

24 Hour DB



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System Description

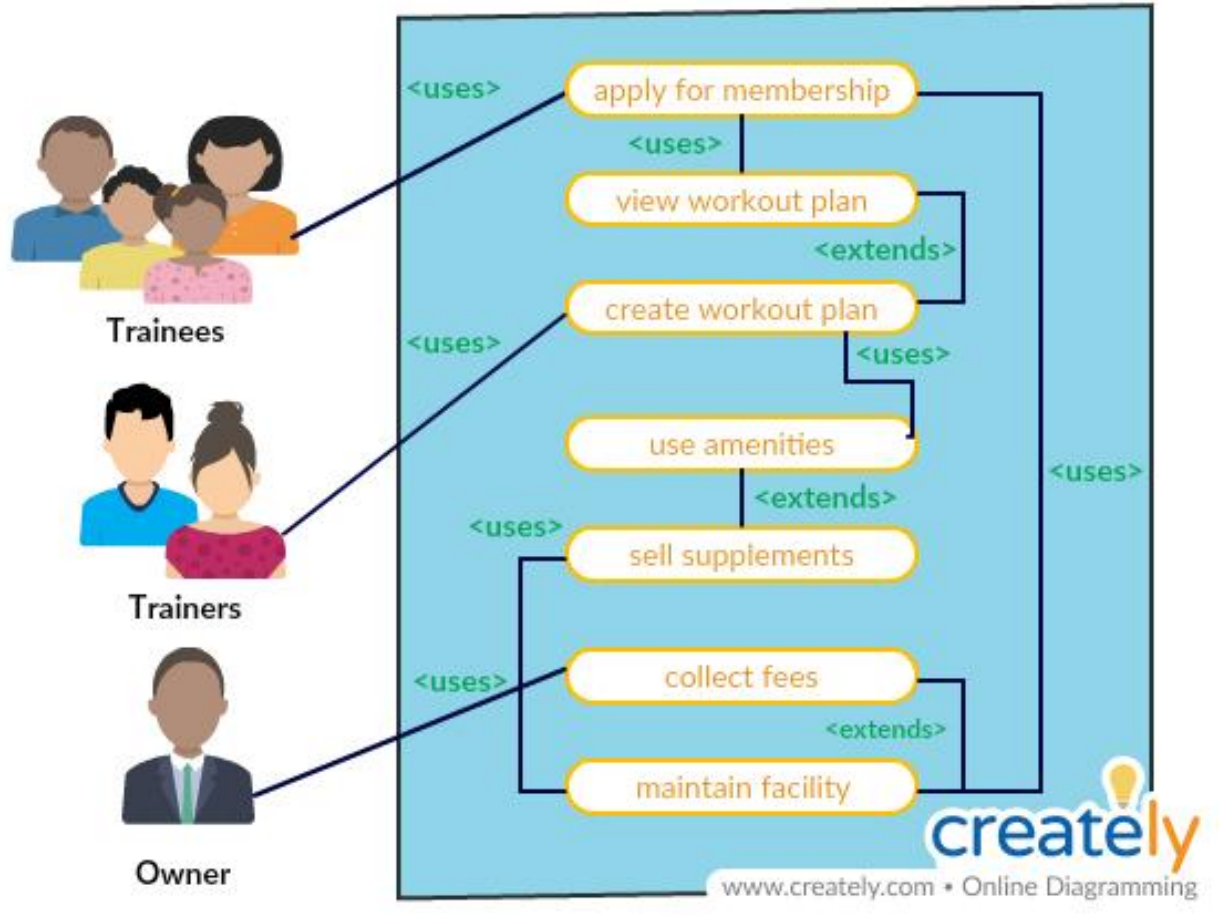
The system we implemented was a DB to easily navigate and eliminate the hassle when trying to find the right gym. Our 24 Hour DB allows for users to see key components such as trainees, trainer's workout plans, where gym trainers are located, what amenities are included in each facility, and the costs it takes to maintain each facility. Whether you are looking to join a gym that's right for you or want to explore amenities at other facilities a get all your information easier with 24 Hour DB



