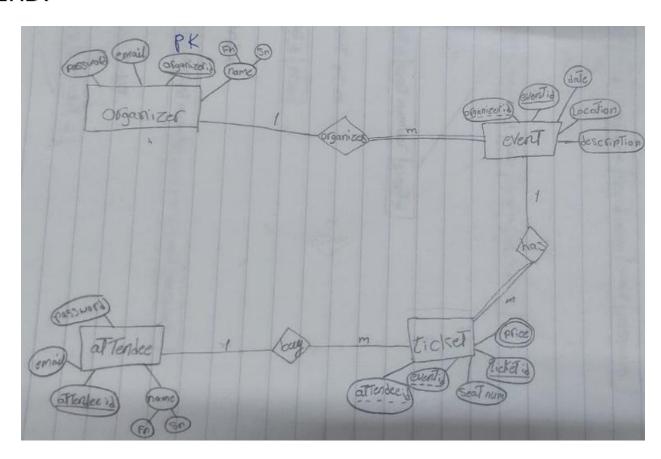
Event management system

Intro:

The Event Management System is a database-based system that helps organize events more easily and efficiently. The goal of the system is to make it simple for organizers to create events and define all related details like the name, location, time, and number of tickets.

It also helps attendees view available events, book their tickets easily, and keep track of their reservations.

ERD:



The system includes main entities such as:

Organizer

Event

Ticket

Attendee

Entities and their attributes:

- ➤ Organizer
 - o Organizer_id PK
 - o Name
 - o Passward
 - o Email

> Event

- o Organizer_id FK
- o Event_id PK
- o Date
- Location
- \circ Description

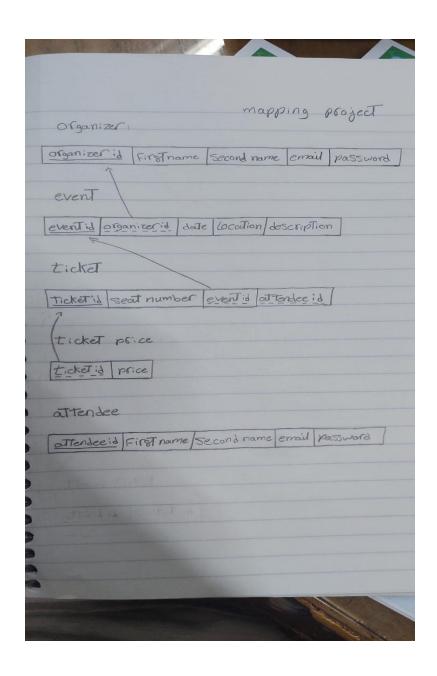
➤ <u>Ticket</u>

- o Ticket_id PK
- o Attendee_id FK
- o Event_id FK
- o Seat num
- o Price

> Attendee

- o Attendee_id FK
- o Name
- o Email
- o Passward
- ✓ Each entity is connected through well-structured relationships, which makes managing and accessing data simple and clear.

Mapping:



SQL & Some queries:

Create database

ysql> DESCR: 	IBE ticket; 	+	+	+	
Field	Type	Null	Key	Default	Extra
ticket_id	 int	NO	PRI	NULL	
event_id	int	YES	MUL	NULL	
seat_num	varchar(50)	YES		NULL	
price	decimal(5,2)	YES	ĺ	NULL	

Field	Type	Null	Key	Default	Extra
attendee_id	 int	NO	PRI	 NULL	
name	varchar(50)	YES		NULL	
email	varchar(50)	YES	ĺ	NULL	
password	varchar(50)	YES		NULL	

Field	Type	Null	Key	Default	Extra
 organizer_id	 int	NO	 PRI	 NULL	,
name	varchar(50)	YES	İ	NULL	
email	varchar(50)	YES	ĺ	NULL	ĺ
password	varchar(50)	YES	ĺ	NULL	İ

Field	Type	Null	Key	Default	Extra
event_id	 int	NO	 PRI	 NULL	
organizer_id	int	YES	MUL	NULL	
description	text	YES	1	NULL	
location	varchar(50)	YES	ĺ	NULL	
date	date	YES	İ	NULL	ĺ

