

# Relate

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## PROBLEM & SOLUTION OVERVIEW

### **Problem**

As social creatures, the relationships we build and maintain with others are very important to us. Communication is a key component to building and maintaining those relationships. Unfortunately, maintaining this communication in an effective, well-balanced manner can be very difficult. Additionally, it can be challenging to determine which relationships are the most important to us, and to make sure we devote an appropriate amount of time and energy to these relationships.

### **Solution**

Our solution to this problem is a mobile application that helps users keep track of the balance, frequency, and quality of communication in their relationships. It will allow them to set goals pertaining to relationship balance as well as prioritize their various relationships. The applications users texts, phone calls, messaging services, Skype, email, etc. will be tracked to establish and meaningfully display data such as the frequency of contact, communication patterns, and overall strength of communication. Our app will focus on creating and maintaining strong relationships, where establishing well-balanced communication is key.

## CONTEXTUAL INQUIRY PARTICIPANTS

### **Irene: Parent of University of Washington freshman**

Irene is a divorced mother with three children. Her oldest daughter is a freshman at the University of Washington Tacoma campus. She described her relationship with her daughter as great and like being best friends. She keeps in constant communication not only with her daughter but also her siblings, friends, and ex-husband. Irene was our only parent interviewed in our contextual inquiries. Her answers helped us refocus and align our next contextual inquiry interviews for a better understanding of how our participants viewed and judged their relationship and communication balance.

### **Jack: Sophomore, International student**

Jack is a foreign student who moved from China and is now a sophomore in the UW CSE program. He frequently calls his parents and other relatives over Skype and explains that the video chat allows for a more intimate complete experience when communicating with family. In contrast, Jack usually uses Facebook to communicate with his friends. He admits that he often does not initiate contact with his friends and that they send much more substantive messages to him than he does to them. Interestingly, Jack does not seem concerned about this imbalance.

### **Sara: Brazilian Exchange Student**

Sara is a Mechanical Engineering major who is here at UW for one quarter with a study abroad program. She also frequently uses Skype to keep in contact with her parents and boyfriend back in Brazil and considers it a more serious form of communication. With most of her younger friends she uses texting and Facebook to communicate but often just to arrange in person meet-ups. Sara's online communications appear to be well balanced, although she does admit to being annoyed at people's glib responses occasionally.

### **Megan: Freshman, In-State Student**

Megan is a first-year student at the University of Washington pursuing a degree in business. She communicates with her current friends by mostly by visiting their dorms or texting them. She gets a lot of personal contact with her friends at UW because they are close in proximity to her. As a result, she believes her relationships with her current friends are balanced. Conversely, she has contact with her older friends from other colleges as they only text occasionally, and usually about insubstantial topics. She believes she grown apart from her friends at other colleges because they do not keep in touch. Megan has noticed a decrease in the communication with her parents, but does not believe their relationship has been negatively affected as a result.

## CONTEXTUAL INQUIRY RESULTS & THEMES

We interviewed four individuals who fit our contextual inquiry participant criteria. Three of our participants were interviewed on campus, specifically Mary Gates Hall and the HUB, and one participant was interviewed by phone because of her distance from campus. We selected the UW campus to carry out the interviews because the students often move away from home, taking on new responsibilities and becoming separated from their family and old friends by distance. Often it's challenging for them to maintain good relationships due to these factors. Additionally they are easily accessible and more receptive to personal questions about communication balance. We used interviews exclusively because it would be difficult to observe and obtain meaningful data on the quality of communication between two individuals without hearing or reading their conversation. Instead, individuals were asked to look at their communication on their mobile devices or computers with people they frequently contact to judge their relationships and the balance of communication between them. We also asked questions pertaining to what relationships were important to them, who initiated conversations, and the balance of communication between the individuals involved. The questions for each contextual inquiry were slightly different because the insights we gained in one interview would cause us to revise and focus our questions to better target our goal for this project.

Two large themes came up in our contextual interviews: differences between communication platforms and trends about relationship balance. We noticed that people had similar uses for certain forms of communication particularly skype and email. People generally consider skype a more intimate or involved form of communication because it allows for both voice (which can give inflectional cues) and nonverbal communication through video. As a result this seems to be the preferred method of communication for family, but does not appear appropriate for more distant friends. Our participants also agreed on email being more formal and for larger or more coherent thoughts and as a result it is also less frequently used. Facebook usage varied considerably between participants. Some used it only to communicate with people they would not be able to otherwise, while others used it more as a main communication platform.

