

Fitter

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Problem Overview:

Mobile apps, which promote a healthy diet and exercise, are not widely used because the value gained from using the app is far outweighed by the effort required to use the app. Our solution to this problem is to not only reduce the effort required for use, but also to drastically increase the value gained through using the app. We propose an app to allow people to share their diet and exercise habits. This app will allow people to promote their healthy lifestyle and discover new practices, enabling some to live a healthier life.

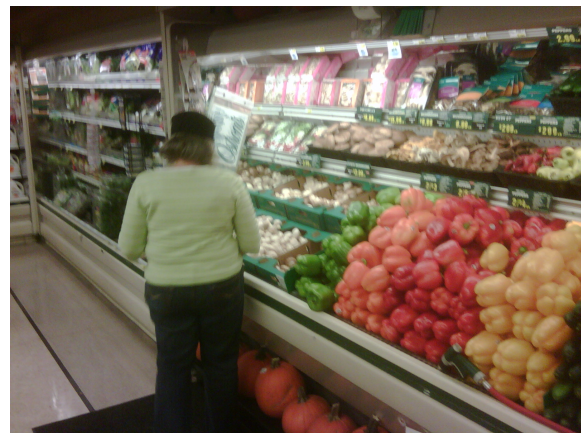
Contextual Inquiry Participants:

Our intended user group is people who are conscious about their health in general but do not necessarily make intentional day-to-day decisions to promote their health. Our target user group is not people who religiously exercise and follow a prescribed diet. Our target group are those who would like to be healthy in the long run but allow other factors such as cost, convenience, or a lack of knowledge take precedence over health when making daily decisions.

From this user group we selected three participants who represent multiple aspects from our user group. We had lunch with two electrical engineering graduate students to gain perspective from people who are more influenced by cost and convenience. This experience demonstrated some of the social pressures that affect people's diet. Then we went grocery shopping with a middle-aged woman who has gained enough knowledge to make healthy decisions while being constrained by cost and convenience.

Our first two participants were Jimmy and Nathan. They are both graduate students in electrical engineering. We met Jimmy and Nathan as they were heading to lunch. Because it was a very rainy day they decided to eat at the HUB. As they were deciding what to eat, we gained some insight into their decision making process. They ultimately choose to have pizza. We finished the inquiry by having lunch with them and discussing how they make diet and exercise decisions. These two participants were selected because they represent people in our intended user group who often make eating decisions based on cost and convenience but regularly exercise.

After seeing the perspective of students on health, we wanted to consider people who try harder to make eating decisions based on health and nutrition.



Grocery shopping with Kate



Kate mostly bought produce.

To accomplish this we headed to the Quality Food Center grocery store in Wallingford on a busy Sunday afternoon. This gave us insights on how people plan and shop for their meals and what dietary factors they take into consideration. Outside the store, we met Kate, a female, middle-aged community college professor, who was shopping for food to cook for her class, an adult ESL course. During the inquiry, she

mentioned that she feels responsible for teaching her students how to eat healthy in Seattle. Kate lives with her daughter,

a grad student, and granddaughter, a teenager, and all three share meal preparation responsibilities. Acting as Kate's apprentice was simple: she explained her shopping habits, reasons for purchasing one item over others, and paused often to allow us to verify our interpretations. In a way she professed her diet rationale, yet remained open enough for modified interpretation.

Contextual Inquiry Results:

As a result of conducting these contextual inquiries, we discovered that our initial ideas on improving weight loss apps were not necessarily correct. We initially proposed adding a social aspect to existing "calorie counter" apps as a way to promote use by adding social pressure. After talking to our three participants, we believe a better approach would be to drop the "calorie counter" aspect and focus on sharing and discovering personal healthy lifestyles.

The most striking commonality between all three participants was the emphasis on convenience. Jimmy and Nathan demanded convenient food choices because they are busy with their schoolwork. Kate was adamant about preparing healthy meals fast and mentioned that due to her hectic teaching schedule she often ate at restaurants. The importance all three participants placed on convenience caused us to realize that exposing convenient and healthy food options would be very valuable to people.

Kate mentioned sharing recipes as a way to accomplish this. She said she often checks local blogs, such as Wallywood in Wallingford, for recipes that make use of fresh local ingredients. It is important to Kate for recipes to provide information about preparation time, and she tends to favor quick recipes, which fit into her busy lifestyle. We believe that sharing healthy recipes that are quick to make would be very beneficial to people like Jimmy and Nathan. This would provide them with healthy alternatives that are still convenient choices.

