### 1-Event Management System

**Entities and Schema**

1. **Events Table**
   * **Columns:**
     + Event\_ID (Primary Key): Unique identifier for each event.
     + Event\_Name: Name of the event.
     + Date: Date of the event.
     + Time: Time the event starts.
     + Category: Type of event (e.g., Concert, Conference).
     + Organizer\_ID (Foreign Key): Link to the organizer of the event
   * **Example Data:**
     + Event\_ID: 1  
       Event\_Name: Tech Conference 2024  
       Date: 2024-12-20  
       Time: 09:00 AM  
       Venue: Downtown Convention Center  
       Category: Conference  
       Organizer\_ID: 10
2. **Organizers Table**
   * **Columns:**
     + Organizer\_ID (Primary Key): Unique ID for each organizer.
     + Name: Organizer's name or company.
     + Contact\_Info: Contact information (email/phone).
   * **Example Data:**
     + Organizer\_ID: 10  
       Name: Tech Solutions Inc.  
       Contact\_Info: contact@techsolutions.com
3. **Participants Table**
   * **Columns:**
     + Participant\_ID (Primary Key): Unique ID for each participant.
     + Name: Name of the participant.
     + Email: Email of the participant.
     + Ticket\_ID (Foreign Key): Link to their ticket for the event.
   * **Example Data:**
     + Participant\_ID: 1001  
       Name: John Doe  
       Email: john.doe@example.com  
       Ticket\_ID: T001
4. **Tickets Table**
   * **Columns:**
     + Ticket\_ID (Primary Key): Unique ID for each ticket.
     + Event\_ID (Foreign Key): Link to the event the ticket belongs to.
     + Price: Price of the ticket.
     + Status: Indicates if the ticket is available, reserved, or sold.
     + Type: what is the type of the ticket
   * **Example Data:**
     + Ticket\_ID: T001  
       Event\_ID: 1  
       Price: 50.00  
       Status: Sold
     + Type: VIP
5. **Sponsors Table**
   * **Columns:**
     + Sponsor\_ID (Primary Key): Unique ID for each sponsor.
     + Name: Name of the sponsor company.
     + Contribution: Amount or service provided by the sponsor.
     + Event\_ID (Foreign Key): Link to the event they are sponsoring.
   * **Example Data:**
     + Sponsor\_ID: 201  
       Name: ABC Corp  
       Contribution: 10000  
       Event\_ID: 1

**6. Feedback Table**

* **Purpose**: To collect feedback from participants about events.
* **Columns**:
  + Feedback\_ID (Primary Key): Unique identifier for each feedback entry.
  + Event\_ID (Foreign Key): Link to the event being reviewed.
  + Participant\_ID (Foreign Key): Link to the participant giving feedback.
  + Rating: Numeric rating for the event (e.g., 1-5 stars).
  + Comments: Written feedback or suggestions.
* **Example Data**:
  + Feedback\_ID: 301
  + Event\_ID: 1
  + Participant\_ID: 1001
  + Rating: 5
  + Comments: "Great event, very informative!"

**7. Sessions Table**

* **Purpose**: For events with multiple sessions or activities.
* **Columns**:
  + Session\_ID (Primary Key): Unique identifier for each session.
  + Event\_ID (Foreign Key): Link to the parent event.
  + Session\_Name: Name of the session.
  + Start\_Time: Start time of the session.
  + End\_Time: End time of the session.
  + Speaker: Speaker or host for the session.
* **Example Data**:
  + Session\_ID: 401
  + Event\_ID: 1
  + Session\_Name: "Future of AI"
  + Start\_Time: 10:00 AM
  + End\_Time: 11:30 AM
  + Speaker: "Dr. Jane Smith"

**8. Roles Table**

* **Purpose**: Manage participant roles (e.g., attendee, speaker, VIP).
* **Columns**:
  + Role\_ID (Primary Key): Unique identifier for each role.
  + Role\_Name: Name of the role (e.g., "Attendee", "Speaker").
* **Example Data**:
  + Role\_ID: 501
  + Role\_Name: "Speaker"

