

## EXPERIMENT 25

### CASE SCENARIO: MYSQL QUERIES IMPLEMENTATION FOR QR ENABLED AUTOMATIC BUS TICKET BOOKING SYSTEM

```
mysql> USE BusBookingSystem;
Database changed
mysql> CREATE TABLE IF NOT EXISTS Users (
    ->     UserID INT NOT NULL PRIMARY KEY,
    ->     Name VARCHAR(50) NOT NULL,
    ->     Email VARCHAR(100) NOT NULL UNIQUE,
    ->     Mobile VARCHAR(15)
    -> );
Query OK, 0 rows affected (0.06 sec)

mysql> CREATE TABLE IF NOT EXISTS Buses (
    ->     BusID INT NOT NULL PRIMARY KEY,
    ->     BusName VARCHAR(50) NOT NULL,
    ->     Source VARCHAR(50),
    ->     Destination VARCHAR(50),
    ->     TotalSeats INT
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql> CREATE TABLE IF NOT EXISTS Tickets (
    ->     TicketID INT NOT NULL PRIMARY KEY,
    ->     UserID INT,
    ->     BusID INT,
    ->     SeatNo INT,
    ->     BookingDate DATE,
    ->     QRCode VARCHAR(255),
    ->     FOREIGN KEY (UserID) REFERENCES Users(UserID),
    ->     FOREIGN KEY (BusID) REFERENCES Buses(BusID)
    -> );
Query OK, 0 rows affected (0.06 sec)

mysql> INSERT INTO Users (UserID, Name, Email, Mobile)
    -> VALUES
    -> (1, 'Divya', 'divya@gmail.com', '9876543210'),
```

```
-> (2, 'Rahul', 'rahul@gmail.com', '9876543211');
Query OK, 2 rows affected (0.04 sec)
Records: 2 Duplicates: 0 Warnings: 0
```

```
mysql> INSERT INTO Buses (BusID, BusName, Source, Destination, TotalSeats)
-> VALUES
-> (1, 'ExpressLine', 'Chennai', 'Bangalore', 40),
-> (2, 'CityRide', 'Chennai', 'Coimbatore', 30);
Query OK, 2 rows affected (0.05 sec)
Records: 2 Duplicates: 0 Warnings: 0
```

```
mysql> INSERT INTO Tickets (TicketID, UserID, BusID, SeatNo, BookingDate, QRCode)
-> VALUES
-> (1, 1, 1, 5, '2025-09-27', 'QR123ABC'),
-> (2, 2, 2, 10, '2025-09-27', 'QR456DEF');
Query OK, 2 rows affected (0.03 sec)
Records: 2 Duplicates: 0 Warnings: 0
```

```
mysql> SELECT t.TicketID, u.Name, b.BusName, t.SeatNo, t.BookingDate, t.QRCode
-> FROM Tickets t
-> JOIN Users u ON t.UserID = u.UserID
-> JOIN Buses b ON t.BusID = b.BusID;
```

TicketID	Name	BusName	SeatNo	BookingDate	QRCode
1	Divya	ExpressLine	5	2025-09-27	QR123ABC
2	Rahul	CityRide	10	2025-09-27	QR456DEF

2 rows in set (0.00 sec)

```
mysql> SELECT * FROM Tickets WHERE UserID = 1;
```

TicketID	UserID	BusID	SeatNo	BookingDate	QRCode
1	1	1	5	2025-09-27	QR123ABC

1 row in set (0.00 sec)

```
mysql> UPDATE Tickets
-> SET SeatNo = 6
-> WHERE TicketID = 1;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> DELETE FROM Tickets WHERE TicketID = 2;
Query OK, 1 row affected (0.04 sec)
```