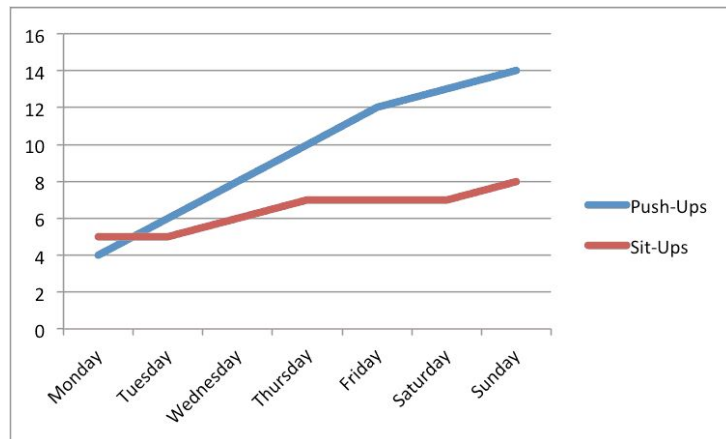# myFitness Analytics

Alberto Valle & Shivneel Chand

Overview

- **Fitness app**
- **Users will be able to:**
  - Search a database for different exercises
  - Add new workouts
  - Track their workouts
  - View their progress
  - Subscribe to trainers who can share workouts

Environment Description

Web Application

- **Backend**
  - ○ **Python Flask**
- **Database**
  - ○ **SQLite**
- **Frontend**
  - ○ **HTML**
  - ○ **Bootstrap**
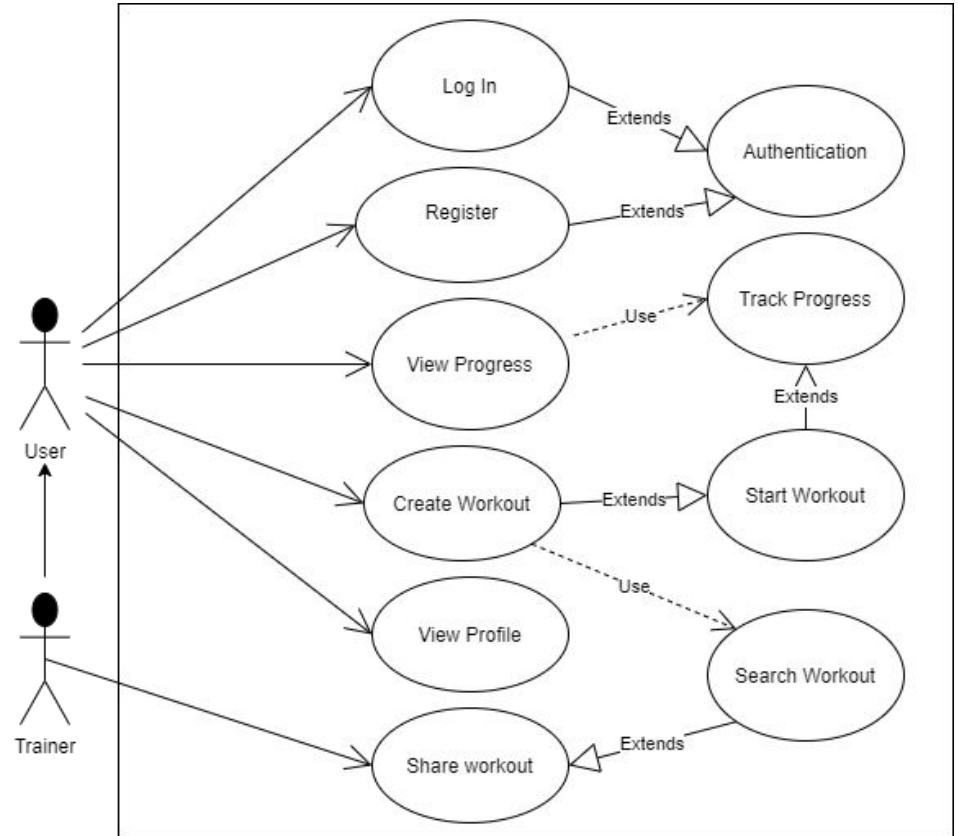- **Graphics and Interactivity**
  - ○ **D3.js**

UML

- User sessions
  - Login/Registration
- Create Workout
  - Choose exercise
  - Add sets/reps/exercise
- View Progress
  - Search workout by date
  - Line graph
- Subscriptions
  - Trainer and Client
  - Share workout plans

