



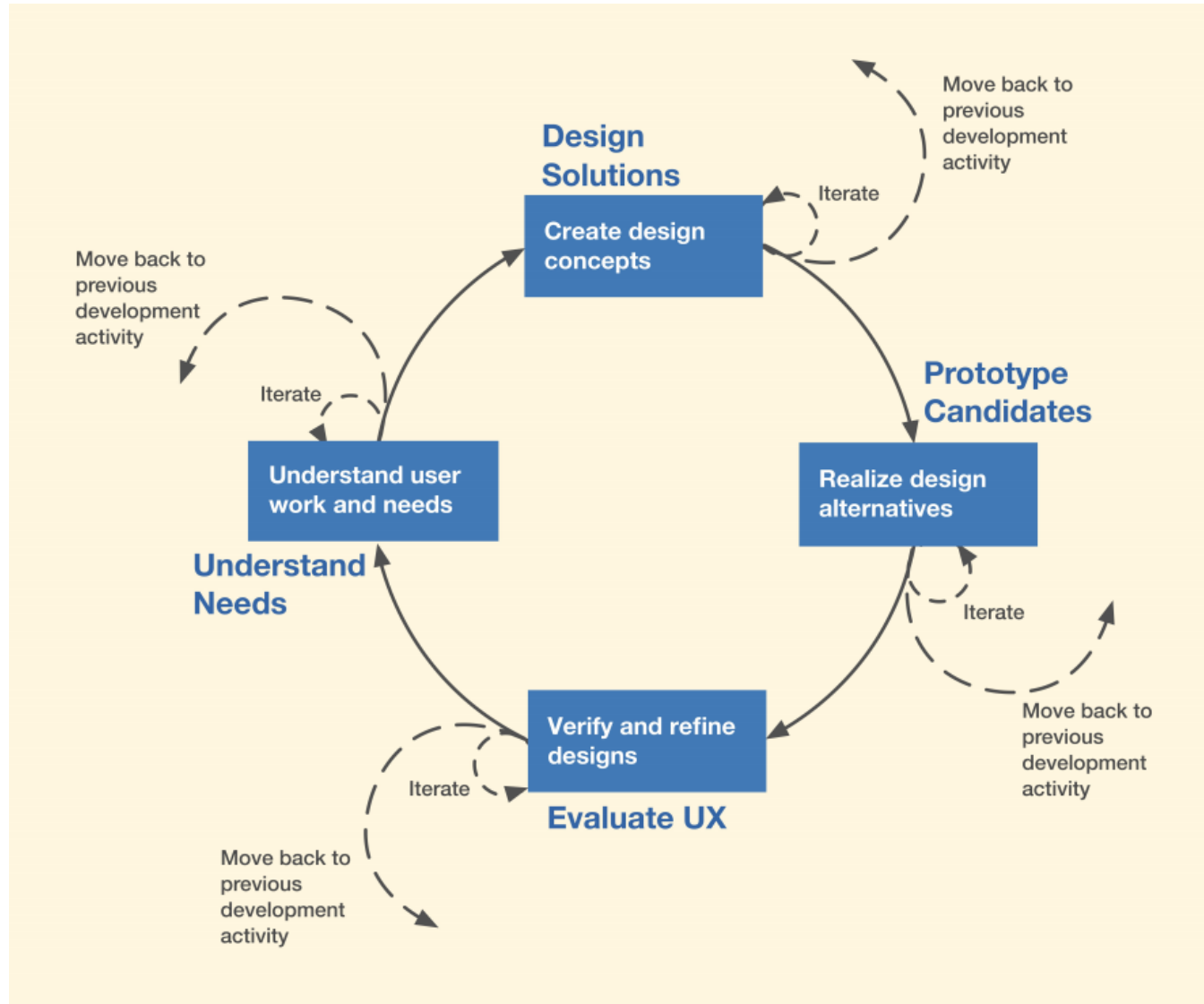
"Don't just work smart
Workout smarter"

