ENLIVEN

SPECIFICATIONS DOCUMENT

Authors: Tiffany Ku and Deepthi Ranganath

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1 DESIGN SPACE

1.1 SUMMARY OF DESIGN SPACE

1.1.1 FOOD ALLERGIES

Food allergies are complex and difficult to predict. Presently, researchers and immunologists are still unclear on why allergies develop. At best, affected individuals can only be aware of their limitations, adapt accordingly, and make smart dietary choices. A lot of times the burden is on the individual, even though there are many ways businesses, healthcare industry, and other people could be more accommodating. Moreover, allergic reactions vary by severity and type. That is why data collection of allergic reactions is necessary to further research in this area and improve quality of life for people who suffer from food-related allergies.

1.1.2 PRE-DIABETES/DIABETES

Diabetes is a global health issue affecting millions of people worldwide. Even more people qualify as prediabetes or are unaware that they are at risk. Diabetes treatment can be very costly. The disease is also linked to several other health complications. There is a viable opportunity to prevent prediabetes from converting into full blown Type-2 diabetes through awareness and social support. That being said, every individual case is context specific. There are definitely many additional factors to account for such as healthcare policy, technology, access to resources, cultural differences, socioeconomic status, etc.

1.2 SYSTEM DIAGRAMS

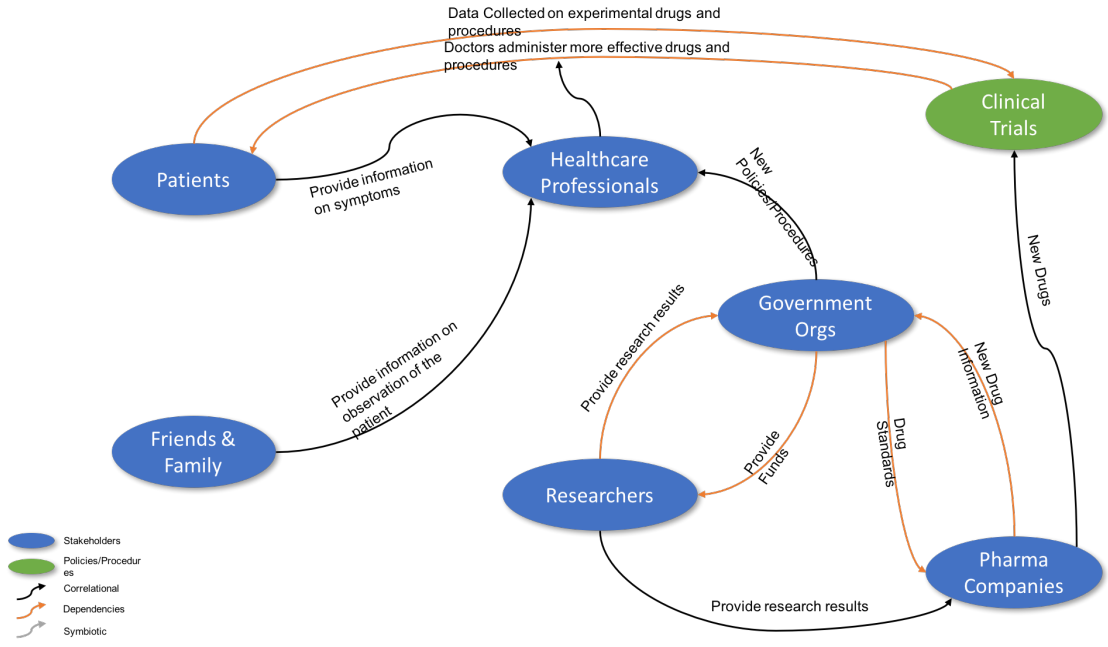


Fig 1: System Diagram for Food Allergies

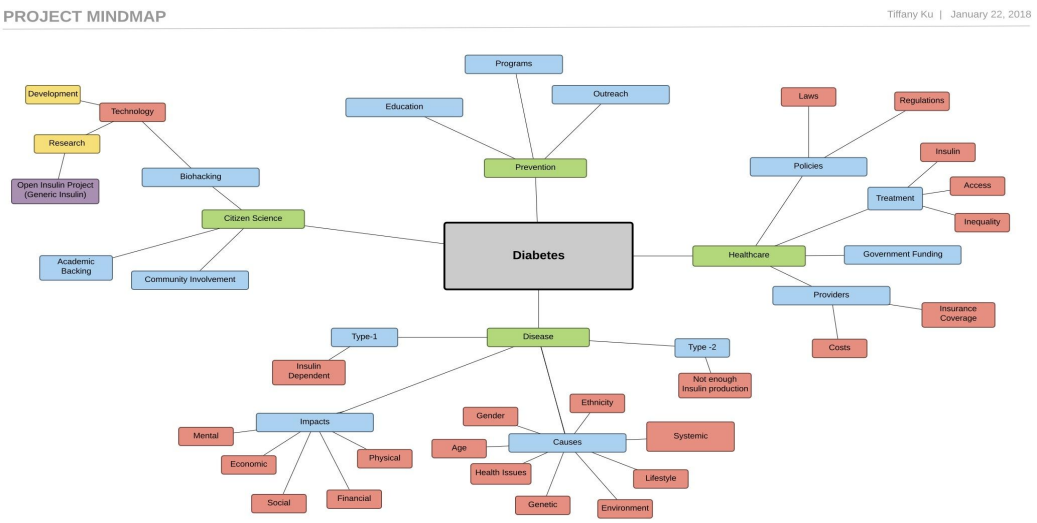


Fig 2.: Mind Map for Diabetes System

2 STAKEHOLDERS

We consolidated the stakeholders of both food allergy system and prediabetes/diabetes system to include individuals who suffer from food allergies, diabetes, those who are pre-diabetic and also those who suffer from one or more chronic medical condition. We expanded our circle to include indirect stakeholders like family, friends and caretakers of individuals. Individuals are in contact with healthcare providers for regular consultations or in times of emergencies and hence they are our stakeholders too. Our secondary stakeholders are Health Insurance companies who need to be aware of an individual's medical condition for them to offer appropriate plans. Pharmaceutical companies who provide necessary medicines and tools for managing the condition. Researchers who are in the process of finding novel solutions and who require longitudinal data for their analysis. Government agencies like National Institute of health who form policies and procedures for healthcare industry operations. Lastly, community health organizations who provide community support for all those who seek to benefit from community offerings.

