

NETAJI SUBHAS UNIVERSITY OF TECHNOLOGY

AZAD HIND FAUJ MARG ,DWARKA SEC-3 NEW DELHI



DATABASE MANAGEMENT SYSTEM (CACSC05)

ASSIGNMENT

SUBMITTED BY -:

ANSHUL YADAV 2022UCA1935

EVENT MANAGEMENT SYSTEM

PROBLEM STATEMENT :

Design a database system for an Event Management company.

The design of an event management database system is imperative for efficiently orchestrating diverse aspects of event planning. The challenge is to create a comprehensive and cohesive database that can seamlessly handle a multitude of crucial data elements, including client information, event details (such as date, location, budget), vendor and service records, financial data, resource allocation, logistics, inventory, and communication logs. This system must provide user-friendly interfaces for data input and reporting while ensuring data security. It should empower event managers to streamline operations, enhance customer service, monitor budgetary constraints, allocate resources optimally, and analyze historical data to make informed decisions. The success of every event depends on the effectiveness of this database system.

Entities involved :-

- Events
- Feedbacks
- Attendees
- Sponsors
- Speakers
- Registrations

Attributes involved:-

- Attendees (AttendeeID, EventID, AttendeeName, AttendeeContact, RegistrationDate)
- Events (EventID,EventName,EventDate,Location,Organizer)
- Feedbacks(FeedbackID,EventID,AttendeeID,Rating)
- Sponsors(SponsorID,EventID,SponsorName,SponsorContact,PaymentStatus)
- Speakers(SpeakerID,EventID,SpeakerName,Topic)
- Registrations(EventID,AttendeeID,RegistrationDate,PaymentStatus)

Integrity Constraints:

1. Primary Key Constraint:

- A primary key constraint ensures that a column or a set of columns uniquely identifies each row in a table.
- It enforces the uniqueness and integrity of the data.

- A table can have only one primary key, and it cannot contain NULL values.

2. Unique Constraint:

- A unique constraint ensures that values in a column or a set of columns are unique across all rows in a table.
- Unlike the primary key, a unique constraint allows for NULL values in the column(s).

3. Foreign Key Constraint:

- A foreign key constraint establishes a link between two tables by enforcing referential integrity.
- It ensures that values in a specific column or columns of one table match the values in a primary key column of another table.
- This constraint is used to maintain relationships between tables.

4. Check Constraint:

- A check constraint defines a condition that values in a column must meet.
- It is used to ensure that data entered into a column adheres to a specific rule or condition.
- For example, you can use a check constraint to enforce that dates must be in the future or that a price must be a positive number.

5. Default Constraint:

- A default constraint specifies a default value for a column if no value is explicitly provided during an INSERT operation.
- It ensures that a column always has a value, even if it's not explicitly provided.

6. Not Null Constraint:

- A not null constraint ensures that a column cannot contain NULL values.
- It enforces that every row in the table must have a value in the specified column.

7. Check Constraint:

- A check constraint specifies a condition that data in a column must satisfy.
- It is used to ensure that data meets a specific rule or condition. For example, you can use a check constraint to ensure that a birthdate is in the past.