SmartLift/ Acting as Our
Own Client

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Design Process

- Define users and system goals
- Conduct research from our user base via interviews
- Construct affinity diagram from the users input
- Develop roles
- Construct hierarchical task inventory model
- Sketch/ Mental Model
- Prototype
- Pilot test



SmartLift



System Concept Statement:

Smart Lift will be a smartphone application that will connect the weightlifter with their weights in a whole new way. Using sensors on both the person and the bar, the user will be able to see how much force is being applied to the bar, amount of strength used by the user, and the position in which the force was being used on. The user base would focus on any weightlifter along with any gym's that are wanting to be next level. The application would require users to securely logon every time the application opens, to ensure that the right information is being tracked. Once logged in, the users would see their past lift information (if already used before), along with the user's gym information. While on the app, the user will be able to see other users progress and compare or brag to other users about their own progress. Smart Lift will also have a feature to share your own progress to a social media platform of their choice to show off their progress. Smart Lift will be developed by an independent client.



SmartLift

To conduct research, each of us interviewed 3 users (gym user or gym owner). The questions we asked are shown here along with a sample of our feedback:

- a. Where/how do you work out?
- b. What would help improve your gym or make it better?
- c. When you think of technology incorporated into working out what do you think of?
- d. What are your thoughts on the idea of sensors on your weights to record your lifting data?
- e. Would you be interested in using your lifting data (i.e., how much weight, how many reps, etc) to be published to a social media application, and what are your thoughts on this idea?
- f. Would seeing your peers' data in a social media format make you want to compete with your followers regarding lifting more weights?
- g. Do you think sensors on your weights would help to improve your form? How would you use the data provided by the weight sensors?
- h. Have you ever suffered an injury as a result of poor lifting form? If so what exercise?
- i. Do you think a system like this would improve your gym's popularity? Explain why or why not.

User 1 Interview:

Age: 17

Relevance: Home gym owner

a. Where/how do you work out:

- Home gym in garage

b. What would help improve your gym:

- More cables
- Bigger dumbbells
- Better lighting
- Since it's a garage more warmth
- Sound system

c. When you think of technology incorporated into working out, what do you think of:

- lifting apps

d. What are your thoughts on the idea of sensors on your weights to record your lifting data:

- Help with progressive overload
- Keep track of weights and sets that have been done
- Will help in the long run

e. Would you be interested in using your lifting data to be published to a social media application, and what are your thoughts on this idea:

- Yes
- Should be an option thought because some might be shy or would make them feel discouraged.

f. Would seeing your peer's data in a social media format make you want to compete with your followers regarding lifting more weights:

- Yes absolutely, competition fuels me.

g. Do you think sensors on your weights would help to improve form, and how would you use the data provided by the sensors:

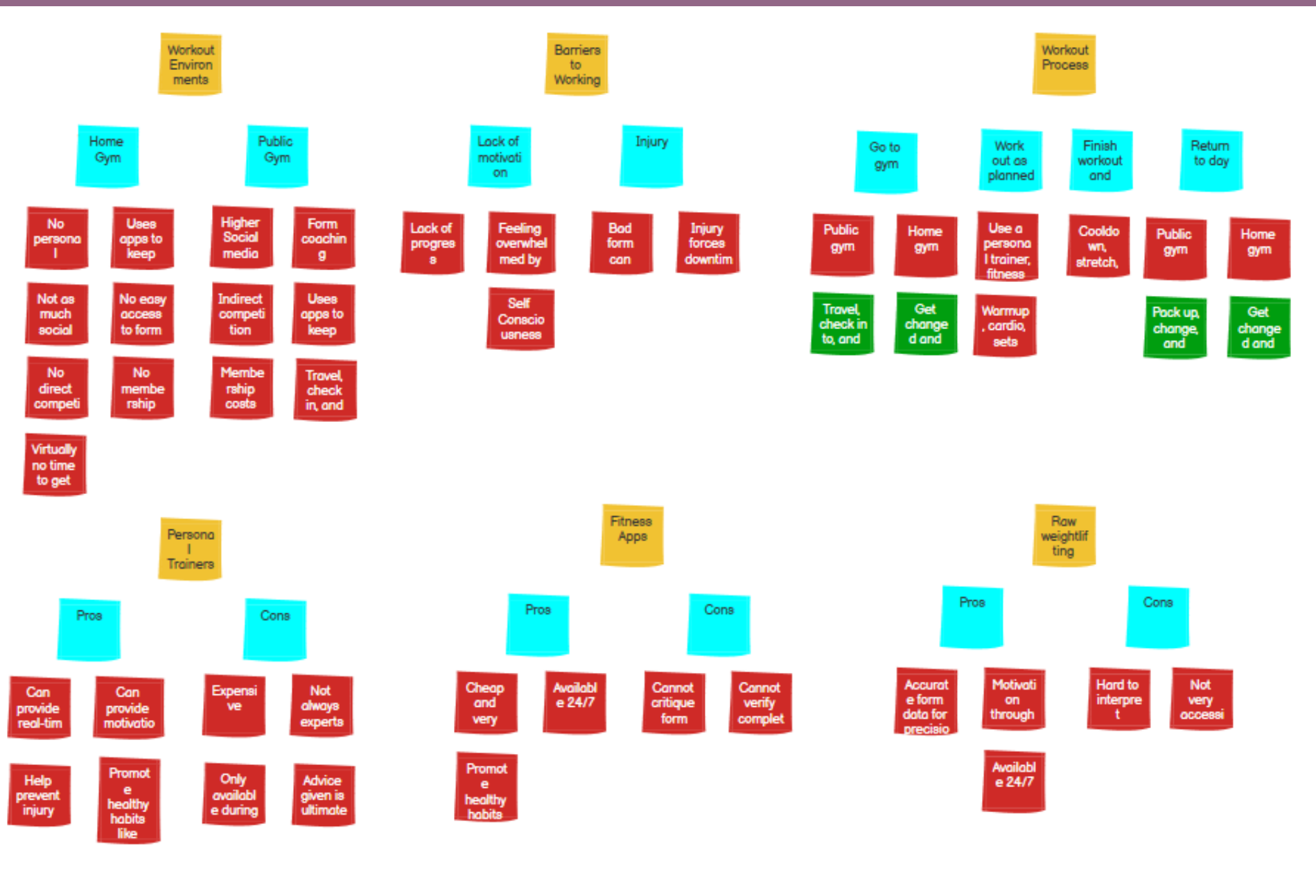
- Yes, for sure will help improve form.
- I would use the data to find weak points in my lifts and focus on the weak areas.

h. Have you ever suffered an injury as a result of poor lifting form? If so what exercise:

- yes, a back strain from deadlifting

i. Would a system like this improve your gym, explain why:

- It would for sure help, granting the fact it gives you intricate details that you would not be able to figure out on your own.