E/R Diagram

- 9 Entities

- One <u>User</u> has one <u>Body</u> and is a <u>Customer</u> and/or <u>Trainer</u>

- One <u>User</u> creates Many <u>Training_Sessions</u>

- One <u>Training_Session</u> has many <u>Workouts</u>

- One <u>Workout</u> has many <u>Sets</u>

- Many <u>Workouts</u> are one <u>Exercise</u>

- Many <u>Exercise</u> can have Many <u>Categories</u>
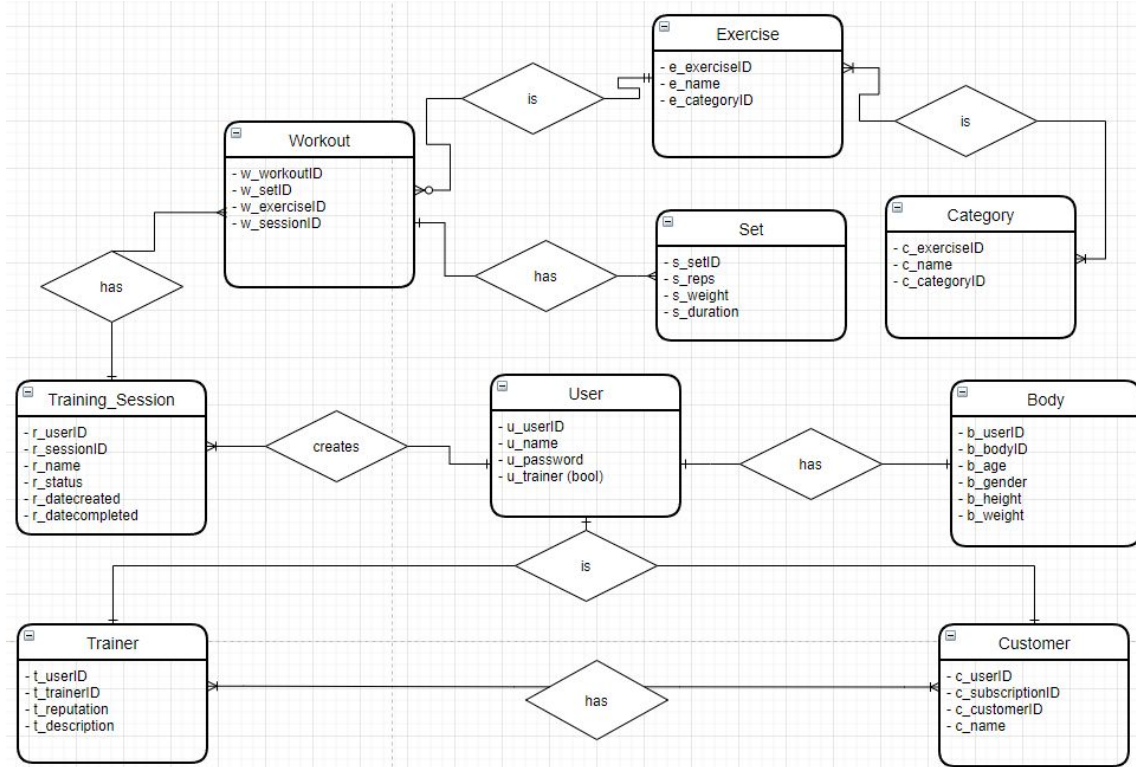
Relational Schema

- <u>User</u>
  - u_userID, u_name
    u_password, u_trainer (bool)
- <u>Body</u>
  - b_userID, b_bodyID, b_age,
    b_gender, b_height, b_weight
- <u>Customer</u>
  - c_userID, c_subscriptionID,
    c_customerID, c_name
- <u>Trainer</u>
  - t_userID, t_trainerID, t_reputation,
    t_description

- <u>Workout</u>
  - w_workoutID, w_setID, w_exerciseID,
    w_sessionID
- <u>Exercise</u>
  - e_exerciseID, e_name, e_categoryID
- <u>Set</u>
  - s_setID, s_reps, s_weight, s_duration
- <u>Category</u>
  - c_exerciseID, c_name, c_categoryID
- <u>Training_Session</u>
  - r_userID, r_sessionID, r_name, r_status,
    r_datecreatedm, r_datecompleted