In terms of relationship balance, our participants separated into two clear groups - one that maintained healthily balanced relationships and one that had moderately unbalanced relationships. None of our participants fell in between these extremes, but that may just have been due to the small sample size. Unsurprisingly, the participants with the healthiest relationship balance were more conscious about how others responded to their communications. More surprisingly, the people who had an unhealthy relationship balance did notice that their communications were somewhat one-sided but did not acknowledge this imbalance as a considerable problem. They also assumed that other people did not mind the imbalance and dismissed it as most of the communication being unimportant.

## ANSWERS TO TASK ANALYSIS QUESTIONS

### **Who is going to use the design?**

Our target audience is young adults, specifically freshmen or international students, that are transitioning into a new environment where it can be difficult to maintain old relationships and build strong new ones. Although we are targeting this target group, our design would be helpful for anyone interested in maintaining their relationships.

### **What tasks do they now perform?**

Individuals are left to judge the strengths of their relationships and remember to keep up with their communication. They sometimes juggle school, work, and internships, while trying to keep both close and long distant relationships strong and functional. This can be difficult to achieve and time/energy consuming.

### **What tasks are desired?**

Individuals want to have strong and happy relationships. As social creatures, we enjoy the company of others in person or over long distance. Understanding the strength of our relationship and how to improve it would be very helpful. Every relationship is different and some require more or less effort to make it balanced so that both individuals are happy. By keeping track of factors such as frequency, quality of communication, methods, etc. each relationship could be monitored and shaped into a strong and happy relationship.

### **How are the tasks learned?**

Most individuals manage their relationships based off experience, trial and error, and advice from others. Some individuals are great at creating and keeping strong relationships, but others struggle. Communication is important in all aspects of life and is especially crucial in relationships.

### **Where are the tasks performed?**

The tasks could be performed anywhere as long as the person has access to their phone, tablet, computer, etc.

### **What is the relationship between the person and data?**

The data represents the amount of communication between the person and other people they have relationships with. It represents the overall balance of communication that person has with their most important relationships.

### **What other tools does the person have?**

To determine the balance in their relationships, users could check the amount of text messages sent by looking at their messaging application. They can look through all of their previous records of communication with a person. To remember to keep in contact with people, a user can manually set reminders to themselves.

### **How do people communicate with each other?**

People communicate with each other through the use of their phones. Their phones allow them to communicate through phone calls, text messages, Facebook messages, Snap chats, tweets, and video messages. Computers are also a larger communication platform. People could Facebook message, and video chat via Skype or Google

Hangouts. They can even communicate while playing video games with headsets. Finally, people also communicate with each other in person through speaking.

**How often are the tasks performed?**

A person could check their relationship balance any time they want. However, most people would most likely check it once a week or once a month in order for them to see trends. The trends they see would allow them to assess the balance of their relationship with others.

**What are the time constraints on the tasks?**

As it stands it could be very time consuming for someone to go through all of their data and try to manually assess their relationships.

**What happens when things go wrong?**

When a person sees that the app is showing an imbalance in their relationship, they could try to rebalance their relationship. If the person is in fact communicating too much, the user would have to assess and figure out how to communicate less in the relationship. If the person is communicating much less, then that person would need to figure out ways to improve on the quality or quantity of their communication. The app could also help set reminders to reach out to people they would like to communicate with more.

## TASKS

### **Task 1: Set Relationship Balances**

A user sets a goal about the specific relationship balance they want to achieve with another person. Different relationships may require a different balance. Intimate relationships may require a more even balance than a professional relationship. This task is a new task that we would enable with our design. People would like a platform to more concretely express the balances they desire and keep track of these.

### **Task 2: Prioritization of Relationships**

Some of a user's relationships are inherently more important than other relationships. A user's relationship with their parents is probably more valuable to them than their relationship with their distant relatives. This task is a new task that we would enable with our design. People may prioritize different relationships without realizing it, but have no current way of formally prioritizing and understanding the amount of effort they are putting into each one.

### **Task 3: Impersonal Communication Platforms**

A user has an unhealthy tendency to prefer Facebook and other impersonal forms of communication over more intimate ones such as Skype or in person. They maintain very good conversational balance over the platforms they communicate on but spend the majority of their time on text-based communication platforms. As a result their relationships lack the same depth of interaction that most healthy relationships contain. After realizing this, the user sets a goal to shift their communication to include more Skype or in-person meetings, but would like reminders to help them remember to use these platforms more.

