Online bus e-ticketing system

Designing the database structure for an online bus e-ticketing system requires careful consideration of the various entities involved and their relationships. Here's a more detailed structure with table names, field names, and foreign keys:

1. **Users Table**:
    - Table Name: **users**
    - Fields:
        - **id** (Primary Key)
        - **name**: User's name
        - **email:** user's email (unique)
        - **mobile:** user's mobile (unique)
        - **password :** Hashed password
        - **role** (e.g., admin, customer)
2. **Operators Table**:
    - Table Name: **operators**
    - Fields:
        - **id** (Primary Key)
        - **name:** Name of the bus operator or company
        - **contact:** Contact information of the operator (phone number, email, etc.)
3. **Buses Table**:
    - Table Name: **buses**
    - Fields:
        - **id** (Primary Key)
        - **operator_id** (Foreign Key referencing **operators**)
        - **name:** Name or identifier of the bus
        - **registration_number :** Bus registration number
        - **total_seats:** Total number of seats in the bus
4. **Routes Table**:
    - Table Name: **routes**
    - Fields:
        - **id** (Primary Key)
        - **name:** Name or identifier of the route
        - **origin:** Starting point of the route
        - **destination:** Destination of the route
        - **distance:** Distance covered by the route
        - **duration:** Duration of the journey
5. **Trips Table**:
    - Table Name: **trips**
    - Fields:
        - **id** (Primary Key)
        - **bus_id** (Foreign Key referencing **buses**)
        - **route_id** (Foreign Key referencing **routes**)
        - **departure_time:** Date and time of departure
        - **arrival_time:** Estimated date and time of arrival
        - **fare:** Fare for the trip
        - **available_seats:** Number of available seats for booking
6. **Bookings Table**:
    - Table Name: **bookings**
    - Fields:
        - **id** (Primary Key)
        - **user_id** (Foreign Key referencing **users**)
        - **trip_id** (Foreign Key referencing **trips**)
        - **seat_number:** Seat number(s) booked by the user
        - **status** (e.g., confirmed, pending, cancelled)
7. **Payments Table**:
    - Table Name: **payments**
    - Fields:
        - **id** (Primary Key)
        - **booking_id** (Foreign Key referencing **bookings**)
        - **amount:** Payment amount
        - **payment_method:** Payment method used (Nagad, bkash, etc.)
        - **transaction_id:** Unique identifier for the transaction
        - **status** (e.g., successful, pending, failed)

Depending on the specific requirements of our e-ticketing system, we may need to expand or modify this schema. For example, we might want to include tables for **cities, discounts, passenger details**, etc.

--Thank You--