Another common theme between all three participants was the desire to be healthy in general. Kate is clearly focused on health when making lifestyle decisions. She explained that over the past several years she has been making an effort to move to eating organic foods and eventually only eat “live” foods. She defined “live” foods as fresh ingredients that have not been processed or cooked in any way.

Jimmy and Nathan on the other hand admitted that they are currently not very concerned with what they eat. But both said they exercised regularly and plan on eating healthier in the future. Apart from convenience, they mentioned cost as an important factor in why they make some unhealthy eating decisions. Jimmy mentioned that an important criterion when selecting meals is “calories per cost”. This mentality seems contrary to healthy eating, but we believe a system that exposes low cost healthy options to people like Jimmy and Nathan would help them make healthy choices within the confines of cost and convenience.

These contextual inquiries led us to believe that a system allowing people to share and discover information on healthy lifestyles would provide much more value than the existing “calorie counter” apps. All three participants alluded to a desire for more information that would enable them to make healthier choices without sacrificing convenience or cost preferences. We envision an app into which people input the food they eat and the exercise in which they take part. Regarding the food, people will be prompted to add recipe information if they prepared the meal, or restaurant information if they went out. Other people will then be able to view this information and discover new ways to eat healthy meals and exercise. Unlike the “calorie counter” apps people will not find their data meaningless if they do not constantly input information. At the same time, people will be inspired by others examples and adopt aspects from healthy lifestyles they see to their own life.

Tasks:

Obtaining information of certain food items – Difficulty: **Easy**

Imagine that you have a lot of food in stored up in your refrigerator that you need to get rid off. You do not want to waste the items but do not know what to make with the food that you currently have. You would like to find recipes based on the ingredients you currently possess so you do not have to go out to buy more. At the same time, you want to make a tasty and healthy meal. You could go online and look up recipes, but these recipes do not provide the nutritional information required to make an educated decision based on health. You would like to know the basic nutritional information of the food that you have in order to make a conscientious decision on what to make. Many food items, such as produce, are not labeled with the information to help you make a decision. You would like a tool that takes as input a food item or group of items and outputs nutritional information and suggestions for recipes. Such a tool would help you make educated decisions to utilize food in healthy and creative ways.

Sharing recipes, and their information – Difficulty: **Medium**

Let's say you are at home and cooking your favorite recipe that has been passed down in your family through generations. You have been fond of this particular dish and would like to share the recipe with friends. But you are uncomfortable emailing the recipe to your friends unsolicited because they may not want to see it. This may seem like an easily solvable task, but currently no technology exists to facilitate a system of sharing like this. In addition to just sending your recipe, you might also want to include the preparation time and perhaps a small set of instructions as well. Furthermore, amongst the people that you would like to share it with, there may exist some who are conscious of the nutritional value of the food they consume. These people may also be interested in the nutritional value of your dish. The best way to accomplish this task now is to email all this information to your friends and family. This model does not give you any feedback to help you know exactly who was interested and would like to be sent more. Without a standardized method of exchanging this type of information, you may never share your recipe, and people who would benefit from seeing it would not have that opportunity.

Choosing What to Eat – Difficulty: **Hard**

Imagine the following: It's Friday at the end of a hectic workweek and lunchtime is rapidly approaching. Because you were up all night preparing a report for your boss, you did not pack a nutritious lunch as normal. The deli across the street is having a special today on their Philly Cheesesteak sandwiches, and you can smell the greasy deliciousness through the open window in your office. But, you have really been trying hard this past month to focus on the nutrition in your diet, so you think to yourself, "If only it were easier to find a healthy lunch in this part of town." You could turn to the Internet and see what people on *Yelp* advise. But why trust some Internet stranger's opinion? Maybe one of your health-conscious co-workers is heading out to lunch. A quick scan of your e-mail reveals nothing and not wanting to interrupt, you decide not to call anyone. A Google Maps search is fruitless because you only discover the location of places, which serve food during lunchtime. You cannot find nutritional information on the food these places serve, or any details on current specials in the area. In the end, the smell of the sandwiches is too much to bear, and you decide to buy one for the lack of a healthier option.

Currently there is no single aggregator of the information needed to make healthy decisions regarding what to eat. Hunger is instinctively overpowering and not often is there enough time to cross-reference several resources before heading out the door. This problem surfaces at home, too. Often people settle for less healthy options when a quick scan of the pantry and refrigerator fails to bring to mind any meal ideas. The lack of a reliable source for food ideas leads people to make unhealthy choices and eat food "because it is there".

Sketches:

