

# UNIVERSITY OF BARISHAL



## PROJECT

**COURSE NAME** : Database

**BATCH** : 1

**TOPIC** : Database designing (**Event Management System**)

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**Batch** : 1

**Serial No.** : 20

**DATE OF SUBMISSION** : 8<sup>th</sup> June, 2024

## 1. Designing (Entity Relationship) ER Diagram

The "**Event Management System (EMS)**" database is structured to handle all critical components of event planning and management through an event managing company. It provides comprehensive functionality by integrating data about events, venues, organizers, attendees, and other key stakeholders. This integration allows for efficient management of event logistics, participant engagement, financial tracking, and post-event evaluation. Each table is interlinked to ensure data consistency and provide a holistic view of the event management process.

### Step-1: Identifying the entities required

A company will conduct one or more event through their event management system. They will accomplish events by providing and storing core and necessary information about **events**, that they provide as their service. They will select **venues** depending on capacity and **organizers** will organize the venue based on **customers** and their **requirements**. The company will keep a track about event **attendees**, event **speakers** or hosts for each event. They will look for **sponsors** for successful completion of events and **vendors** will provide them various services including light or sound systems, catering services and others and will record tasks assigned to the vendors. The company will keep the record for overall **expenses** for an event and will provide it to the customers as per requirement. After successful completion of each event, the company will be able to justify their service and customer satisfaction through **feedbacks** that are provided by the customers and attendees and will further carry out events based on the obtained feedbacks.

### Step-2: Identifying the Attributes and Primary key for each Entity

1. events (**eventID**, event\_name, date\_time, description, status)
2. customer (**customerID**, name, address, contact)
3. requirement (**requirementID**, description)
4. venues (**venueID**, venue\_name, address, capacity, contact)
5. organizers (**organizerID**, organizer\_name, role, contact, email)
6. attendees (**attendeesID**, name, contact)
7. speakers (**speakerID**, name, contact)
8. sponsors (**sponsorID**, name, contact, email, contribution\_type, amount)
9. vendors (**vendorID**, name, service\_type, contact)
10. expenses (**expenseID**, total\_amount, payment\_type)
11. feedback (**feedbackID**, rating, date\_time, description)

### Step-3: Identifying the Relationship needed

1. Venue – conduct – Events
2. Organizers – select – Venues
3. Organizers – need– Requirements
4. Customer – gives – Requirements
5. Sponsors – sponsoring – Organizers
6. Vendors – support – Organizers

7. Speakers – host – Events
8. Attendees – attend – Events
9. Attendees – gives – feedback
10. Events – have – Expenses

#### Step-4: Identifying the Cardinality Ratio and Participation

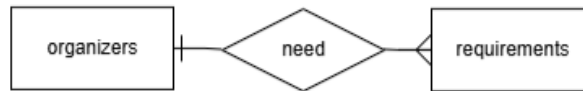
1. Venue – conduct – Events



2. Organizers – select – Venues



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5. Sponsors – sponsoring – Organizers



