Based on the scenario for the classic car club, we can outline the following entities, their attributes, and relationships. Here's a breakdown of how you might set up your data model:

#### **Entities and Attributes**

# 1. Member

#### Attributes:

- Membership Number (Primary Key)
- Name
- Address
- Date of Birth
- Club Points

## 2. **Car**

#### Attributes:

- Registration Number (Primary Key)
- Make
- Model
- Mileage
- Band

# 3. Booking

### Attributes:

- Booking ID (Primary Key)
- Membership Number (Foreign Key)
- Registration Number (Foreign Key)
- Start Date
- Number of Days
- End Date (calculated based on Start Date and Number of Days)

# 4. Invoice

### Attributes:

- Invoice ID (Primary Key)
- Booking ID (Foreign Key)
- Cost in Club Points

# Relationships

## 1. Member to Booking

- Type: One-to-Many
- Explanation: A member can have multiple bookings, but each booking belongs to one member.

### 2. Car to Booking

- o **Type:** One-to-Many
- Explanation: A car can be booked multiple times, but each booking is for one specific car.

### 3. Booking to Invoice

- o **Type:** One-to-One (or One-to-Many if a booking can generate multiple invoices)
- Explanation: Each booking generates one invoice, but you could model it as a oneto-many relationship if you plan for scenarios where multiple invoices might arise from a single booking.

### **Visual Representation**

In a tool like Visual Paradigm, you would represent these entities as tables with their attributes listed underneath, and use lines to connect them to depict relationships, using appropriate notation (like crow's feet for one-to-many).

#### Summary

This data model captures the essential relationships and attributes required for managing members, cars, bookings, and invoices within the classic car club. The relationships reflect the interactions

between members and bookings, ensuring efficient tracking and management of the classic car rental process.