

Resources and Relationships

Facilities

Facilities represent the physical locations where sessions are held, like tennis courts or pools.

- **Relationships:**
 - Facilities to Slots: One-to-Many. Each facility has multiple slots.
 - Facilities to Sessions: One-to-Many. Each facility can host multiple sessions.

Slots

Time intervals available for booking at each facility.

- **Relationships:**
 - Slots to Sessions: One-to-One or One-to-Many. Each slot can accommodate one or multiple sessions, depending on the setup.

Sessions

The classes, lessons, or appointments available for booking.

- **Relationships:**
 - Sessions to Bookings: One-to-Many. Each session can be booked multiple times by different members.
 - Sessions to Members (via Bookings): Many-to-Many. Members can book multiple sessions, and sessions can have multiple members booked.

Members

Individuals who use the system to make bookings.

- **Relationships:**
 - Members to Bookings: One-to-Many. Each member can make multiple bookings.

Bookings

Records of members reserving specific sessions.

- **Relationships:**
 - Bookings to Members: Many-to-One. Multiple bookings can be associated with a single member.
 - Bookings to Sessions: Many-to-One. Multiple bookings can be made for the same session, assuming it supports multiple participants.

Summary

- **Facilities** have multiple **Slots** and host multiple **Sessions**.

- **Slots** are designated times at **Facilities** and can be linked to one or more **Sessions**.
- **Sessions** occur during **Slots** at **Facilities** and can have multiple **Bookings** by **Members**.
- **Members** can make multiple **Bookings** for different **Sessions**.
- **Bookings** connect **Members** to **Sessions** and, indirectly, to **Slots** and **Facilities**.