# Project Documentation

Event Management & Ticketing System on Salesforce

## Phase 3: Data Modeling & Relationships

### 1. Introduction

In this phase, we design the data model of the Salesforce application to represent the event management process. A well-structured data model ensures scalability, consistency, and efficient reporting.

This phase involves working with **Standard Objects, Custom Objects, Fields, Record Types, Page Layouts, Compact Layouts, Schema Builder, Relationships, and Junction Objects**.

### 2. Standard & Custom Objects

**Standard Objects:** - **Account** → Represents sponsoring organizations or partners.  
- **Contact** → Represents attendees or staff contacts.  
- **Opportunity** → Can be used for sponsorship or paid ticket deals.  
- **Case** → Can track attendee support requests.

**Custom Objects (specific to project):** - \*\*Event\_\_c\*\* → Stores event details (Name, Date, Venue, Capacity, Organizer).  
- \*\*Ticket\_\_c\*\* → Represents tickets issued for an event (Type, Price, QR Code, Status).  
- \*\*Attendee\_\_c\*\* → Represents participants (Name, Email, Phone, Check-in Status).  
- \*\*Feedback\_\_c\*\* → Captures post-event attendee feedback.  
- \*\*EventAttendee\_\_c (Junction Object)\*\* → Links Attendees and Events (many-to-many relationship).

### 3. Fields

Each object has standard fields plus additional custom fields.

\*\*Event\_\_c Fields:\*\* - Event Name (Text)  
- Event Date (Date)  
- Venue (Text)  
- Capacity (Number)  
- Organizer (Lookup → User)

\*\*Ticket\_\_c Fields:\*\* - Ticket Type (Picklist → VIP, Regular, Student)  
- Ticket Price (Currency)  
- QR Code (Text/External API link)  
- Status (Picklist → Issued, Scanned, Cancelled)  
- Related Event (Master-Detail → Event\_\_c)

\*\*Attendee\_\_c Fields:\*\* - Attendee Name (Text)  
- Email (Email)  
- Phone (Phone)  
- Registration Date (Date)  
- Check-in Status (Checkbox)  
- Ticket (Lookup → Ticket\_\_c)

\*\*Feedback\_\_c Fields:\*\* - Rating (Picklist: 1–5)  
- Comments (Long Text Area)  
- Related Event (Lookup → Event\_\_c)  
- Related Attendee (Lookup → Attendee\_\_c)

\*\*EventAttendee\_\_c (Junction Object):\*\* - Event (Master-Detail → Event\_\_c)  
- Attendee (Master-Detail → Attendee\_\_c)  
- Registration Status (Picklist → Registered, Confirmed, Cancelled)

### 4. Record Types

Record Types allow different processes within the same object.

\*\*Event\_\_c Record Types:\*\* - Conference  
- Workshop  
- Concert/Festival

\*\*Ticket\_\_c Record Types:\*\* - VIP Ticket  
- Regular Ticket  
- Student Ticket

\*\*Attendee\_\_c Record Types:\*\* - Individual Attendee  
- Corporate Attendee (linked to Account)

### 5. Page Layouts

\*\*Event\_\_c Layouts:\*\* - Conference Layout → Includes Agenda, Speaker Details.  
- Workshop Layout → Includes Trainer, Materials.  
- Concert Layout → Includes Artist Line-up, Stage Details.

\*\*Ticket\_\_c Layouts:\*\* - VIP Ticket Layout → Shows exclusive benefits.  
- Regular Ticket Layout → Shows standard seating details.

\*\*Attendee\_\_c Layouts:\*\* - Individual Layout → Basic contact details.  
- Corporate Layout → Includes Company (Account Lookup).

### 6. Compact Layouts

\*\*Event\_\_c Compact Layout:\*\* Event Name, Date, Venue, Capacity.  
\*\*Ticket\_\_c Compact Layout:\*\* Ticket Type, Price, Status.  
\*\*Attendee\_\_c Compact Layout:\*\* Attendee Name, Email, Check-in Status.  
\*\*Feedback\_\_c Compact Layout:\*\* Rating, Related Event, Related Attendee.

### 7. Schema Builder

Schema Builder will be used to: - Visualize relationships between **Event, Ticket, Attendee, Feedback, EventAttendee**.  
- Arrange objects to represent ERD (Entity Relationship Diagram).  
- Validate fields and relationships created.

### 8. Relationships

* \*\*Event\_\_c → Ticket\_\_c:\*\* Master-Detail (an Event can have many Tickets).
* \*\*Event\_\_c → EventAttendee\_\_c:\*\* Master-Detail.
* \*\*Attendee\_\_c → EventAttendee\_\_c:\*\* Master-Detail.
* \*\*Attendee\_\_c → Ticket\_\_c:\*\* Lookup (an attendee may hold a ticket).
* \*\*Event\_\_c → Feedback\_\_c:\*\* Lookup.
* \*\*Attendee\_\_c → Feedback\_\_c:\*\* Lookup.

### 9. Junction Objects

* \*\*EventAttendee\_\_c\*\* is the junction object between Event and Attendee.
* Purpose: Manage many-to-many relationships (one event has many attendees, one attendee can attend many events).

### 10. External Objects

* \*\*External\_Payment\_\_x\*\* → Connects Salesforce to payment gateway (Stripe/PayPal) for ticket purchases.
* \*\*External\_Survey\_\_x\*\* → Connects Salesforce to external survey tool (Google Forms/SurveyMonkey) for feedback.

### 11. Documentation Deliverables

* ERD Diagram (Event, Ticket, Attendee, Feedback, EventAttendee).
* Custom Object & Field Tables (Name, API Name, Type, Description).
* Record Type & Layout Mapping.
* Junction Object Mapping.
* Screenshots: Schema Builder, Page Layouts, Compact Layouts.

### 12. Benefits of This Phase

* Provides a clear and scalable data structure.
* Enables automation of registrations, reminders, and check-ins.
* Supports advanced reporting & dashboards.
* Prepares model for integration with payment & survey systems.

✅ **Phase 3 Deliverable:** By the end of Phase 3, we have: - Defined objects, fields, and relationships.  
- Mapped record types, layouts, and compact layouts.  
- Designed ERD using Schema Builder.  
- Established junction objects for many-to-many relationships.  
This forms the foundation for **Phase 4: Process Automation (Admin)**.