2.1 PERSONAS

Name: Amy Age: 29 Occupation: Paralegal Location: Philadelphia, PA

Amy is allergic to peanuts. She was tested and diagnosed for food allergies as a child. She is slightly allergic to other types of nuts but her peanut allergy is the most severe. Since then, she has adopted a strong mentality to warn herself to be highly aware of potential encounters with peanut related foods. As an adult now, she aspires to have a vibrant social life, which includes trying new restaurants and cuisines with friends. However, she is always worried about her dietary restrictions when going out to eat. She hasn't found an effective way to ensure if a particular restaurant can accommodate or has options that are safe for her to eat.

Name: Karen Age: 60 Occupation: Banker Location: San Jose, CA

Karen was recently diagnosed with Type-2 diabetes. She had been experiencing a myriad of other health issues which finally forced her to consult a doctor. Her doctor indicated that inactivity was one of the main sources of her diagnosis. Karen wasn't able to connect why her inactivity lead to developing diabetes. While Karen doesn't

mind exercising sporadically, she has a hard time maintaining a routine. Moreover, in her treatment plan, her doctor also suggested that she make some critical diet changes as well, such as cutting out processed foods and sugars. Karen feels slightly isolated in her journey. She wishes she knew other people in the same predicament who could help keep her accountable in consistently making better choices.

Name: Jordan Age: 42 Occupation: Business Analyst Location: Houston, TX

Jordan's father suffers from Type-1 diabetes. His father, Roland, has been battling the disease for a few decades and is now experiencing some kidney issues. Jordan resides in Texas, while his father is currently living in an assisted nursing home in San Diego. Roland's health requires constant monitoring. Jordan feels guilty that he is unable to take care of his dad on a daily basis. He wonders if there is a way to track his dad's health remotely and find additional resources about managing health complications related to diabetes. Jordan's intention is to increase his own awareness about the disease and help his dad have a better quality of life.

2.2 CONTEXTUAL INQUIRY

2.2.1 DESCRIPTION OF CONTEXTUAL INQUIRY

#	WHO	WHERE	WHAT	WHY
1	• Elizabeth, 27, female • First-year MSIM student at UW • Allergic to peanuts and salmon	Elemental Restaurant	Observe the stakeholder using apprentice model ordering food and eating at a restaurant	• Is a direct stakeholder and gives insights on the dining experience of an allergy patient
2	• Suzan, 60, female • Property Manager • Diagnosed with prediabetes	Shoreline, WA	Observe the stakeholder participating in a physical activity - walking	• Is a direct stakeholder and has insight about struggles with making lifestyle changes related to health
3	• Jenny, 20, female • Undergraduate student at UW • Allergic to peanuts and fish	Kisaku Sushi Restaurant	Observe the stakeholder using apprentice model ordering food and eating at a restaurant	• Is a direct stakeholder and gives insights on the dining experience of an allergy patient

2.2.2 SUMMARY OF EXPLICIT AND IMPLICIT OBSERVATION

#	EXPLICIT	IMPLICIT
1	• Avoids all nuts • Has asthma • Also, allergic to pet dander, penicillin derivatives, dust and mold • Reactions have remained consistent over the years • Carries EpiPen	• Concerned about privacy of her allergy data • Concerned about others around her (Family & friends) • Carefully evaluates menu • Confident in ordering. Knows what she wants
2	• Prefers to walk with others • Walking is better than going to the gym • Doesn't understand connection between diabetes and exercises • Acknowledges that she needs to exercise more and change eating habits	• Walking is a time for reflection • Grief can affect motivation to exercise or take action • Has other obligations that take priority • Worst case scenario mindset
3	• Was tested for allergies at a young age - peanuts and fish • Over the years, allergic reactions become less severe • Only needs to take Benadryl • Actively tries to avoid peanuts • Is able to eat certain types of fish and discovered this through testing • Only takes Benadryl, has never used EpiPen	• Has issues with stress so has been collecting biometric health data with FitBit app • Eats at her own risk • Would like a more obvious way to see allergy friendly options at restaurants such as on Yelp

3 INTERVENTION

3.1 PROBLEM DESCRIPTION

We reflected heavily on our contextual inquiries, which provided a closer look at these distinct problem spaces. We found overlapping challenges and themes among all three participants. Our interviewees, regardless of their health challenges, all had similar concerns about their overall wellbeing and minimizing negative side effects of their condition. We identified major themes surrounding awareness & understanding of a condition, ability to internalize health concepts, finding motivation, communicating with healthcare providers, and getting support from others. Each participant faced some difficulties talking to family and friends about their conditions, and could be attributed to not wanting to be a burden. At the same time, people around them need to be aware of their limitations because a situation could quickly escalate into a matter of life and death. In addition, accepting that they would need to manage their health condition on a daily basis was key in taking steps towards making lifestyle changes. Not fully comprehending the consequences of failing to make lifestyle changes presented itself as one of the main barriers in achieving results. Thus, we wanted to extrapolate our findings and work towards a solution that could extend beyond one specific health condition and have multiple uses. Our goal is to empower individuals to engage with health science and be able to apply that knowledge to improve their overall well-being and be able to pay it forward by helping others as well.

3.2 INTERVENTION RATIONALE

To identify a point for intervention that would be relevant to both of our topics and fit under the umbrella of citizen science, we did a system mapping for our two uses cases: self-management of allergies vs. self-management of prediabetes.

