Project 4: Design

Project Name: Snow Tek Bot

Show how users will interact with the product, using sketches and wireframes

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1. System Concept Statement

SnowTekBot will help Snow College students solve computer problems they are facing. If SnowTekBot can't solve the problem, it will direct them to the right place to have their problem solved. It will also:

- Have a friendly interface to be more appealing to Snow College students.
- Be programmed to react to certain responses.
- Help user with specific computer problems and questions.
- Guide the user to a specific Snow College department that specializes in solve their problem.
- Have a friendly response system that will help mitigate user frustration.
- Have step-by-step solutions for generic and common problems that students encounter.
- Quickly escalate questions beyond its scope.

2. Tailoring the scope

We started with the idea to create a huge database of information designed to provide an answer to any question a student could come up with. As we began the design process we imagined a simple problem, “I can’t connect to the internet”. As we thought about it, we were able to come up with 20 different ways of asking the same question, and half of them did not use the same words to analyze. Our second observation came from our own experience using products like Siri to answer questions, and some of the input we received from our contextual inquiry: AI currently does a very poor job of guessing what is being asked.

Towards that end, we narrowed the scope and approach to our design. Rather than trying to develop an artificial intelligence to answer every question, we will provide concrete answers to the questions we can easily answer, and to create an easy escalation to help desk personnel for those questions that cannot be answered easily.

Also instead of focusing on analysis of the question to parse the exact question the user may have, we decided to make more guided FAQ. Our analysis of the question will examine words in the question and guess at the three most likely questions a user may be asking.

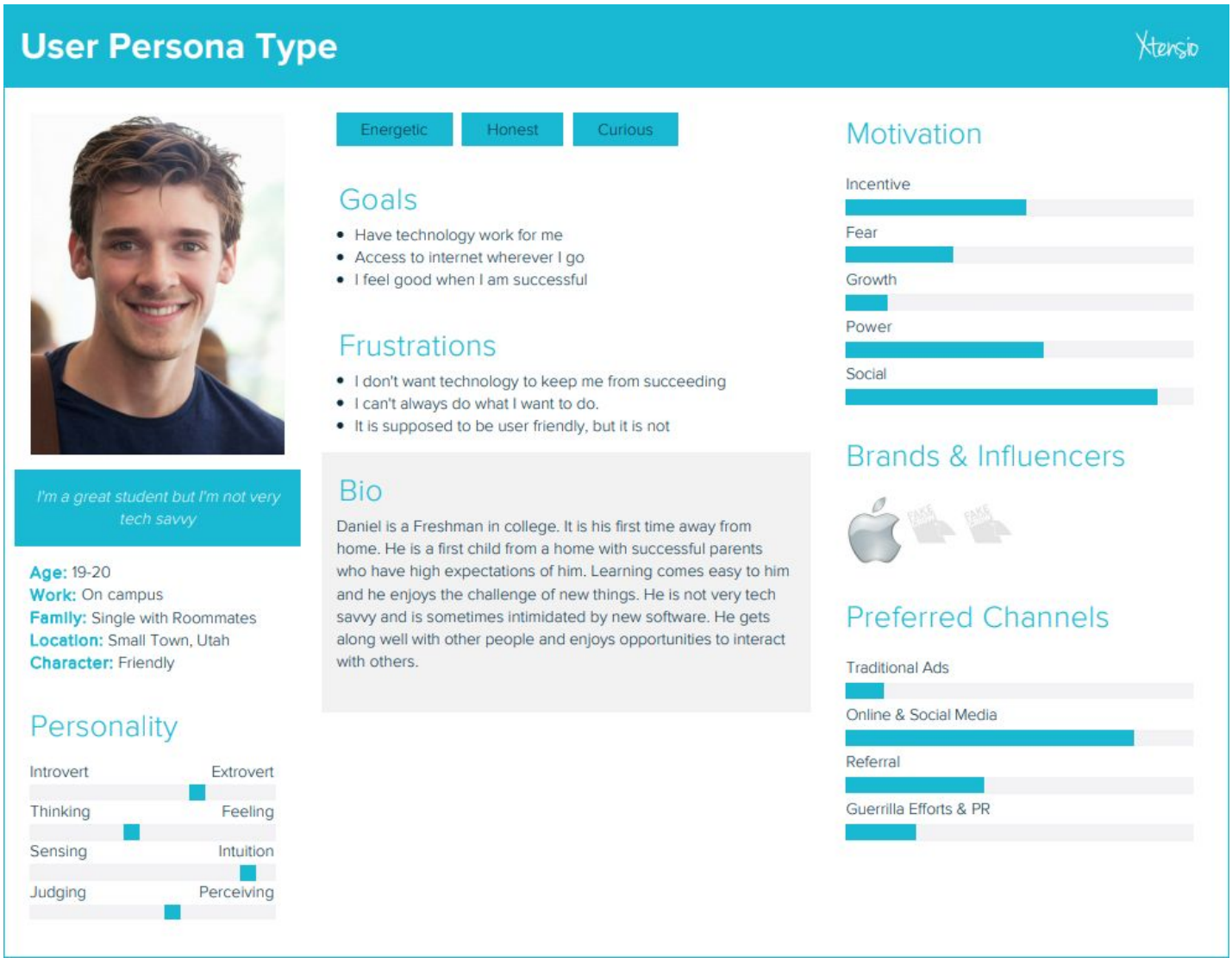
Making these early design decisions in approach we were able to alter our user experience to reflect our application providing this solution for them.

3. Persona

For our project, we decided to create two distinct personas.

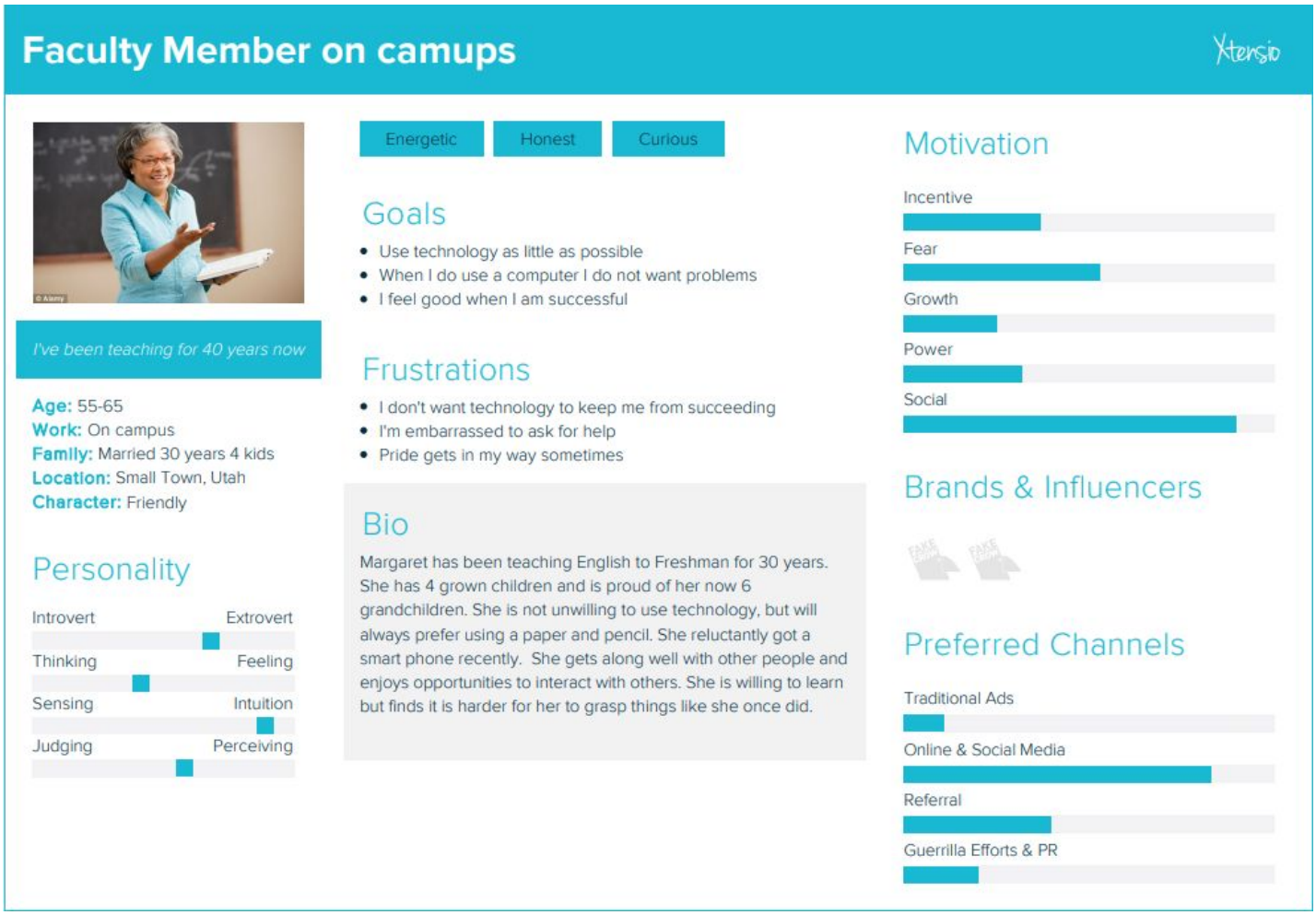
The Student:

Daniel is a typical student. He was successful in High School and would like to continue to succeed here at Snow. He owns several devices and knows how to use all the apps on his phone, but has never spent much time trying to understand how it does what it does. He has a job on campus helping students with housing. Although he isn't familiar with all the ins and outs of how his phone works, he certainly knows when it doesn't work, and wants easy solutions to get it working again. For additional information regarding the persona, you can use the picture below.



The Professor:

Margaret is a 20 year English professor. She is young enough to have been exposed to technology, but stubborn enough to never take the time to learn it well. While she recognizes the need to use modern software, she still prefers a paper and pencil. When she does need to do something on her computer she will frequently struggle, but she is embarrassed to ask for help. As such the chance to get assistance without exposing her ignorance is appealing to her. For additional information regarding the persona, you can use the picture below.



How we established these personas:

Early on in our project, we realized we had two distinct groups using the help desk. As such we quickly gravitated to the need to have two personas. Our typical professor and our typical student were who we began talking with when we began our contextual inquiry, and who became the models for our personas.

4. Ideation

In our ideation process, we looked at a few different designs that other major companies use for their chatbots. Including Google, iPhone, and the chat assistants offered by many companies now. We noticed that many companies provide live assistance to provide this service to their customers. During our defining the scope we decided the idea of allowing the help desk attendants to monitor the ‘chatbot’ conversations and provide live assistance as needed to be considered in a future version of our chatbot.

We picked apart each feature that the chatbot offers, and we took features and the ideas that best fit our created personas based on the interviewed individuals. Listening to our interviewed individuals, we made note of features that they would like or wanted. We have tried our best to incorporate these ideas in our ideation process while keeping the navigation simplistic and not overbearing. As we would discuss different features, we would generate our own versions of features and what was simple and easy for the user to work with. All along this process, we continue to generate ideas for chat client that best fits our personas needs. Even in the stages of creating different view sketches and wireframes, we have new ideas that we want to implement that would be useful to our personas.

The Sketching process helped us start our wireframe. The helpful connection between the ideation process and the sketching process comes from viewing other chatbots and our own collaboration. We first started our sketches based off a few designs coming from those ideas. The mobile version of SnowTekChat was sketched into some storyboards and these were then extended into our wireframes that are the building blocks for our eventual final design. This critical step gives us the bones from which our final product will emerge, and also allow for future expansion to make the product better in the future.

5. Workspace

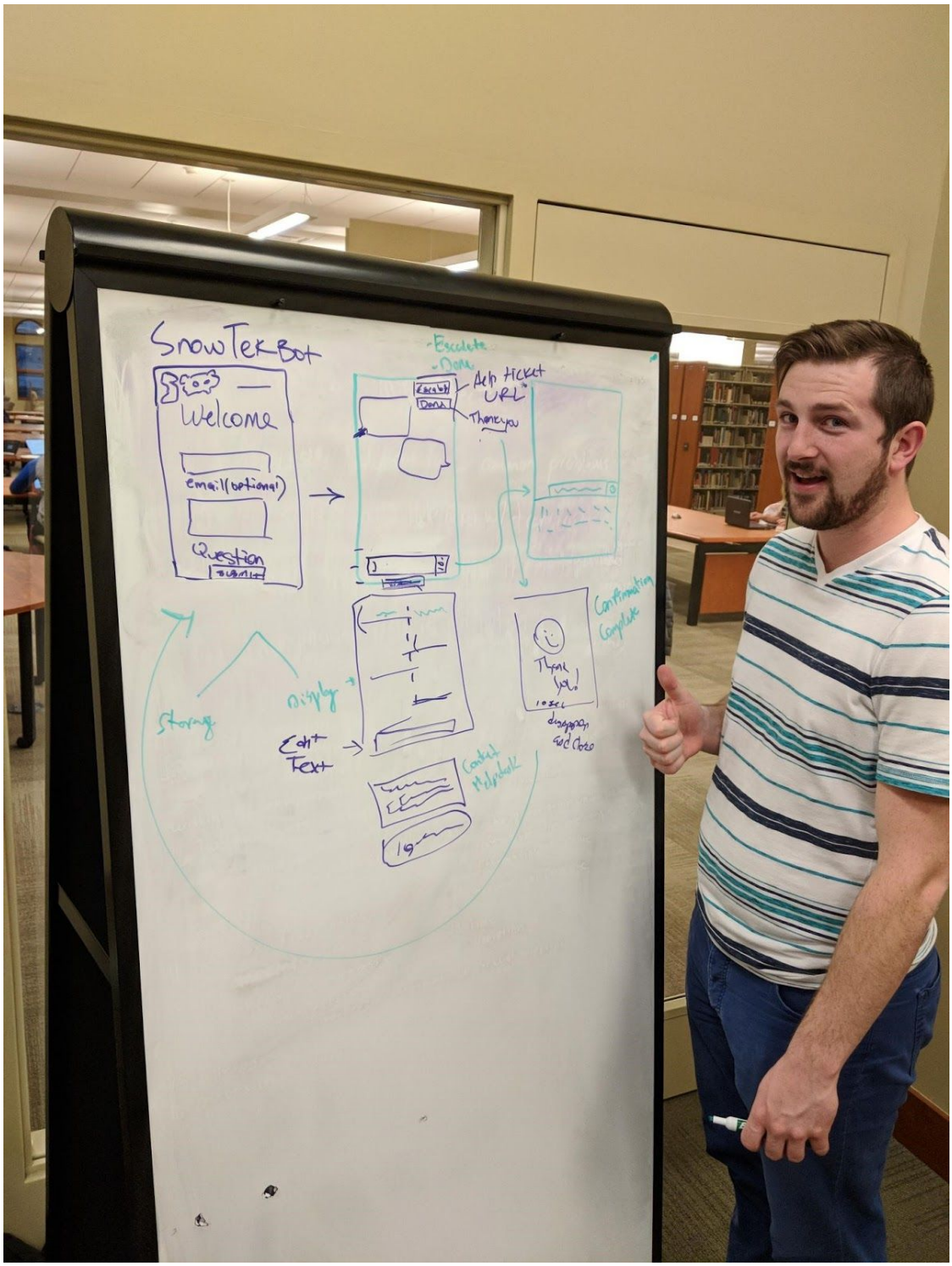
As part of our humble, student budget, our workspace was fairly simple and straightforward. In the beginning we used a whiteboard to generate a few ideas between the two of us. We also started doing sketches on a paper to help each other see what potential models we could use for SnowTekBot. We came up with a few ideas and agreed upon designs and quickly started working on mock ups. We learned that using a computer program to create mockups was really resourceful. With the ability to adjust features across multiple pages is really helpful. We used PowerPoint to create a few designs. We used basic paper and pencil to create our storyboard ideas. Throughout the whole process though, we would use a white board to discuss different designs and what would be best with what we have. We also used Xtensio to better develop who our personas are.

