

1. Health Rival

2. Interactive Design Requirements Specification Collaboration

Version: 1.3.0

Date: September 5, 2018

Presented by: Team 2

Team Member 1's Name	<u>Peter Budd</u>
Team Member 2's Name	<u>Nick Asermily</u>
Team Member 3's Name	<u>Doanh Pham</u>

3. Revision History:

- September 5th - Doc Revision 1 - Deliverable 0 v1.0.0
- September 10th - Doc Revision 2 - Deliverable 1 v1.1.0
- September 17th - Doc Revision 3 - v 1.1.1
- September 19th - Doc Revision 4 - Deliverable 2 v1.2.0
- September 24th - Doc Revision 5 - Deliverable 3 v1.3.0

1. System Concept

We will be creating a competitive fitness tracker that allows users to collaborate within a webpage using a common HTML/CSS/JavaScript design. Users will be people interested in improving their physical (and mental) state who are also more fueled by a competitive environment. Users will be able to interact with each other through a forum area to ask direct questions about their workouts and/or diets as well as suggest/compare their workouts to the community. Users can also search for other members looking for a friend in their area to go to the gym with and to help motivate them to go. Users can also become involved in a ranking system where they are engaged in a competitive environment and are motivated to reach and push their goals. The ranking system would be dependent upon their current physical body and would work as follows: different ranks correspond to different body types and each month they work towards goals; reps, sets, weights, how often they go, etc. There would also be an area in which users could contribute diet plans for what to eat dependent upon body type. The system would ultimately provide users with an experience that motivates them to improve themselves, gives them a chance to collaboratively influence others and also fuels their competitive nature.

2. Interview/observation Notes

Interview approach would be to present the potential users with the prototype itself, giving a description of what the system will do and give them access to. We would then ask questions such as:

1. Do you go to the gym/workout?
 - a. If yes: How long have you been working out? How frequently do you work out and for how long? Why are you working out? Do you go with a friend?
 - b. If no: Why do you want to go to the gym/workout? How long have you wanted to go to the gym?
2. Have you ever quit working out and what stopped you?
3. Would you be more motivated to go to the gym with a friend or by yourself and why?
4. Do you diet alongside working out?
 - a. If yes: What diet? How long have you been on that diet? How well has it worked out for you? Do you think dieting is important and why?
 - b. If no: What would make you want to consider going on a diet?
5. Would you consider yourself a competitive person?
 - a. If yes: Would competing to reach workout goals against friends motivate you?
 - b. If no: Would setting fitness goals help to motivate you?
6. Do you look for information about weightlifting/dieting online to help improve yourself/techniques?
 - a. If yes: Where do you look? Do you post any information yourself? How has this information changed your routine/habits?
 - b. If no: Why not?

7. Would you be comfortable working out with a stranger/new people of varying experience such as someone with more experience or someone with less experience?

We are looking for different types of users such as; someone looking to lose weight and find motivation to go to the gym, someone who currently goes frequently, someone who is on a diet, someone who goes and is competitive, etc.

During the interview, we will go solo and ask questions as well as take notes via laptop or other method.

Interviews

User 1: John Smith

1. Yes, I go to the gym
 - a. I've been going to the gym for 7 Years
 - b. I go to the gym 3 to 4 days a week for one hour to an hour and a half
 - c. I got to the gym stay in shape and to feel good
 - d. Yes, I go with a friend
2. I quit going to the gym Senior year of highschool due to senioritis. More time for recreational activities
3. I prefer to go with a friend because it adds another brain or another way to think through your workout, someone to keep you focused and goal oriented.
4. No, I do not diet but I am conscious with what I'm eating
 - a. If someone made him go on a diet or if he had an outline, metabolism is good
5. Yes, I am a competitive person
 - a. Absolutely, tried competing against friends last year
6. Yes, I look for information online
 - a. I use an app on my phone to get workouts when I want to change workouts because the change helps get results.
 - b. No, I don't post myself
 - c. Given me more activities to do and more goals to focus on because there is a science behind working out and being fit
7. Yes, I would go with a stranger because it will help me expand or strengthen knowledge depending on other person's experience and adds new factors which keeps things interesting.

User 2: Ali Batayneh

1. No, I do not go to the gym
 - a. I want to go to the gym to become a healthier human being
 - b. I would want to go between an hour and two hours 4 days a week

2. Yes I stopped because of stress and schoolwork
3. I would be more motivated with a friend because they hold me accountable
4. No, I do not diet
 - a. I would need to have a plan
5. Yes, I am a competitive person.
 - a. Yes, a competition between friends would help to motivate me.
6. Yes, I look for information online
 - a. I search using Google
 - b. No, I don't post myself
 - c. Helps me find more efficient ways to solve problems and reduces time spent trying to find new techniques
7. Yes, I would go with a stranger.

User 3: Jonah Bates

1. I've been going to the gym 5-7 days a week for around for almost 5 years and I'm usually there for about an hour and a half. I look and feel much healthier as a result of exercising. For the most part, I like to lift by myself.
2. I have taken some breaks from lifting in the past, due to illness, injury or schoolwork.
3. I much prefer going to the gym by myself, but I can see how others might be more likely to honor a commitment to go with somebody else.
4. The only dieting I do is making sure I eat enough calories in a day. I would consider going on a strict diet if at some point I were to gain or lose a substantial amount of weight without trying to.
5. I consider myself to be somewhat competitive, but I don't know if competing to workout goals would motivate me. Everyone's body is a little different, and I think doing so would only lead to frustration.
6. I'm always searching for more ways to make my workouts more effective, and the internet is a great tool to do so. The community on r/fitness is really informative and always willing to help out. I've never posted any information about myself, but it is pretty standard practice. I'll incorporate new sets that people recommend all the time. Arnold puts it best when he says "shock the muscle to stimulate growth."
7. I don't think I'd be comfortable with that. The gym is a place for me to focus on myself. I like going with a friend every once and a while, but I wouldn't even consider going with a stranger.

User 4: Devan Lad

1. No, I do not go to the gym. I want to go to the gym because I want to be healthier
2. I did quit work out since I had no motivation. The motivation I did have was a grade since I was taking a class

3. No, I would not be more motivated to work out with a friend because my workout routine would be restricted to their routine. Plus there would be a more interest in talking then actually working out.
4. No, nothing would make me go on a diet because I don't want my choices to me restricted.
5. No, I would not be working out in the first place, I never set goals even when I was working out.
6. No, I was taking a class so information on how to diet or weight lift was and still is common knowledge to me.
7. I would high prefer to workout with a stranger that has equal/more experience because inexperience people tend to take the motivation and the pace of working out if they don't know anything.

3. Work Roles

Work Role:	Experienced Gym Member
Context of use	Looking to use this for tracking their fitness, setting fitness goals, learning and sharing information and tips, finding other like-minded individuals through the forums, and/or finding a friend to workout with.
Goals	Track progress in fitness endeavors, learn from or teach other members, and find friends
Frequency of use	Every time they visit the gym or participate in physical activity or just to browse the forums in their free time.
Work responsibilities	Responsible for tracking their fitness accurately and to contribute to the forums to help less experienced members.
Work environment	At the gym or at home
Abilities	Strong knowledge in weightlifting/dieting/working out
Personal	Age 18-30+, Male or Female, Any cultural background