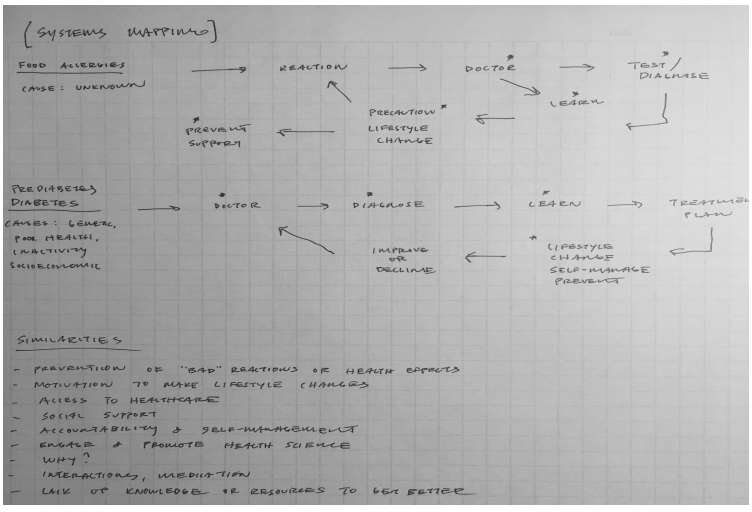


Fig 3. Systems mapping of allergies and diabetes that can be applied to other health conditions. Points of convergence are starred and indicated in similarities section.

Our intervention focuses specifically on the self-management phase and setting the stage for individuals to gain positive results. We felt that implementing some type of assistive technology specific to helping individuals monitor and take greater responsibility for their own health could really improve quality of life over time. We want to help people reach their full potential for leading a healthier and more informed lifestyle by adding a social support and community building aspect. If individuals can share their journey or struggles with loved ones or connect with others who are going through similar experiences it can be a source of encouragement. Key stakeholders include those who presently are dealing with day-to-day management of any health-related condition or illness as well as close family members and friends who are aware of the situation.

After reviewing the material and information gathered for our initial design spaces, we started to brainstorm possible interventions that would emphasize building community & support, provide credible resources, inspire users to take control/responsibility, and track progress:

- Medical resource web repository
- Social media platform
- Health / fitness mobile app
- Game that is connected to wearable
- Add-on sharing feature to existing healthcare apps
- Private app for family members and friends
- Food scanner wearable
- Information card
- Reminder or warning system

After much deliberation and risk assessment, we came to an agreement that we should develop a mobile application that combines features of sharing health information with loved ones, accessing credible resources, joining communities, and biometric tracking. We believe that the application can be of convenience and easily incorporated into daily life. Almost everyone owns or has some experience using mobile applications a smartphone. The selling point of our application is that it is one centralized platform for social networking, managing personal health, and tracking progress. We envision that the app can interface with wearables as well. Also, to address issues of cultural barriers, we propose that users can select language, translation, and geographic preferences.

3.3 INTERVENTION DIAGRAM

From our conversations with a physician, we gathered that for most diagnosed health conditions, there are generally three major phases that we have generalized and adapted from sources such as generic treatment plans and doctor's visit flows:

1. Acknowledgement and understanding of one's condition, including a treatment plan usually initiated by a healthcare professional
2. Self-management of the condition over time
3. Results and improvement based on effectiveness of self-management

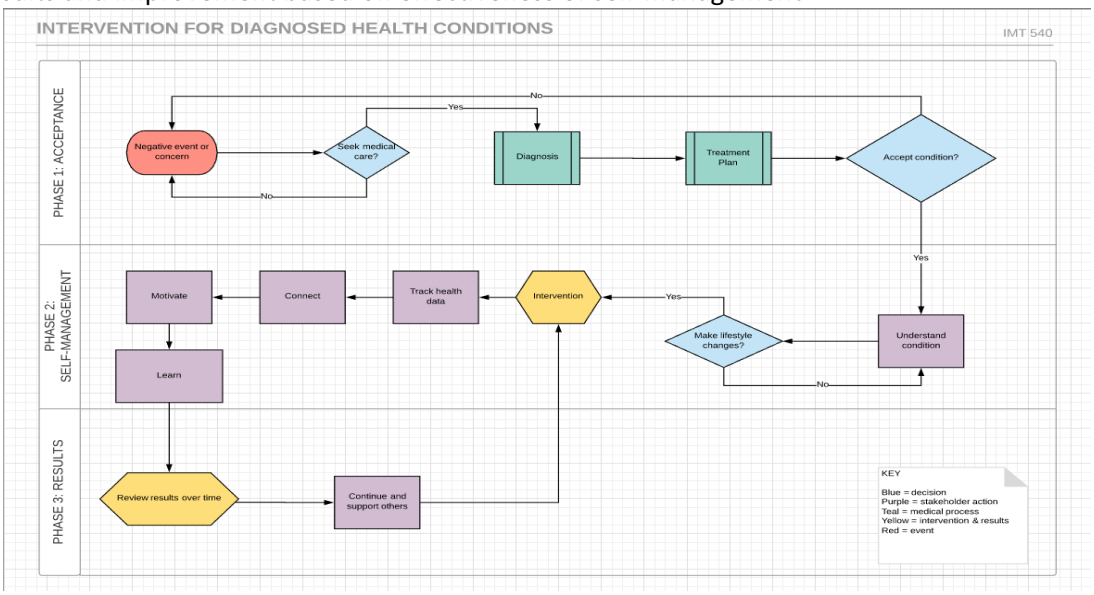


Fig 4. Intervention in the system

4 PROOF OF CONCEPT PROTOTYPE

4.1 PROTOTYPE DESCRIPTION

We began the prototyping process with brainstorming, reviewing existing apps like FitBit, Kaiser Permanente, Apple Health, and then generating some rough sketches to incorporate features we liked from examples. Following, we transferred our designs and ideas into Adobe XD. We didn't prototype every feature that we envisioned for the app. We wanted to have enough screens to conduct basic usability testing. Based on feedback from testing, we can decide how to iterate and continue building out our prototype.

