

Title: Office Meeting Room Management System with Room Preparation Notifications

1. DB Schema

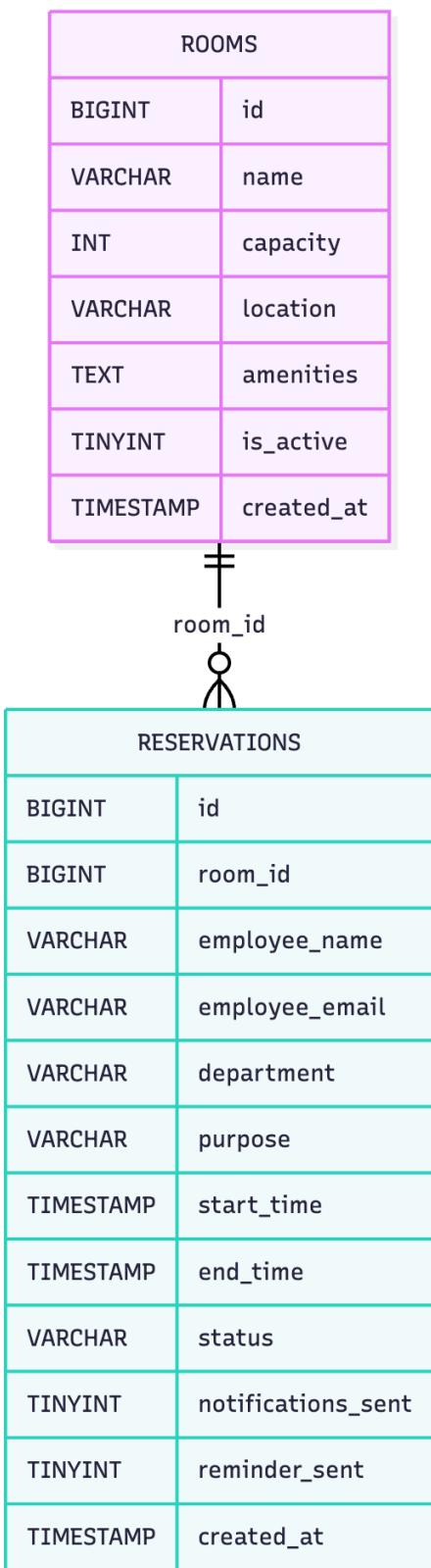
Rooms

```
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 Postman API client interface. The top bar indicates a **POST** method and the URL **http://localhost:8969/api/reservations**. The **Body** tab is selected, showing a JSON payload:

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

The response tab shows a successful **200 OK** status with a response body:

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

2.1 Automated mail notification to employee and room service.

