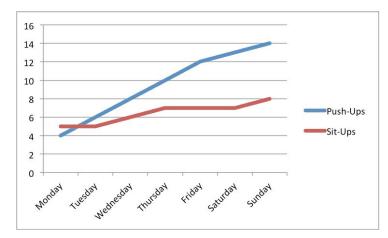
## myFitness Analytics

Alberto Valle & Shivneel Chand

### System Implementation

- Fitness app
- Users will be able to:
  - Search a database for different exercises
  - Add new workouts
  - View their progress
  - Subscribe to trainers to view their workouts

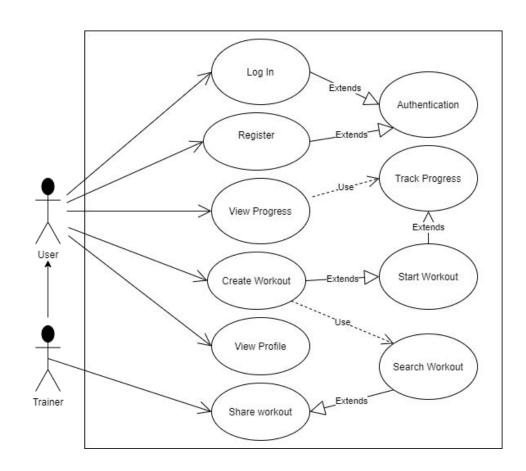




#### Github repo: <a href="https://github.com/Betovef/fitness-tracker">https://github.com/Betovef/fitness-tracker</a>

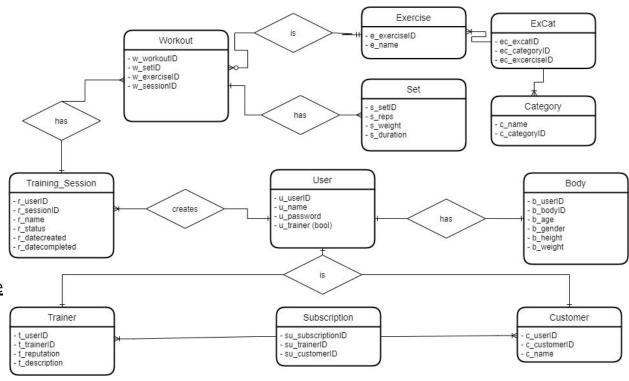
# UML

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



# 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 Workouts are one Exercise
- Many <u>Exercise</u> can have Many <u>Categories</u>



#### **Relational Schema**

- User
  - u\_userID, u\_nameu\_password, u\_trainer (bool)
- Body
  - b\_userID, b\_bodyID, b\_age,
    b\_gender, b\_height, b\_weight
- Customer
  - c\_userID, c\_customerID
- <u>Trainer</u>
  - t\_trainerID, t\_userID, t\_reputation, t\_description
- <u>Subscription</u>
  - su\_subID, su\_customerID, su\_trainerID

- Workout
  - w\_workoutlD, w\_setlD, w\_exerciselD, w\_sessionlD
- Exercise
  - e\_exerciseID, e\_name
- Set
  - s\_setID, s\_reps, s\_weight, s\_duration
- <u>Category</u>
  - c\_name, c\_categoryID
- <u>Training\_Session</u>
  - r\_userID, r\_sessionID, r\_name, r\_status,
    r\_datecreatedm, r\_datecompleted
- <u>ExCat</u> (connects category to exercise)
   ec\_id, ec\_categoryID, ec\_exerciseID,

## **Implementation Details**

#### Web Application:

- Backend
  - Python Flask
- Database
  - SQLite
- Frontend
  - o HTML
  - o CSS
  - o JS
- Graphics and Interactivity
  - D3.js