### **Task 4: Forgetting to Respond**

A user may not know if they are achieving a good balance in their relationship. They may notice that they do not text their friend back at all. They may realize that they send way too many texts and come across as annoying. This task requires an overall awareness of their texting patterns with their friend. Not recognizing the pattern could strain their relationship. They may not realize it until their friend calls them out. A user might currently perform the task of realizing the pattern by manually going through their texts, but a more automated way would be preferable.

### **Task 5: Older Relationships**

A user may forget to communicate with someone that they have not seen in a long time. It is common for people with busy lifestyles to forget about certain relationships. It is also common when users maintain relationships over a long distance. It can be difficult for a user to realize that they may not have communicated with those friends for a while, and would like a more systematic way to remember to do so.

### **Task 6: Initiation of Contact**

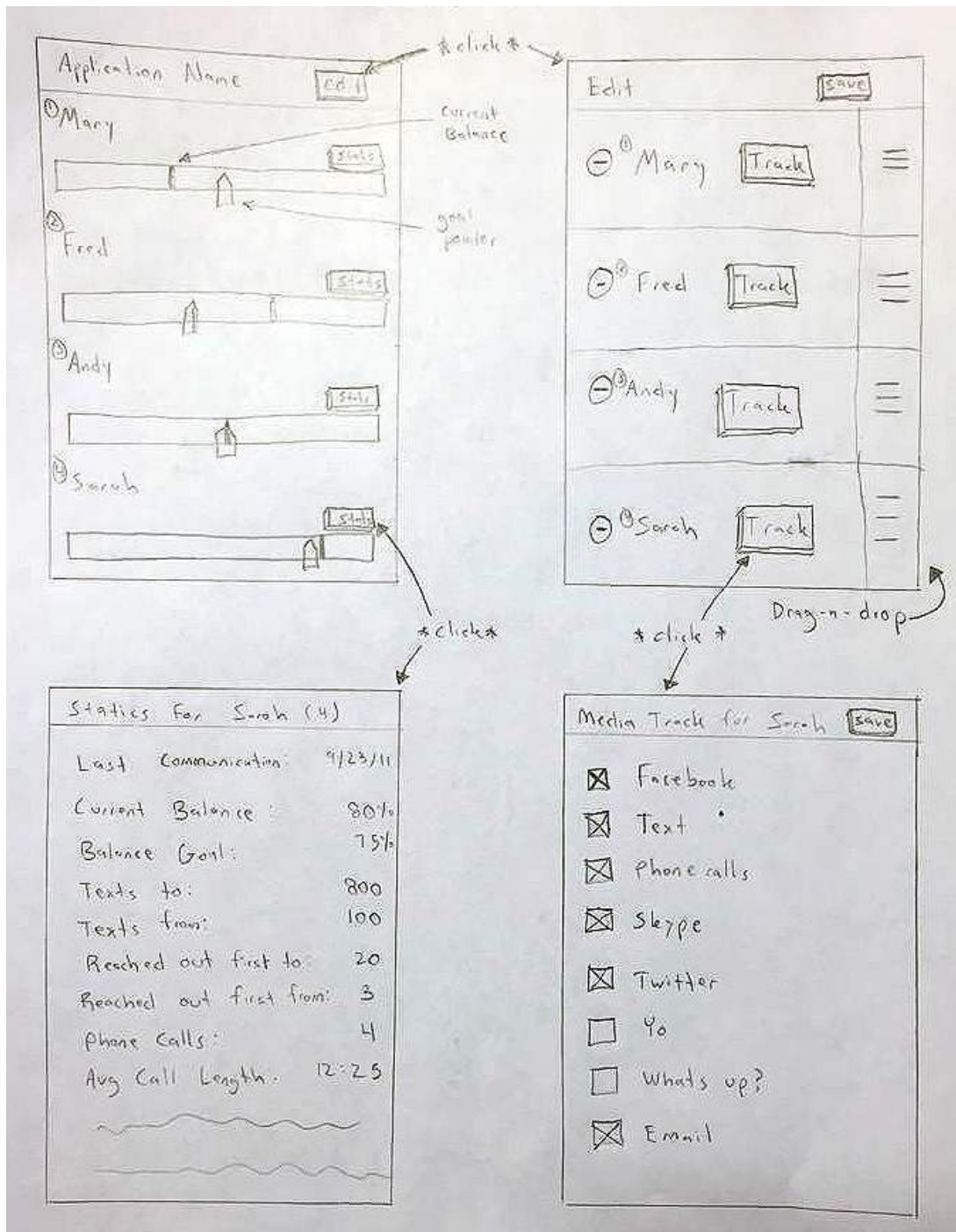
A user only engages in conversation or communication when others reach out to them first. They do not initiate text conversations, phone calls, or person-to-person contact. The user may or may not believe this is a bad habit and does not realize this behavior negatively affect his relationships. Friends, family, or significant others interpret this behavior as a lack of interest and feel confused or hurt. The user might not realize his negative behavior until someone tells him, and would like a way to easily identify this behavior. After identifying this behavior, the user may want help remembering to initiate contact with others.