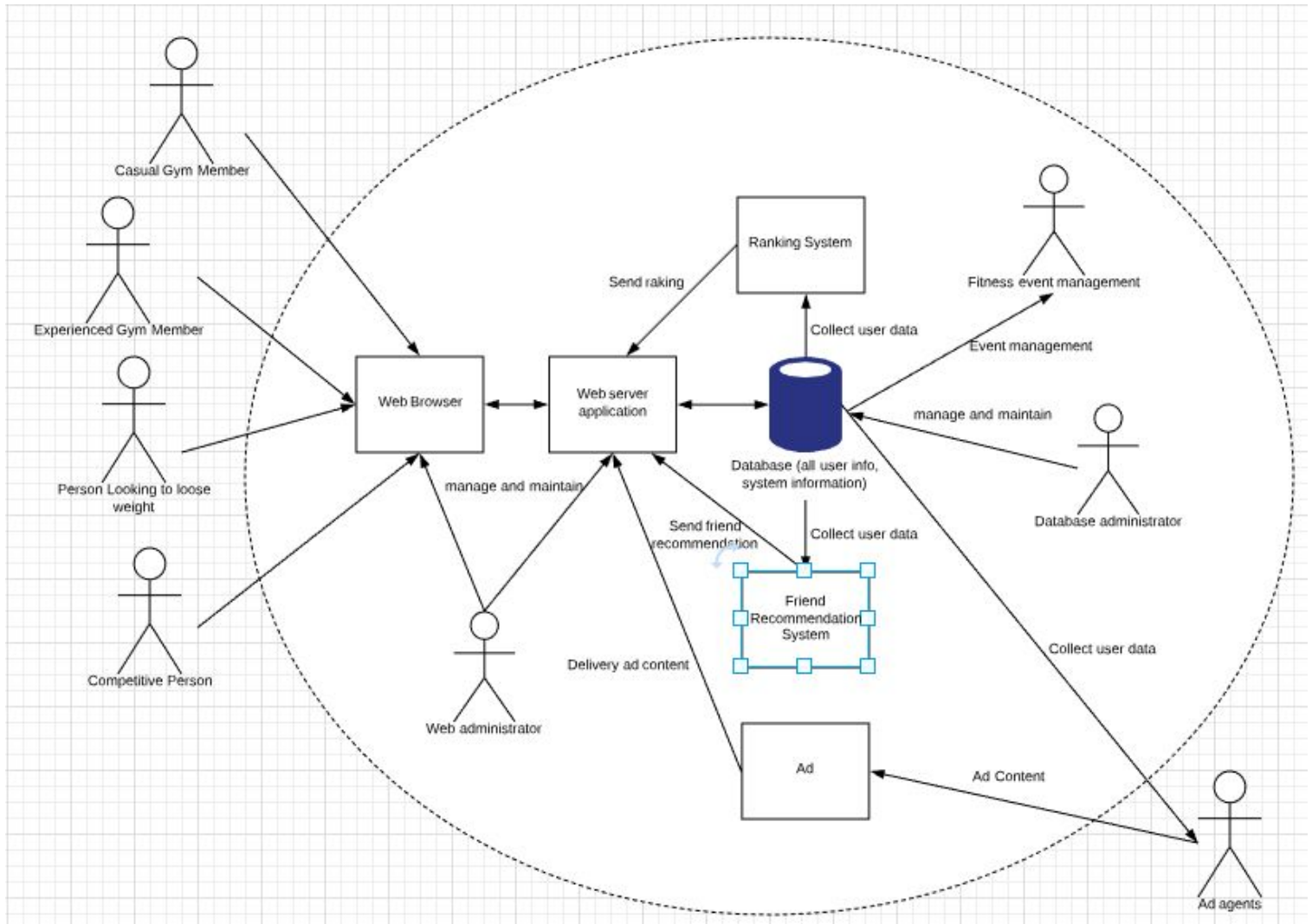
Work Role:	Person Looking to Lose Weight/Build Muscle
Context of use	Looking to use this to set fitness goals to lose weight and/or build muscle, learn information and getting started tips/tricks from the forums, and finding a friend to help motivate them.
Goals	Ultimately to lose weight or build muscle by setting fitness goals and learning from the forums about what they can be doing and how to get started. Also to possibly find a friend to go with to help motivate them.
Frequency of use	Whenever visiting the gym or participating in physical activity.
Work responsibilities	Responsible for setting fitness goals and learning from the forums.
Work environment	At the gym or at home.
Abilities	Little to no experience going to the gym, Little knowledge of weightlifting/dieting
Personal	Age 18-30+, Male or Female, Any cultural background

