**COMP 3005 - Final Project Version B**

**ASSUMPTION LIST**

**The order is based on the ER diagram from top to bottom and right to left**

**Partial/Total Participation Notation**

Dotted line: partial participation (PP)

Regular line: total participation (TP)

**ASSUMPTIONS - ER DIAGRAM BUILD PROCESS**

**Availability**

* An availability must be possessed by 1 to many trainers (TP)

**Trainer**

* All trainers that are in the database have a security clearance checked (since they are viewing sensitive data and personal health information on the members)
* All trainers have some sort of certifications that can vary in different specializations
* A trainer must have 1 to many availabilities (TP)
* Each trainer must view 1 trainer schedule (TP)
* A trainer can host 1 to many bookings (PP)
* A trainer can view 1 to many profiles (PP)
* A trainer can assign (exerciseID) to 1 to many profiles (PP)
  + As approved by Prof Abdelgheny, this part was not implemented (evidence uploaded as an email chain (Questions\_To\_Prof\_Abdelghny.eml)

**Trainer Schedule**

* Each trainer schedule is viewed by exactly one trainer (TP)
* A trainer schedule must track 1 to many bookings (TP)
* A trainer schedule must be updated by an admin (PP)

**Routine**

* A routine can be owned by 1 to many profiles (PP)
* Possesses a description (so it can be anything in the form of a string)

**Profile**

* A profile can be viewed by 1 to many trainers (PP)
* A profile can be assigned 1 to many exerciseIDs (PP)
* A profile can have 1 to many routines (PP)
* A profile can have 1 to many goals (PP)
* A profile can have 1 to many achievements (PP)
* A profile can make 1 to many payments (PP)
* A profile must be managed by a member (TP)

**Goal**

* A goal must be owned by a profile (TP)
* A goal can be tracked by an accomplishment (PP)
* Once a goal is achieved, its goal id is saved into the achievement
  + As approved by Prof Abdelgheny, this part was not implemented (evidence uploaded as an email chain (Questions\_To\_Prof\_Abdelghny.eml)
* Goals only include the target weight, target pace (for running), and target body fat

**Achievements**

* An achievement must track 1 goal (TP)
* An accomplishment must be owned by a profile (TP)
* Stores the goal id as achieve id and it also stores date achieved

**Member**

* A member must manage a profile (TP)
* A member can view 1 member schedule (PP)
* A member can request 1 to many bookings (PP)
  + Member can choose Trainer, room and time
* Manager and profile entities are essentially one thing
  + Represent the users, just split the information into two entities

**Member Schedule**

* A member schedule must be viewed by a member (TP)
* A member schedule can track 1 to many bookings (PP)
* A member schedule must be updated by an admin (TP)

**Bookings**

* A booking must be tracked by a trainer schedule (TP)
* A booking must be hosted by a trainer (TP)
* A booking must be tracked by a member schedule (TP)
* A booking must be requested by a member (TP)
* A booking must be processed by an admin (TP)
* When a member requests a booking, the status will be “pending”
  + The system will determine if the trainer is available on specified date and time and display as a boolean value
  + The system will determine if the equipment status is > 7 in the requested room and display as a boolean value
  + The system will determine if the room requested is available and display as a boolean value
  + The admin will review these boolean values and ultimately approve or deny the booking
  + Upon approval, the admin must manually create an invoice/billing to the member, set the price and billing date and send it to the member.
    - When a member pays, the billing will disappear from both the member side and admin side.

**Payment**

* A payment must be made by a profile (TP)
* A payment must be processed by an admin (TP)
* Mentioned earlier: a payment is submitted separately and manually from the admin approving a booking request. Basically, when an admin approves a booking, the admin must then manually submit a payment to that member.

**Admin**

* An admin can process 1 to many payments (PP)
* An admin can process 1 to many bookings (PP)
* An admin can monitor 1 to many equipments (PP)
* An admin can update 1 to many trainer schedules (PP)
* An admin can update 1 to many member schedules (PP)

**Equipment**

* An equipment must be monitored by an admin (TP)
* The status of an equipment is determined by it’s score (score is out of 10)
* The admin can update it’s score anytime and specify the date of the last check
* If the score is below 7, then when a member requests a booking that will be using this equipment, the admin will see “false” in the status of the equipment meaning it’s quality is not adequate to be used.
* Equipment score is to be selected from 1-10.