## PROPOSED DESIGN SKETCHES

### DESIGN 1:

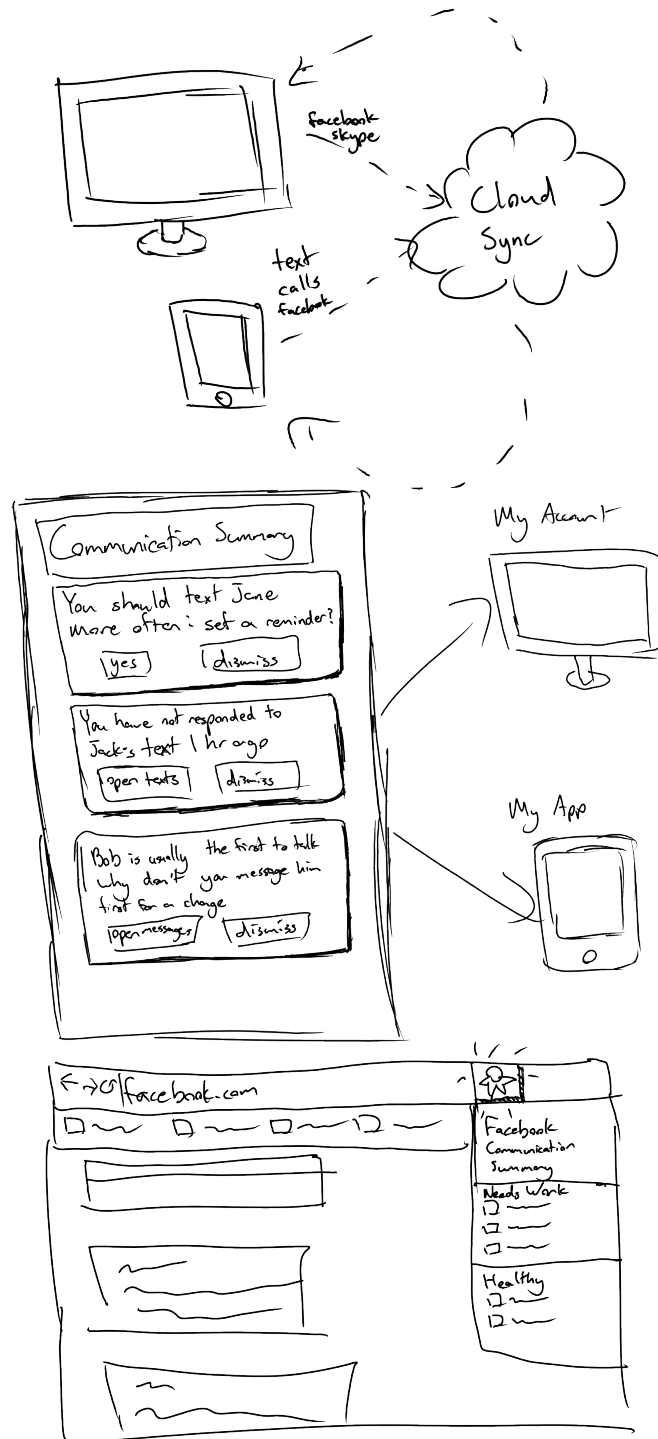
This design is a mobile application that can be used to keep personal informatics on the balance and effort of pre-selected relationships. The idea is that a user can manage relationships (people) that they desire to track relationship information on. They can prioritize which relationships are the most important to them. For each relationship they can set applicable goals, manage media types they wish to track, and look at statistics.





