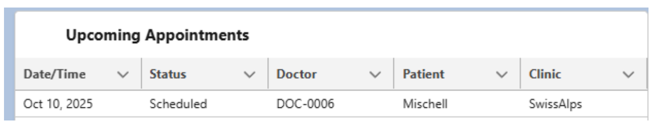
DOC-0002

DOC-0005



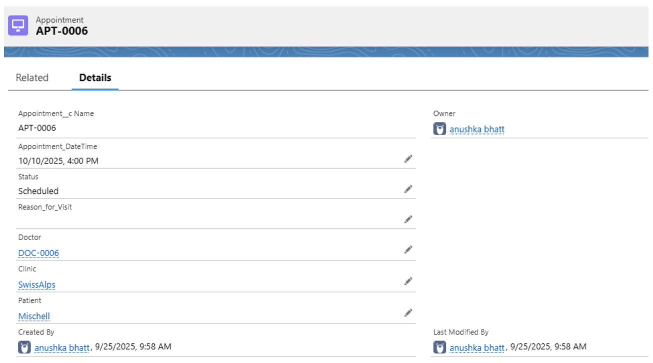
10/10/2025

* Appointment_DateTime — Date: 10/10/2025, Time: 4:00 PM	* Patient: Mischell
* Doctor: DOC-0005	Clinic: SwissAlps
* Status: Scheduled	



Upcoming Appointments

Date/Time	Status	Doctor	Patient	Clinic
Oct 10, 2025	Scheduled	DOC-0006	Mischell	SwissAlps



Appointment
APT-0006

Appointment__c Name: APT-0006	Owner: anushka bhatt
Appointment_DateTime: 10/10/2025, 4:00 PM	
Status: Scheduled	
Reason_for_Visit:	
Doctor: DOC-0006	
Clinic: SwissAlps	
Patient: Mischell	
Created By: anushka bhatt, 9/25/2025, 9:58 AM	Last Modified By: anushka bhatt, 9/25/2025, 9:58 AM

The appointment got created successfully, lwc component got updated in real time, and the record was reflected in the appointment object also.
I also tried out agentforce for developer extension by giving structured ICED-TO Approach prompt to it.

ICED-TO stands for Instruction,Context,Example,Desired output, Tone and Output format.

Intent:
I want to create a Lightning Web Component that displays all follow-up treatments scheduled for today.

Context:
We are building a healthcare scheduling dashboard. We already have two LWCs:

- *PatientAppointments* (shows future appointments).
- *DoctorAvailability* (shows doctor availability).
  This third component will be a small tile that lists treatments requiring follow-up **today**, so front desk staff don't miss them.

Examples:

- If a Treatment__c record has Followup_Required__c = true and Visit_Date__c = today(), show that patient.
- Show Patient Name + Doctor Name + Treatment Diagnosis.

