## Phase 6: User Interface Development – Event Management & Ticketing 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.

#### 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.

#### 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.

#### 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.

#### 5. Utility Bar

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

#### 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.

#### 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);  
 }  
 }  
}

#### 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.