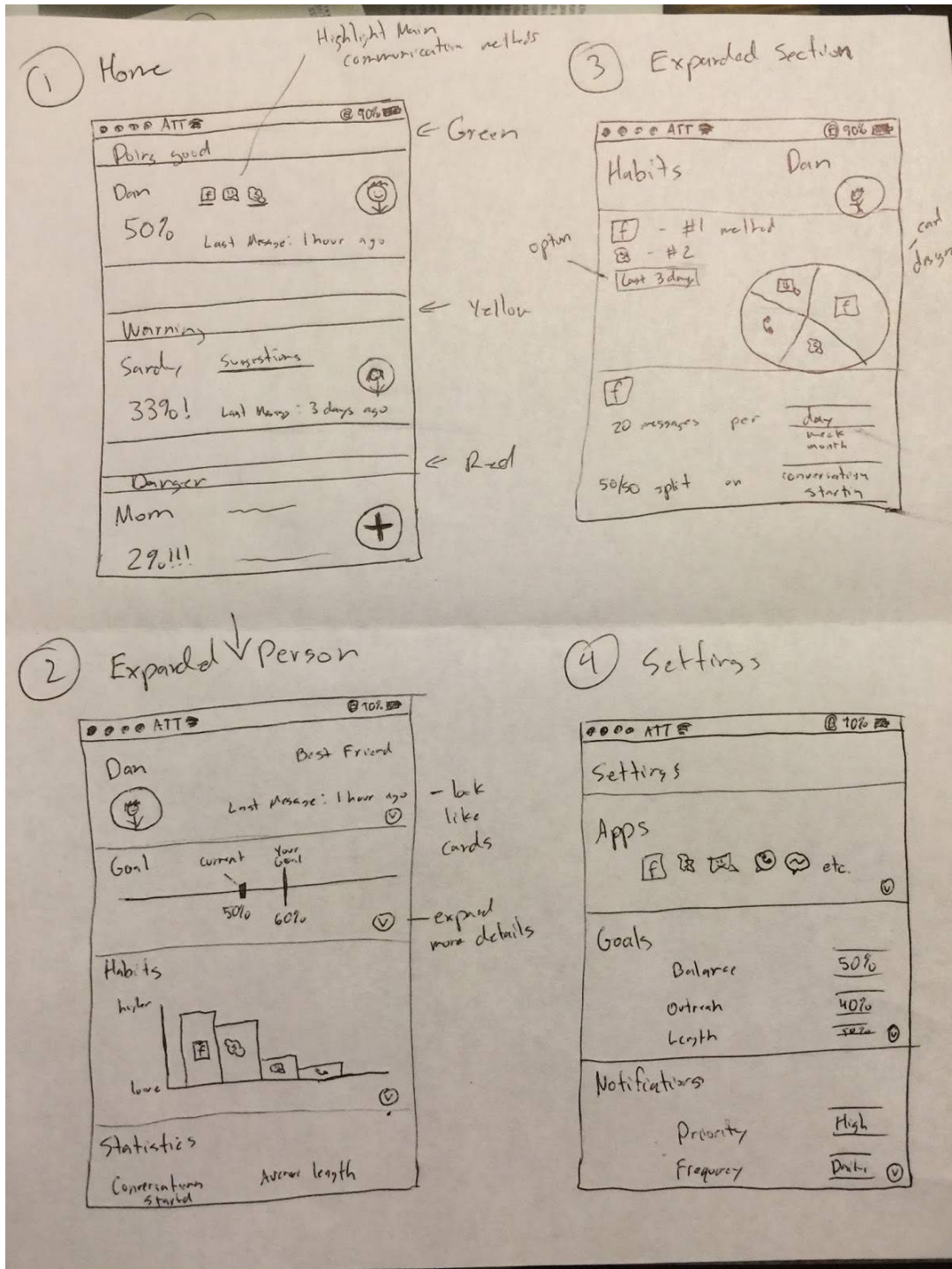
**DESIGN 2:**

This design is a multiple application system that includes an application on the user's phone and a plugin on their browser. These plugins automatically track the user's usage of different communication platforms (e.g. messages sent to people on Facebook or texts and calls to people from their phone). Users can then pull up the application's suggestions for improving their communications with people.