Work Role:	Casual Gym Member
Context of use	Keep tracking their progress and share new achievement with everyone. Make connection with others in local area who have same interests. Read tips, tricks and learn new exercises. Setting their goals
Goals	Tracking progress and comparing it to their friends or people in the forum
Frequency of use	Use it every time they start doing exercises to track their progress or when they want to share their new achievement
Work responsibilities	Their achievement may motivate the beginner or people want to lose weight and also sharing dieting planner to guide beginner
Work environment	At the gym
Abilities	Have some experiences with weight lifting and dieting
Personal	Age 18-30+, Male or Female, Any culture background

Work Role:	Competitive Person Looking to get motivated to go to the gym
Context of use	Looking to use this to find someone to go to the gym with or any way to motivate them to go. Keep track of progress and use competition to challenge them to keep themselves involved and healthy
Goals	Keep motivated and compete with others
Frequency of use	Use it every time they go to the gym
Work responsibilities	Responsible for keeping track of workout and staying involved in the competitive ranking
Work environment	At the gym or at home
Abilities	Little knowledge of working out or dieting, high competitive drive
Personal	Age 18-30+, Male or Female, Any culture background

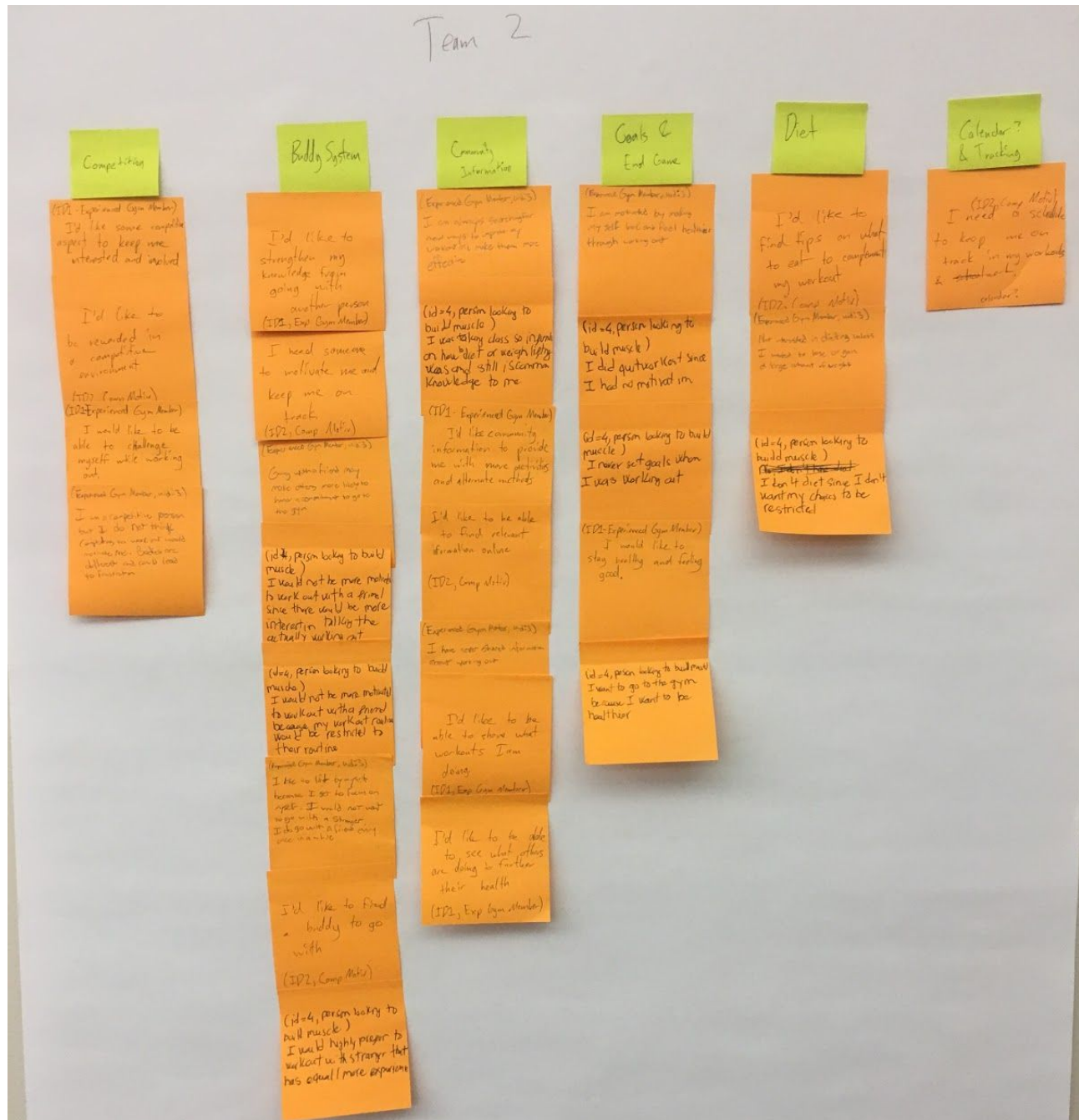
4. Workflow Diagram

Each work role utilizes and contributes to the community available on the site. They can track their progress and diet, meet new people, compete against friends for weekly or monthly goals, and browse or participate on the forums all through the site.



5. WAAD

