



EVENT PLANNER

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Event Planner Report

Project Description

The event planner is a database system designed to help individuals or organizations manage and organize events. This system allows users to plan various events, manage participant lists, schedule activities, and allocate resources. The primary goal is to ensure smooth coordination of event details and facilitate better communication among stakeholders, ultimately making the event planning process more efficient.

Business Rules

Below are the business rules that guide the structure of the database:

- An Event must have at least one Organizer.
 - Each event is created and managed by an organizer, ensuring responsibility for event oversight.
- An Organizer can manage multiple Events.
 - Organizers can be involved in planning multiple events simultaneously.
- An Event can have multiple Participants, and a Participant can attend multiple Events.
 - Attendees may be invited to or participate in multiple events.
- Each Event must have a specific Location assigned.
 - An event requires a defined location for it to take place. However, a location may host multiple events, either concurrently or at different times.
- Organizers can have direct communication with Participants.
 - Organizers may need to coordinate with participants directly regarding event details, participation requirements, or updates.

Entities for the ERD

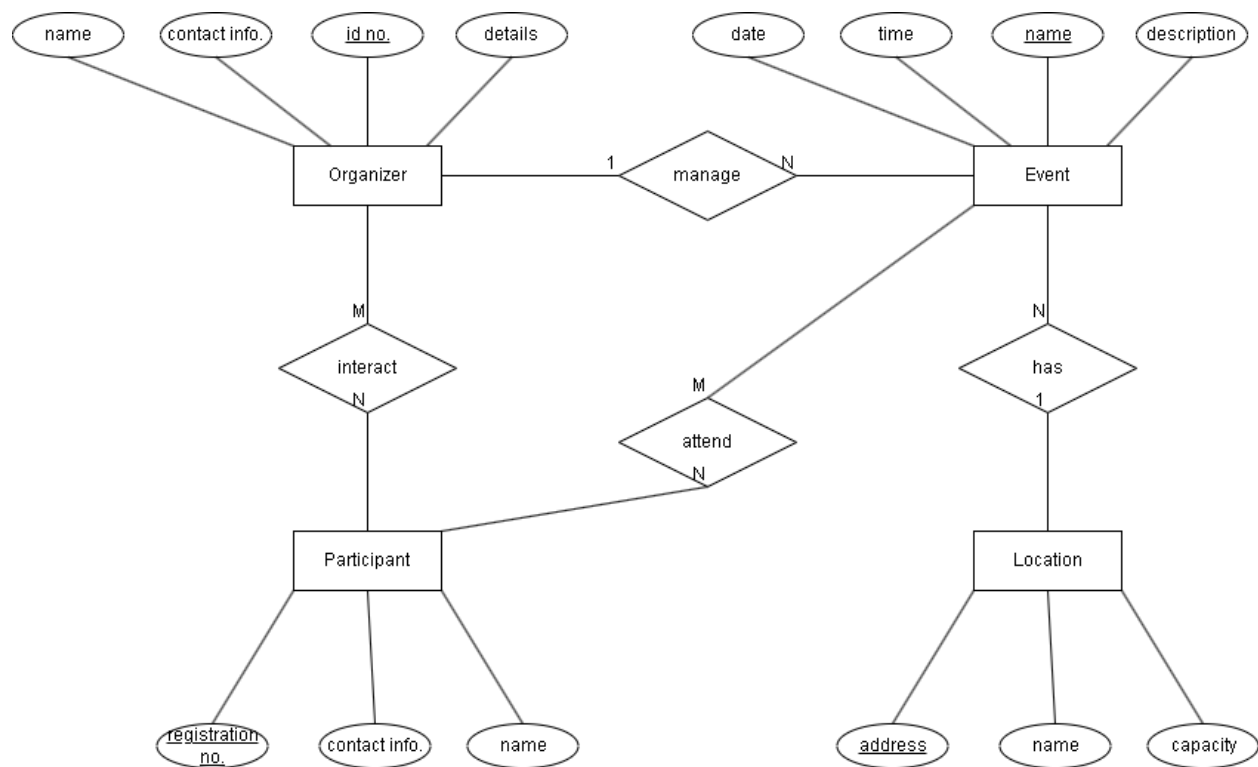
Based on these business rules, the four primary entities for the Event Planner database are:

- **Organizer:** Contains details about the event organizer, including name, id no, contact information, and any relevant details.
- **Event:** Stores information about each event, such as event name, date, time, description.
- **Participant:** Includes participant details like name, contact information, and registration number.
- **Location:** Holds information about various locations available for events, including name, address, and capacity.

