Relationships:

1. A Bus has a Route (Many-to-One relationship).

2. A Route has multiple Stops (One-to-Many relationship).

3. A Booking is associated with one User, one Bus, and one Route (Many-to-One relationships).

4. A Bus has multiple Seats (One-to-Many relationship).

5. A Cancellation is linked to a Booking (One-to-One relationship).

6. A User can provide multiple Feedback (One-to-Many relationship).

7. An Admin can manage multiple Routes (One-to-Many relationship).

8. An Admin can manage multiple Buses (One-to-Many relationship).

9. A Route has multiple Stops managed by an Admin (One-to-Many relationship).

10. An Admin can manage multiple Passengers (One-to-Many relationship).

11. An Admin can manage multiple Bus Details (One-to-Many relationship).

12. A Payment is associated with a Booking managed by an Admin (One-to-One relationship).

13. A Bus is associated with a Driver (One-to-One relationship).

Database Schema:

Table: Bus

- BusID (Primary Key)

- Type

- Capacity

- RegistrationNumber

- AvailabilityStatus

Bus\_Driver

- DriverID (Foreign Key)

- BusID ( Foreign Key )

Table: Route

- RouteID (Primary Key)

- DepartureCity

- ArrivalCity

- Distance

- Duration

- Fare

Table: Stop

- StopID (Primary Key)

- RouteID (Foreign Key)

- StopName

- StopType (Pick-up/Drop-off)

Table: User

- UserID (Primary Key)

- Username

- Password

- FirstName

- LastName

- Email

- ContactNumber

Table: Booking

- BookingID (Primary Key)

- UserID (Foreign Key)

- BusID (Foreign Key)

- RouteID (Foreign Key)

- BookingDate

- TotalFare

- NumPassengers

- BookingStatus

Passenger

-passengerID (primary key)

-passengerName

-passengerLastName

-passengerAge

-passengerGender

-passengerID

-passengerMobileNo

-passengerEmail

Booking \_ Passenger

-BookingID

--passengerID

-- SeatID

Table: Seat

- SeatID (Primary Key)

- BusID (Foreign Key)

- SeatNumber

- AvailabilityStatus

Table: Cancellation

- CancellationID (Primary Key)

- BookingID (Foreign Key)

- CancellationDate

- RefundAmount

Table: Feedback

- FeedbackID (Primary Key)

- UserID (Foreign Key)

- FeedbackText

- Rating

Table: Admin

- AdminID (Primary Key)

- Username

- Password

- FirstName

- LastName

- Email

- ContactNumber

Table: Payment

- PaymentID (Primary Key)

- BookingID (Foreign Key)

- PaymentDate

- PaymentAmount

- PaymentMethod

Table: Driver

- DriverID (Primary Key)

- FirstName

- LastName

- ContactNumber

- LicenseNumber

- LicenseExpiryDate

- ExperienceYears

Modules:

1. Admin Module:

- This module manages Routes, Buses, Stops, Passengers, Bus Details, and Drivers.

- Admins have complete control over these functionalities.

2. Bookings and Cancellation Module:

- This module handles the entire booking process, including searching routes, selecting seats, providing information, making payments, and printing tickets.

- Users can also cancel bookings.

3. User Module:

- Users can register, log in, book buses, cancel bookings, and provide feedback.

4. Payment Module:

- Handles payment-related information, including Payment ID, Booking ID, Payment Date, Payment Amount, and Payment Method.