We found this to be a great way to organize the information received from all of our interviews. We were able to break our data down into six main categories: Competition, Buddy System, Community Information/Collaboration, Goals/End Game, Dieting, and Tracking/Schedule. This will help us define user needs for when the product is started.



6. Interactive Design Requirements

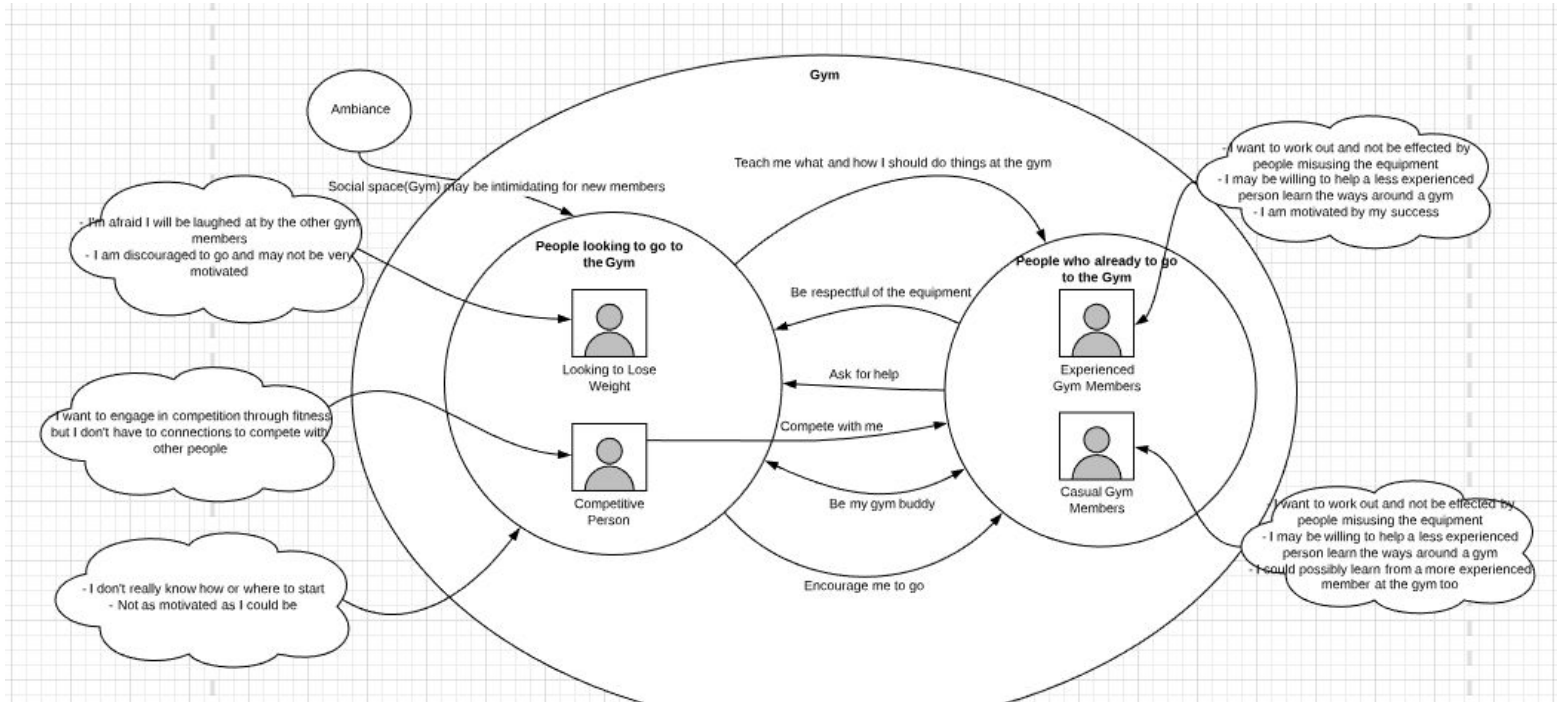
Category Name	Second-Level Feature	UX Requirement Statement	Rationale/Notes
Competition	Leaderboard	Users will be provided with a competitive platform in the form of a leaderboard to increase their motivation. [C1]	Many users said a competitive aspect would help to motivate them or go more often.
Competition	Rewards	Users should be incentivised to reach higher on the leaderboards to increase motivation. [C2]	Having something to show for a user's hard work is a source of motivation other than just seeing your name on a leaderboard.
Buddy System	Friend Search	Users should be able to find other users to go to the gym with by searching for members near me or by gym. [B1]	They should be shown the level of experience of the user whether or not they would like to teach someone of lesser experience, learn with someone of similar experience, or to find someone with more experience for help.
Community Information/ Collaboration	Forum Board	Users will be provided with a resource in the form of a forum board to share, learn, and teach to or from other members. [I3]	This could consist of different sections including a workout section, diet section, getting started section, advice section.
Scheduling	Calendar	Users should be able to keep track of their schedules and plan out their workout times. [T1]	They should have a way to plan their lives and a calendar can keep them honest with what they plan to do.
Scheduling	Calendar Sharing	Users should be able to share their calendars. [T1]	They should be able to use this feature to collaborate with others. This would

