

# Title: Office Meeting Room Management System with Room Preparation Notifications

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## 1. DB Schema

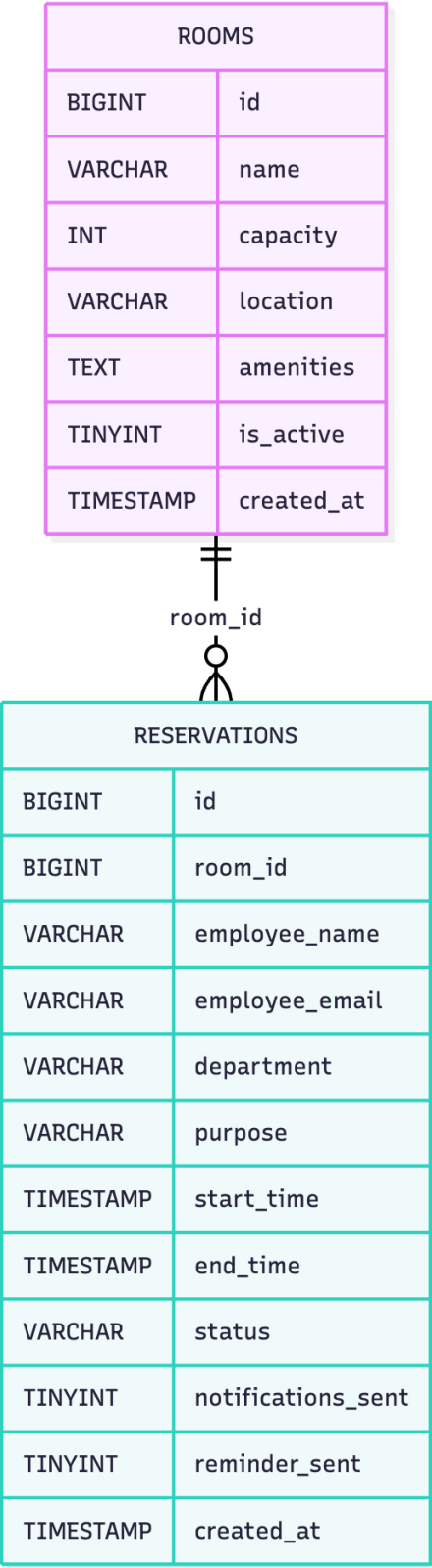
### Rooms

```
CREATE TABLE rooms (  
  id BIGINT NOT NULL AUTO_INCREMENT PRIMARY KEY,  
  name VARCHAR(255) NOT NULL,  
  capacity INT NOT NULL,  
  location VARCHAR(255) NOT NULL,  
  amenities TEXT DEFAULT NULL,  
  is_active TINYINT(1) NOT NULL DEFAULT 1,  
  created_at TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP  
);
```

### Reservations

```
CREATE TABLE reservations (  
  id BIGINT NOT NULL AUTO_INCREMENT PRIMARY KEY,  
  room_id BIGINT NOT NULL,  
  employee_name VARCHAR(255) NOT NULL,  
  employee_email VARCHAR(255) NOT NULL,  
  department VARCHAR(255) NOT NULL,  
  purpose VARCHAR(500) NOT NULL,  
  start_time TIMESTAMP NOT NULL,  
  end_time TIMESTAMP NOT NULL,  
  status VARCHAR(20) NOT NULL DEFAULT 'RESERVED',  
  notifications_sent TINYINT(1) NOT NULL DEFAULT 0,  
  reminder_sent TINYINT(1) NOT NULL DEFAULT 0,  
  created_at TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP,  
  
  -- Foreign key if rooms table exists  
  FOREIGN KEY (room_id) REFERENCES rooms(id)  
);
```

2. ER Diagram



## Output Screenshots

### 1. Create Rooms

```
mysql> INSERT INTO rooms (name, capacity, location, amenities, is_active)
      -> VALUES ('Conference Room A', 20, '2nd Floor', 'Projector, Whiteboard, WiFi', 1);
Query OK, 1 row affected (0.100 sec)

mysql> INSERT INTO rooms (name, capacity, location, is_active)
      -> VALUES ('Meeting Room 1', 10, '1st Floor', 1);
Query OK, 1 row affected (0.206 sec)
```

```
mysql> select * from rooms;
```

id	name	capacity	location	amenities	is_active	created_at
1	Conference Room A	20	2nd Floor	Projector, Whiteboard, WiFi	1	2025-11-22 15:20:30
2	Meeting Room 1	10	1st Floor	NULL	1	2025-11-22 15:20:41

### 2. Create Reservation

The screenshot shows a REST client interface with a POST request to `http://localhost:8969/api/reservations`. The request body is a JSON object containing reservation details. The response is also in JSON format, showing a successful creation with a reservation ID and a confirmation message.

**Request:**

```
{
  "roomId": 1,
  "employeeName": "rocky",
  "employeeEmail": "iamr0han7527@gmail.com",
  "department": "dev",
  "purpose": "lunch",
  "startTime": "2025-01-21T11:30:00",
  "durationMinutes": 30
}
```

**Response:**

```
{
  "reservationId": 1,
  "roomId": 1,
  "roomName": "Conference Room A",
  "startTime": "2025-01-21T11:30",
  "endTime": "2025-01-21T12:00",
  "message": "Reservation created successfully. Notifications sent."
}
```

## 2.1 Automated mail notification to employee and room service.