Materials Used:

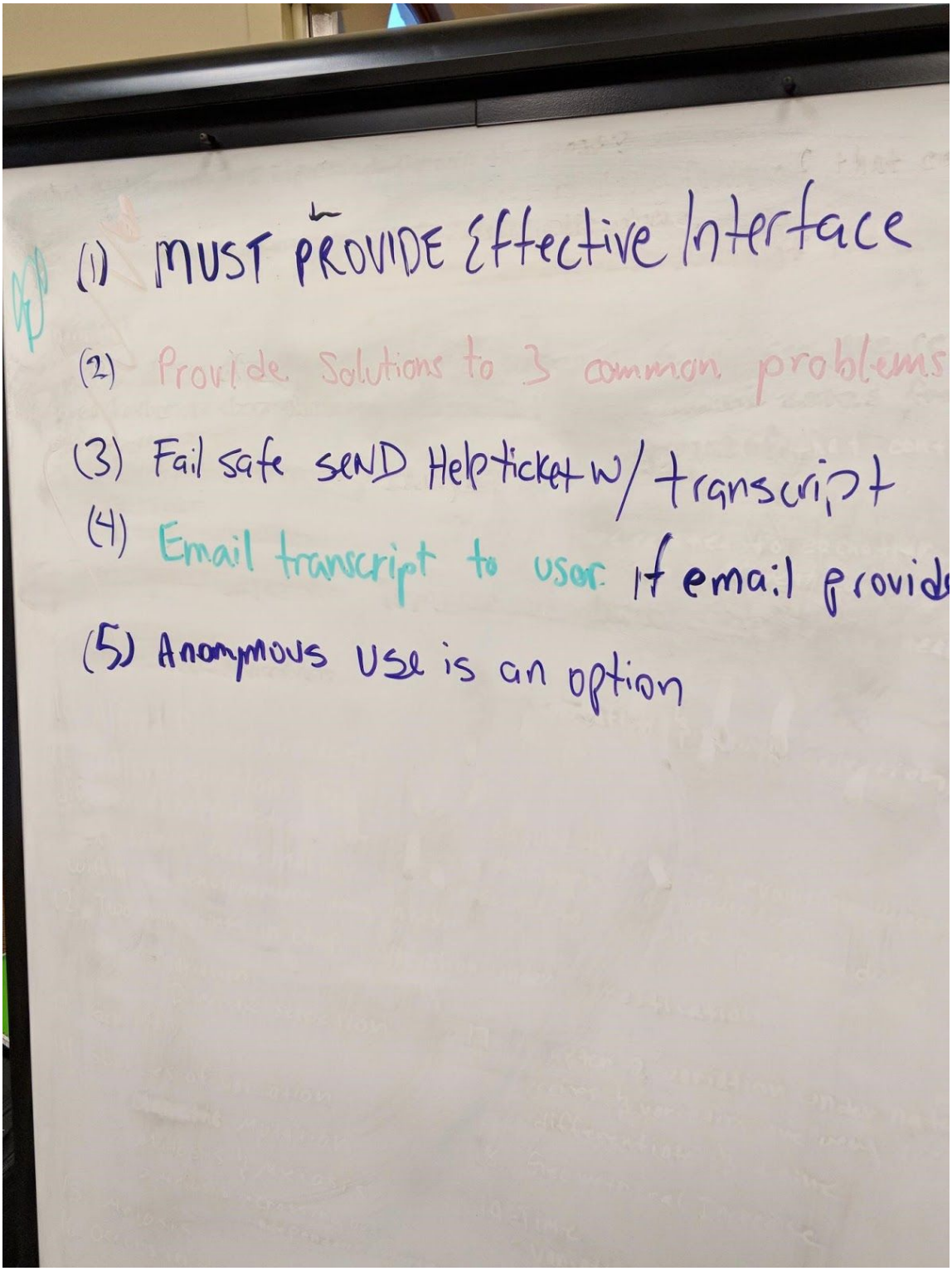
- Paper
- Pencil
- Whiteboards
- Xtensio

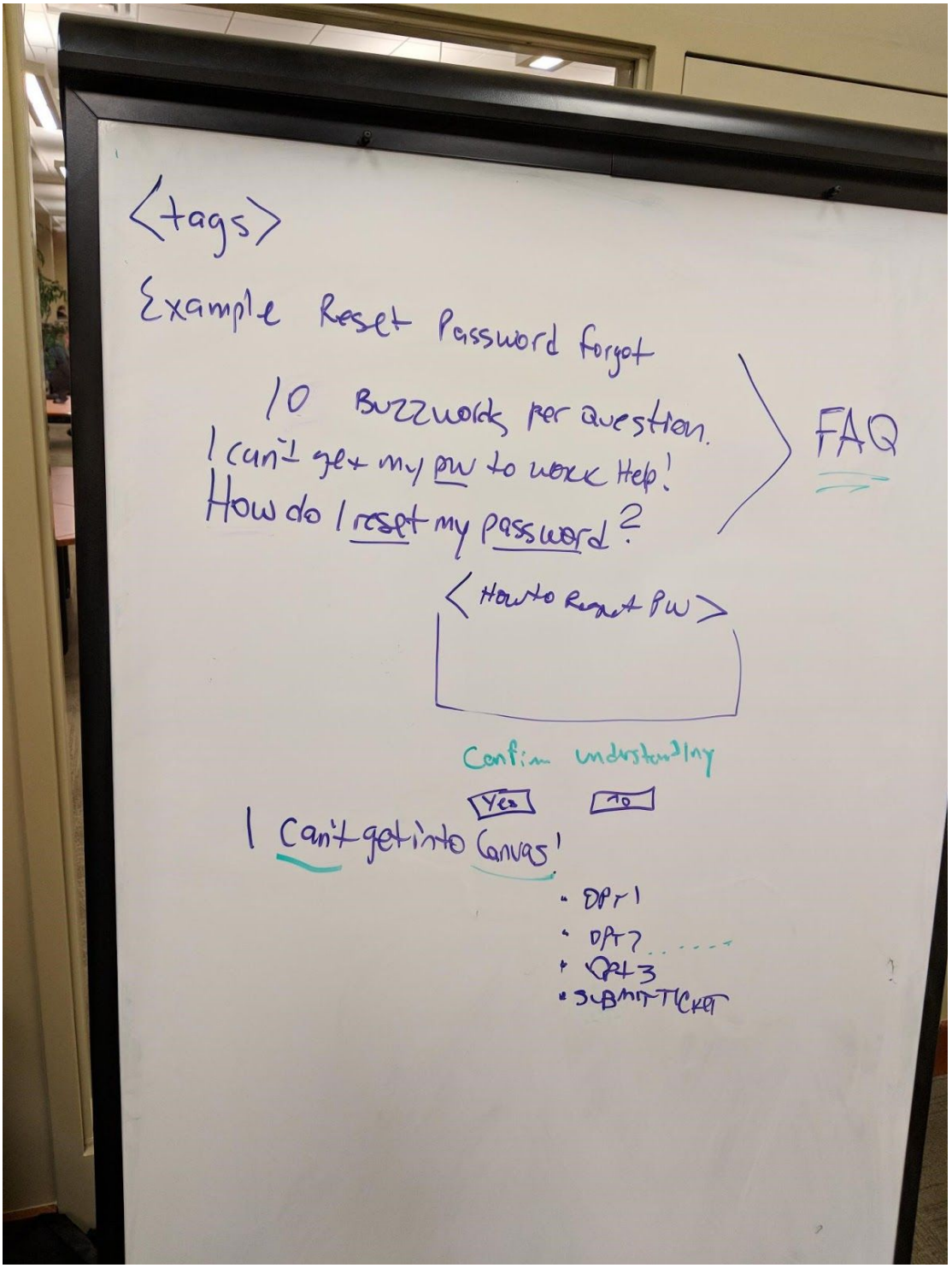
6. Photos

Photo of the team working.