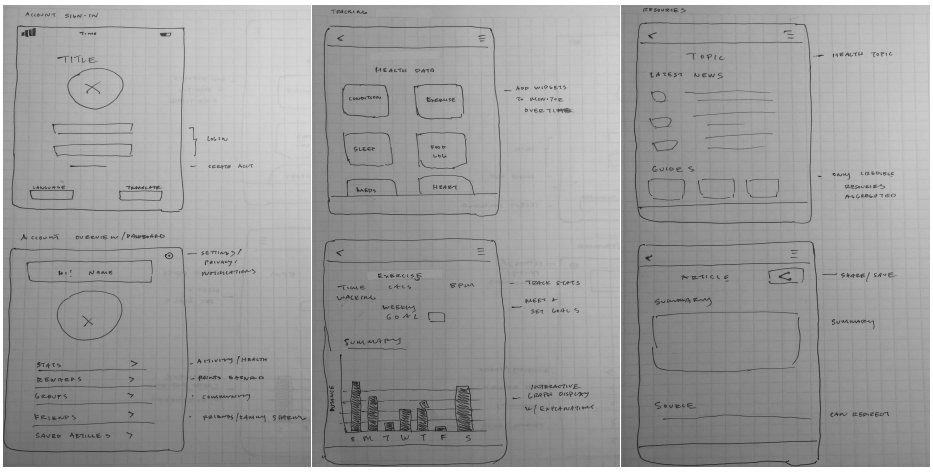


Fig 5. Sketches for account, health data tracking dashboard, and resources portal.

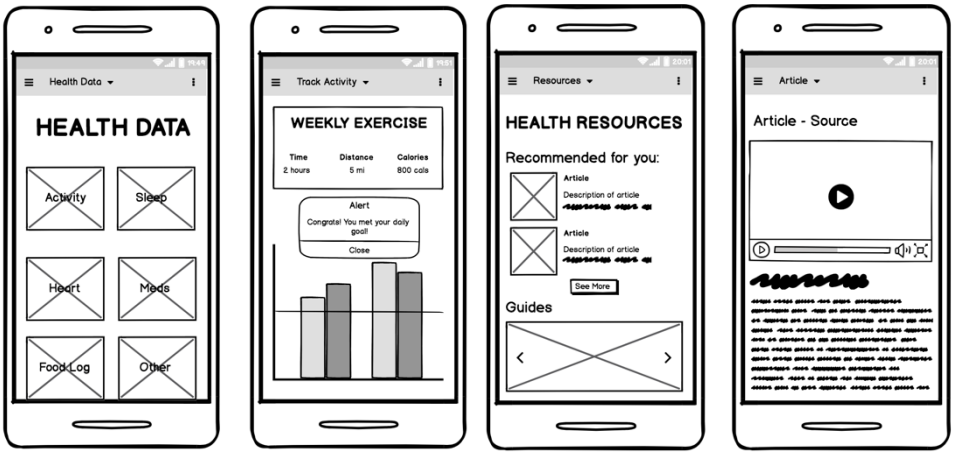


Fig 6. Wireframes created in Balsamiq.

Specifically, we want to test the intuitivity of the user interface and practicality of the app. It will be difficult to benchmark but we will have to develop certain standards and can use a Likert scale to capture quantitative data. This will confirm or reject our assumptions that our app does not have a steep learning curve if users are able to navigate their way through the application to complete a task or find specific information that is beneficial to them. Our purpose is to examine if our application would complement users on a daily basis in managing personal health and learning more about their condition(s).

4.2 CREATION PROCESS (ITERATIONS)

Iteration 1: We initially thought we wanted to incorporate a game center to be more interactive.

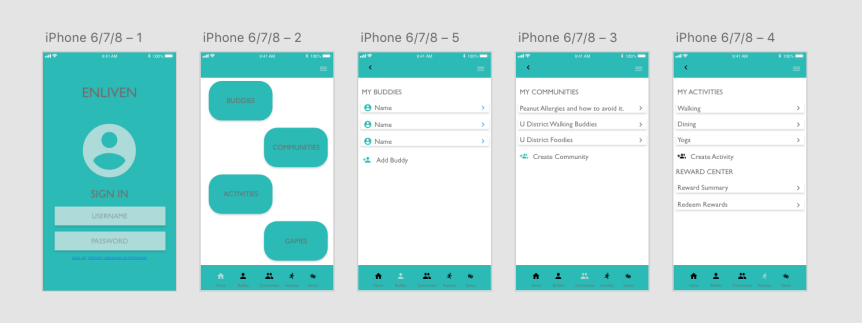


Fig 7. Iteration 1

Iteration 2: Shows the landing pages for each section. Got rid of games since none of our interviewees mentioned about gamification and replaced with resources because we wanted to incorporate a way for users to access important health information and research.

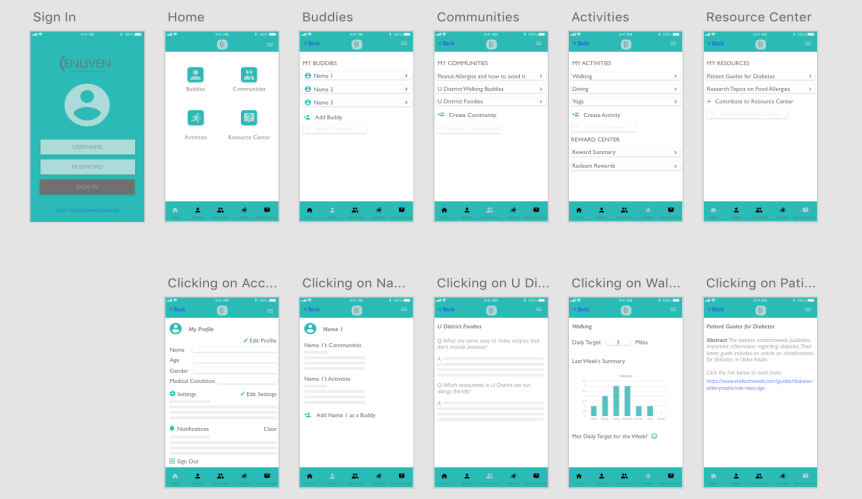


Fig 8. Iteration 2

Iteration 3: Includes language options. We don't want to restrict use of app based on language.

