# Overview

EventMaster is a comprehensive event management system designed to simplify the planning, coordination, and execution of various types of events. EventMaster offers a range of features to streamline event organization, attendee management, venue booking, and budget tracking. The platform caters to event planners, vendors, and attendees, providing tools for seamless collaboration and communication throughout the event lifecycle.

At the heart of EventMaster lies its robust entity-relationship model, designed to efficiently handle the intricacies of event data. Events are central to the system, each uniquely identified by an Event ID and encompassing essential attributes such as Title, Description, Start Date, End Date, Organizer, Venue ID, and Budget. Venues, with their own set of attributes including Name, Location, Capacity, and Rental Cost, are seamlessly associated with events, ensuring the perfect match for every occasion.

Attendees play a vital role in the EventMaster ecosystem, registering for events effortlessly through the platform. With Attendee IDs, names, email addresses, Event IDs and registration dates meticulously recorded, event planners can effortlessly manage attendee engagement and communication. Meanwhile, speakers bring events to life with their expertise and insights. The system accommodates their profiles with Speaker IDs, names, bios, Event IDs and topics, facilitating seamless scheduling and coordination.

Vendor participation is another cornerstone of EventMaster, with vendors adding vibrancy and variety to events across diverse categories. Each vendor is uniquely identified by a Vendor ID, Event IDs, Name, category ,contact information offering their services or products to enhance the event experience. Their contact information and category details streamline collaboration and communication, ensuring smooth integration into event planning.

Finally, the Schedule feature brings structure and clarity to event agendas, detailing activities, times, and speakers for each event. With Schedule IDs, event IDs, dates, times, activity descriptions, and speaker IDs meticulously recorded, EventMaster empowers event planners to orchestrate seamless experiences for attendees.

## **Entities and Attributes:**

## 1. Event:

- Attributes:
  - Event ID (Integer, unique)
  - Title (String, simple)
  - Description (Text, simple)
  - Start Date (Date, simple)
  - End Date (Date, simple)
  - Organizer (String, simple)
  - Venue ID (Integer, composite-key)
  - Budget (Float, simple)

#### 2. Venue:

- Attributes:
  - Venue ID (Integer, unique)
  - Name (String, simple)
  - Location (String, simple)
  - Capacity (Integer, simple)
  - Rental Cost (Float, simple)

#### 3. Attendee:

- Attributes:
  - Attendee ID (Integer, unique)
  - Event ID (Integer, composite-key)
  - Name (String, simple)
  - Email Address (String, simple)
  - Registration Date (Date, simple)

# 4. Speaker:

- Attributes:
  - Speaker ID (Integer, unique)
- Event ID (Integer, composite-key)
- Name (String, simple)
- Bio (Text, simple)
- Topic (String, simple)

#### 5. Vendor:

- Attributes:
  - Vendor ID (Integer, unique)
  - Event ID (Integer, composite-key)
- Name (String, simple)
- Category (String, simple)
- Contact Information (String, simple)

#### 6. Schedule:

- Attributes:
  - Schedule ID (Integer, unique)
  - Event ID (Integer, composite-key)
- Date (Date, simple)
- Time (Time, simple)
- Activity (String, simple)
- Speaker ID (Integer, simple)

# Relationships:

#### 1. Event and Venue:

- Each event is associated with a specific venue. (One-to-One)
- An event can only be hosted at one venue, but a venue can host multiple events.

## 2. Event and Attendee:

- Attendees register for events. (One-to-Many)
- An event can have multiple attendees, but an attendee can only register for one event.

# 3. Event and Speaker:

- Speakers present at events. (Many-to-Many)
- Multiple speakers can present at a single event, and a speaker can present at multiple events.

#### 4. Event and Vendor:

- Vendors participate in events. (Many-to-Many)
- Multiple vendors can participate in a single event, and a vendor can participate in multiple events.

#### 5. Event and Schedule:

- Schedules detail the activities and speakers for each event. (One-to-Many)
- Each event can have multiple schedules detailing various activities and speakers, but each schedule belongs to only one event.

# 6. Speaker and Schedule:

- Each schedule includes activities and speakers. (Many-to-Many)
- Multiple speakers can be scheduled for the same activity, and a speaker can participate in multiple activities across different schedules.

## 7. Vendor and Schedule:

- Each schedule may include vendor-related activities. (Many-to-Many)
- Multiple vendors can be involved in various activities within the same schedule, and a vendor can participate in multiple activities across different schedules.

# ER diagram

