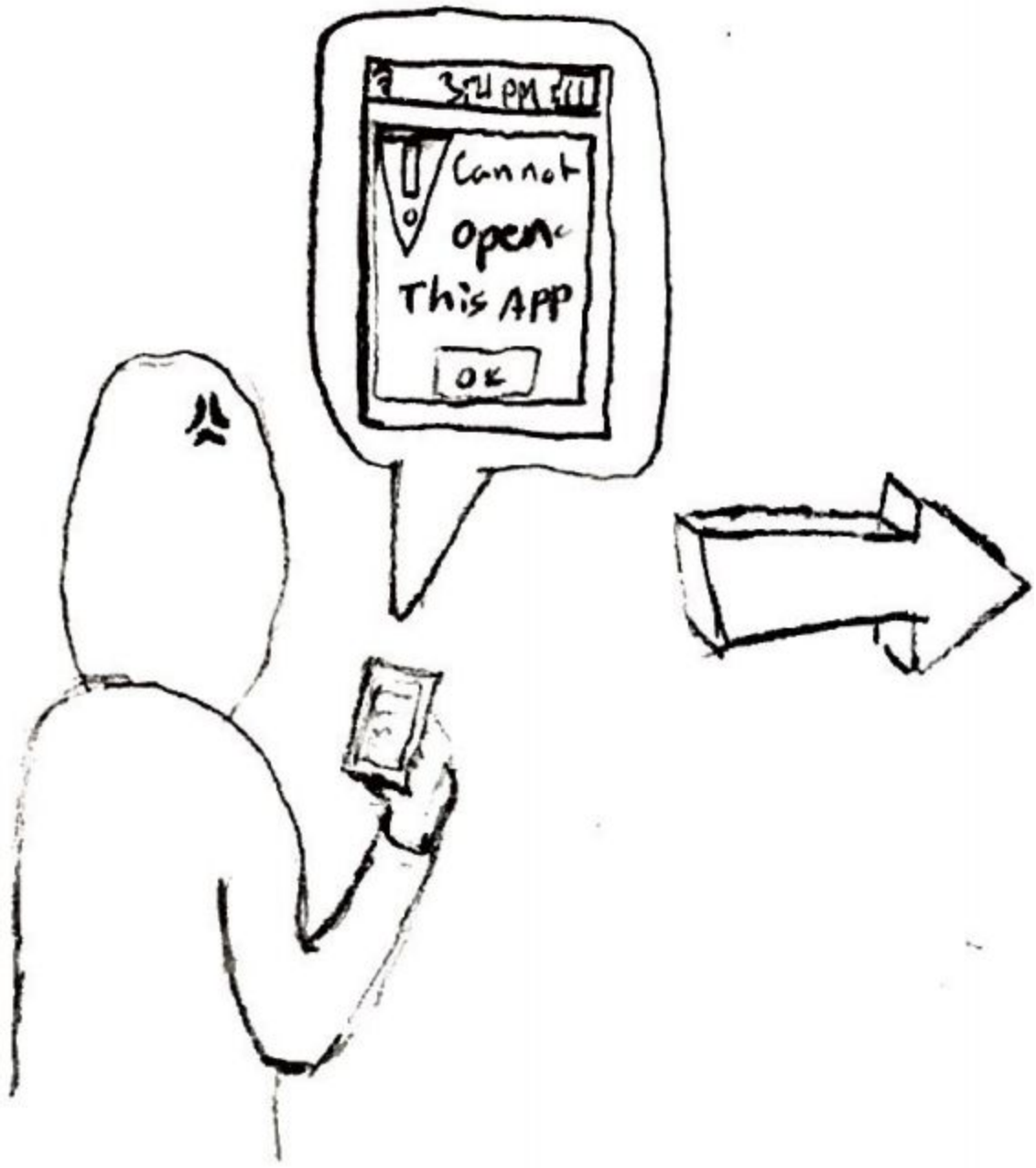
7. Scans and Pictures

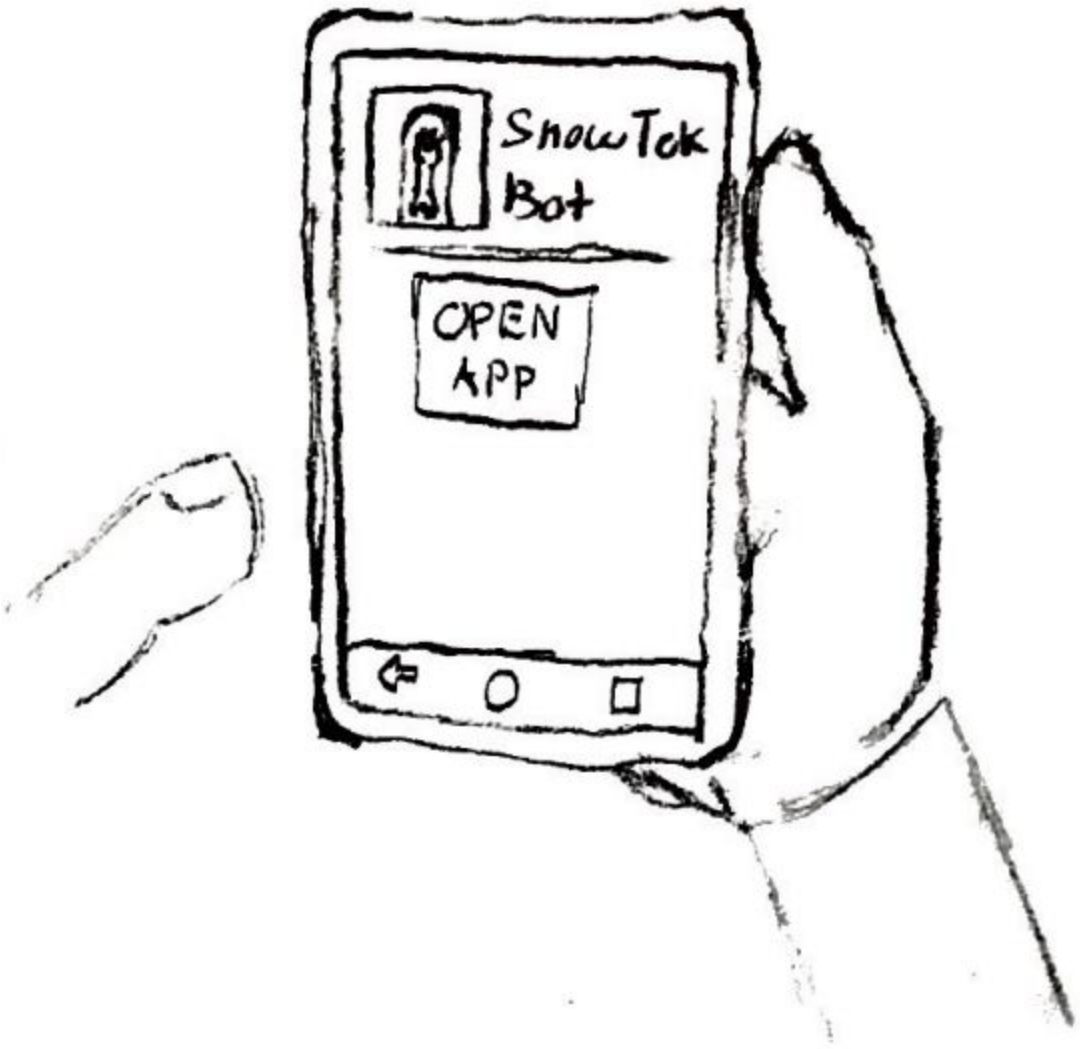



<tags>
Example Reset Password forgot
10 Buzzwords per question.
I can't get my pw to work Help!
How do I reset my password?
FAQ
<How to Reset PW>
Confirm understanding
Yes
no
I can't get into Canvas!
DPT1
DPT2
DPT3
SUBMIT TICKET