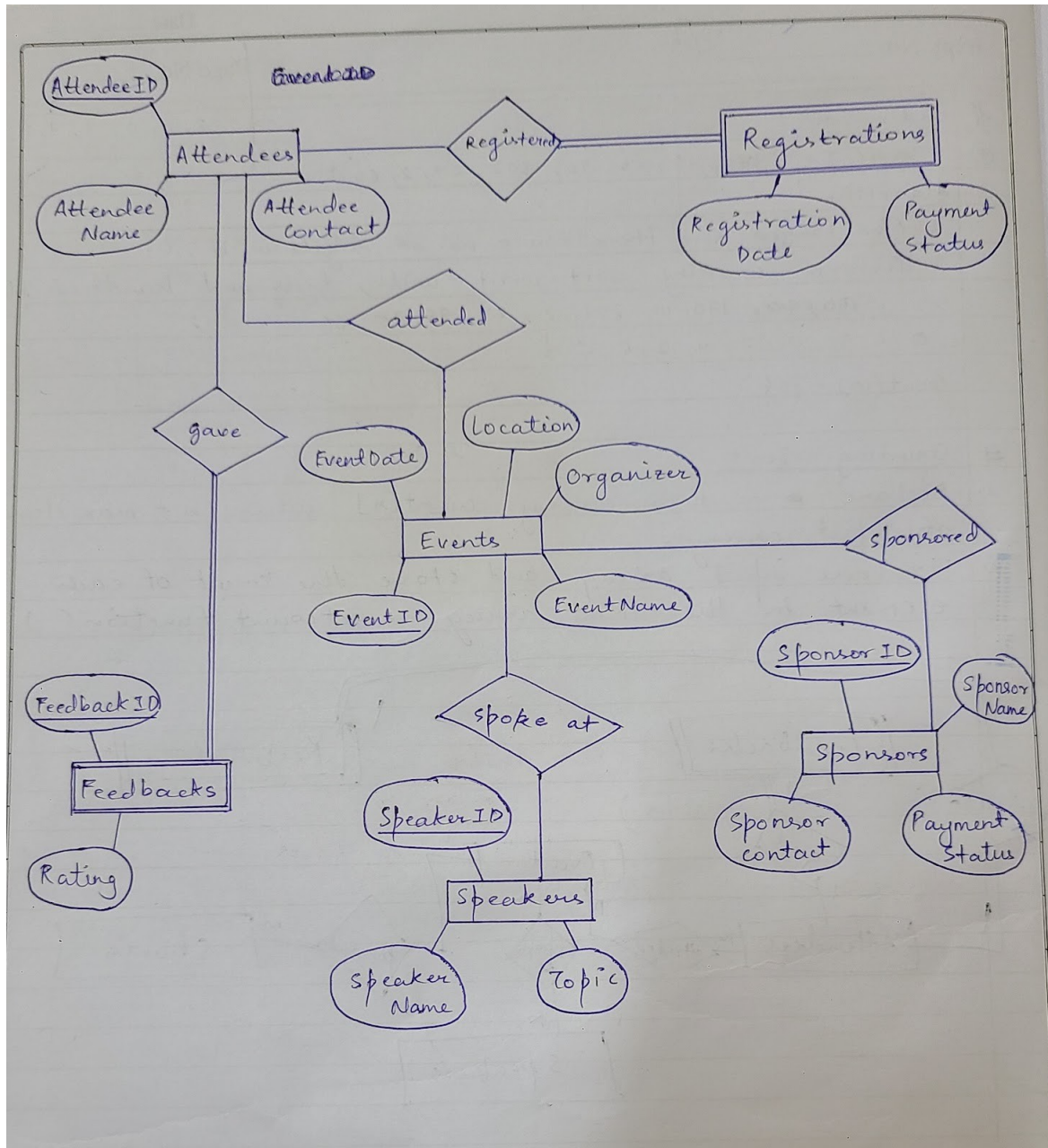
8. Unique Key Constraint:

- A unique key constraint is similar to a unique constraint but is often used to refer to the logical concept of a unique key in the database, which might or might not be a primary key. It enforces uniqueness but doesn't necessarily imply that the column(s) are used for referential integrity.

9. Composite Key Constraint:

- A composite key constraint involves using multiple columns to form a unique key. The combination of values in these columns must be unique across all rows in the table.

ER Diagram:



SQL QUERIES

1. Creating the tables

-- Create the Attendees table

```
CREATE TABLE Attendees (  
    AttendeeID INT PRIMARY KEY,  
    EventID INT,  
    AttendeeName VARCHAR(255),  
    AttendeeContact VARCHAR(255),  
    RegistrationDate DATE,  
    FOREIGN KEY (EventID) REFERENCES Events(EventID)  
);
```

-- Create the Events table

```
CREATE TABLE Events (  
    EventID INT PRIMARY KEY,  
    EventName VARCHAR(255),  
    EventDate DATE,  
    Location VARCHAR(255),  
    Organizer VARCHAR(255)  
);
```

-- Create the Feedbacks table

```
CREATE TABLE Feedbacks (  
    FeedbackID INT PRIMARY KEY,  
    EventID INT,  
    AttendeeID INT,  
    Rating INT,  
    FOREIGN KEY (EventID) REFERENCES Events(EventID),  
    FOREIGN KEY (AttendeeID) REFERENCES Attendees(AttendeeID)  
);
```