**10. Logistics Table**

* **Purpose**: Track logistical details for events.
* **Columns**:
  + Logistic\_ID (Primary Key): Unique identifier for each logistic item.
  + Item: Name of the logistic item (e.g., "Projector", "Tables").
  + Quantity: Quantity required.
  + Status: Status of the logistic item (e.g., "Pending", "Acquired").
* **Example Data**:
  + Logistic\_ID: 701
  + Item: "Chairs"
  + Quantity: 100
  + Status: "Acquired"

**11. Event Expenses Table**

* **Purpose**: Track expenses related to event organization.
* **Columns**:
  + Expense\_ID (Primary Key): Unique identifier for each expense entry.
  + Event\_ID (Foreign Key): Link to the event.
  + Description: Description of the expense.
  + Amount: Cost of the expense.
  + Date: Date of the expense.
* **Example Data**:
  + Expense\_ID: 801
  + Event\_ID: 1
  + Description: "Catering"
  + Amount: 2000.00
  + Date: 2024-12-18

**12. Event Categories Table**

* **Purpose**: Normalize the event categories.
* **Columns**:
  + Category\_ID (Primary Key): Unique identifier for each category.
  + Category\_Name: Name of the category (e.g., "Conference", "Concert").
* **Example Data**:
  + Category\_ID: 901
  + Category\_Name: "Conference"

**13. Event Attendees Table (If required separately from Participants)**

* **Purpose**: Track attendance for events.
* **Columns**:
  + Attendance\_ID (Primary Key): Unique identifier for each attendance entry.
  + Event\_ID (Foreign Key): Link to the event.
  + Participant\_ID (Foreign Key): Link to the participant.
  + Check\_In\_Time: Timestamp when the participant checked in.
* **Example Data**:
  + Attendance\_ID: 1001
  + Event\_ID: 1
  + Participant\_ID: 1001
  + Check\_In\_Time: 08:45 AM

**14. Promotions Table**

* **Purpose**: Manage promotional activities for events.
* **Columns**:
  + Promotion\_ID (Primary Key): Unique identifier for each promotion.
  + Event\_ID (Foreign Key): Link to the event.
  + Medium: Medium of promotion (e.g., "Social Media", "TV").
  + Cost: Cost of the promotion.
  + Reach: Estimated number of people reached.
* **Example Data**:
  + Promotion\_ID: 1101
  + Event\_ID: 1
  + Medium: "Social Media"
  + Cost: 500.00
  + Reach: 20000

### 14. Income Table

**Purpose**: Track all revenue sources for events.

#### **Columns**:

* **Income\_ID (Primary Key)**: Unique identifier for each income record.
* **Event\_ID (Foreign Key)**: Link to the event associated with the income.
* **Source**: The origin of the income (e.g., Ticket Sales, Sponsorships, Merchandise).
* **Amount**: The amount of money earned from this source.
* **Date\_Received**: The date when the income was received.
* **Description** (Optional): Additional details about the income.

#### **Example Data**:

* **Income\_ID**: I001
* **Event\_ID**: 1
* **Source**: Ticket Sales
* **Amount**: 5000.00
* **Date\_Received**: 2024-12-21
* **Description**: Early bird ticket sales for the conference

### 15. ****Event Staff Roles Table****

This table will link events to staff roles and the specific staff members assigned to those roles.

#### Columns:

* **Event\_ID** (Foreign Key): Link to the **Events** table.
* **Staff\_ID** (Foreign Key): Link to the staff member in the **Staff** table (which may contain staff member details).

### 16. ****Event Logistics Table****

This table will track the logistics associated with each event and their status.

#### Columns:

* **Event\_Logistic\_ID** (Primary Key): Unique identifier for each logistic item assigned to an event.
* **Event\_ID** (Foreign Key): Link to the **Events** table.
* **Logistic\_ID** (Foreign Key): Link to the **Event Logistics** table.
* **Quantity**: Quantity of the logistic item required for the event.
* **Status**: Status of the logistic item (e.g., "Pending", "Acquired")

### ****Staff Table****

The **Staff** table holds basic details of staff members who may be assigned to one or more roles in various events.

#### Columns:

* **Staff\_ID** (Primary Key): Unique identifier for each staff member.
* **Name**: Name of the staff member.
* **email**:
* **phone number**:
* **Role ID**: (Foreign key): to the roles table