			allow them to find a buddy who goes at similar times or has similar free times.
Dieting	Diet Plan	Users should be able to learn about different diets and their success/failures through either the forum or given common knowledge about some popular diets. [D1]	Can include information about why dieting may be beneficial to those who do not want to diet.
Goals/End Game	Goals List	Users should be able to set fitness goals as visualizing and setting a hard goal can push users to reach said goal. [G4]	It is a visual aid to motivate users to continue doing what they originally set out to do.

7. Usability Requirements

1. The interface should be easy to learn for users of different skill levels at the gym so it is not to discourage new users.
2. Gym lingo should be reduced to a minimum or explained for new users so they are not confused.
3. Users should be able to sign into an account and have their passwords remembered.
4. All pages should have a help button to explain how to use the interface.
5. Users should be able to see their daily, weekly, or monthly progress as seeing how they have improved is a satisfying accomplishment.
6. The need for memorization should be minimal and using the product should be simple and straightforward.

8. Design Modeling - Social Model Diagram



9. Design Modeling - Task Analysis

9.1 Buddy System

0. Finding friend to go to the gym with

1. User enters information

1.1. Provide the location

1.2. Provide the schedule

2. System list recommend friends

2.1. Allows user to filter the list by location, name,...

2.2. Allows user to send friend request

2.1. Send request with custom message

2.2 Send request to a phone number

3. Send notification to user when a friend request is accepted

3.1. Send to user's email

Plan: Do 1,2, and 3 in that order. Do 1.1, 1.2, 2.1, 2.2 in the same order. Do 2.2-1, 2.2-2 is optional, they can be done in any order