-- Create the Sponsors table

```
CREATE TABLE Sponsors (  
    SponsorID INT PRIMARY KEY,  
    EventID INT,  
    SponsorName VARCHAR(255),  
    SponsorContact VARCHAR(255),  
    PaymentStatus VARCHAR(50),  
    FOREIGN KEY (EventID) REFERENCES Events(EventID)  
);
```

-- Create the Speakers table

```
CREATE TABLE Speakers (  
    SpeakerID INT PRIMARY KEY,  
    EventID INT,  
    SpeakerName VARCHAR(255),  
    Topic VARCHAR(255),  
    FOREIGN KEY (EventID) REFERENCES Events(EventID)  
);
```

-- Create the Registrations table

```
CREATE TABLE Registrations (  
    EventID INT,  
    AttendeeID INT,  
    RegistrationDate DATE,  
    PaymentStatus VARCHAR(50),  
    FOREIGN KEY (EventID) REFERENCES Events(EventID),  
    FOREIGN KEY (AttendeeID) REFERENCES Attendees(AttendeeID)  
);
```

2. Inserting Values

-- Sample data for the Events table

```
INSERT INTO Events (EventID, EventName, EventDate, Location, Organizer)  
VALUES  
(1, 'Conference on Technology', '2023-11-15', 'New York', 'Tech Corp'), (2,  
'Music Festival', '2023-12-05', 'Los Angeles', 'Music Promotions LLC'), (3,  
'Business Expo', '2023-10-20', 'Chicago', 'Business Events Inc');
```

-- Sample data for the Attendees table

```
INSERT INTO Attendees (AttendeeID, EventID, AttendeeName, AttendeeContact,  
RegistrationDate)  
VALUES  
(1, 1, 'John Doe', 'john@example.com', '2023-11-01'),  
(2, 2, 'Alice Smith', 'alice@example.com', '2023-11-10'),  
(3, 3, 'Bob Johnson', 'bob@example.com', '2023-09-25');
```

-- Sample data for the Feedbacks table

```
INSERT INTO Feedbacks (FeedbackID, EventID, AttendeeID, Rating)  
VALUES  
(1, 1, 1, 4),  
(2, 2, 2, 5),
```

(3, 3, 3, 3);

-- Sample data for the Sponsors table

```
INSERT INTO Sponsors (SponsorID, EventID, SponsorName, SponsorContact,
PaymentStatus)
```

```
VALUES
```

```
(1, 1, 'Tech Solutions Inc', 'sponsor1@example.com', 'Paid'),
(2, 2, 'Music Gear Co', 'sponsor2@example.com', 'Pending'),
(3, 3, 'Business Services Ltd', 'sponsor3@example.com', 'Paid');
```

-- Sample data for the Speakers table

```
INSERT INTO Speakers (SpeakerID, EventID, SpeakerName, Topic)
```

```
VALUES
```

```
(1, 1, 'Dr. Tech Expert', 'Future of Technology'),
(2, 2, 'Music Star', 'Music in the Digital Age'),
(3, 3, 'Business Guru', 'Entrepreneurship Strategies');
```

