**FastX- Ticket Booking System**

CREATE DATABASE fastx;

USE fastx;

CREATE TABLE users (

id INT AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(60),

email VARCHAR(40) UNIQUE,

password VARCHAR(25),

role ENUM('USER', 'ADMIN', 'OPERATOR')

);

CREATE TABLE buses (

id INT AUTO\_INCREMENT PRIMARY KEY,

bus\_name VARCHAR(60),

bus\_number VARCHAR(20),

type VARCHAR(50),

total\_seats INT,

amenities VARCHAR(25)

);

CREATE TABLE routes (

id INT AUTO\_INCREMENT PRIMARY KEY,

bus\_id INT,

origin VARCHAR(50),

destination VARCHAR(50),

departure\_time DATETIME,

arrival\_time DATETIME,

fare DECIMAL(10,2),

FOREIGN KEY (bus\_id) REFERENCES buses(id)

);

CREATE TABLE bus\_operators (

id INT AUTO\_INCREMENT PRIMARY KEY,

user\_id INT NOT NULL,

company\_name VARCHAR(100),

FOREIGN KEY (user\_id) REFERENCES users(id)

);

CREATE TABLE seats (

id INT AUTO\_INCREMENT PRIMARY KEY,

route\_id INT NOT NULL,

seat\_number VARCHAR(10),

is\_booked BOOLEAN DEFAULT FALSE,

FOREIGN KEY (route\_id) REFERENCES routes(id)

);

CREATE TABLE bookings (

id INT AUTO\_INCREMENT PRIMARY KEY,

user\_id INT NOT NULL,

route\_id INT NOT NULL,

booking\_date TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

total\_amount DECIMAL(10,2),

status ENUM('CONFIRMED', 'CANCELLED') DEFAULT 'CONFIRMED',

FOREIGN KEY (user\_id) REFERENCES users(id),

FOREIGN KEY (route\_id) REFERENCES routes(id)

);

CREATE TABLE booking\_seats (

id INT AUTO\_INCREMENT PRIMARY KEY,

booking\_id INT NOT NULL,

seat\_id INT NOT NULL,

FOREIGN KEY (booking\_id) REFERENCES bookings(id),

FOREIGN KEY (seat\_id) REFERENCES seats(id)

);

INSERT INTO users (name, email, password, role) VALUES

('Sharma', 'sharma@example.com', 'password123', 'USER'),

('Ram', 'ramin@example.com', 'adminpass', 'ADMIN'),

('Charu', 'charu@egs.com', 'operator123', 'OPERATOR');

INSERT INTO buses (bus\_name, bus\_number, type, total\_seats, amenities) VALUES

('Chetan Express', 'MH12AB1234', 'SLEEPER\_AC', 40, 'Water Bottle,TV,Blanket'),

('City Rider', 'KA01BC5678', 'SEATER\_NONAC', 30, 'Charging Point'),

('Night Queen', 'DL03CD4321', 'SLEEPER\_NONAC', 36, 'Blanket,Charging Point');

INSERT INTO routes (bus\_id, origin, destination, departure\_time, arrival\_time, fare) VALUES

(1, 'Mumbai', 'Pune', '2025-06-09 07:00:00', '2025-06-09 10:00:00', 500.00),

(2, 'Bangalore', 'Chennai', '2025-06-09 08:00:00', '2025-06-09 13:00:00', 750.00),

(3, 'Delhi', 'Jaipur', '2025-06-09 22:00:00', '2025-06-10 04:00:00', 600.00);

INSERT INTO seats (route\_id, seat\_number, is\_booked) VALUES

(1, 'A1', FALSE), (1, 'A2', FALSE), (1, 'A3', TRUE),

(2, 'B1', FALSE), (2, 'B2', TRUE), (2, 'B3', FALSE),

(3, 'C1', FALSE), (3, 'C2', FALSE), (3, 'C3', TRUE);