Inserte data into tables:

organizer_id	name	email	password
1	Ali Hassan	ali@example.com	pass123
2	Sara Ahmed	sara@example.com	sara456
3	Omar Adel	omar@example.com	omar789
4	Mona Khaled	mona@example.com	mona321
5	Hassan Zaki	hassan@example.com	hz456
6	Laila Nabil	laila@example.com	laila654
7	Tamer Hany	tamer@example.com	th123
8	Eman Saad	eman@example.com	eman987
9	Mahmoud Gamal	mahmoud@example.com	mg456
10	Nada Yasser	nada@example.com	ny111

ticket_id	event_id	seat_num	price
+ 1	101	A1	150.00
2	101	A2	150.00
3	102	B1	100.00
4	103	C3	200.00
5	104	D5	120.00
6	105	E2	180.00
7	106	F4	160.00
8	107	G1	130.00
9	108	H3	140.00
10	109	I2	170.00

attendee_id	name	email	password
1	Ahmed Ali	ahmed@example.com	ah123
2	Salma Youssef	salma@example.com	salma456
3	Khaled Tamer	khaled@example.com	kt789
4	Huda Farid	huda@example.com	hf321
5	Yasser Nabil	yasser@example.com	yn654
6	Mariam Adel	mariam@example.com	ma456
7	Rami Saeed	rami@example.com	rs987
8	Dina Omar	dina@example.com	do123
9	Nour Hossam	nour@example.com	nh789
10	Fady Reda	fady@example.com	fr111

```
mysql> select * from Event;
 event_id | organizer_id | description
                                                   location
                                                                date
                            Music Concert
                                                                 2025-07-01
       101
                                                   Cairo
       102
                        2
                                                   Alexandria
                                                                 2025-07-05
                             Art Gallery
       103
                        3
                             Book Festival
                                                   Cairo
                                                                 2025-07-10
       104
                        4
                             Music Concert
                                                   Giza
                                                                 2025-07-12
                                                                 2025-07-15
       105
                        5
                             Art Gallery
                                                   Mansoura
       106
                             Science Expo
                                                   Tanta
                                                                 2025-07-17
                        6
                        7
                             Photography Contest
                                                   Ismailia
       107
                                                                 2025-07-20
       108
                        8
                             Food Festival
                                                   Cairo
                                                                 2025-07-22
                             Gaming Convention
                                                   Alexandria
                                                                 2025-07-25
       109
                        9
       110
                             Science Expo
                                                   Cairo
                                                                 2025-07-28
                       10
10 rows in set (0.00 sec)
```

```
mysql> INSERT INTO ticket_price (ticket_id, price)
    -> SELECT ticket_id, price
    -> FROM ticket;
Query OK, 10 rows affected (0.01 sec)
Records: 10 Duplicates: 0 Warnings: 0
mysql> SELECT * FROM ticket_price;
 ticket_id | price
          1
              150.00
          2
              150.00
          3
              100.00
          4
              200.00
              120.00
          5
          6
              180.00
          7
              160.00
          8
              130.00
          9
              140.00
            170.00
10 rows in set (0.00 sec)
```

Apply some important queries in sql:

```
mysql> SELECT event_id, organizer_id FROM event WHERE location = 'cairo';
+-----+
| event_id | organizer_id |
+-----+
| 101 | 1 |
| 103 | 3 |
| 108 | 8 |
| 110 | 10 |
+-----+
4 rows in set (0.00 sec)
```

```
mysql> SELECT event.event_id,
    -> organizer.organizer_id,
    -> event.description,
    -> organizer.name AS 'organizer_name'
    -> FROM event
    -> INNER JOIN organizer ON event.organizer_id = organizer.organizer_id;
  event_id |
             organizer_id | description
                                                   organizer_name
                            Music Concert
       101
                                                    Ali Hassan
                        1
       102
                        2
                            Art Gallery
                                                    Sara Ahmed
       103
                        3
                            Book Festival
                                                    Omar Adel
                        4
                            Music Concert
                                                   Mona Khaled
       104
       105
                        5
                             Art Gallery
                                                    Hassan Zaki
                             Science Expo
       106
                        6
                                                    Laila Nabil
                        7
                             Photography Contest
       107
                                                   Tamer Hany
                             Food Festival
       108
                        8
                                                    Eman Saad
                        9
       109
                             Gaming Convention
                                                    Mahmoud Gamal
                           | Science Expo
       110
                       10
                                                   Nada Yasser
10 rows in set (0.00 sec)
```

```
mysql> SELECT SUM(price) AS 'total revenue' FROM ticket;
+-----+
| total revenue |
+-----+
| 1500.00 |
+----+
1 row in set (0.01 sec)

mysql> |
```

attendee_id	name	email	password
1	Ahmed Ali	ahmed@example.com	ah123
8	Dina Omar	dina@example.com	do123
10	Fady Reda	fady@example.com	fr111
4	Huda Farid	huda@example.com	hf321
3	Khaled Tamer	khaled@example.com	kt789
6	Mariam Adel	mariam@example.com	ma456
9	Nour Hossam	nour@example.com	nh789
7	Rami Saeed	rami@example.com	rs987
2	Salma Youssef	salma@example.com	salma456
5	Yasser Nabil	yasser@example.com	yn654