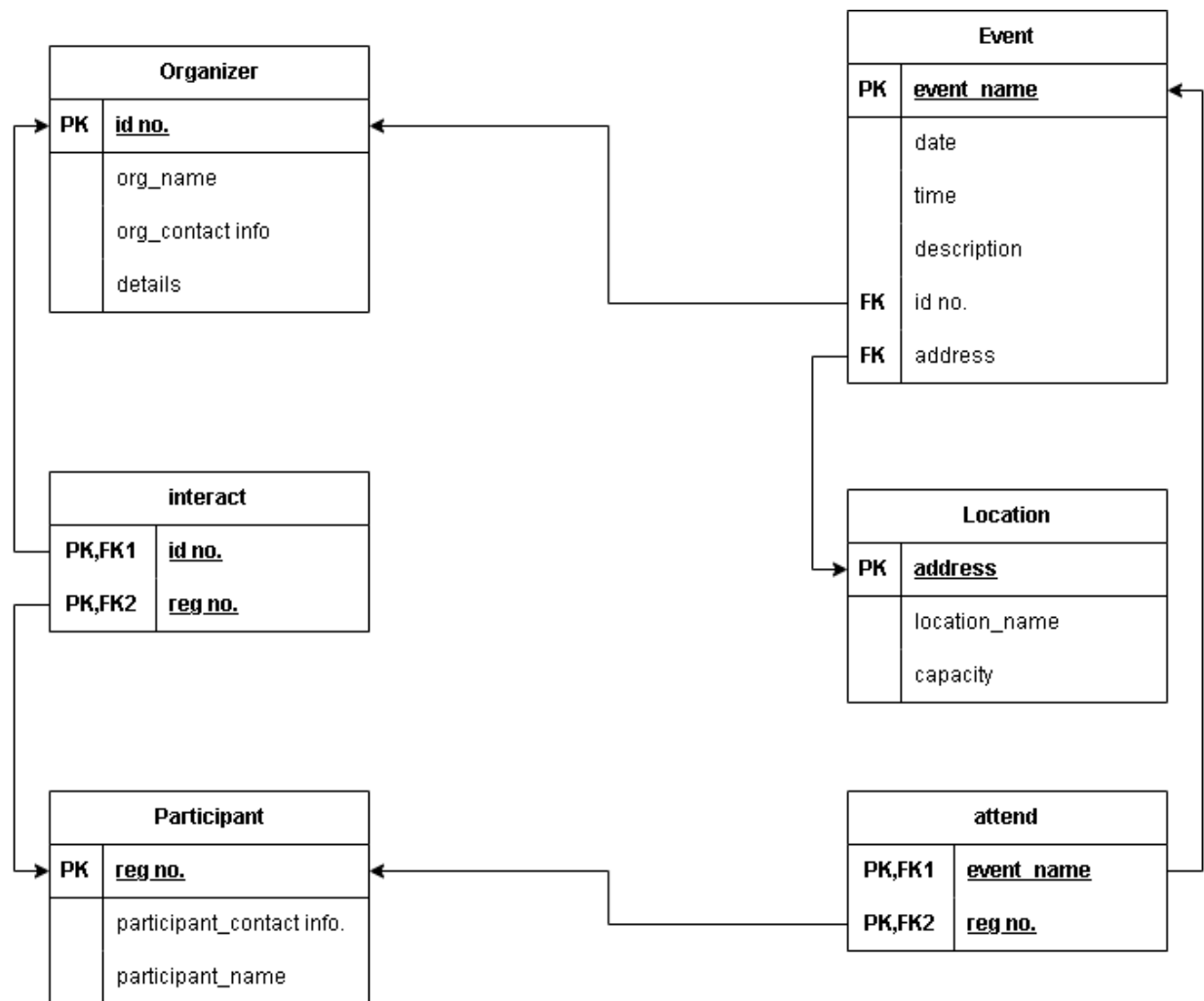
Relationships

- **Organizer to Event:** One-to-Many (One Organizer can manage multiple Events).
- **Event to Participant:** Many-to-Many (One Event can have many Participants, and one Participant can attend many Events).
- **Event to Location:** Many-to-One (One Event has one Location, but one Location can host many Events over time).
- **Organizer to Participant:** Many-to-Many (An Organizer can communicate with multiple Participants, and a Participant may interact with multiple Organizers across different events).

