Assignment Two: Needfinding, POVs, HMWs, and Prototypes

Introduction:

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Studio Theme: Health

Words: 1748

Problem Domain: Promote healthy lifestyles to prevent people from getting sick rather than treating them when they do: in short, preventative healthcare. Our initial needfinding illustrated that the vast majority of individuals care a great deal about their health, but generally struggle to find time or motivation to prioritize exercise and a healthy diet.

Initial POV:

We met a self-identifying non-fitness-oriented college student. We were amazed to realize that she was interested in strenuous fitness challenges for incentives and medals—which she proudly displayed—but was uninterested in training or lead-up work. It would be game-changing to offer tangible incentives to exercise more regularly!

Additional Needfinding:

We conducted several additional needfinding interviews this week, two of which we shared in this write-up:

We met a woman in her 40's who works as a lawyer. Her daily life does not organically involve much physical activity, and thus she is aware of the fact that she has

to make an effort to get a healthy dose of exercise in. However, she informed us that she dislikes working out and motivates herself to do it by taking group classes and befriending her classmates.

We met Jonathan, a specification engineer who has been working for over 30 years. He spends 95% of his time Monday through Friday at the office, much like the others we interviewed. He's not active but wants to be, and makes an effort to walk every day at lunch, even though he finds it boring. He has found success playing Pokémon Go, and feels like it makes him more active because it makes walking more entertaining and allows him to discover new places. We also found out that he owns an exercise bike at home, but rarely uses it.

Three Revised POV's & Sample HMW's:

1. We met a middle-aged lawyer. We were amazed to realize she dislikes working out, but motivates herself by taking group classes and befriending her classmates. It would be game-changing if she could find social connection in other types of exercise and health practices.
    a. HMW connect people with strangers who share their fitness/health goals?
    b. HMW make exercise a social activity?
    c. HMW make social activities more active?
    d. HMW help people find others who are interested in the same exercises as them?
    e. HMW make exercising more attractive to extroverts?
    f. HMW make health trendy?
    g. HMW make exercise goals shareable with friends?
    h. HMW get people's close networks engaged in their fitness goals?
2. We met a college-aged fitness-enthusiast and were amazed to realize that he was dedicated to fitness but found himself with no time to pursue goals. It would

be game-changing if there was a way to help him integrate his goals into his daily schedule.

a. HMW break down exercise into smaller activities that can be done throughout the day?
b. HMW structure exercise around the lifestyle of busy people?
c. HMW help people prioritize exercise more?
d. HMW help people find time in their schedules to exercise?
e. HMW incorporate exercise into everyday, busy schedules?
f. HMW find people more free time?
g. HMW help people find time to exercise by changing their schedule?
h. HMW help people find time to exercise without changing their schedule?
i. HMW improve the general work/life balance of college students?
j. HMW come up with a way to study and exercise simultaneously?

3. We met a middle-aged civil engineer who spends most of his day sitting in an office. We were amazed that he felt strongly about staying healthy and living longer but rarely prioritized exercise. It would be game-changing if there was a way to incentivize exercising by keeping in mind the goal of staying healthy and living longer.
    a. HMW make exercising more convenient?
    b. HMW incentivize exercise?
    c. HMW make the idea of exercising more enticing?
    d. HMW reward those who exercise and work on healthy habits?
    e. HMW eliminate the idea of avoiding exercise?
    f. HMW structure exercise around the lifestyle of busy people?
    g. HMW make it easier for people to exercise during the workday?
    h. HMW get people more excited about exercising?
    i. HMW make workplaces more exercise-friendly?
    j. HMW use the idea of living longer to motivate people to act in health-conscious ways?

Three Best HMW's:

1. HMW get people more excited about exercising? (3)
2. HMW structure exercise around the lifestyle of busy people? (2)
3. HMW make social activities more active? (1)

Three Best Solutions:

1. A personal trainer app that helps users achieve small, simple fitness-related goals to increase their fitness level throughout their day—tailored to your schedule/situation so that you can meet goals while busy.
2. An application that rewards users—virtually or monetarily—for accomplishing fitness goals set by themselves, their friends, or physicians.

