

Project: Event Management System using PostgreSQL.

1. Database creation

```
CREATE DATABASE "EventsManagement"
WITH
OWNER = postgres
ENCODING = 'UTF8'
LC_COLLATE = 'English_United States.1252'
LC_CTYPE = 'English_United States.1252'
TABLESPACE = pg_default
CONNECTION LIMIT = -1
IS_TEMPLATE = False;
```

a. Table Creation

Events	Attendees
<pre>CREATE TABLE Events (Event_Id INT, Event_Name VARCHAR(30), Event_Date DATE, Event_Location VARCHAR(100), Event_Description VARCHAR(200), PRIMARY KEY (Event_Id));</pre>	<pre>CREATE TABLE Attendees (Attendee_Id INT, Attendee_Name VARCHAR(30), Attendee_Phone NUMERIC, Attendee_Email VARCHAR(30), Attendee_City VARCHAR(20), PRIMARY KEY (Attendee_Id));</pre>
Registrations	
<pre>CREATE TABLE Registrations (Registration_Id INT, Event_Id INT, Attendee_Id INT, Registration_Date DATE, Registration_Amount NUMERIC, PRIMARY KEY (Registration_Id), FOREIGN KEY (Event_Id) REFERENCES Events(Event_Id), FOREIGN KEY (Attendee_Id) REFERENCES Attendees(Attendee_Id));</pre>	

2. Data Creation

INSERT INTO Events

(Event_Id, Event_Name, Event_Date, Event_Location, Event_Description) VALUES
('101', 'AR Rahman', '2024-03-03', 'Chennai', 'Music Show'),
('102', 'Comicon 2023', '2023-11-19', 'Bangalore', 'Exhibition'),
('103', 'National Awards', '2023-11-12', 'Delhi', 'Movie'),
('104', 'I was not Ready Da!', '2024-01-06', 'Bangalore', 'Comedy'),
('105', 'Thangalan - Tamil', '2024-02-13', 'Kolkata', 'Movie');

SELECT * FROM Events;

	event_id [PK] integer	event_name character varying (30)	event_date date	event_location character varying (100)	event_description character varying (200)
1	101	AR Rahman	2024-03-03	Chennai	Music Show
2	102	Comicon 2023	2023-11-19	Bangalore	Exhibition
3	103	National Awards	2023-11-12	Delhi	Movie
4	104	I was not Ready Da!	2024-01-06	Bangalore	Comedy
5	105	Thangalan - Tamil	2024-02-13	Kolkata	Movie

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

('1001', 'Muskaan', '9999999991', 'Muskaan@gmail.com', 'Delhi'),
('1002', 'Rajat', '9999999992', 'Rajat@gmail.com', 'Delhi'),
('1003', 'Abhinav', '9999999993', 'Abhinav@gmail.com', 'Mumbai'),
('1004', 'Kundan', '9999999994', 'Kundan@gmail.com', 'Uttar Pradesh'),
('1005', 'Karishma', '9999999995', 'Karishma@gmail.com', 'Mumbai'),
('1006', 'Shivani', '9999999996', 'Shivani@gmail.com', 'Goa'),
('1007', 'Devashish', '9999999997', 'Devashish@gmail.com', 'Uttarakhand'),
('1008', 'Sarthak', '9999999998', 'Sarthak@gmail.com', 'Delhi');

SELECT * FROM Attendees;

	attendee_id [PK] integer	attendee_name character varying (30)	attendee_phone numeric	attendee_email character varying (30)	attendee_city character varying (20)
1	1001	Muskaan	9999999991	Muskaan@gmail.com	Delhi
2	1002	Rajat	9999999992	Rajat@gmail.com	Delhi
3	1003	Abhinav	9999999993	Abhinav@gmail.com	Mumbai
4	1004	Kundan	9999999994	Kundan@gmail.com	Uttar Pradesh
5	1005	Karishma	9999999995	Karishma@gmail.com	Mumbai
6	1006	Shivani	9999999996	Shivani@gmail.com	Goa
7	1007	Devashish	9999999997	Devashish@gmail.com	Uttarakhand
8	1008	Sarthak	9999999998	Sarthak@gmail.com	Delhi

INSERT INTO Registrations

```
(Registration_Id, Event_Id, Attendee_Id, Registration_Date, Registration_Amount) VALUES
('10001', '101', '1001', '2023-10-12', '7500'),
('10002', '102', '1003', '2023-09-25', '1000'),
('10003', '103', '1002', '2023-10-29', '2000'),
('10004', '104', '1004', '2023-10-20', '500'),
('10005', '101', '1005', '2023-09-10', '7500'),
('10006', '103', '1008', '2023-09-15', '2000'),
('10007', '101', '1007', '2023-11-01', '7500'),
('10008', '102', '1006', '2023-11-05', '1000');
```

```
SELECT * FROM Registrations;
```

	registration_id [PK] integer	event_id integer	attendee_id integer	registration_date date	registration_amount numeric
1	10001	101	1001	2023-10-12	7500
2	10002	102	1003	2023-09-25	1000
3	10003	103	1002	2023-10-29	2000
4	10004	104	1004	2023-10-20	500
5	10005	101	1005	2023-09-10	7500
6	10006	103	1008	2023-09-15	2000
7	10007	101	1007	2023-11-01	7500
8	10008	102	1006	2023-11-05	1000

3) Manage Event Details

a) Insert New event

```
Insert INTO Events (Event_Id, Event_Name, Event_Date, Event_Location, Event_Description) VALUES
('106', 'Unheard Diaries', '2023-10-29', 'Delhi', 'Storytelling');
```

b) Update event's information

```
UPDATE Events
SET Event_Location = 'Mumbai' WHERE Event_Id = '104';
```

c) Deleting an event

```
DELETE FROM Events WHERE Event_Id = '105';
```

4) Manage Track attendees and handle events

a) Insert new attendee

```
INSERT INTO Attendees (Attendee_Id, Attendee_Name, Attendee_Phone, Attendee_Email,
Attendee_City)
VALUES ('1009', 'Krishna', '9999999999', 'Krishna@gmail.com', 'Tamil Nadu');
```

b) Register attendee

```
INSERT INTO Registrations
(Registration_Id, Event_Id, Attendee_Id, Registration_Date, Registration_Amount)
VALUES ('10009', '101', '1009', '2023-11-11', '7500');
```

5) Retrieve event information, generate attendee list, Calculate event attendee statistics

```
WITH Event1 AS(
SELECT E.Event_id, E.event_name, E.event_date, E.event_location,
SUM(R.registration_amount) OVER(PARTITION by E.event_id) AS Amountgenperevent
FROM Events E JOIN Registrations R ON E.event_id = R.event_id
JOIN Attendees A ON A.attendee_id = R.attendee_id)
SELECT Event_id, event_name, event_location, Amountgenperevent
FROM Event1
GROUP BY 1,2,3,4
ORDER BY Amountgenperevent DESC;
```

	event_id [PK] integer 	event_name character varying (30) 	event_location character varying (100) 	amountgenperevent numeric 
1	101	AR Rahman	Chennai	30000
2	103	National Awards	Delhi	4000
3	102	Comicon 2023	Bangalore	2000
4	104	I was not Ready Da!	Mumbai	500