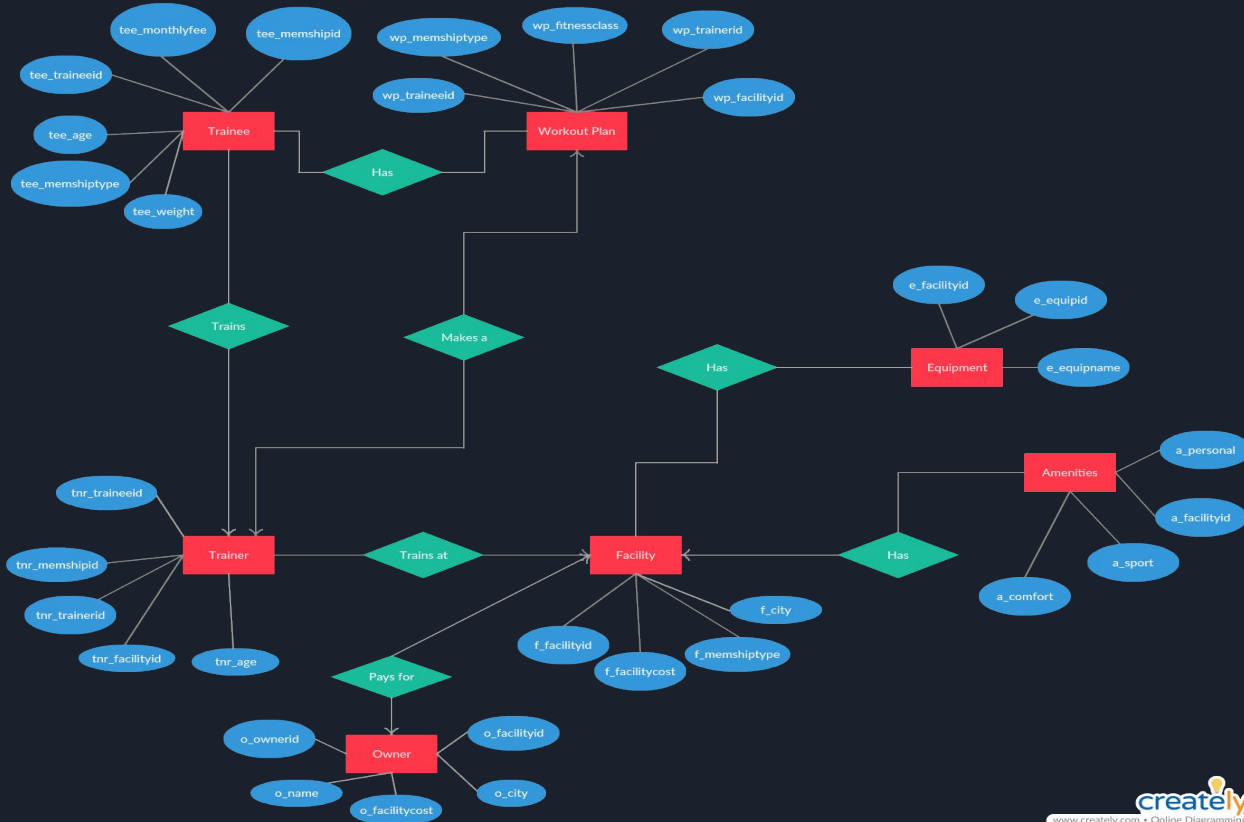


Use Case Description

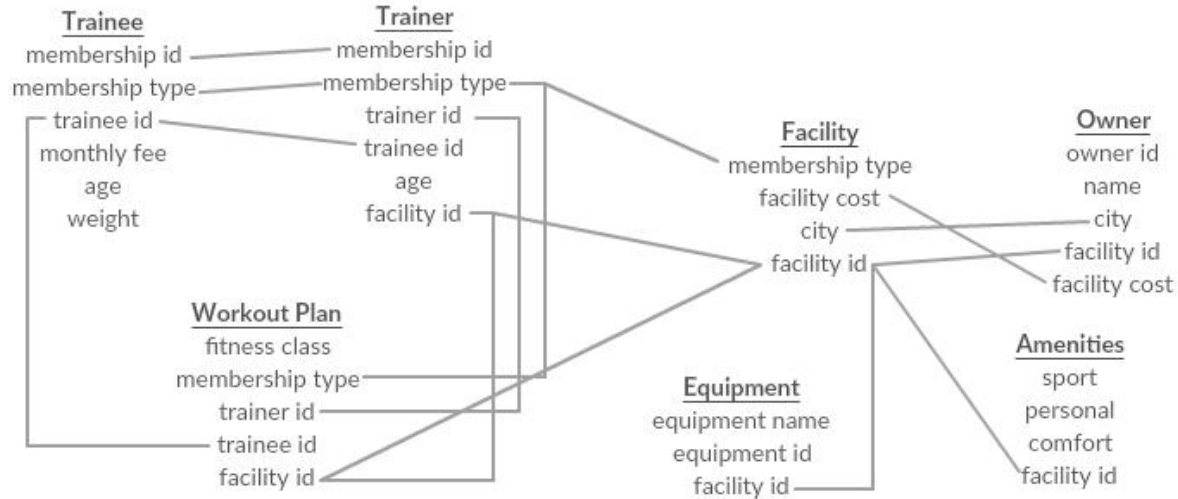
- Types of memberships Trainees have
- What trainers have what trainees
- Equipment available at each facility
- What types of workout plans Trainers have for their Trainees
- Owners can see the cost of their respective facility
- What facilities offer specific workout plans and amenities



E/R Diagram



Relational Schema





Implementation Details

The database used in the project is SQLite3. We were able to nicely connect it to a C++ program which makes all of the SQL statement calls. We first load a menu which asks the user what information they would like to be provided with. According to what the user wants, certain functions are called to display the correct information. Our C++ functions first open the existing database, and if it does not exist, makes the DB. We then execute 'if' statements to see if the database was opened successfully(error checking). If it is, we declare a variable called sql(char pointer) which will be set equal to whatever sql statement we want to run(insert, delete, select, etc.). Finally, we call a function sqlite3_exec which will have sql as a parameter and executes the statement. Additional 'if' statements are also included for better error checking.



Demo Time!