8. Mockups

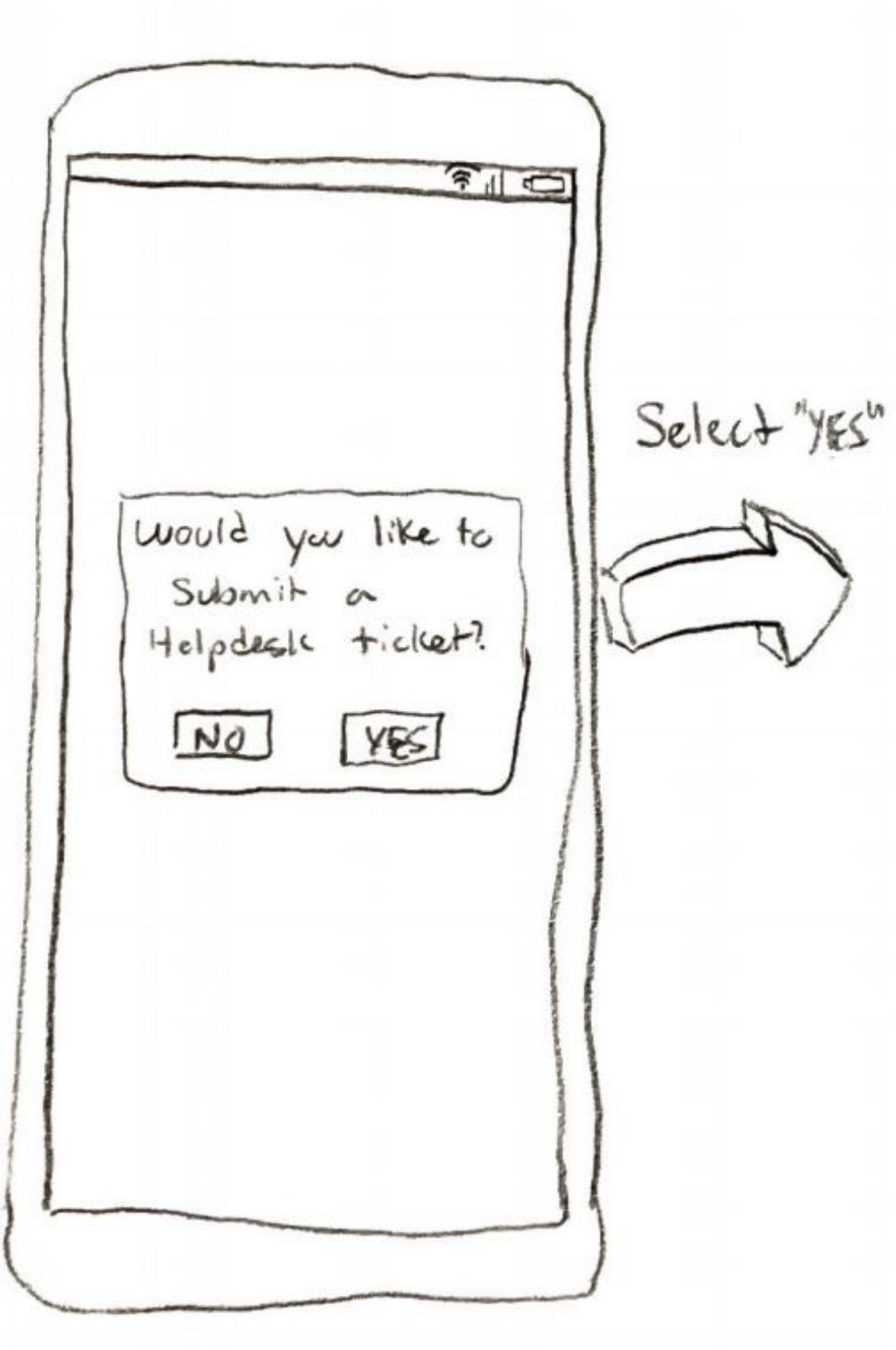
Someone using the SnowTekBot app

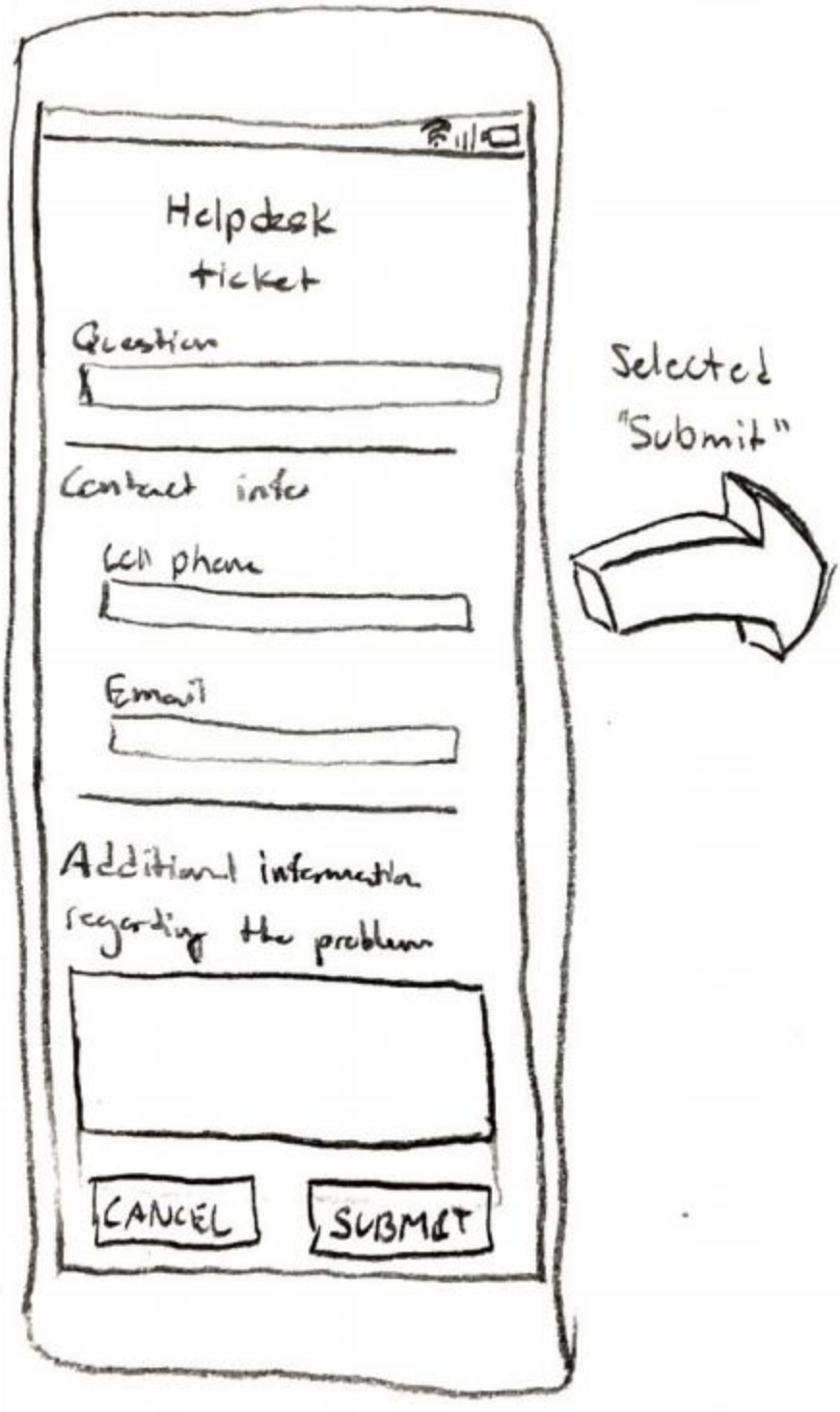


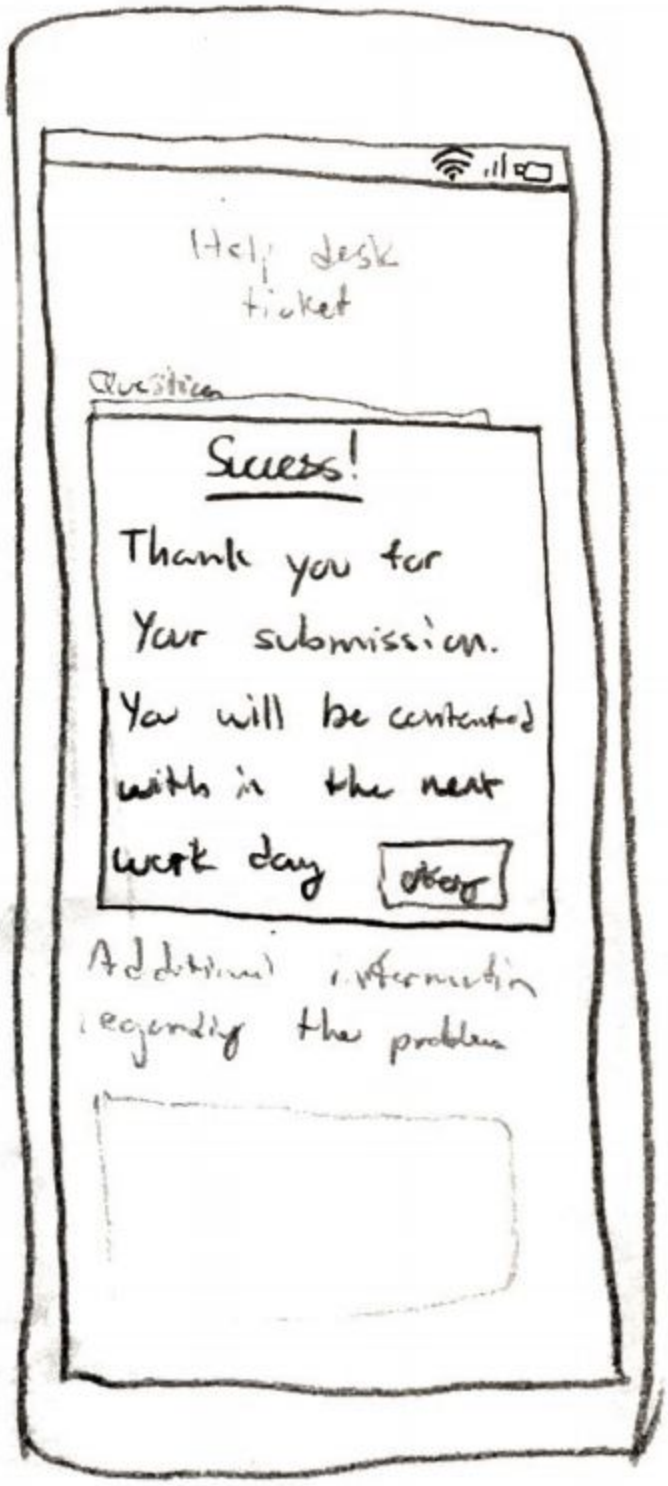

ShowTok
Bot
OPEN
APP


Snow Tek Bot
(optional)
Email
"I cant open my application on my phone."
