**Group 17**

**Project Proposal**

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**Group Training Classes in a Gymnasium**

We are developing a scheduling system for a gymnasium. The scope of this example includes gym members, instructors, and the group training facilities. Out of the scope is accounting, HR, inventory, facility management, and areas or functions of the Gym not related to group training.

**Business Rules**

1. Each member of the gymnasium must have a name, address, email, phone number, membership ID, and a number of class credits along with their expiry dates. A member may have a medical condition and associated waiver from a doctor. A member may sign up for a particular class, or a package of classes at a discounted rate.
2. Each gym class will have a time, room, members signed up, instructor, class number, class type, and standard number of credits required to attend the class or discounted number of credits to attend the class as part of a class package
3. The number of member credits may be an actual number, or the the member may be on an unlimited plan that terminates at the end of the month or year.
4. A class may have a minimum number of required attendees, in which case below required signup will result in class cancellation.
5. Attending each class deducts required number of credits from member’s account, unless the member has unlimited credits and is using it prior to expiration date.
6. Each Instructor will have a name, address, email, phone, instructor ID, and a list of certifications (i.e. credentials)
7. For an instructor to teach a class of a certain type, they must have a corresponding certification.
8. The Gym has multiple group exercise rooms. Each room has a maximum capacity, room ID, and a list of class types that the room can be used for. Each room also has a schedule. The schedule coordinates classes with trainers and members.
9. Instructors may also give personal training sessions, which do not require a room but do require a certification in personal training, member, and time.

10. Instructors may also offer some promotional classes each year, as part of marketing effort, as part of a health-fair seminar that would be open to public - i.e. membership is not required.

**Assumptions**

The Gym is expected to have at most 7 full-time trainers, 4 studio rooms, and up to 6 classes per day per room.

A room can accommodate up to 20 members during a class session.

We estimate conducting up to 6,000 classes in a given year, serving up to 5,000 members annually.

**Provided Functionality**

* A web portal for members to view their membership status, available classes and how many members have signed up in each for a given day, ability to sign up for a class, ability to view weekly class schedule, and ability to display and print their own weekly schedule.
* A web portal for instructors to view room availability, schedule a class, cancel a class, and display/print their weekly or monthly training schedule.
* A dashboard that summarizes group training related key measures for a given period of time.