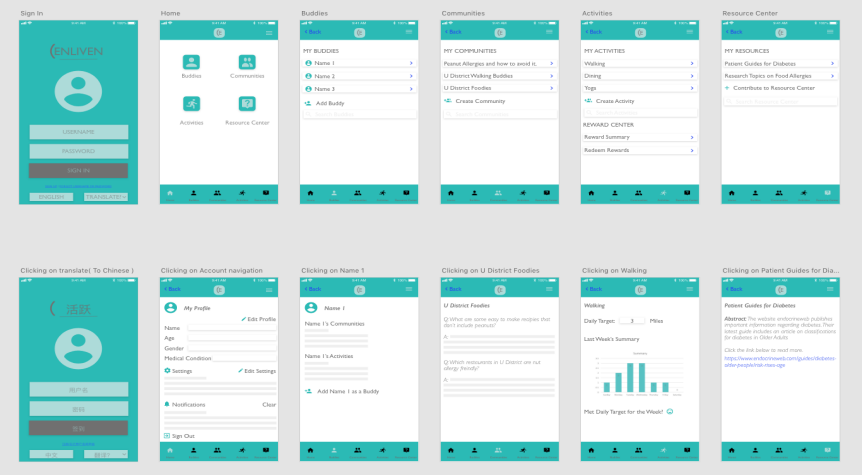


Fig 9. Iteration 3

5 EVALUATION

5.1 TEST PLAN

We created a robust test plan with an intention to come back to it when required. We understand that user study is a continual process and thus the language used here uses a present tense as a reminder for us that we design according to user needs and concerns.

5.1.1 QUESTIONS

We intend to help individuals to improve self-management their medical conditions through our intervention and answer the following questions:

- What physical activities can I do to self-manage my specific health condition?
- How can I make smart and nutritious dining choices to avoid severe allergic reactions?
- How do I motivate myself to achieve consistency in performing physical activities?
- How can friends/family/community support gain understanding of my medical condition?
- How can friends/family/community support me in daily prevention methods?

5.1.2 METHODS

Observation and think aloud:

We intend to observe our users through the 'think aloud' protocol. We believe, asking test users to articulate what they are thinking while performing tasks will give us insights on which areas of our prototype are problematic and also steer us towards their cognitive thinking process. The qualitative results that we achieve will help us in improving our prototype addressing test user problems. We will begin our observation by giving an overview of our prototype and project objectives.

Survey:

Along with the think aloud protocol, we also want to conduct a survey to receive feedback on our prototype. Our intention is to get feedback on ease of navigation of the user interface and overall applicability to our stakeholders. The survey will collect both quantitative and qualitative data. We will gather quantitative responses using Likert scale questioning, for example, "how likely are you to use this app on a daily basis? 1 - never, 2 - rarely, 3 - sometimes, 4 - frequently, 5 - always". We can analyze these responses using statistical analysis. For qualitative data, we can use methods like analysis methods such as affinity diagramming to identify broad themes and possible solutions. We are also making inferences based on our observation notes and discussion. We will need to remain aware of biases.

5.1.3 OVERVIEW

"Enliven" is a mobile application that helps you track health data and access expert resources. The application incorporates social features to add friends and form communities so that you can share your health journey experiences with others. Users can find and join local group activities such as going out for dinner together or exercises classes. Our hope is that those who are dealing with medical conditions can find social support through the app to encourage prevention, learning, and motivation.

5.1.4 INSTRUMENTS

We will be using specific tasks as instruments to guide test users to perform tasks involving user interface navigation of our mobile application. Following, completion of tasks, we will have users fill out a survey about their experience. The survey contains both quantitative and qualitative assessments.

5.1.5 MEASURES

We will be employing qualitative measures of silent observation, facial expression evaluation, body language evaluation, only intervening when we find test users lost in navigating our prototype to align them to the ideal path keeping the invasion minimal. We will not ask explicit questions during the observation process except when we ask the test users to perform certain tasks which may involve asking test users questions. We will be employing both quantitative and qualitative measures for surveys as described above.

5.1.6 PROCEDURES

We will keep the observation informal. We will also use audio and video recording media to document the observation process with explicit permission from test users to collect data. One of us will take notes and the other will manage the media.

We will create a web form like a google form or catalyst to create surveys and have it distributed to our potential stakeholders along with a published prototype for them to test. The survey protocol will take place online without any physical intervention from us. We will make ourselves available for any troubleshooting during the survey process.

5.1.7 RECRUITMENT

We plan on recruiting a minimum of 5 test users through the following avenues:

1. Convenience sampling: reaching out to people we know that either 1.) deal with a diagnosed health condition on a daily basis or 2.) are close to someone who deals with a diagnosed health condition on a daily basis. For example, could include but not limited to food allergies and prediabetes.
2. We will rely on these “domain experts” to refer other similar users to us via snowball sampling.
3. We plan to develop a screening survey to address our inclusion and exclusion criteria, which is discussed in the following subsection.
4. We can use also use channels like iSchool slack or iSchool listserv to recruit users.

5.1.8 INCLUSION/EXCLUSION CRITERIA

Inclusion Criteria: Our test users should have the following characteristics to participate in our test:

- At Least 1 test user known to have food allergies as a medical condition
- At least 1 test user known to have prediabetes/diabetes as a medical condition
- Can be an indirect stakeholder known to have close association with someone who has a diagnosed medical condition
- Has experience using mobile applications preferably an iOS system

Exclusion Criteria: Test users who do not meet the inclusion criteria stated.