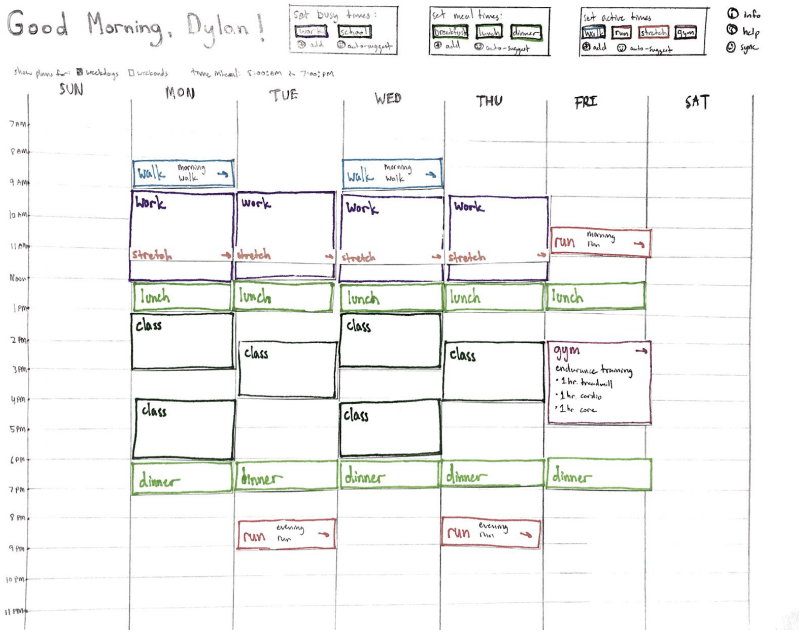
3. A virtual/augmented reality that offers storylines/scenarios—including running through a scenic forest or away from zombies—that you experience firsthand while exercising.

Three Experience Prototypes:

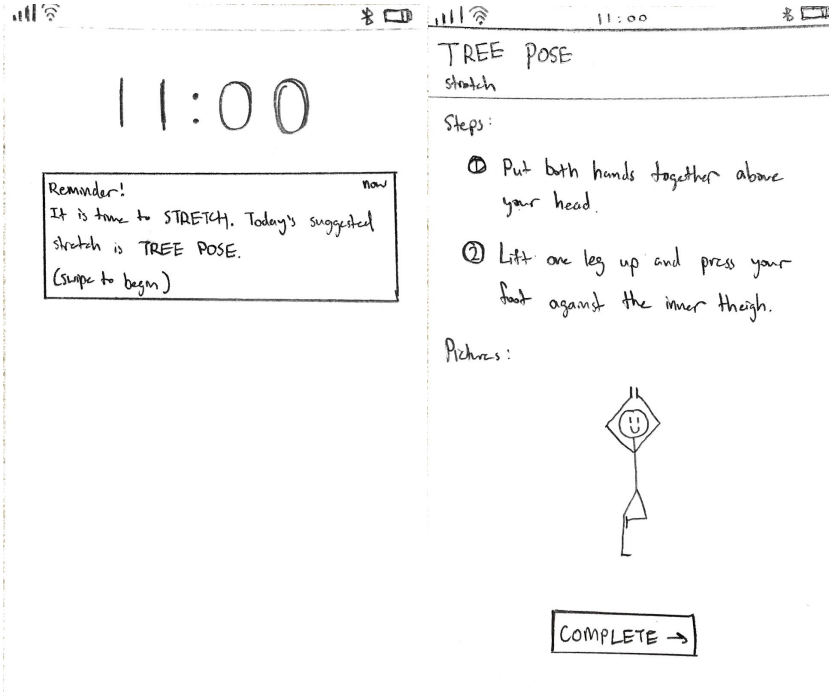
Virtual Personal Trainer:

This experience prototype focused on a virtual personal trainer that helps users achieve small goals to increase their fitness level throughout the day. The application experience, tailored to the user's personal schedule, stemmed from the assumption that people feel they do not have enough time to complete significant physical activity. Having a personal trainer motivate them and help them perform small lifestyle changes throughout their day will have a significant impact on their overall health.

The experience prototype, made of paper, mimicked a web dashboard and mobile application interface. First, the tester filled the web calendar interface with his schedule, using paper "blocks" to represent when he was busy. Then (acting as the application), we filled in gaps with various fitness-related activities and asked the tester to rearrange them to his liking. The final schedule, illustrated in the paper prototype below, shows both large and small fitness activities to be done throughout the tester's day.



We then "synced" these reminders to the mobile interface. We showed the test user an example of what the "stretch" activity looks like, as a mobile notification and the activity in the mobile application itself. The screenshots below illustrate this.



