

COMP 3005 Final Project

Health and Fitness Club Management System

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Link to youtube video: <https://www.youtube.com/watch?v=H3xxs3xO0RM>

Link to Github: <https://github.com/Mika0917/COMP3005FinalProject>

Conceptual Design:

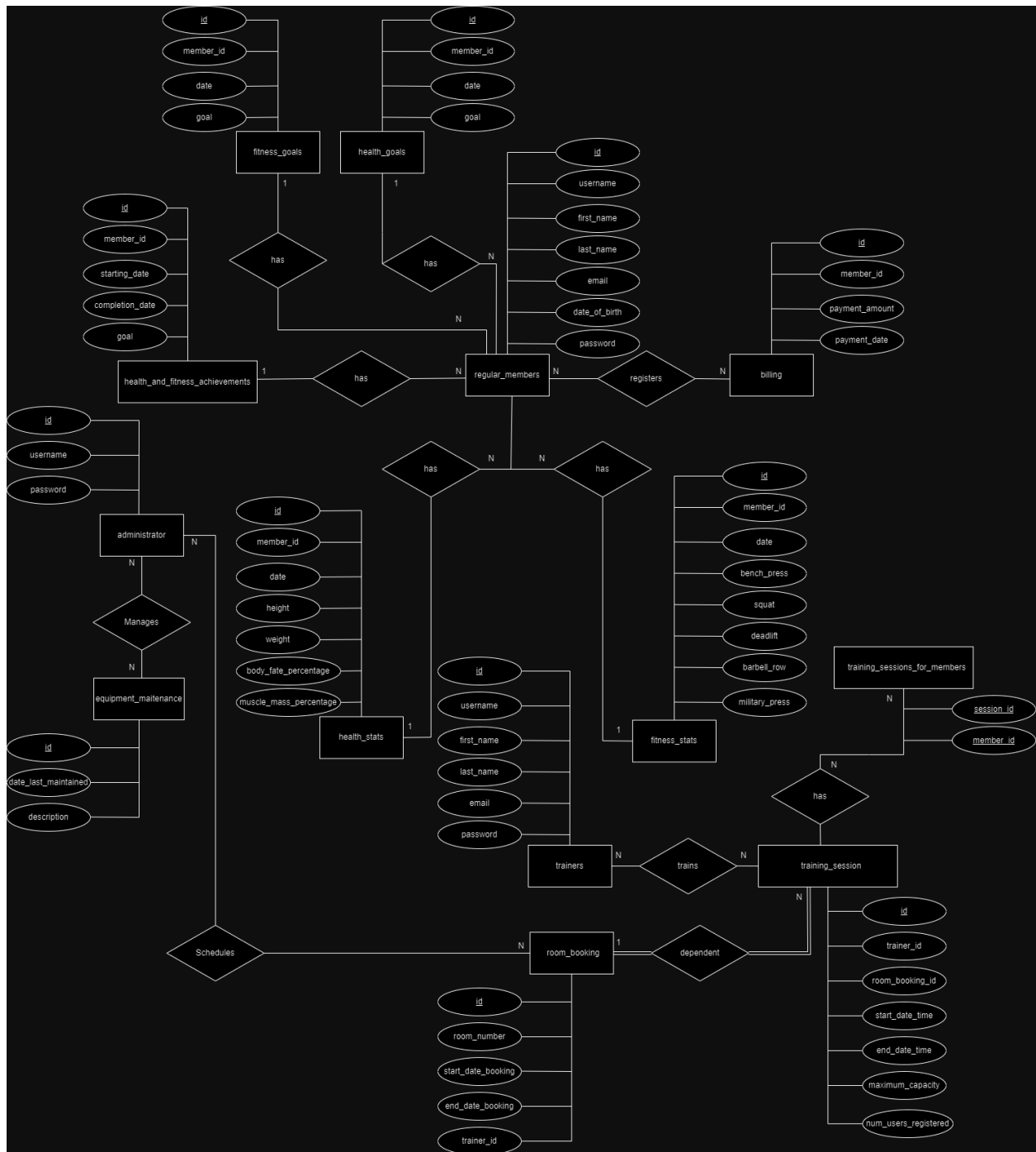
I designed my project adhering to the specifications, and made assumptions where the specifications were vague. So there are 3 types of users, members, trainers and admins. You have to first register for whichever type of user you are and depending on that you will have different options. One of the assumptions that I made was that users would pay to become members and then if they join training sessions it won't cost them more since they already paid to be a member. The way the design works is that admins can create rooms, then trainers can book those rooms and create training sessions which users can join.

For the members when you register you have to pay a membership fee and then you will be able to become a member. There are member functions like profile management, dashboard display, and schedule management. In profile management you will be able to view your profile and edit your profile like update the information, update health stats, update fitness stats, update health goals, and update fitness goals. In the dashboard display you will be able to view your goals and view your achievements. In schedule management the members will be able to see open sessions, view sessions they are registered in, join sessions and cancel any sessions that they are in.

For the trainers after you register you can log in. There are trainer functions like schedule management and search member profiles. In schedule management trainers will be able to view all the sessions they train, show all available rooms that they can book, they can create a training session, they can cancel their training sessions, and they can see users that are registered in a session.

For the admins I also made it so you can register and login because I assumed there would be multiple employees who would be admins, but this can easily be changed in the code. There are admin functions like room booking management, equipment maintenance logs, class schedule updating and billing management. In room booking management, an admin can view booked rooms, view available rooms, create a new room, and cancel a room.

ER Model Design:



Relational Database Schema:



DDL File:

The DDL file can be found in the github repository.

DML File:

The DML file can be found in the github repository.

Bonus:

There are a lot of fail safe checks and extra functions that were not specifically mentioned to do in the specification for example there are checks for members, trainers and admins to see if their usernames and password are actually valid. I put a lot of time and effort in, bonus🙄please 🙏I pray. Project was also done solo.