

HCI: GROUP DESIGN PROJECT

Objective

Within a group consisting of five classmates design digital support for one step of an activity using a human-centered design process and improve the experience of carrying out the activity for a targeted user group of individuals.

Project Outline

Provide four check-ins and three deliverables within the allotted timetable.

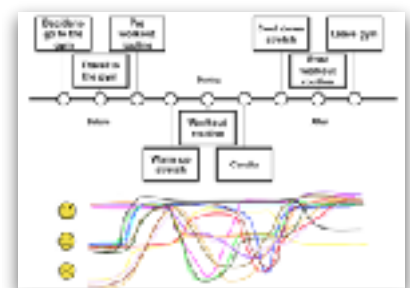
- Choose a focal activity, have users carry out this activity; interview them on their experience
- Research and define a segment of under-supported users
- Investigate as a group design inspiration based on existing products, and carry out targeted user research
- Design storyboard sketches
- Develop user testing plan
- Create a user-testable prototype

Focal Activity

The under-supported user group selected for this activity was individuals lacking motivation to work out. Exercising at the gym is a struggle for a large segment of the population for many reasons. Discovery is necessary through research to determine how to improve this experience and create motivation.

User Research

Preliminary research was conducted by in-person interviews at local gyms. The subjects were asked to be mindful of their workout activities and then document their routine. This data was then turned into an experience timeline, where each step in their process was rated; creating the timeline of peaks and valleys. The valleys were in their workout routine were vital to the research indicating breakdowns in motivation. All fifteen individual experiences were compiled and one timeline was developed to identify commonalities, shown to the right. From these findings the research questions, “What is keeping

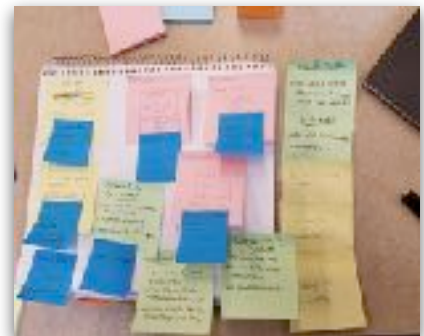


people from going to the gym?” or “What is keeping people from going back to the gym?” were developed. Use of the IDEO Method Cards steered the research activities to include fly on the wall, five whys, critical incident interviews, interviews, and survey methodologies. An additional 25 subjects were included in the study, but would

consist of inactive gym goers, or better defined as people that do have a desire to be healthy through exercising at the gym but for some reason(s) do not manage to go to the gym on a consistent basis. This user base was targeted because most existing products are either designed for those already in the gym looking for exercise programs, or those looking to improve their diet in conjunction with a pre-existing exercise regimen. The selection of this user base drove the creation of the how might we question, “how might we motivate people to get to the gym in the first place”, and was derived from the emotional valleys cited on the experience timeline. In an effort to answer this question a follow up interview with 5 original subjects was conducted to see if they also fit into the user segment with the additional questions of, if they sometimes go to the gym to workout but don’t go as often as they would like to due to lack of motivation, then what motivates them to do something they have no motivation to do.

Design Activities

The next step in the design process was taken from: *Sprint*, by Jake Knapp, Simon & Schuster, 2016. Individually the group members were to come up with design inspiration from three pre-existing applications that they might base some of their designs on. The first design activity they embarked on was lightning demos, picture shown to the right. Then they were able to pick ideas from each application that they might want to consider adding to the design focus. Each of the group members followed Knapp's four steps of divergent sketching: Notes (gathered from all research thus far), Ideas (possible solutions to our design challenge), Crazy-8s (eight rapid drawings of our strongest solution), and a Solution Sketch.



Crazy 8s



Solution Sketch



Ideas



Rationale on Design Decisions

From the individual sketches, they were able to vote and convergence on key points/details that they believed would help get the targeted users to go to the gym, see picture below. The main components of the app will be a challenge/rewards system. From the user research, they found out that of the people in the target user group interviewed, these users would be interested in a reward based system. Reading about intrinsic motivation in *Cognitive Surplus*, Creativity and Generosity in a Connector Age, by Clay Shirky gave an insight on to what really motivates people. The two main types of motivation are the desire to be autonomous and the desire to be competent. But what happens when people's intrinsic motivation is suppressed? That is where this app would assist. Soon the user would realize how achievable and realistic their goal and this would address the competent motivation. Even though initially it seems like the app is taking away their autonomy at the moment of the "to gym or not to gym" question, the app will get the user to the gym and be a reminder that after their workout they will indeed feel better, it is hard to visualize that post work out feeling when one lacks motivation. With the "challenge" the user will feel like they are part of a community and also know that they are not alone. When going to the gym becomes a habit for the user, the app will become more of a fun community based fitness challenge where rewards will be a bonus instead of the reason to get you to the gym.