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7. Speakers – host – Events



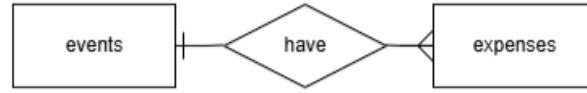
8. Attendees – attend – Events



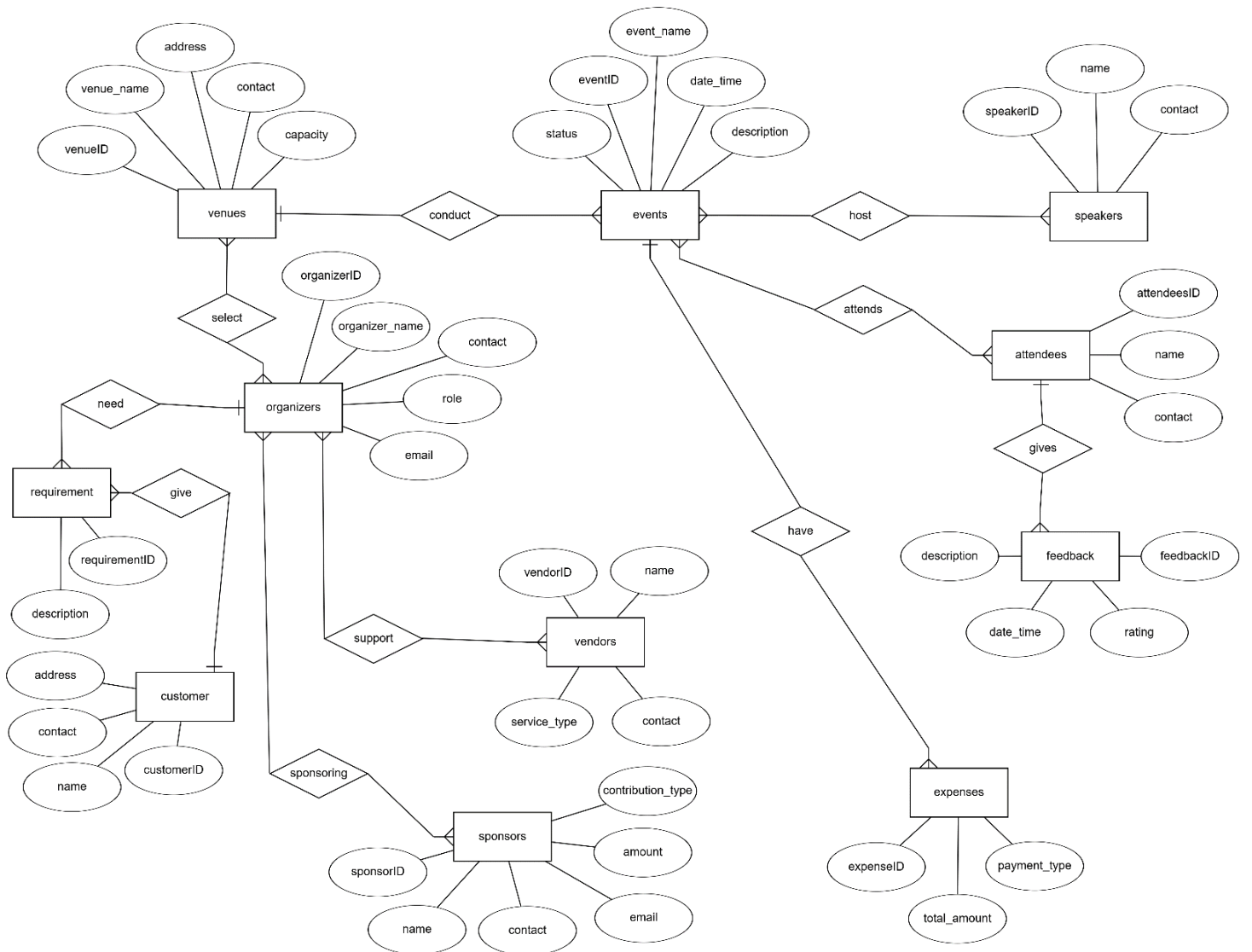
### 9. Attendees – gives – feedback



### 10. Events – have – Expenses



## Step-5: Drawing the Diagram



## 2. Reduction to database schema

1. events (**eventID**, event\_name, date\_time, venueID, customerID, organizerID, description, status)
2. customer (**customerID**, name, attendeesID, address, contact)
3. requirement (**requirementID**, description, organizerID, customerID, eventID)
4. venues (**venueID**, venue\_name, address, capacity, organizerID, eventID, contact)
5. organizers (**organizerID**, organizer\_name, sponsorID, vendorID, role, contact, email)
6. attendees (**attendeesID**, name, role, contact, eventID)
7. speakers (**speakerID**, attendeesID, name, contact, eventID)
8. sponsors (**sponsorID**, name, contact, email, contribution\_type, amount, eventID, organizerID)
9. vendors (**vendorID**, name, service\_type, eventID, organizerID, contact)
10. expenses (**expenseID**, eventID, total\_amount)
11. feedback (**feedbackID**, eventID, attendeesID, customerID, rating, description)