5.1.9 DATA COLLECTION

Our observation data will be recorded through the following methods

- Audio recording
- Video recording
- Handwritten note taking
- Web forms

The data will be collected in the following ways

- After recruitment and before observation/survey: we will collect demographic and general health data as part of informal getting to know the test user before observation/survey.

- During observation/survey: we will collect data through the above-mentioned recording methods during the course of observation process either through explicit questioning or implicit observation.
- After observation/survey: we will review our audio/video files, notes, survey results to draw inferences. We will analyze data using quantitative and qualitative methods of analysis.

5.1.10 DURATION OF TEST PROCESS

We plan on dividing our time as follows

- Planning the observation/survey - 4 Hours
- Recruitment - 4 Hours
- Observation/survey - 2.5 - 3 Hours
- Data Analysis - 4 Hours
- Total - Approx. 15 Hours

5.1.11 DEFINITION OF COMPLETE

We will declare our evaluation completed when:

- All test users have been observed
- All data has been collected
- No outstanding questions remain for test users
- The test users can be informed about the completion of recruitment need

5.2 TEST EXECUTION

5.2.1 TEST USER DESCRIPTION

TEST USER	DESCRIPTION	STRENGTHS	WEAKNESSES
User 1	• Female, 28 • Mid-career student at iSchool • Allergic to walnuts	• Can use technology efficiently • Has experience in dealing with allergies directly	• Can be rigid to accept new ways of managing allergies
User 2	• Male, 34 • Software Developer at Microsoft • Family member of a diabetic patient	• Can use technology efficiently • Knows how mobile applications work from UI and backend perspective	• Can make assumptions about what is affecting his family member and how he can help
User 3	• Male, 29 • Full-time graduate student • Family members with mental health issues	• Can use technology efficiently • Has designed webs	• Doesn't enjoy using social media
User 4	• Female, 20 • Undergraduate student a • Allergic to fish and peanuts	• Can use technology efficiently • Has to self-manage and be aware of allergies daily	• Uses social media often • Already uses other apps to track biometric health data
User 5	• Male, 44 • Compensation Analyst • Parents have multiple health issues	• Open to trying new things • Can use technology efficiently but might take some time to learn initially	• Would have trouble explaining how to use technology to others

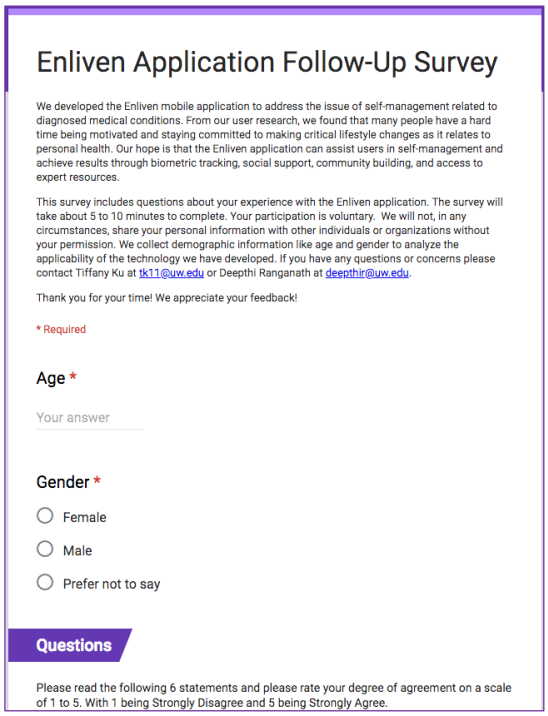
5.2.2 TEST TASKS

5.2.2.1 TEST SCRIPTS

Sample Test Scripts

SL NO	TASK NAME	STEPS	DESCRIPTION	EXPECTED RESULTS
1	Sign In Page	1	Click on Sign In	Home page should be displayed with Buddies, Communities, Activities, Resource Center Tiles
2	Home Page - Buddies	1	Click on Buddies Tile	My Buddies page should be displayed
		2	Click on "Name 1"	Screen should display profile information for Name 1
		3	Click on Back	Screen should return to My Buddies page

5.2.2.2 SURVEY QUESTIONS



Enliven Application Follow-Up Survey

We developed the Enliven mobile application to address the issue of self-management related to diagnosed medical conditions. From our user research, we found that many people have a hard time being motivated and staying committed to making critical lifestyle changes as it relates to personal health. Our hope is that the Enliven application can assist users in self-management and achieve results through biometric tracking, social support, community building, and access to expert resources.

This survey includes questions about your experience with the Enliven application. The survey will take about 5 to 10 minutes to complete. Your participation is voluntary. We will not, in any circumstances, share your personal information with other individuals or organizations without your permission. We collect demographic information like age and gender to analyze the applicability of the technology we have developed. If you have any questions or concerns please contact Tiffany Ku at tk11@uw.edu or Deepthi Ranganath at deepthir@uw.edu.

Thank you for your time! We appreciate your feedback!

* Required

Age *

Your answer

Gender *

Female

Male

Prefer not to say

Questions

Please read the following 6 statements and please rate your degree of agreement on a scale of 1 to 5. With 1 being Strongly Disagree and 5 being Strongly Agree.

