

ER Diagram

Each member has a unique ID, as well as name, a unique email, password, and member points. Each member also has a set of fitness goals, and a set of health metrics.

Members are responsible for paying bills for the services they are receiving. Members can have any number of bills assigned to them, which track which member needs to pay, what the bill is for, how much the bill is, and when the bill was paid (if it has been paid yet). Bills cannot exist on their own, and require a member to be assigned to.

Personal trainers have a unique ID and email, a name, and a password, and are assigned to train members at the member's discretion.

Members can participate in any number of Events, which contain a unique ID, a name, date of occurrence, and what type of event it is.

Members can also participate in Personal Training sessions, which cannot exist without a member participating. PT sessions track the date of occurrence, the topic covered in the session, and any progress notes made by the personal trainer assigned to the session.

PT sessions and events are held in Locations, which have a unique ID and a name, as well as a multivalued attribute that tracks the equipment inside that location.

Staff have a unique ID and email, and have a name, password, and role. Staff don't directly participate in anything, but they will have special permissions that allow them to manage billing, scheduling, and equipment from the front end of the DBMS.