Data:
Custom Object: Treatment__c

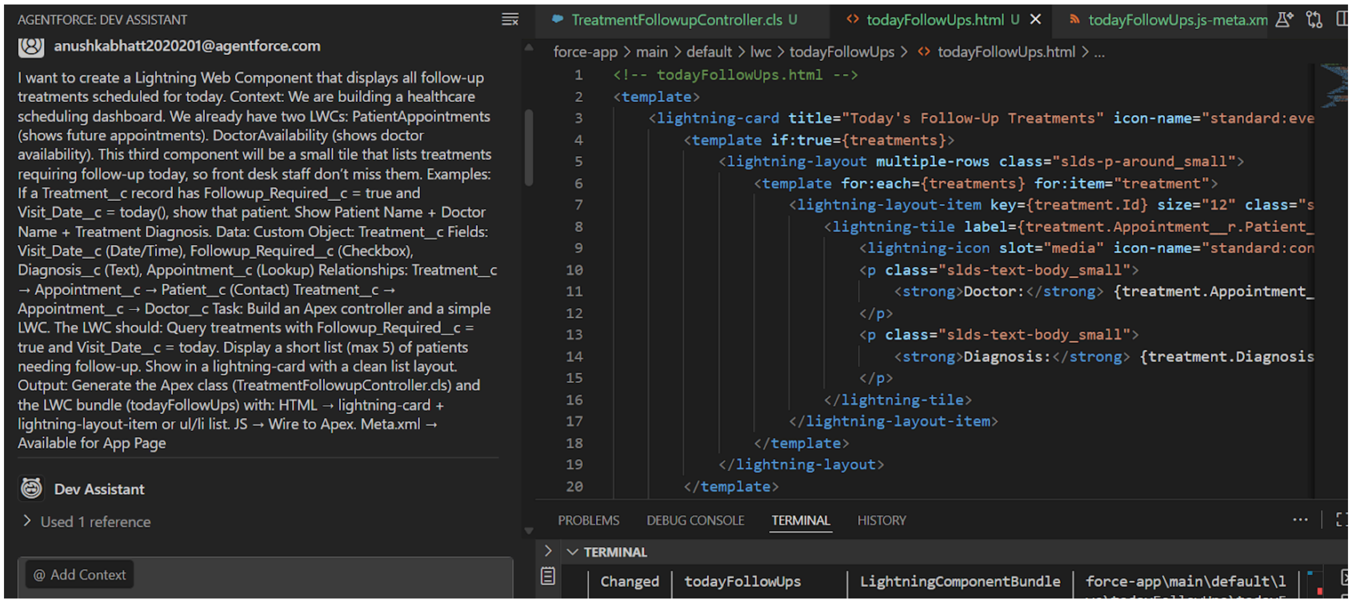
- Fields: Visit_Date__c (Date/Time), Followup_Required__c (Checkbox), Diagnosis__c (Text), Appointment__c (Lookup)
- Relationships:
- Treatment__c → Appointment__c → Patient__c (Contact)
- Treatment__c → Appointment__c → Doctor__c

Task:
Build an Apex controller and a simple LWC. The LWC should:

- Query treatments with Followup_Required__c = true and Visit_Date__c = today.
- Display a short list (max 5) of patients needing follow-up.
- Show in a **lightning-card** with a clean list layout.

Output:
Generate the Apex class (TreatmentFollowupController.cls) and the LWC bundle (todayFollowUps) with:

- HTML → lightning-card + lightning-layout-item or ul/li list.
- JS → Wire to Apex.
- Meta.xml → Available for App Page.


AGENTFORCE: DEV ASSISTANT
TreatmentFollowupController.cls U
todayFollowUps.html U
todayFollowUps.js-meta.xm
force-app > main > default > lwc > todayFollowUps > todayFollowUps.html > ...
Dev Assistant
Used 1 reference
@ Add Context
PROBLEMS
DEBUG CONSOLE
TERMINAL
HISTORY