Fig 10. Online Survey created using Google Forms

5.3 TEST RESULTS

5.3.1 THINK ALOUD PROTOCOL OBSERVATIONS

TEST USER	RESULTS
User 1	• Would Like to see questions related to specific allergies (E.g. wheat allergy) that are most voted • Would want to see the app connected to other fitness apps that she already uses like fitbit to get data • Would want to see the graph showing the last seven days as opposed to last week • Would like to know there is an ability to add personal notes under resource center • Would want to know what Resource Center does exactly? • Would it suggest communities based on the medical condition entered in My profile?
User 2	• Would like to see only the Translate button on sign in without the Language(English) button

	• Suggested to remove Add Name 1 as buddy under Name 1 page since Name 1 is already added • Would want to know how the daily target is calculated • Would like to understand how he can contribute to resource center
User 3	• Confused on the purpose of communities page, was expecting different information such as events and locations, would need persistent use to build those connections • Thought that daily and weekly target was unclear • Curious about rewards piece, wants to see rewards incorporated within all different features of the app • For Resources page, thinks should display full article instead of linking to an external site • For Profile page, was unclear if the information was internal use or externally facing, would want settings to control what is being displayed to the public • Would like to see how to create own community or join a community • Are resources user-generated or from medical experts or suggested based on user medical conditions?
User 4	• QA format on communities is unclear, are they user-generated questions, who asks and who is able to respond? • Do users have a journal or diary to log experiences? • Wants the tracking app function to be more interactive with features like sliders and sharing with others • Wants dashboard to see all biometric stats right after logging in, it would be helpful to see a summary, thought it took too long to get to certain information • Resources would be useful to her • Didn't notice the rewards feature • Didn't have that much trouble navigating but did not find the app visually appealing
User 5	• Had trouble clicking through the application and touch sensitivity • Didn't understand the point of communities, thought it was more of a forum, can people post questions? • Should be able to add more than one health condition • Doesn't think there would be enough users in specific areas to generate questions and answers • Brought up a really good point about how billing and health insurance across different specialists is not connected in one place • Intuitively, thinks that top level navigation should be on the top left, kept trying access home page that way • Wants a search function for friends and resources • Wants resources to be organized in logical categories that pertain to user specifically, is there a way to curate or personalize resources? • Rewards should be able to compete with friends and send notifications, maybe a chat feature

5.3.2 SURVEY RESULTS

We conducted a follow- up survey after concluding the think aloud observation. Test users were provided a link to take the survey online. Our test users ranged from ages 20 to 44, 60% of them were male and 40% female. Below are the results of the survey:

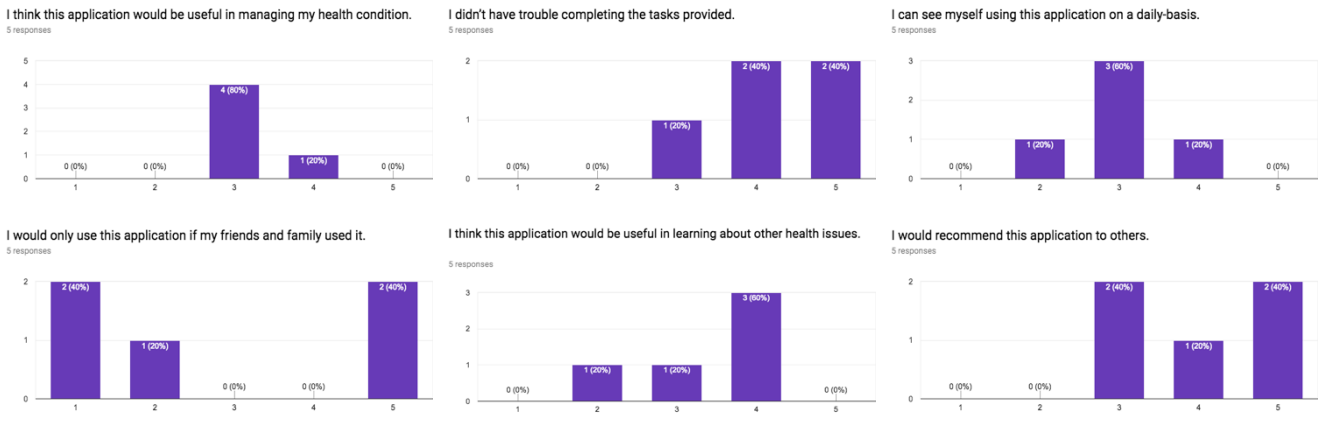


Fig 11 - 16. Quantitative questions and results from survey.

Qualitative Responses

Test User	What features on a mobile application are most important to you?	What did you like best about the application?	What did you like least about the application?	If you could change anything about the application, what would it be and why?	Any other suggestions or comments?
User 1	Ease of use- easy search options, know what is trending	It is simple without bells and whistle. Clean and simple	It had too much white space	I want to change the colors. And need option to do it	Rewards to be kept outside of Activities, probably in Home
User 2	Should be easy and intuitive to use	Nice layout and easy navigation	Translate button! and some small confusion in my activities	Add more information through crowdsourcing	No
User 3	Getting the information I need when I need it	I liked how the UI was pretty friendly and foregrounded what I needed when I needed it	I wanted to see more information about interactions a user would have, rather than just gathering info (like creating events, and so on)	I would probably change the hamburger menu and bottom nav	Try to make more of a space for user interactions (like the "what I liked least" section)
User 4	Visual design, ability to access information, and how practical it is for me to use it on a daily basis	The overall idea of it, I think an application like this is definitely useful for people to manage their health concerns.	The design, it's not as interactive as I would have liked / not as easy to go through.	The design because it's not the most appealing and user-friendly for people who may not be used to technologies	Making the app more visual by including more graphs, images, would be helpful. Also, more work can be done on the resource center - where are the resources coming from?
User 5	Ease of use and being well integrated	Uncluttered look	The button clicks were not responsive enough	It's in prelim stages. Needs to be more robust	Good start!

6 ITERATION

6.1 ITERATION RATIONALE

We found that the most valuable feedback occurred when we asked users to just explore the app on their own. This allowed us to get a sense of each individual's thought process, user needs, and reveal functions we hadn't thought of in the initial design.