9.2 Setting Goals

- 0. User sets the goals and their end game
 - 1. User go to the goal page to set the goals
 - 1.1. Goal by day
 - 1.2. Goal by week
 - 1.3. Goal by month
 - 2. User update progress after finishing exercises
 - 2.1. User choose the date
 - 2.2. User fills the form and submit it
 - 3. Award user if goal is achieved
 - 3.1. Send notification
 - 3.2. Giving user a special badge
 - 3.3. Giving option to share with friends
- Plan: Do 1, 2, 3 in that order and 1.1, 1.2, 1.3 in any order

9.3 Diet Plan

- 0. User make diet plan
 - 1. User go to diet plan page to set diet planning
 - 1.1. User choose date
 - 1.2. User pick a food from drop-down that associate with amount of calories
 - 1.3. If user pick other, user have to enter food name and calories
 - 1.4. Display total of consuming calories
 - 2. User can read other shared diet plan
 - 2.1. Pick a diet plan on the dashboard
 - 2.2. User is able to mark a plan as favorite
 - 3. Calories statistic
 - 3.1. List all foods with calories by weekly
 - 3.2. List all foods with calories by monthly
 - 3.3. User is able to filter by name and calories
 - 4. Displaying ad on the diet plan page
- Plan: Do 1, 2 and 3 in that order and 4 is optional. It can be done when we have time

9.4 Forums/Community

- 0. Go to the Forums
- 1. Choose a subcategory
 - 1.1. Dieting Category
 - 1.2. Weightlifting Category
 - 1.3. Tips/Advice Category

- 1.4. Competition Category
- 1.5. Miscellaneous Category
- 2. Reading a Post
 - 2.1. Post a comment
- 3. Posting a new thread
 - 3.1. Write post
 - 3.2. Submit to forum

Plan: Do 1 first, then 1.1, 1.2, 1.3, 1.4, or 1.5 can be chosen or switched at any time, 2 and 3 are optional

9.5 Competition

- 0. Go to Competition Tab
- 1. Check leaderboards
 - 1.1 By Week
 - 1.2 By Month
 - 1.3 By Year
- 2. Enter Daily Progress
 - 2.1 Amount of Time
 - 2.2 How much physical activity
 - 2.3 What activity/machine
- 3. View Progress over time
 - 3.1 By Week
 - 3.2 By Month
 - 3.3 By Year

Plan: Do 1,2,3 in any order depending on user

9.6 Scheduling

- 0. Go to the schedule page
- 1. Choose to edit calendar
 - 1.1 Enter a date
 - 1.2 Create event
 - 1.3 Submit event
- 2. Sharing a calendar
 - 2.1 Calendar can be shared with anyone on friend list
 - 2.2 Simply choose which friend from list to be shared with

Plan: Do 0, 1, and 2 in order

10. Design Modeling - Usage Scenarios

10.1 Usage Scenario 1: Forums

For an experienced gym member, he signs into the website. He is then presented with the home page which allows him to select any of the different pages. This consists of: the competitive page, the buddy finder page, the calendar page, and the forums. Since his goal is to learn from or teach other members, he goes to the forums page. On this page he is allowed to look through posts and comment on them. He is also allowed to post in the forums, where others can look through posts and comment on them.

10.2 Usage Scenario 2: Buddy System

For an experienced gym member, from the home page, he can select the buddy finder tab. He can then select which information to put in and whether or not to provide a schedule. The friend finder will suggest friends for the user. The system will allow the user to send a friend request or accept. The user will be notified when a friend request is accepted.

10.3 Usage Scenario 3: Goals/Motivation

For an experienced gym member, from the home page, he can select the goals/motivation page. From here he can choose to select a goal and set it by day, week, or month. A user can update his progress after activities. Once a goal is achieved, the user is rewarded in some designated way.

10.4 Usage Scenario 4: Dieting

For an experienced gym member, from the home page, he can select the dieting tab. This is where the user may set a diet plan, specifying which food it is and how many calories it contains. The user can also share as well as view shared diet plans. The user can then select at any time to see all the calories listed.

10.5 Usage Scenario 5: Competition

For an experienced gym member, from the home page, he/she can view the competition page. From there they can either view the leaderboard among friends or globally, they can enter new tracking data such as time at the gym or on a treadmill, and they can view their progress competitively over time.