Infinity
diagram
WAAD

Work Roles

Gym Attendees

- People who are active inside the gym area

Developers

- The people behind the building and installment of the sensors and equipment

Social Media Connection

- Other social media apps that the user will be able to share progress on

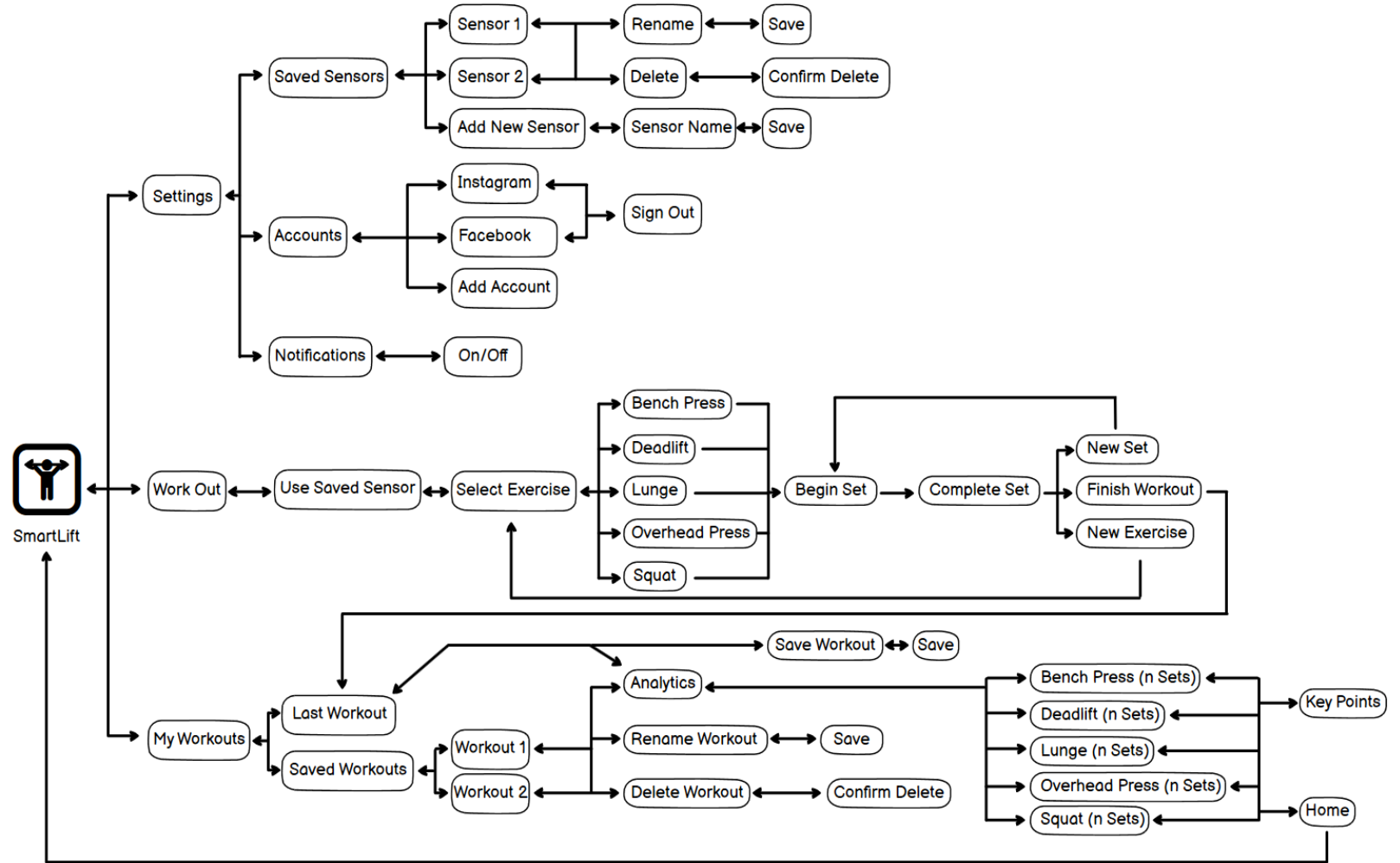
Smart Phone

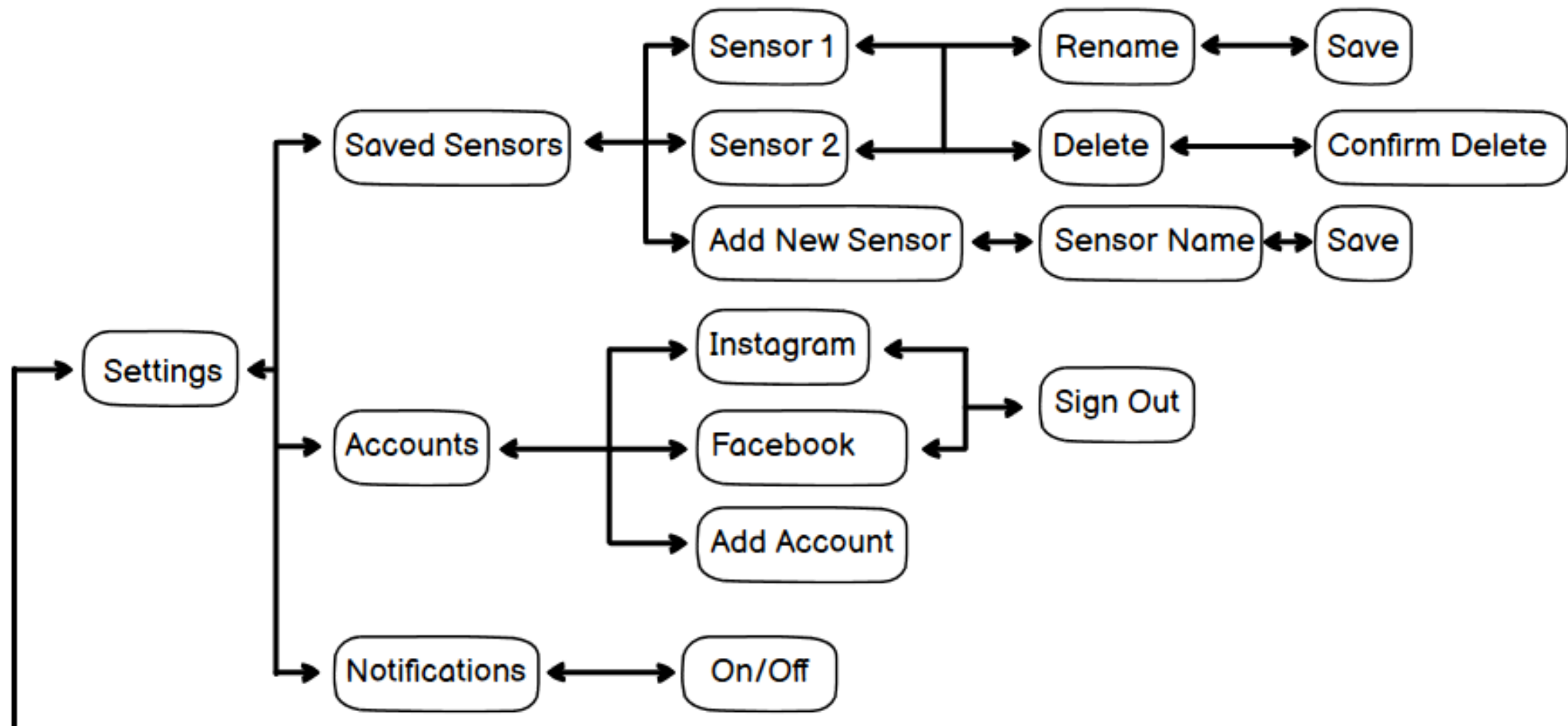
- Provides the user to access their account and workouts

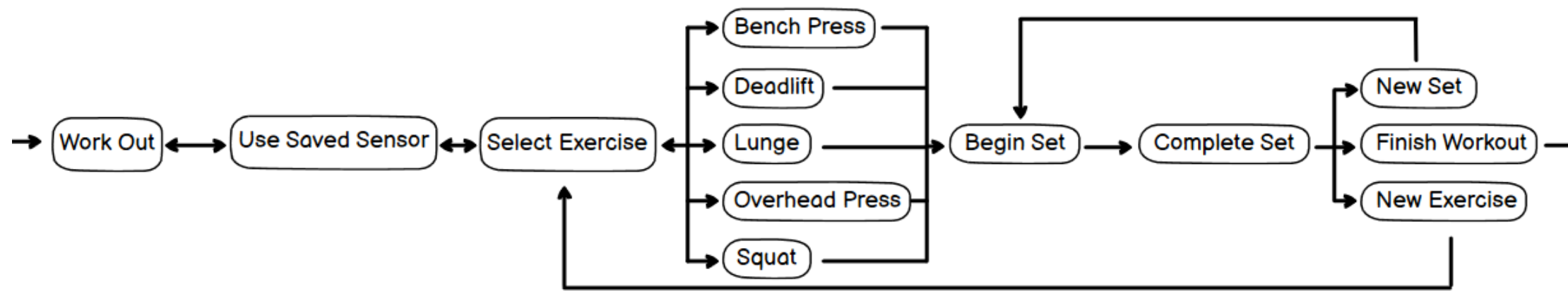
Sub Roles

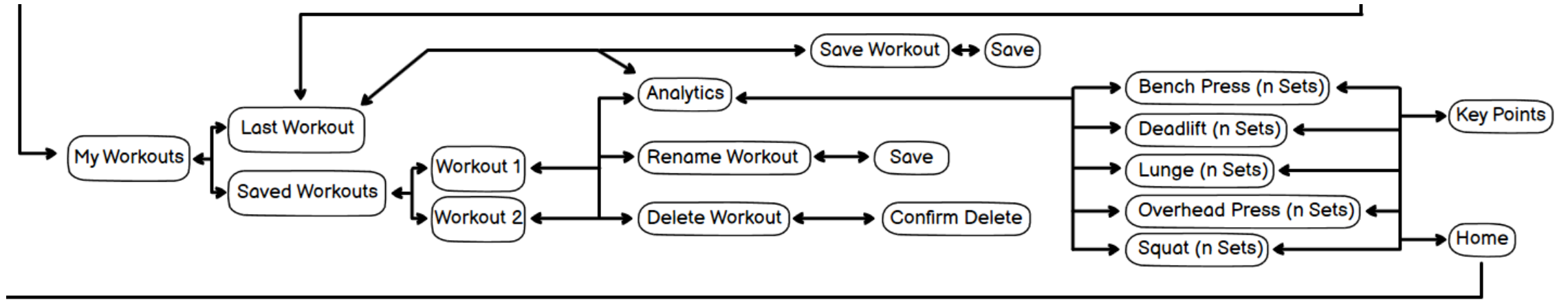
- Gym User
 - Someone who goes to a gym and uses the equipment
- Gym Owner
 - someone who has their own gym or owns a gym
- Personal Trainer
 - Someone who trains other gym users
- Sensor tester
 - someone who designs and tests on all the equipment
- Sensor Installation
 - Someone who installs the sensors on desired equipment
- Sensor designer
 - Someone who makes the sensors

Hierarchical Task Inventory





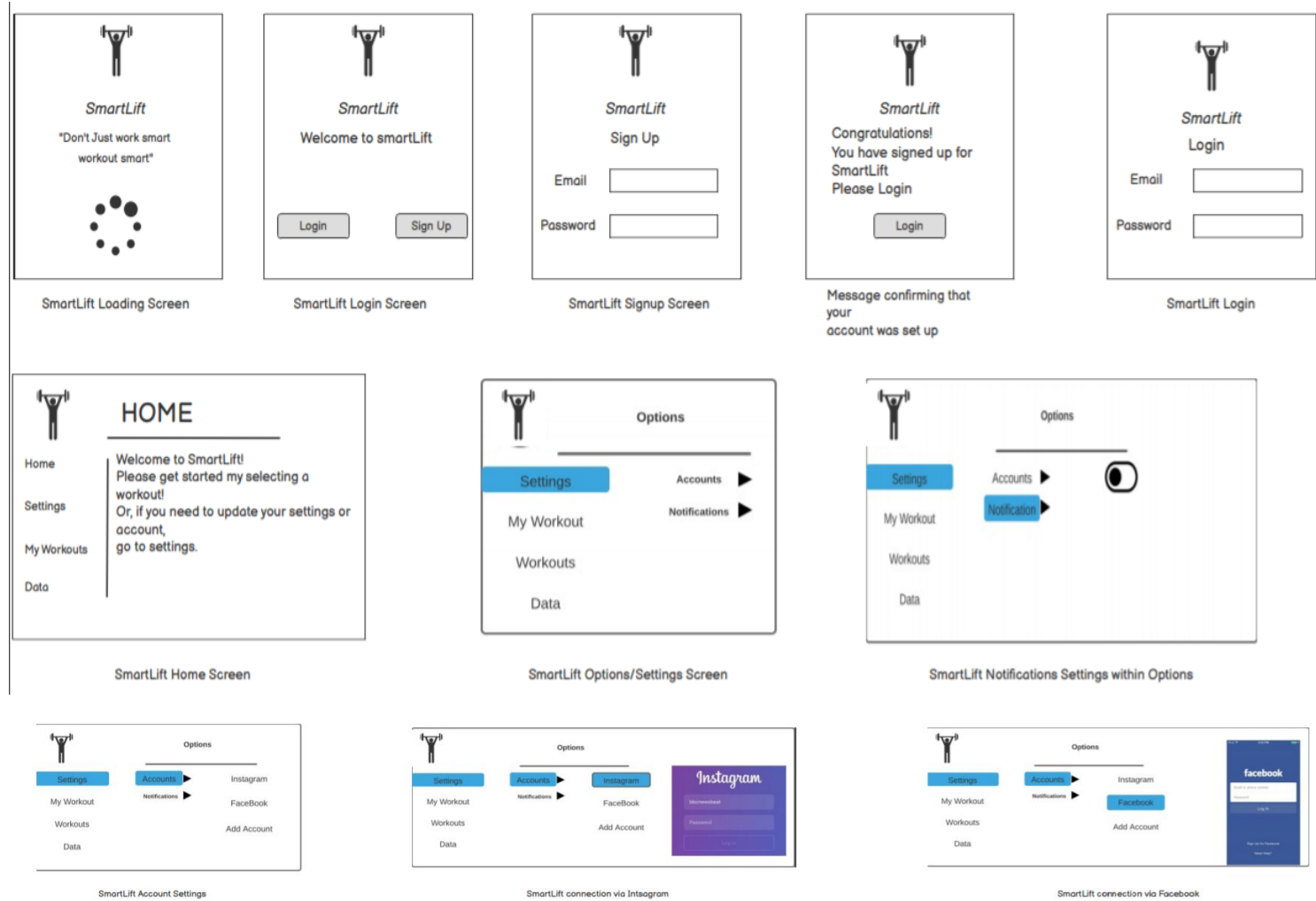




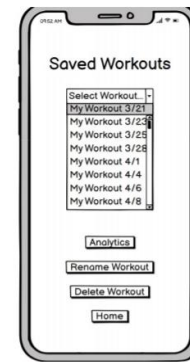
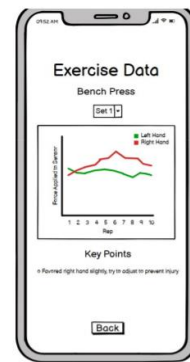
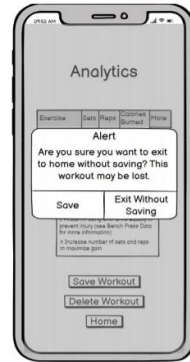
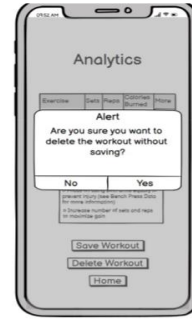
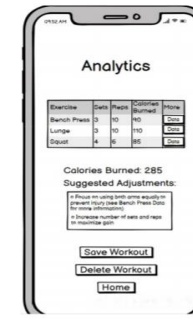
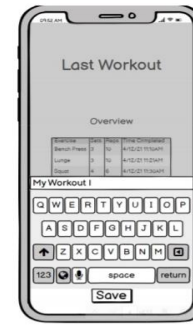
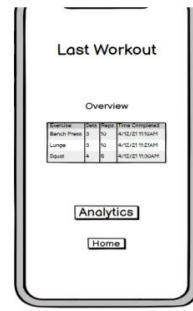
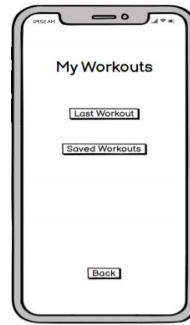
Pilot Test

- *Interviewed one of the users to get their view on the project.
- * Showed all the prototypes and wireframes we made
- * user think it is easy and simple to use.
- * like idea on the feedback we receive from the sensors.

Prototype for Setting



Prototype for my workout and data



Prototype for Workout