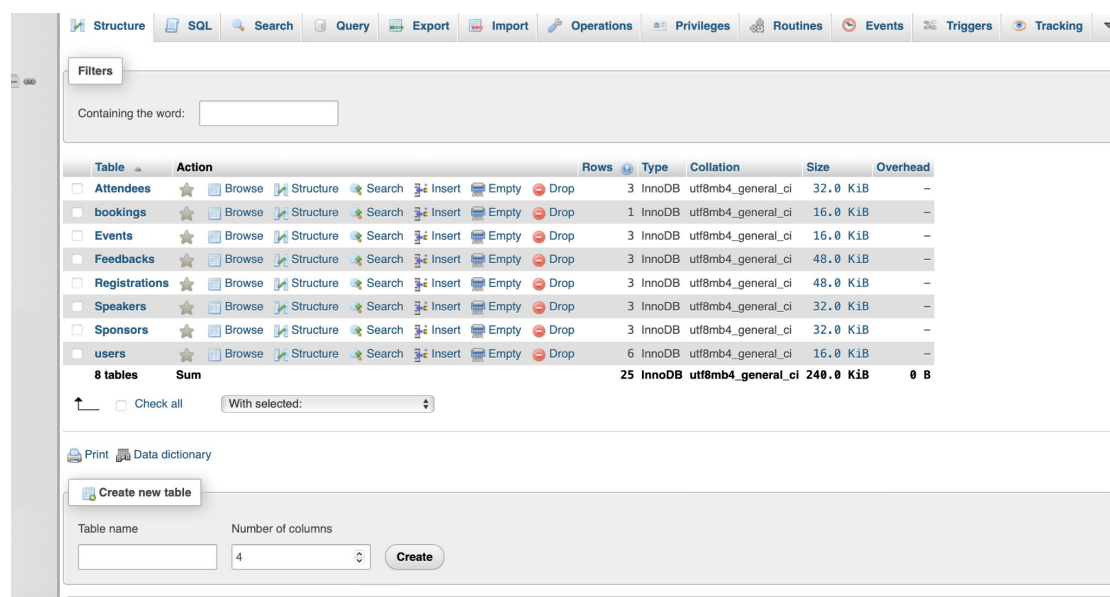
-- Sample data for the Registrations table

```
INSERT INTO Registrations (EventID, AttendeeID, RegistrationDate, PaymentStatus)
```

```
VALUES
```

```
(1, 1, '2023-11-01', 'Paid'),
(2, 2, '2023-11-05', 'Pending'),
(3, 3, '2023-09-25', 'Paid');
```

Screenshots:-



Server: localhost » Database: webt » Table: users

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Showing rows 0 - 5 (6 total, Query took 0.0001 seconds.)

SELECT * FROM `users`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

| | | userID | Username | Email | pass_word |
|--------------------------|------------------|--------|-------------|--------------------------|--|
| <input type="checkbox"/> | Edit Copy Delete | 1 | druv sarkar | anshuladav0135@gmail.com | \$2y\$10\$/rqvtcVAuYJsQc9GFcjUuBf.g9VGcVbghk0JcQ8tXj... |
| <input type="checkbox"/> | Edit Copy Delete | 2 | aaa | asd@gmail.com | \$2y\$10\$TGP3SUrKYF3xeNWp1jVqG.B7h2L9eDqm3bhNdocONQL... |
| <input type="checkbox"/> | Edit Copy Delete | 3 | vansh | vansh@123 | \$2y\$10\$ojMsBGLm90QN1QLqkt9n9ebxOdW1R5QpVkBn9858sep... |
| <input type="checkbox"/> | Edit Copy Delete | 5 | anshul | druv@gmail.com | \$2y\$10\$3jeKZaWibBwTkz9DLnghUO2Qs.3yijAY3WFOVlqmaq9... |
| <input type="checkbox"/> | Edit Copy Delete | 7 | anshul | druv@gmail.com | \$2y\$10\$cF2.uU/nQwpl.k5C1nxVkOyd0Xf1sVXPo.VixGfBMyJ... |
| <input type="checkbox"/> | Edit Copy Delete | 8 | 1234567890 | anshul@gmail.com | \$2y\$10\$dzuU5N9v5hEx9ZD0..MSDObiNNcz5tV8xEfIBtNlBAL... |

Check all | With selected: Edit Copy Delete Export

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

Print Copy to clipboard Export Display chart Create view

Bookmark this SQL query

Console

Server: localhost » Database: webt » Table: Events

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Showing rows 0 - 2 (3 total, Query took 0.0001 seconds.)

SELECT * FROM `Events`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

| | | EventID | EventName | EventDate | Location | Organizer |
|--------------------------|------------------|---------|--------------------------|------------|-------------|----------------------|
| <input type="checkbox"/> | Edit Copy Delete | 1 | Conference on Technology | 2023-11-15 | New York | Tech Corp |
| <input type="checkbox"/> | Edit Copy Delete | 2 | Music Festival | 2023-12-05 | Los Angeles | Music Promotions LLC |
| <input type="checkbox"/> | Edit Copy Delete | 3 | Business Expo | 2023-10-20 | Chicago | Business Events Inc |

Check all | With selected: Edit Copy Delete Export

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

Print Copy to clipboard Export Display chart Create view

Bookmark this SQL query

Label: ☐ Let every user access this bookmark

Console