Phase 6: User Interface Development – Healthcare Event management system

Objective

This phase focuses on designing and building the **User Interface (UI)** for the *Event Management & Ticketing System*. The goal is to provide an interactive, responsive, and user-friendly experience for **Event Organizers, Attendees, and Admins** using Salesforce Lightning Experience features and Lightning Web Components (LWC).

Components of UI Development

1. Lightning App Builder

- **Organizer Dashboard** → Displays event overview, ticket sales, attendee registrations, and upcoming schedules.
- **Attendee Dashboard** → Shows registered events, tickets, QR codes, and feedback forms.
- **Admin Dashboard** → Provides system-wide analytics on events, ticketing trends, and revenue.

Implementation Steps: 1. Use Lightning App Builder to create App Pages for each persona (Organizer, Attendee, Admin). 2. Drag-and-drop components such as Report Charts, List Views, and Related Lists. 3. Insert custom LWCs as placeholders (EventSummaryCard, TicketList, FeedbackForm). 4. Activate per App/Profile so that each persona sees their respective dashboards.

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2. Record Pages

Customized record pages for key objects: - **Event__c Record Page** → Displays event details, ticket summary, attendee list, and feedback. - **Ticket__c Record Page** → Shows ticket type, status, and linked attendee. - **Attendee__c Record Page** → Displays attendee info, registered events, and feedback history.

Layout Example (Event Record Page): - Left Panel → Event Highlights (date, venue, capacity). - Middle Panel → Event Details + Ticketing Data. - Tabs → Attendees (related list), Tickets, Feedback. - Right Panel → Organizer Activity Timeline.

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3. Tabs

Tabs provide structured navigation within the app. - **Organizer Tabs:** Dashboard, Manage Events, Ticket Reports, Attendee Analytics. - **Attendee Tabs:** My Events, Tickets, Feedback, Profile. - **Admin Tabs:** All Events, Revenue Reports, System Logs, User Management.

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4. Home Page Layouts

- **Organizer Home Page:** Shows upcoming events, ticket sales reports, quick links to manage events.
- **Attendee Home Page:** Personalized greeting, list of registered events, QR codes for check-in, upcoming reminders.
- **Admin Home Page:** Analytics charts (total events, revenue, attendees) and approval workflows.

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5. Utility Bar

- **Quick Search** (Events/Tickets/Attendees).
- **Quick Add Event** (Organizer-only LWC).
- **Help/FAQ Chatbot** for attendees.
- **Recent Items** for faster navigation.

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6. Lightning Web Components (LWC)

Key LWCs for the project: - **EventSummaryCard** → Displays event info & ticket stats. - **TicketList** → Shows all tickets with QR codes. - **AttendeeDashboard** → Displays attendee's registered events and tickets. - **FeedbackForm** → Allows attendees to submit post-event feedback. - **QRScanner** → Custom LWC for scanning tickets during check-in.

Each LWC uses **Apex controllers** to fetch data dynamically and update the UI.

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7. Apex with LWC

- **Use Case:** Fetch attendee tickets dynamically.

```
public with sharing class TicketController {
    @AuraEnabled(cacheable=true)
    public static List<Ticket__c> getTicketsByAttendee(Id attendeeId){
        return [SELECT Id, Ticket_Type__c, Status__c, QR_Code__c, Event__r.Name
                FROM Ticket__c WHERE Attendee__c = :attendeeId];
    }
}
```

```
import { LightningElement, wire, api, track } from 'lwc';
import getTicketsByAttendee from '@salesforce/apex/TicketController.getTicketsByAttendee';

export default class TicketList extends LightningElement {
    @api attendeeId;
    @track tickets;

    @wire(getTicketsByAttendee, { attendeeId: '$attendeeId' })
    wiredTickets({ error, data }){
        if(data){
            this.tickets = data;
        } else if(error){
            console.error(error);
        }
    }
}
```

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8. Navigation Service

- Example: Attendee clicks "View Event" → Redirects to Event__c Record Page.

```
this[NavigationMixin.Navigate]({
    type: 'standard__recordPage',
    attributes: {
        recordId: eventId,
        objectApiName: 'Event__c',
```

```
        actionName: 'view'
    }
});
```

Outcome of Phase 6

User-friendly dashboards for each persona (Organizer, Attendee, Admin).
Record pages optimized for event, ticket, and attendee management.
LWCs enable dynamic interaction (ticket lists, QR check-in, feedback forms).
Navigation & Utility Bar improve usability and efficiency.