Based on feedback gathered from testing observations and the follow-up survey, most users thought that the general concept of our app had potential for adoption and learning more about various health conditions. However, different issues surfaced during usability testing, primarily the need for more integration, interaction, and personalization. Overall, users definitely experienced confusion with the various sections such as Resources, Communities, and Rewards. Each user seemed to have their own ideas on the purpose of the Communities page. Some wanted to be able to create their own communities while, others saw it as more of a QA forum. In addition, for Resources, there was some debate about whether the resources should be user-

generated or from academic sources. Another good point that was brought up was the ability to save and share articles. While most users were able to navigate the app without too much difficulty, they did feel that the app could use a face lift in terms of color and responsiveness. Two of our users indicated that they enjoyed tracking physical activity, heart rate, and sleep patterns with the FitBit app and Apple Health. If our application was able to integrate with those applications or a wearable, it would be highly beneficial. Another feature that we intend to improve upon and build out is Rewards. Some users suggested a chat function or messaging to engage with other friends who use the app in order to compete for rewards. Incentives can be helpful for increasing engagement, having a benchmark for important milestones, and adding a social element to one's health journey.

6.2 ITERATION PROCESS

In this process, we incorporated data collected through testing, video, survey and peer review. Our main focus was on making the application more responsive and less redundant. In addition, we felt that the application should be more interactive and engage the user visually. Visual design can make the experience more intuitive and assist users to discover features. We understand that in order to make significant improvements, multiple iterations and testing would be necessary.

For this iteration, we wanted to create a dashboard page so that users could view a summary of all their health statistics that are being tracked, right after logging in. This provides a layer of personalization and instant access. We also enhanced the activity tracking to include more interactive graphs and specific information. The activity tracking has different views for instance, activity per day versus a weekly overview. We made changes to the login and signup page to have the functionality to connect with other social media like Facebook. This would make it easier for users to adopt and share their progress with others. We included welcome pages for activities, communities and resource center to avoid confusion and get users started. We made several other small enhancements like adding settings page, edit profile page and guiding texts wherever necessary.

6.3 FINAL PROTOTYPE

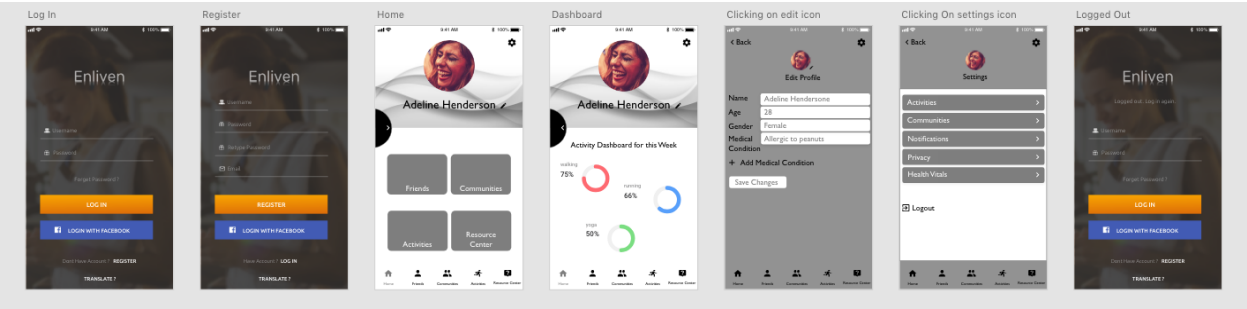


Fig 17. New Login/Register as well as Profile, Dashboard and Settings

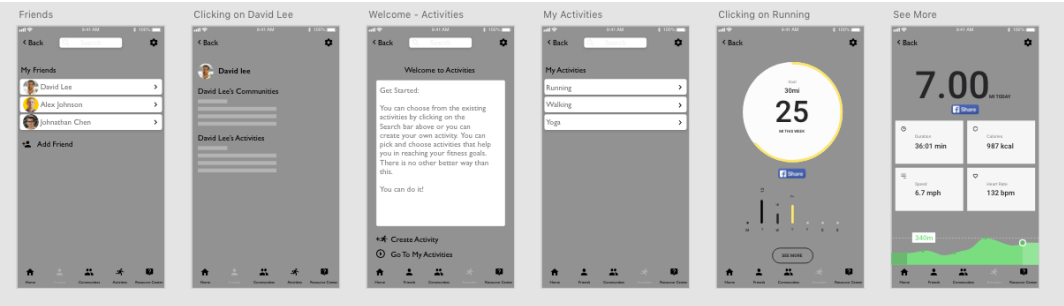


Fig 18. More interaction for activity tracking and share capability. Welcome screen with information to get started

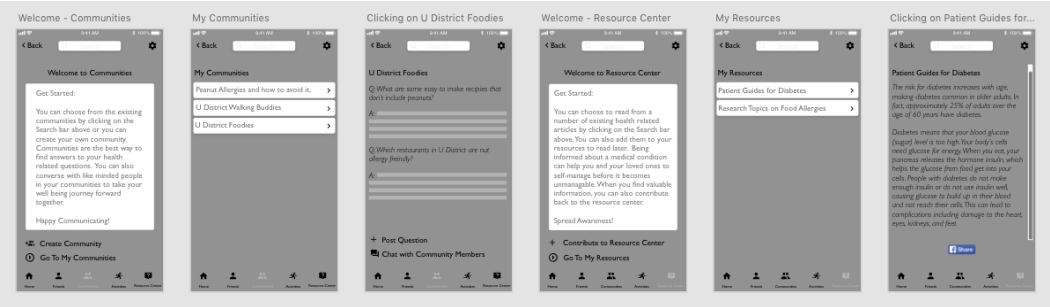


Fig 19. Changed the color scheme so that it is easier to navigate and read. Changed Resource Center to include entire article

Please click on the link below to access the interactive Xd prototype:

https://xd.adobe.com/view/335ff1a4-4f00-4846-bfde-12207bedf5b3

7 NEXT STEPS

We would like to continue refining our existing prototype to incorporate all valuable user feedback. We would like to continue our research and include other stakeholders like researchers and healthcare providers and eventually make the data available to them. We would want to continue usability testing with every iteration we undertake to get their feedback. We would want to eventually integrate our application with existing wearables in an effort to make it more accessible and relevant.

8 DESIGN PROCESS VIDEO

Please click on the link below to watch our design process video

https://www.youtube.com/watch?v=Wu5Q5T2n8r8

9 REFERENCES

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