The test user liked rearranging the events in the calendar because it gave him maximum flexibility to achieve only what he was willing to do. He enjoyed how simple the “tree pose” instructions were and was interested to see what other simple activities might be possible.

He wished there were more “active times” besides walking, running, stretching, and gymming. He felt even simple actions like these were too time-consuming, and lamented how messy the calendar paper prototype felt because there were too many moving parts with the paper “blocks”.

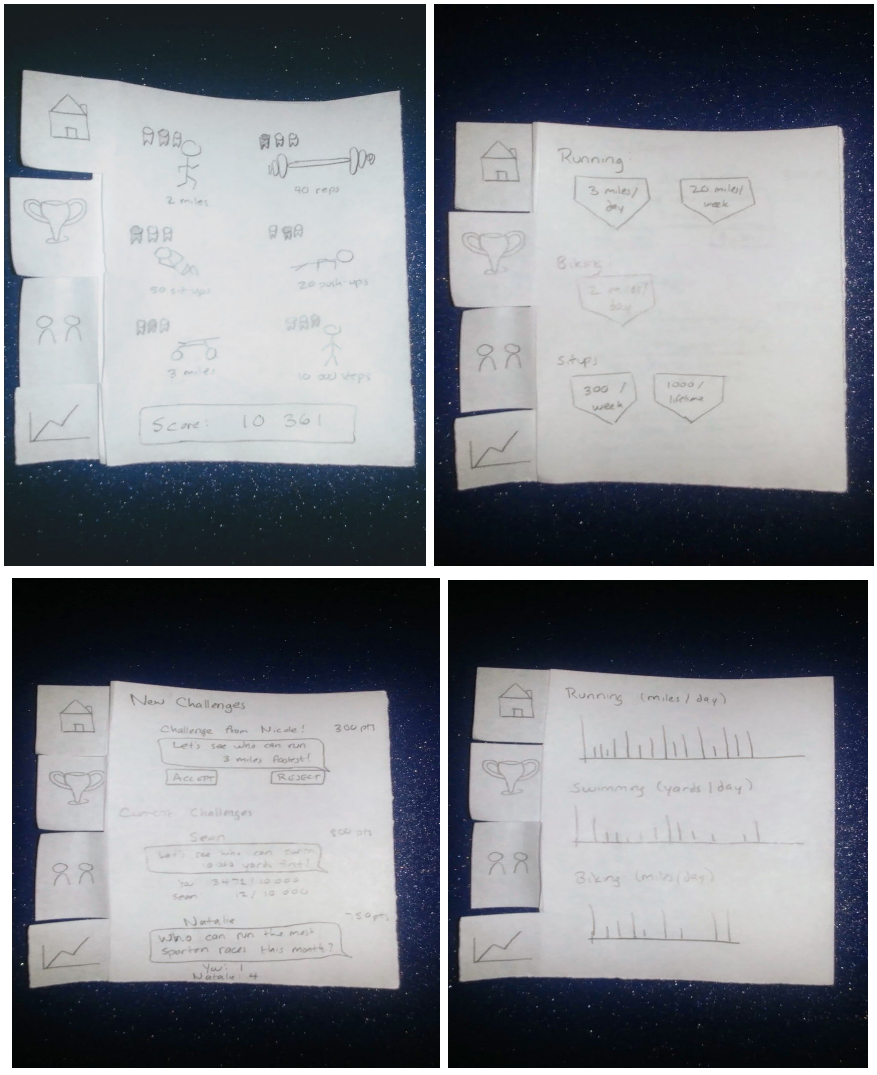
This prototype validated the assumption that people felt they didn’t have time for significant physical activity. Furthermore, the tester wished for even simpler activities than the ones suggested. The assumption that a virtual personal trainer would help motivate these people become more active remains to be seen, but the tester seemed happy with the preliminary “tree pose” activity’s simplicity.

Gamifying Health:

This experience prototype stemmed from the assumption that people don’t exercise because they cannot conceptualize the concrete, long-term rewards associated with it. We wanted to test whether people would prioritize their fitness if we

gamified exercise - making it a competition - and gave them tangible, short-term rewards upon achieving goals.

The app's prototype was made of paper; each sheet represented a different "dashboard". The home page (top left), summarizes specific fitness tasks, tracking progress and quantifying this into a score. The trophy page (top right) highlights the rewards earned via competitions or exercise-specific goals. The social page (bottom left) lists competitions to which the user had been challenged (either by friends or physicians), tracking his progress and comparing it to others involved. Here, we thought direct competition is more of a concrete motivating factor than reminders and notifications. The development page (bottom right) tracks one's personal long-term progress across activities, showing him how he's developed. Here, we thought if the user sees himself in a lull of activity, he will be motivated to pick it up again rather than letting it fade out of his routine.



