Project 3

Title: Event Management System (SQL)

1. Database Creation

Create a database named "EventsManagement."

Create tables for Events, Attendees, and Registrations.

Events- Event_Id, Event_Name, Event_Date, Event_Location, Event_Description

Attendees- Attendee_Id, Attendee_Name, Attendee_Phone, Attendee_Email, Attendee_City

Registrations-Registration_id, Event_Id, Attendee_Id,Registration_Date,Registration_Amount.

The FOREIGN KEY constraint in the Registrations table references the Event_Id column in the Events table and the Attendee_Id column in the Attendees table.

Query:

-- Creating the database

CREATE DATABASE EventsManagement;

USE EventsManagement;

-- Create the Events table

CREATE TABLE Events (

   Event_Id INT PRIMARY KEY,

   Event_Name VARCHAR(100) NOT NULL,

   Event_Date DATE NOT NULL,

   Event_Location VARCHAR(100),

   Event_Description TEXT

);

-- Create the Attendees table

CREATE TABLE Attendees (

   Attendee_Id INT PRIMARY KEY,

   Attendee_Name VARCHAR(100) NOT NULL,

```sql
    Attendee_Phone VARCHAR(15),

    Attendee_Email VARCHAR(100) UNIQUE,

    Attendee_City VARCHAR(50)

);
```

-- Create the Registrations table

```sql
CREATE TABLE Registrations (

    Registration_Id INT PRIMARY KEY,

    Event_Id INT NOT NULL,

    Attendee_Id INT NOT NULL,

    Registration_Date DATE NOT NULL,

    Registration_Amount DECIMAL(10, 2),

    FOREIGN KEY (Event_Id) REFERENCES Events(Event_Id),

    FOREIGN KEY (Attendee_Id) REFERENCES Attendees(Attendee_Id)

);
```


2. Data Creation

:

Insert some sample data for Events, Attendees, and Registrations tables with respective fields.

Query:

-- Insert sample data into Events table

```sql
INSERT INTO Events (Event_Name, Event_Date, Event_Location, Event_Description)

VALUES

    ('Tech Conference', '2024-12-10', 'New York', 'A conference on emerging technologies.'),

    ('Music Fest', '2024-12-15', 'Los Angeles', 'A grand music festival with live bands.'),

    ('Art Exhibition', '2024-12-20', 'San Francisco', 'Showcasing contemporary art.');
```

-- Insert sample data into Attendees table

INSERT INTO Attendees (Attendee_Name, Attendee_Phone, Attendee_Email, Attendee_City)

VALUES

   ('John', '1234567890', 'John@gmail.com', 'New York'),

   ('Priya', '0987654321', 'Priya@gmail.com', 'Los Angeles'),

   ('Abi', '1122334455', 'Abi@egmail.com', 'San Francisco');

   -- Insert sample data into Registrations table

INSERT INTO Registrations (Event_Id, Attendee_Id, Registration_Date, Registration_Amount)

VALUES

   (1, 1, '2024-11-20', 100.00),

   (2, 2, '2024-11-21', 150.00),

   (3, 3, '2024-11-22', 200.00);

3. Manage Event Details

3.1 Question:

a) Inserting a new event.

Query:

INSERT INTO Events (Event_Name, Event_Date, Event_Location, Event_Description)

VALUES ('Workshop on AI', '2024-12-25', 'Boston', 'Hands-on AI workshop.');

3.2 Question:

B) Updating an event's information

Query:

UPDATE Events

SET Event_Location = 'Chicago', Event_Date = '2024-12-30'

WHERE Event_Id = 1;

3.3 Question:

C) Deleting an event.

DELETE FROM Events WHERE Event_Id = 2;

4) Manage Track Attendees & Handle Events

4.1 Question:

a) Inserting a new attendee.

Query:

INSERT INTO Attendees (Attendee_Name, Attendee_Phone, Attendee_Email, Attendee_City)

VALUES ('Saranya', '9988776655', 'Saranya@gmail.com', 'Boston');

4.2 Question:

b) Registering an attendee for an event.

Query:

INSERT INTO Registrations (Event_Id, Attendee_Id, Registration_Date, Registration_Amount)

VALUES (1, 4, '2024-11-23', 120.00);

5.Develop queries to retrieve event information, generate attendee lists, and calculate event attendance statistics.

5.1 Question:

Retrieve Event Information

Query:

SELECT * FROM Events;

Output:

Event_Id	Event_Name	Event_Date	Event_Location	Event_Description
1	Tech Conference	2024-12-30	Chicago	A conference on emerging technologies.
3	Art Exhibition	2024-12-20	San Francisco	Showcasing contemporary art.
4	Workshop on AI	2024-12-25	Boston	Hands-on AI workshop.
5	Workshop on AI	2024-12-25	Boston	Hands-on AI workshop.
6	Workshop on AI	2024-12-25	Boston	Hands-on AI workshop.

5.2 Question:

Generate an Attendee List for a Specific Event

Query:

SELECT a.Attendee_Name, a.Attendee_Phone, a.Attendee_Email, a.Attendee_City,r.Event_id

FROM Registrations r

JOIN Attendees a ON r.Attendee_Id = a.Attendee_Id

WHERE r.Event_Id = 1;

Output:

Attendee_Name	Attendee_Phone	Attendee_Email	Attendee_City	Event_id
John	1234567890	John@gmail.com	New York	1
Saranya	9988776655	Saranya@gmail.com	Boston	1

5.3 Question:

Calculate Event Attendance Statistics

Query:

SELECT e.Event_Name, COUNT(r.Registration_Id) AS Total_Attendees,

COALESCE (SUM(r.Registration_Amount),0) AS Total_Revenue

FROM Events e

LEFT JOIN Registrations r ON e.Event_Id = r.Event_Id

GROUP BY e.Event_Name, e.Event_Id;

Output:

Event_Name	Total_Attendees	Total_Revenue
Tech Conference	2	220.00
Art Exhibition	1	200.00
Workshop on AI	0	0.00