Question
Submit

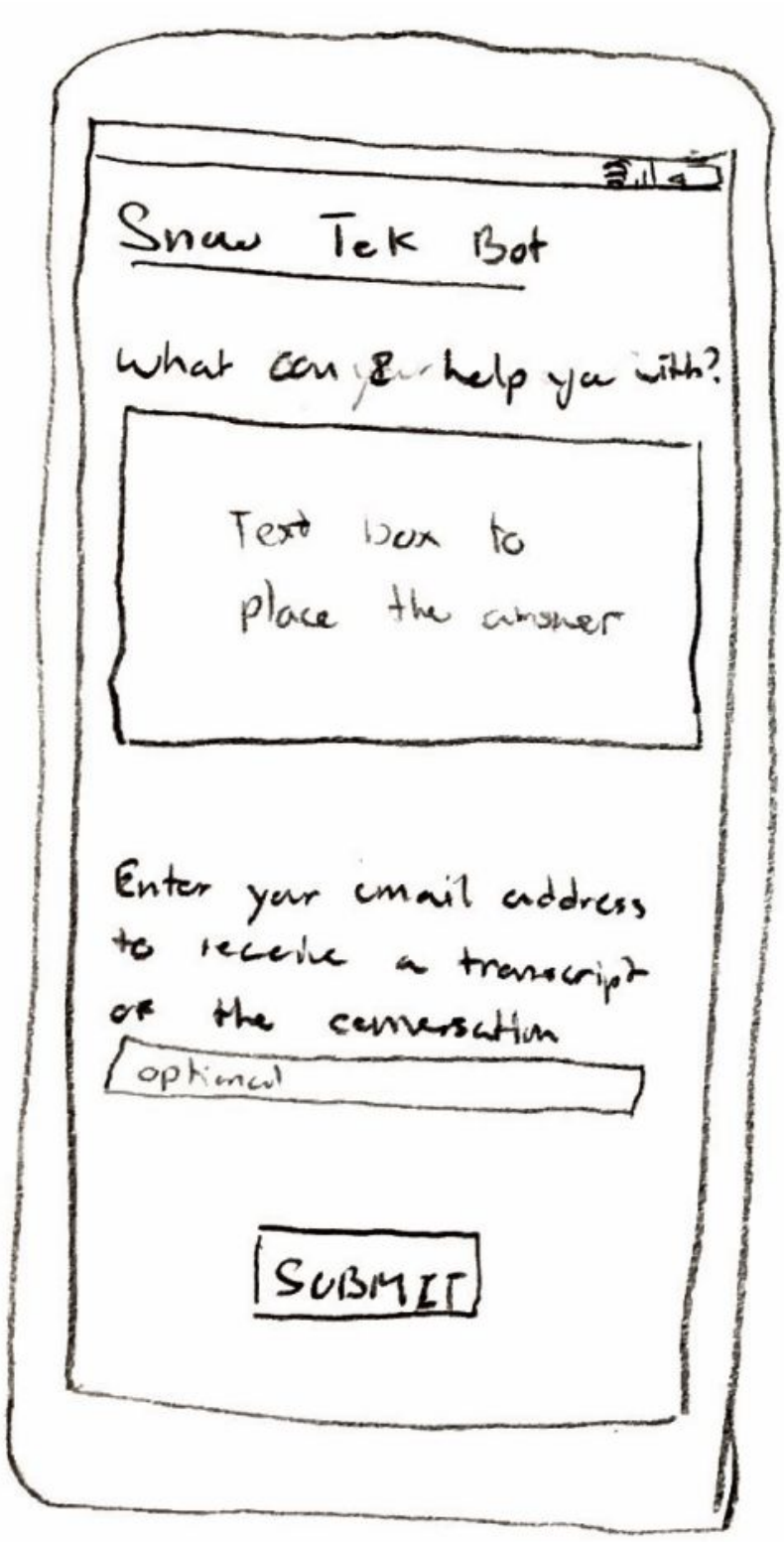
Help Desk Submission Option

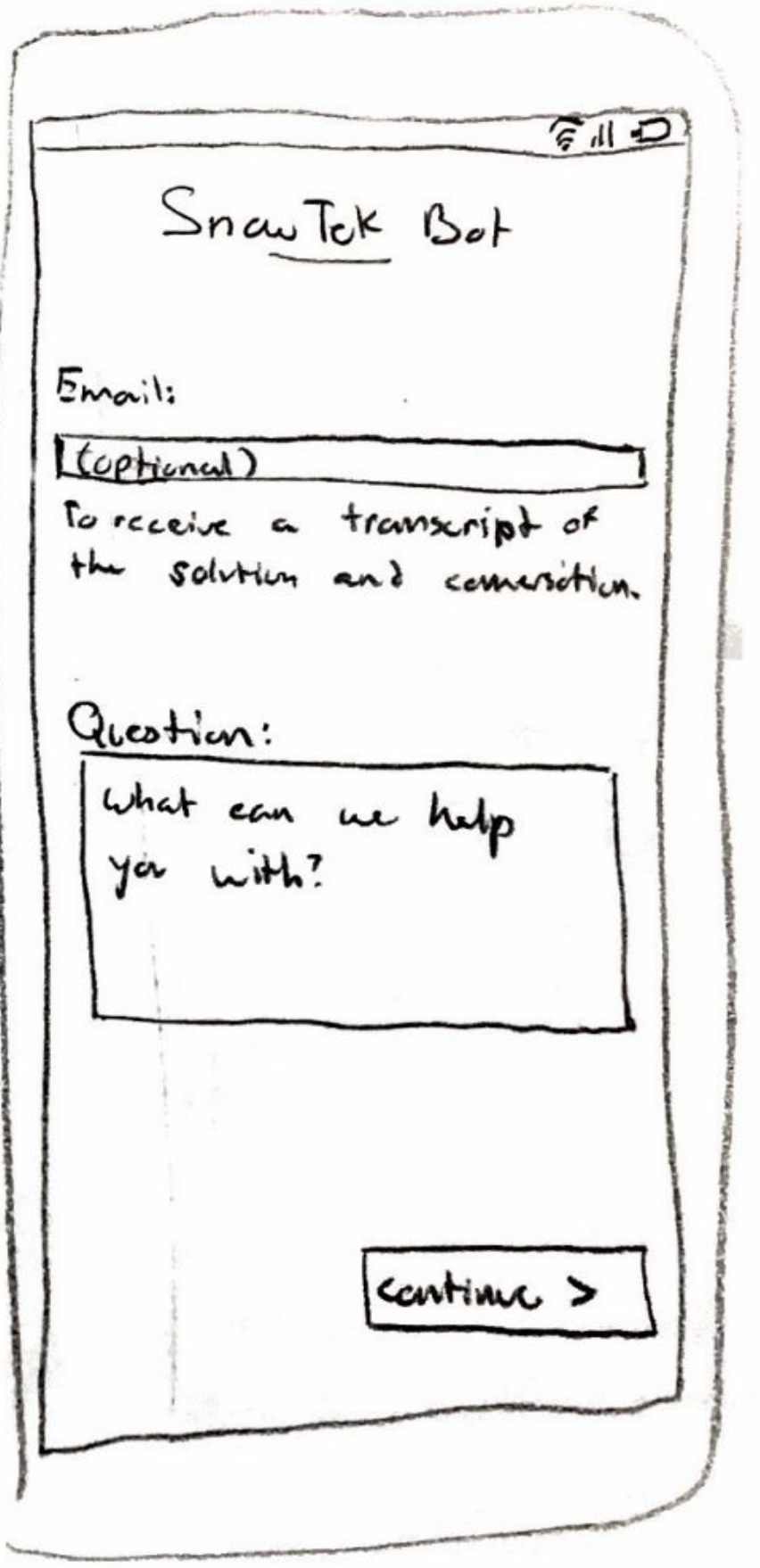



Helpdesk
ticket
Question
Contact info
Cell phone
Email
Additional information
regarding the problem
CANCEL
SUBMIT
Selected
"Submit"

