# GYM Management System

## Introduction

The gym management system database consists of 7 main tables that track members, staff, classes, memberships, and bookings.

## ERD

A diagram of a company

AI-generated content may be incorrect.

## Main Entities (Description , Attributes and relations)

1. **Member**

* Stores all personal information about gym members
* Attributes: member\_id, name, date (birth date), gender
* Related to: Member\_Phone, Membership, Member\_book\_Class

2. **Staff**

* Contains information about gym employees/trainers
* Attributes: staff\_id, name, role, gender, phone
* Related to: Class (as trainers)

3. **Class**

* Represents fitness classes offered by the gym
* Attributes: class\_id, trainer\_id, name, schedule, capacity
* Related to: Staff, Member\_book\_Class, Class\_Sessions

4. **Membership**

* Tracks membership plans for gym members
* Attributes: membership\_id, member\_id, start\_date, end\_date, type, status
* Related to: Member

5. **Session (Class\_Sessions)**

* Represents specific instances of scheduled classes
* Attributes: start\_time, class\_id, session\_date, end\_time
* Related to: Class

### Supporting/Junction Entities:

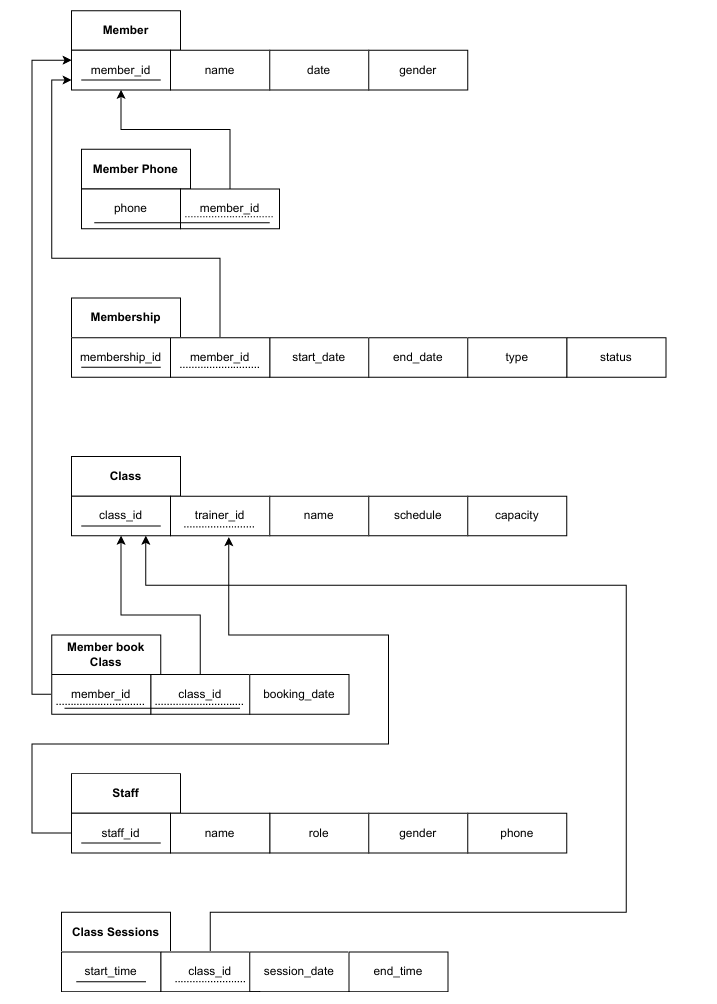
6. **Member\_Phone**

* Stores phone numbers for members (1-to-many relationship)
* Attributes: phone, member\_id
* Related to: Member

7. **Member\_book\_Class**

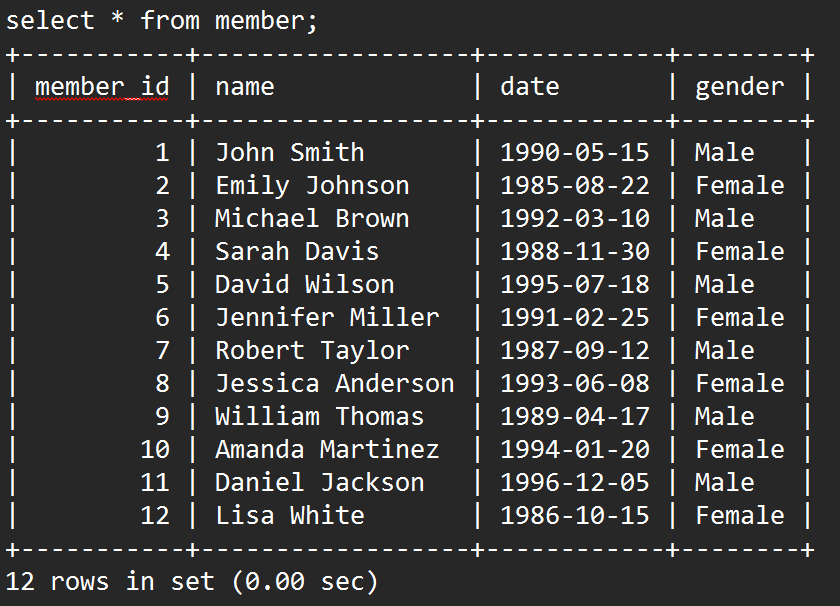
* Junction table tracking which members booked which classes
* Attributes: member\_id, class\_id, booking\_date
* Related to: Member and Class

## Mapping



## Tables

### Member



### Member’s Phone

A screen shot of a phone number

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### Staff

A screenshot of a computer

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### Membership

A screenshot of a computer screen

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### Class

A screenshot of a computer program

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### Member book Class

A black screen with white text

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### Class Sessions

A screen shot of a black and white screen

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## SQL & Some Queries:

1: List all members with active memberships, showing their names and membership types.

A computer screen with white text

AI-generated content may be incorrect.

2: class that contains the highest capacity

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3: Show members with their phone numbers

A screenshot of a computer

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4: List members by birth date (oldest first)

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5: average capacity of all classes

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6:How many members does each membership type have?

A screenshot of a computer

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7: How many classes has each trainer taught?

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