Our testers were given this scenario: they wanted to improve their fitness, but did not currently exercise (citing lack of time, motivation, etc). Both test subjects said that this represented their everyday lives.

We then asked questions per each screen. We included our main questions, although we asked additional ones based off their answers.

- Would seeing your statistics upon opening this app motivate/demotivate you from exercising? Why?
- What do you like about its features? What's lacking? Why?
- Would this app affect the way you work out/motivate yourself to work out?
- What features are you looking for that this currently doesn't include?

We found the testers liked the prototype. One person was very vocal about not liking it initially, but grew more positive as he imagined using it regularly.

Surprisingly, people weren't fans of the score, but were motivated to exercise by challenging their friends in various competitions. They liked tracking their own personal fitness history, but thought the current format was confusing.

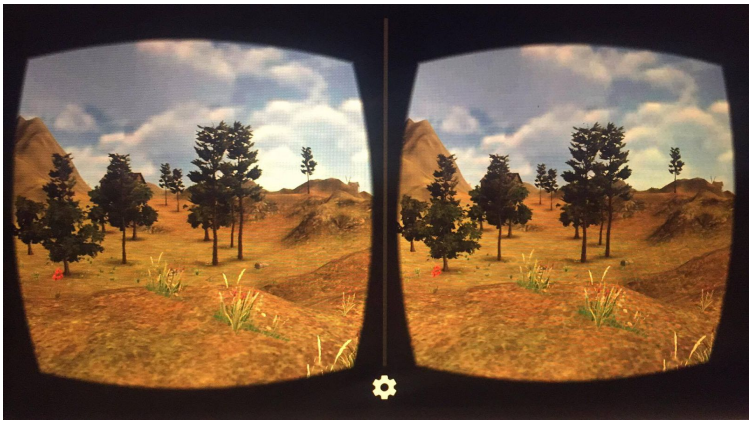
Overall, people wanted something simple over complicated, even if the complicated version included more features. They liked that it appeared easy to use and add workouts, but resented adding extra features and cluttering the simple UI. As one tester said: "The more I think about it, the more I think it would be a good app. The majority of apps I've seen are come in three categories, hitting at most two: good UI, tracks multiple sports, and is free for all features. This app seems to hit all three of those."

From our discussions, it seemed our assumption was valid. People were more motivated to exercise when they could gamify and reward their motivation. This led to the new assumption that people want to improve their fitness, even if they don't currently prioritize it.

Exercising in VR:

In this final experience prototype, we tested the assumption that people aren't motivated to exercise because they don't find it very enjoyable/fun, but if we could transport into a more appealing or exciting scenario, they would find the motivation to exercise.

We made this prototype using a set of Google Cardboard VR glasses, as well as some images of scenarios we believe would motivate people to exercise:



We tested this prototype by having one of our interviewees try on the headset with a variety of scenarios. We painted a vivid image in their minds of what the experience would entail, like running through a beautiful forest or away from some scary creatures. We asked them if they would prefer simple static terrains or more involved storylines, including participating in some adrenaline-inducing chase from their favorite TV show or movie.

We found that the VR approach would indeed motivate users to exercise. Much like WII makes exercise more appealing, this helped users forget they are doing something they would rather avoid, and instead make exercising something exciting to look forward to. However, we found it very difficult to test this prototype. Our users informed us that it sounded wonderful in theory; however, our experience prototype is too rough to invoke the emotions, adrenaline, or excitement that we believe a functioning product would.

Additionally, we learned there may be technical limitations to this concept. VR works well for video games where you are generally stationary. However, during an intense workout, you are going to be moving very vigorously. Current VR headsets—even top-of-the-line models—are clunky, bothersome, and may get in the way. While we believe that our initial assumption was validated, in light of the technical limitations that arose, we aren't certain this product would be viable at the present moment.

Best Prototype:

Overall, we believe that our experience prototype in gamifying health was the most successful in achieving its desired solution. This prototype has elements of the others: adding incentives, making exercise more exciting, and personalizing challenges: effectively acting as a virtual personal trainer. This experience prototype was the most successful with our testers, receiving the most positive feedback. Furthermore, this prototype is the most technically feasible and most widely accessible to our users.