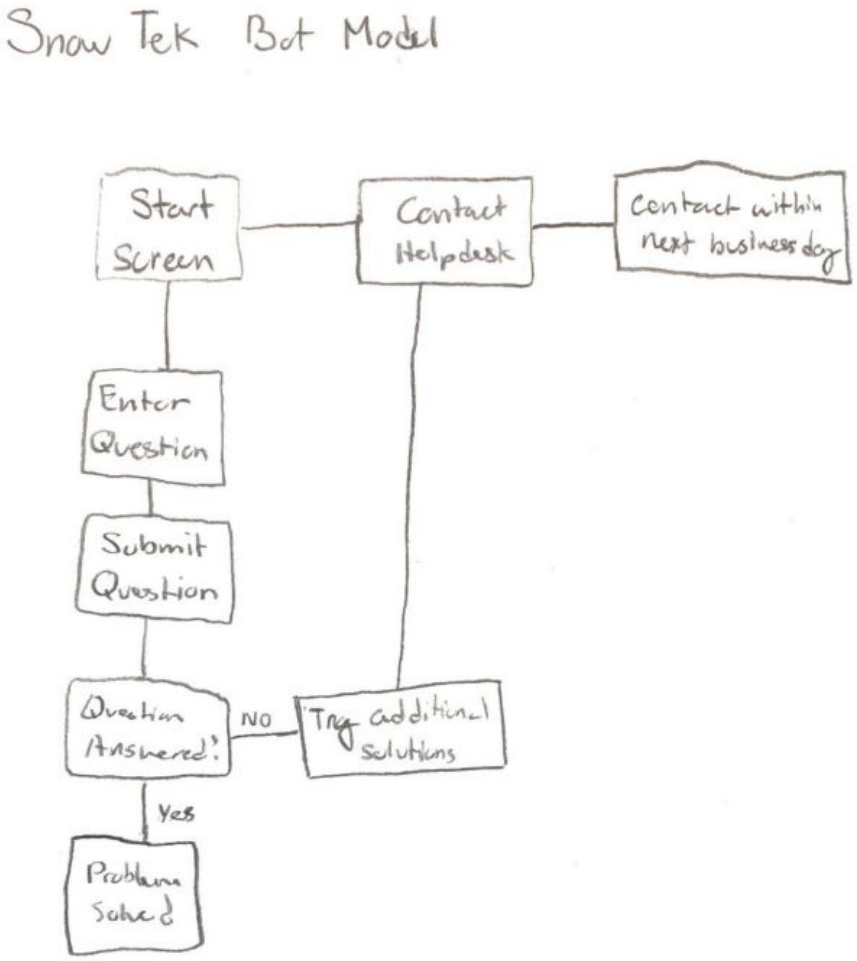

Help desk
ticket
Question
Sucess!
Thank you for
Your submission.
You will be contented
with in the next
work day
Okay
Additional information
regarding the problem

Possible Home Screen Options




SnowTek Bot
Email:
(optional)
To receive a transcript of the solution and conversation.
Question:
What can we help you with?
continue >

Connections between the different states

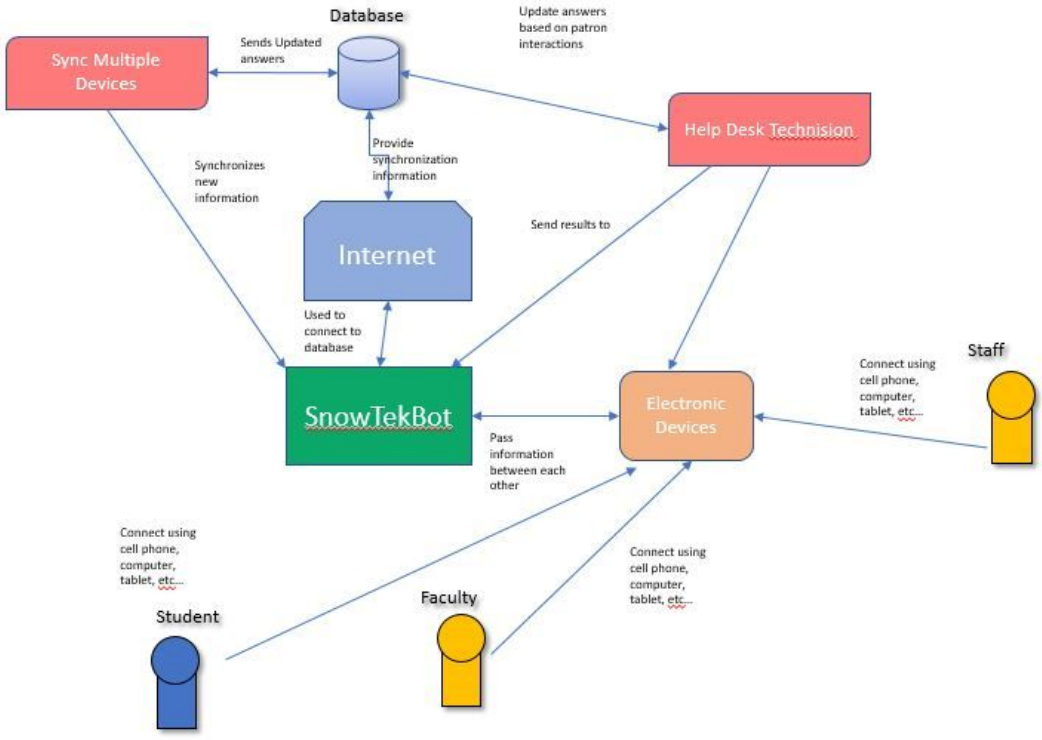


9. Model Mapping

Designer Mental Model

Our mental model came from a lot of brainstorming. We would think a lot about different problems users face and how to solve them. Each of us have experience those chat bots that supposedly can help you with whatever you're doing. We looked at these simple services other companies used and tried to pick apart what we liked and didn't like. As we thought about the design of our program we wanted it to be simple and easy for the user to use. We didn't want it to be very flash, and wanted to keep it straight forward.