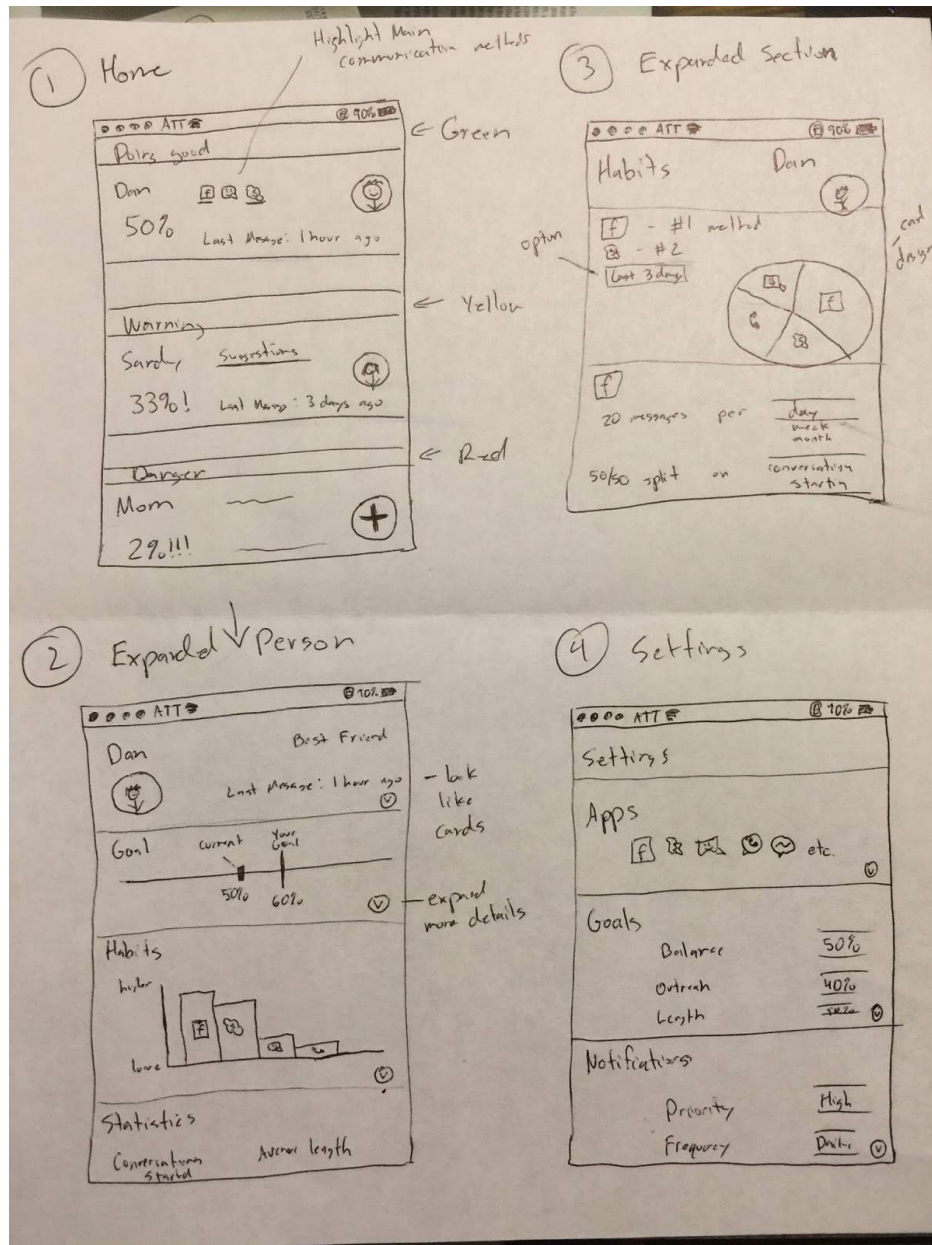
**DESIGN 3:**

This design illustrates a smartphone app to track, manage, and analyze a relationship. It is designed for individuals interested in tracking and understanding the balance and effort being put into their relationships. Users can set goals to help maintain their relationship, track their communication methods and frequencies, and receive suggestions and notifications. The app is customized for the user based on their goals and data collected through personal informatics.



## SELECTED DESIGN

We chose **Design 3** because we felt like this was the most thought out design compared to our other designs. It also incorporated the most important tasks for our users. Because a huge part of our users are people who are far in distance from those they are in a relationship with, this design allows our users to set goals for their relationship balance. It also allows for users to receive push notifications when they have not contacted someone for a long time. We felt that setting a goal was a must-have task because each user has a specific preference for how they want to balance their relationships. Another task that was important was somehow reminding or pushing notifications to our users when they have not talked to someone for a long time. From our interviews, this seemed like a common recurring theme.





# STORYBOARDS & SCENARIOS

## Task 1: Setting relationship goals



Task 5: Contacting someone you haven't talked to in a long time

