**Entities and Attributes**

**Relationship**

1. Gymnasium:

Attributes are:

|  |
| --- |
| **Gym\_id (primary key),** |
| **Name,**  **Address,**  **Phone\_number** |

1. **Coach**

**Attributes:**

|  |
| --- |
| **coach\_id (Primary Key),**  **last\_name,**  **first\_name,**  **age,**  **specialty** |

1. **Member:** One-to-many relationship. Each gymnasium can have multiple members registered, but each member is registered at one specific gymnasium.

**Relationship: ( Gymnasium** ---< **Member)**

**Attributes:**

|  |
| --- |
| **Member id**  **last\_name,**  **first\_name,**  **address,**  **date\_of\_birth,**  **gender,**  **gym\_id => Name,**  **Address,**  **Phone\_number** |

1. **Session:** One-to-many relationship. Each gymnasium can have multiple sessions, but each session is organized at one specific gymnasium.

**Relationship: (Gymnasium** ---< **Session)**

**Attributes:**

|  |
| --- |
| **session\_id(Primary Key) ,**  **sport\_type,**  **schedule,**  **gym\_id => Name,**  **Address,**  **Phone\_number** |

1. **Enrollment : Many-to-many relationship between sessions and members, facilitated by the Enrollment entity.**

**Relationship: Session >---< Enrollment >---< Member**

**Attributes:**

|  |
| --- |
| **enrollment\_id (Primary Key),** |
| **member\_id => (session\_id**  **last\_name,**  **first\_name,**  **address,**  **date\_of\_birth,**  **gender,**  **gym\_id => ( Name,**  **Address,**  **Phone\_number)),**  **session\_id => (sport\_type,**  **schedule,**  **gym\_id => (Name,**  **Address,**  **Phone\_number))** |

1. **Session-coach :** for the many-to-many relationship between Session and Coach. Each session can have up to two coaches, and each coach can lead multiple sessions.

**Relationship: Session >---< Session\_Coach >---< Coach**

**Attributes:**

|  |
| --- |
| **session\_coach\_id** |
| **session\_id => (sport\_type,**  **schedule,**  **gym\_id => (Name,**  **Address,**  **Phone\_number)**  **),**  **coach\_id => (last\_name,**  **first\_name,**  **age, specialty)** |