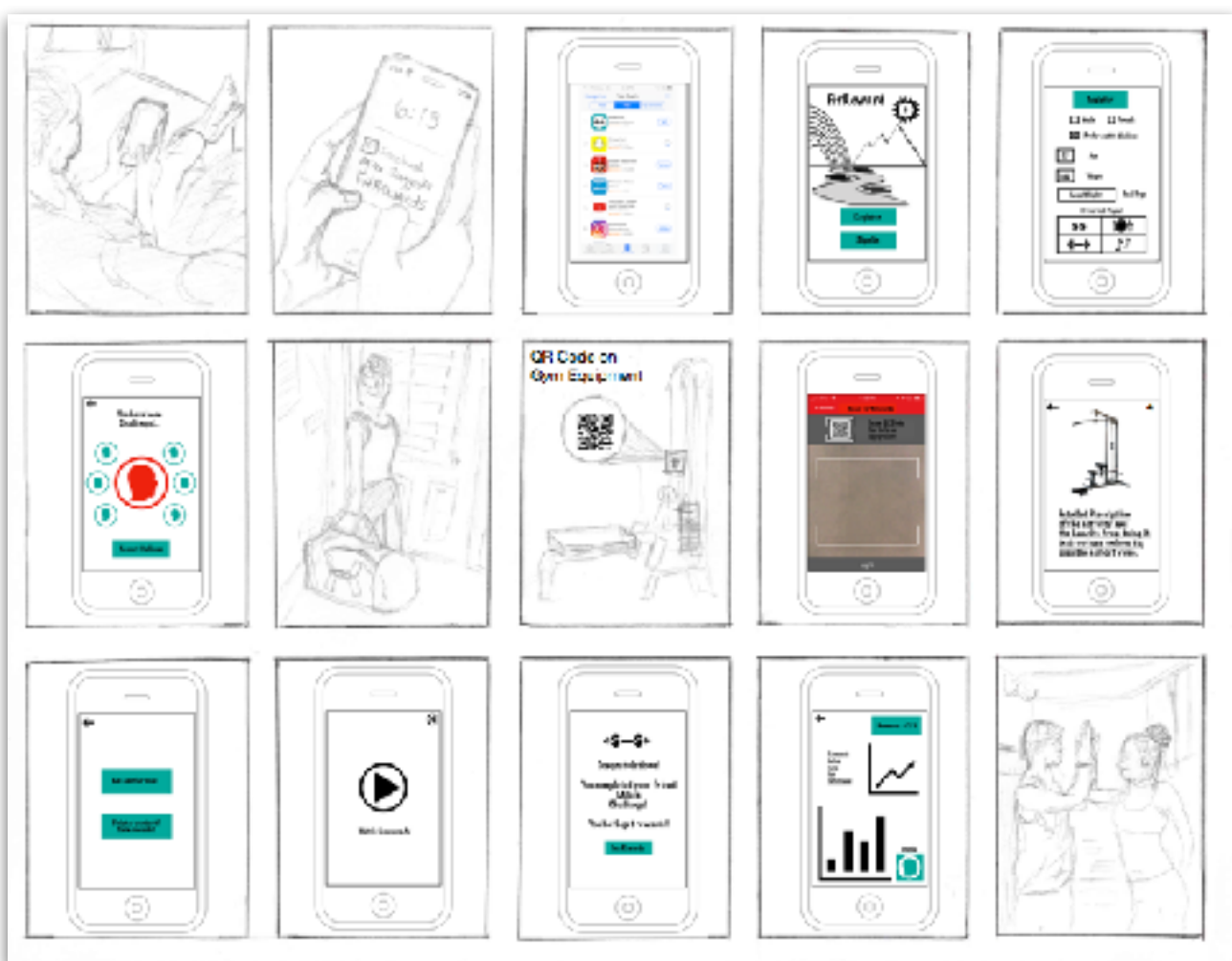
Scenario

Ashanti is sitting on the couch relaxing after a long day at work just surfing the inter webs. You see, she would normally be at the gym but her lack of motivation is in full swing. But then she gets a Facebook notification from her friend Mike. He suggests she download FitRewards a new motivation fitness app. She clicks the link and it takes her to the app store and she notices it has a good rating and proceeds to download it. She is greeted with registration page where she can fill out what motivational rewards she would prefer and some of her goals. As soon as she is done registering to her surprise she already has a workout challenge from her friend Mike. Why not she thinks to herself. She gets her stuff together and heads to the gym. At the gym she is prompted to follow Mike's workout by scanning the QR codes for workout check-ins and information on how to. When she is done

with her workout she watches a short sponsored ad and rewarded with her rewards. Since Mike challenged her he also will get the rewards, win-win!

Storyboard

After the group decided on a design, Leah created a detailed storyboard following Jake Knapp's instructions in his chapter on storyboarding from *Sprint*. Illustrated below.



Prototyping and Usability Testing

The prototyping design phase consisted of executing a technology demonstrator. I.e. PowerPoint click-through. The team collaborated on screening and recruitment procedures, as well as a testing plan followed by user testing.