ER Diagram



Relational Model



Database my_event_planner

Table structure for table attend

Column	Type	Null	Default
event_name	varchar(50)	No	
reg_no	int(11)	No	

Dumping data for table attend

Art Fair	102
Tech Expo	101

Table structure for table event

Column	Type	Null	Default
event_name	varchar(50)	No	
date	date	Yes	NULL
time	time	Yes	NULL
description	varchar(50)	Yes	NULL
id_no	int(11)	Yes	NULL
address	varchar(50)	Yes	NULL

Dumping data for table event

Art Fair	2024-02-20	15:00:00	An exhibition of modern art	2	LOC002
Tech Expo	2024-01-15	10:00:00	A showcase of new tech innovations	1	LOC001

Table structure for table interact

Column	Type	Null	Default
id_no	int(11)	No	
reg_no	int(11)	No	

Dumping data for table interact

1	101
2	102

Table structure for table location

Column	Type	Null	Default
address	varchar(50)	No	
location_name	varchar(50)	Yes	NULL
capacity	int(11)	Yes	NULL

Dumping data for table location

LOC001	Tech Hall	500
LOC002	Art Gallery	300

Table structure for table organizer

Column	Type	Null	Default
id_no	int(11)	No	
org_name	varchar(50)	Yes	NULL
org_contact_info	varchar(50)	Yes	NULL
details	varchar(50)	Yes	NULL

Dumping data for table organizer

1	Tech Society	1234567890	Handles tech-related events
2	Art Guild	0987654321	Organizes art exhibitions

Table structure for table participant

Column	Type	Null	Default
reg_no	int(11)	No	
participant_contact_info	varchar(50)	Yes	NULL
participant_name	varchar(50)	Yes	NULL

Dumping data for table participant

101	1111111111	Alice Johnson
102	2222222222	Bob Smith

Database Queries

```
CREATE DATABASE my_event_planner;
```

```
USE my_event_planner;
```

```
CREATE TABLE Organizer(  
    id_no INT PRIMARY KEY,  
    org_name VARCHAR(50),  
    org_contact_info VARCHAR(50),  
    details VARCHAR(50)  
);
```

```
CREATE TABLE `Event` (  
    event_name VARCHAR(50) PRIMARY KEY,  
    date DATE,  
    time TIME,  
    description VARCHAR(50),  
    id_no VARCHAR(50),  
    address VARCHAR(50)  
);
```

```
CREATE TABLE Location(  
    address VARCHAR(50) PRIMARY KEY,  
    location_name varchar(50),  
    capacity INT  
);
```



```
CREATE TABLE Participant(  
    reg_no INT PRIMARY KEY,  
    participant_contact_info VARCHAR(50),  
    participant_name VARCHAR(50)  
);
```

```
CREATE TABLE Interact(  
    id_no INT,  
    reg_no INT,  
    PRIMARY KEY(id_no, reg_no) -- composite primary key  
);
```

```
CREATE TABLE Attend(  
    event_name VARCHAR(50),  
    reg_no VARCHAR(50),  
    PRIMARY KEY(event_name, reg_no) -- composite primary key  
);
```

```
ALTER TABLE attend  
MODIFY reg_no INT;
```

```
ALTER TABLE `event`  
MODIFY id_no INT;
```

```
ALTER TABLE `event`
```

```
ADD CONSTRAINT fk_event_id_no  
FOREIGN KEY(id_no) REFERENCES organizer(id_no),
```

```
ADD CONSTRAINT fk_event_address
FOREIGN key(address) REFERENCES location(address);
```

```
ALTER TABLE interact
ADD CONSTRAINT fk_interact_id_no
FOREIGN KEY (id_no) REFERENCES organizer(id_no),
```

```
ADD CONSTRAINT fk_interact_reg_no
FOREIGN KEY (reg_no) REFERENCES participant(reg_no);
```

```
ALTER TABLE attend
ADD CONSTRAINT fk_attend_event_name
FOREIGN KEY(event_name) REFERENCES event(event_name),
ADD CONSTRAINT fk_attend_reg_no
FOREIGN KEY (reg_no) REFERENCES participant(reg_no);
```

```
INSERT INTO organizer (id_no, org_name, org_contact_info, details)
VALUES (1, 'Tech Society', '1234567890', 'Handles tech-related events'),
       (2, 'Art Guild', '0987654321', 'Organizes art exhibitions');
```

```
INSERT INTO Location (address, location_name, capacity)
VALUES ('LOC001', 'Tech Hall', 500),
       ('LOC002', 'Art Gallery', 300);
```

```
INSERT INTO `event` (event_name, date, time, description, id_no, address)
VALUES ('Tech Expo', '2024-01-15', '10:00:00', 'A showcase of new tech innovations', 1, 'LOC001'),
       ('Art Fair', '2024-02-20', '15:00:00', 'An exhibition of modern art', 2, 'LOC002');
```

```
INSERT INTO Participant (reg_no, participant_contact_info, participant_name)
VALUES (101, '1111111111', 'Alice Johnson'),
       (102, '2222222222', 'Bob Smith');
```

```
INSERT INTO Interact (id_no, reg_no)
VALUES (1, 101),
       (2, 102);
```

```
INSERT INTO Attend (event_name, reg_no)
VALUES ('Tech Expo', 101),
       ('Art Fair', 102);
```