Conceptual Design



Our conceptual design is based all around our user. We looked at our personas and designed our app towards those individuals. When you have frustrated students of faculty members, they often submit to their bugs or problems until something happens that makes it worse. We wanted this app to be a resource for those individuals so that they can get quick, remote help to their tech problems. A faculty or student will communicate with the SnowTekBot using their mobile device. The tech bot will help assess the problem they are having and provide a few different solutions. The user then has the option to try some of the solutions, or create a ticket for the

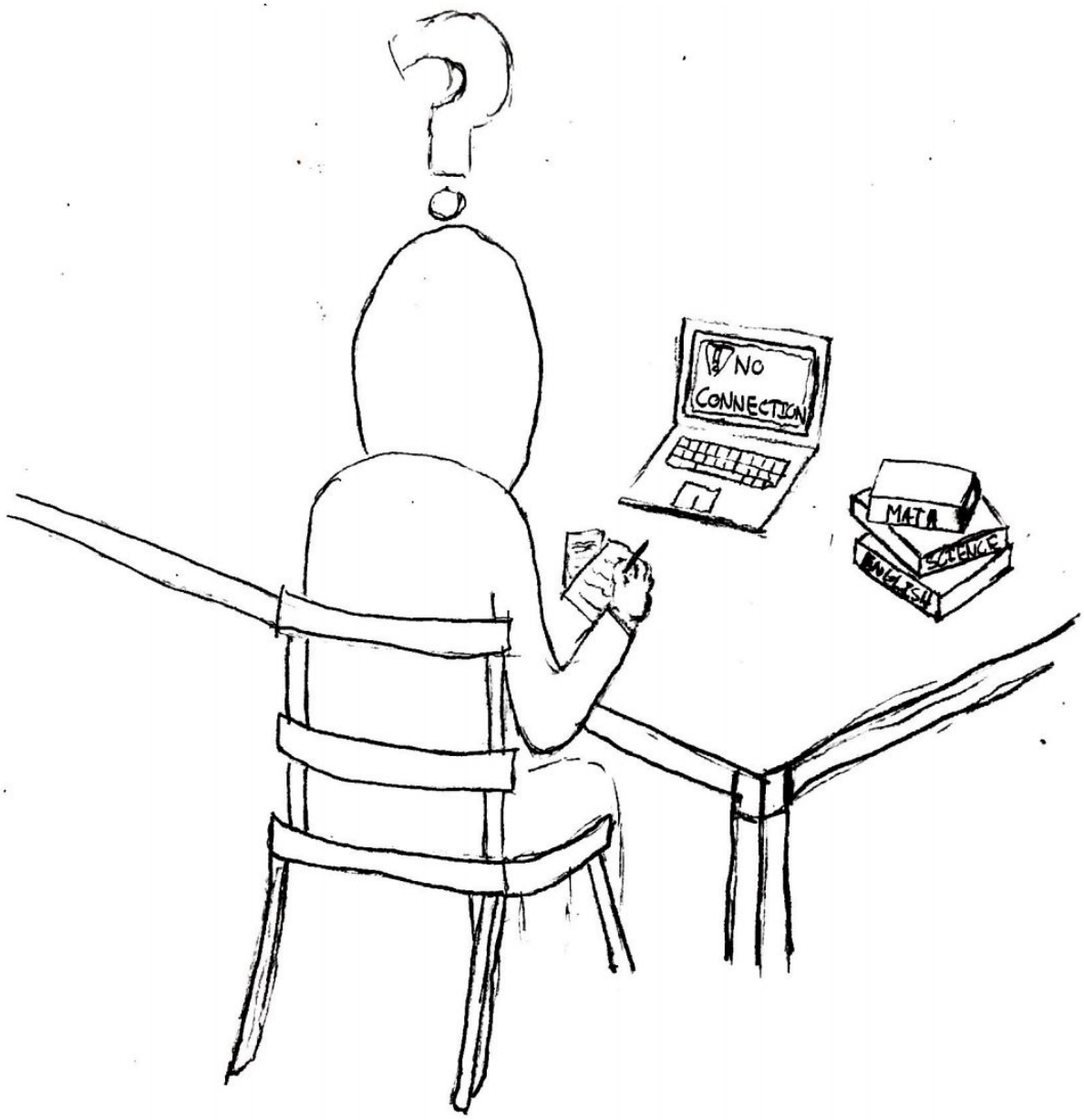
Snow College Help Desk to assist them. We needed to connect the devices to the internet so that they SnowTekBot can pull up information to help the user. If the user does submit a ticket, the expectation is placed that the helpdesk will contact the user within the next business.

Mapping from Designer to User

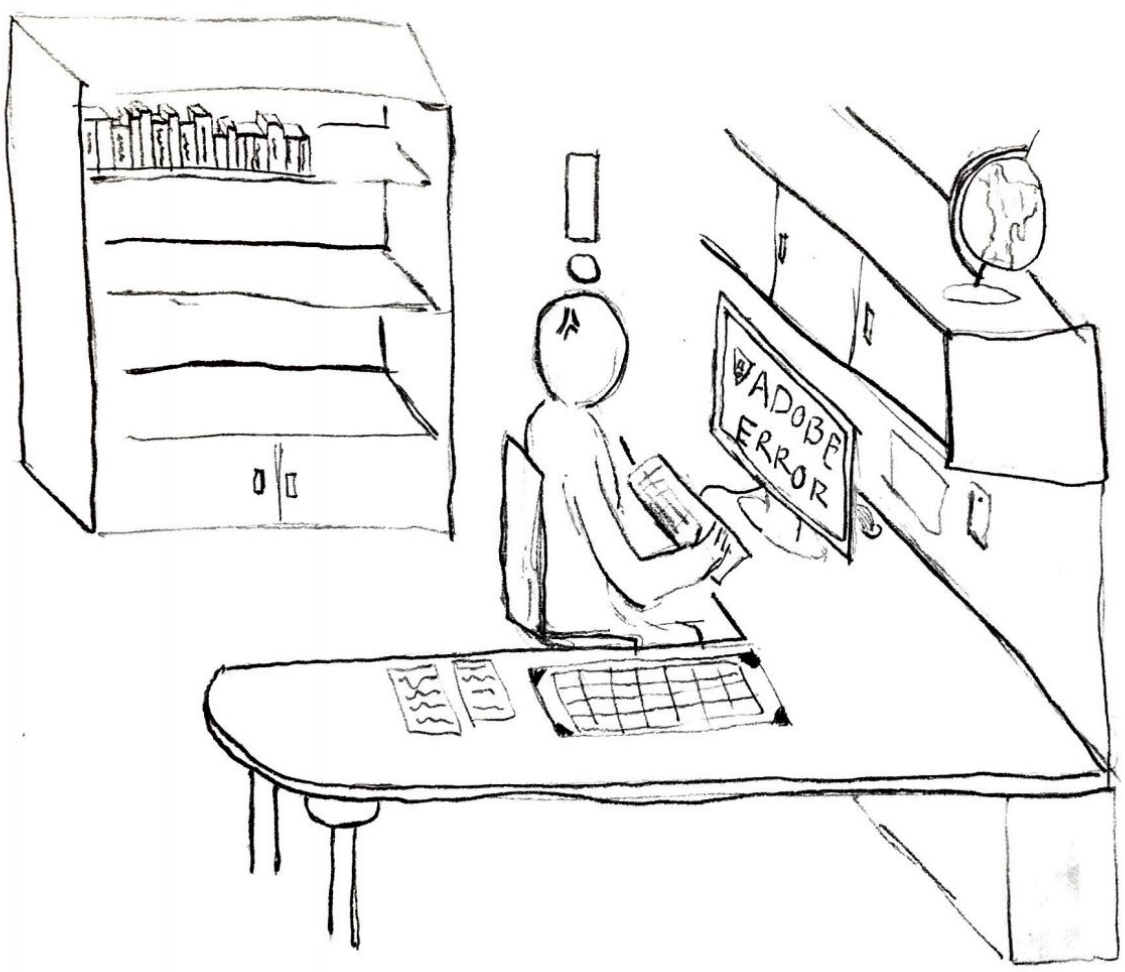
The conceptual design helps us realize how to know what the user wants and how we can make the best product we can for the user. From what we design for the user in the conceptual design will give us the blueprint of how to design SnowTekBot so that this implementation of a tech assistant can be what the user wants.

We as the designers need to pretend that will be the end user and put our feet in our persona to be able to really design what the end user wants and needs. In doing this, our designing skills will have a sharper effect on the user. This impact will allow the user to continue to use the design we create.

10. Story Boarding



This picture is a of a modest Snow College student. This student is working on homework at some place on college campus. While they are doing homework, something happens to their computer to where they can no longer connect to the internet. They try a few different options but it ultimately unable to fix it. In this situation, it would be convenient for them to use the SnowTekBot app to find a solution.



In another common scenario, this teacher walks into their office and starts up the computer. They open up an adobe program only to find out that they can't get into the program they need. After trial and error, they are unable to find a solution to this problem. In this moment, it would be opportune to use the SnowTekBot app to try and find a solution.

In these two examples, you are able to see an ecological and emotional perspective used in this storyboard. These two individuals are frustrated that they have these problems in the first place. At the same time, they can quickly find a solution to their problems using the TekBot application.

11. Wireframing

For wireframe examples of our program. See the attached file of “new project-1.pdf”

12. Design Techniques

The main technique used in this project was brainstorming on whiteboard and on paper. As well as designing and reiterating the designs to improve them and get a better concept of our project.