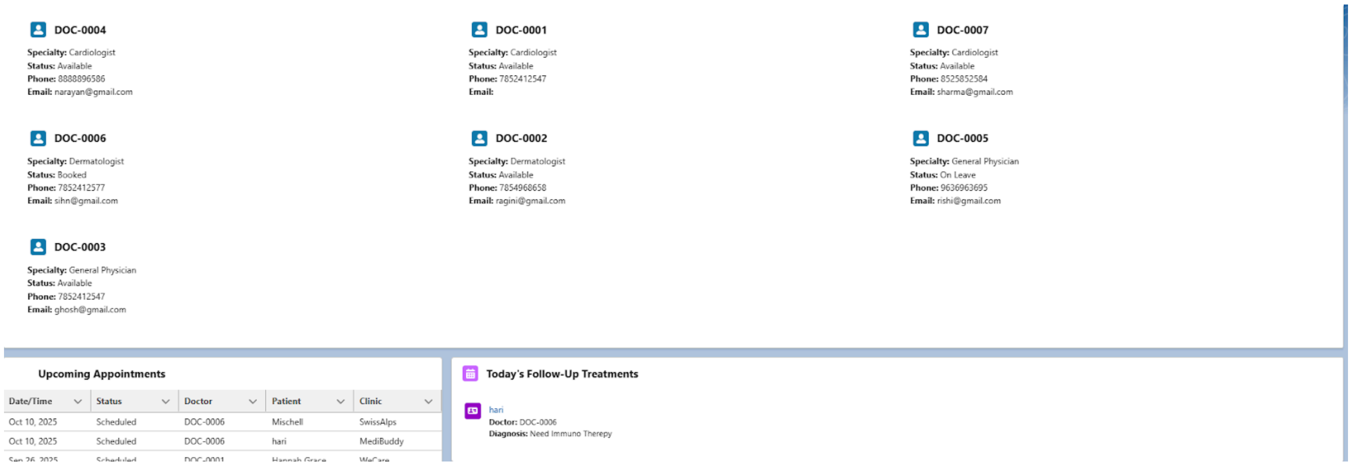
anushkabhatt2020201@agentforce.com

I want to create a Lightning Web Component that displays all follow-up treatments scheduled for today. Context: We are building a healthcare scheduling dashboard. We already have two LWCs: PatientAppointments (shows future appointments). DoctorAvailability (shows doctor availability). This third component will be a small tile that lists treatments requiring follow-up today, so front desk staff don't miss them. Examples: If a Treatment__c record has Followup_Required__c = true and Visit_Date__c = today(), show that patient. Show Patient Name + Doctor Name + Treatment Diagnosis. Data: Custom Object: Treatment__c Fields: Visit_Date__c (Date/Time), Followup_Required__c (Checkbox), Diagnosis__c (Text), Appointment__c (Lookup) Relationships: Treatment__c → Appointment__c → Patient__c (Contact) Treatment__c → Appointment__c → Doctor__c Task: Build an Apex controller and a simple LWC. The LWC should: Query treatments with Followup_Required__c = true and Visit_Date__c = today. Display a short list (max 5) of patients needing follow-up. Show in a lightning-card with a clean list layout. Output: Generate the Apex class (TreatmentFollowupController.cls) and the LWC bundle (todayFollowUps) with: HTML → lightning-card + lightning-layout-item or ul/li list. JS → Wire to Apex. Meta.xml → Available for App Page

```
<!-- todayFollowUps.html -->
<template>
    <lightning-card title="Today's Follow-Up Treatments" icon-name="standard:eve
        <template if:true={treatments}>
            <lightning-layout multiple-rows class="slds-p-around_small">
                <template for:each={treatments} for:item="treatment">
                    <lightning-layout-item key={treatment.Id} size="12" class="s
                        <lightning-tile label={treatment.Appointment__r.Patient_
                            <lightning-icon slot="media" icon-name="standard:con
                            <p class="slds-text-body_small">
                                <strong>Doctor:</strong> {treatment.Appointment_
                            </p>
                            <p class="slds-text-body_small">
                                <strong>Diagnosis:</strong> {treatment.Diagnosis
                            </p>
                        </lightning-tile>
                    </lightning-layout-item>
                </template>
            </lightning-layout>
        </template>
```

```
TERMINAL
 Changed │ todayFollowUps │ LightningComponentBundle │ force-app\main\default\l
```

Fixed the bug made by AI: Visit_Date__c is a Date/Time field, but in Apex you're filtering it with a Date (today).Changed the classic UI by using Lightining component library.And finally component is ready.



DOC-0004
Specialty: Cardiologist
Status: Available
Phone: 8888896586
Email: narayan@gmail.com

DOC-0001
Specialty: Cardiologist
Status: Available
Phone: 7852412547
Email:

DOC-0007
Specialty: Cardiologist
Status: Available
Phone: 8525852584
Email: sharma@gmail.com

DOC-0006
Specialty: Dermatologist
Status: Booked
Phone: 7852412577
Email: sihn@gmail.com

DOC-0002
Specialty: Dermatologist
Status: Available
Phone: 7854968658
Email: ragini@gmail.com

DOC-0005
Specialty: General Physician
Status: On Leave
Phone: 9636963695
Email: rishi@gmail.com

DOC-0003
Specialty: General Physician
Status: Available
Phone: 7852412547
Email: ghosh@gmail.com

Upcoming Appointments

Date/Time	Status	Doctor	Patient	Clinic
Oct 10, 2025	Scheduled	DOC-0006	Mischell	SwissAlps
Oct 10, 2025	Scheduled	DOC-0006	hari	MediBuddy
Sep 26, 2025	Scheduled	DOC-0001	Hannah Grace	WeCare

Today's Follow-Up Treatments

hari
Doctor: DOC-0006
Diagnosis: Need Immuno Therepy