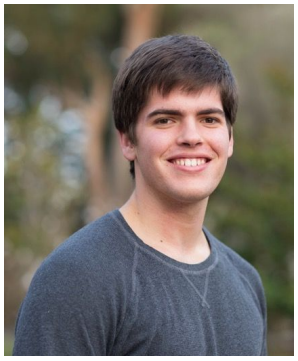
Low-fi Prototyping and Pilot Usability Testing

Assignment 5 • rekindl • Local Community (1:30PM)

Meet The Team


Ryan C.


Amanda L.


Sara V.


James C.

Introduction

Mission Statement: **Reignite** faded friendships.

Problem Overview: Busy schedules and distance can cause even the closest of friends to **grow apart**. We often **forget to check in**, and with so much on our plates, it can be extremely **difficult to follow up** on those “we should get lunch sometime” or “it’s been too long” moments.

Solution Overview: Rekindl helps you keep up friendships by **reminding** you of connections that are becoming distant, **saving** memories of your meet ups, and **choosing** relationships you want to reignite.

Sketches

Concept Sketches:

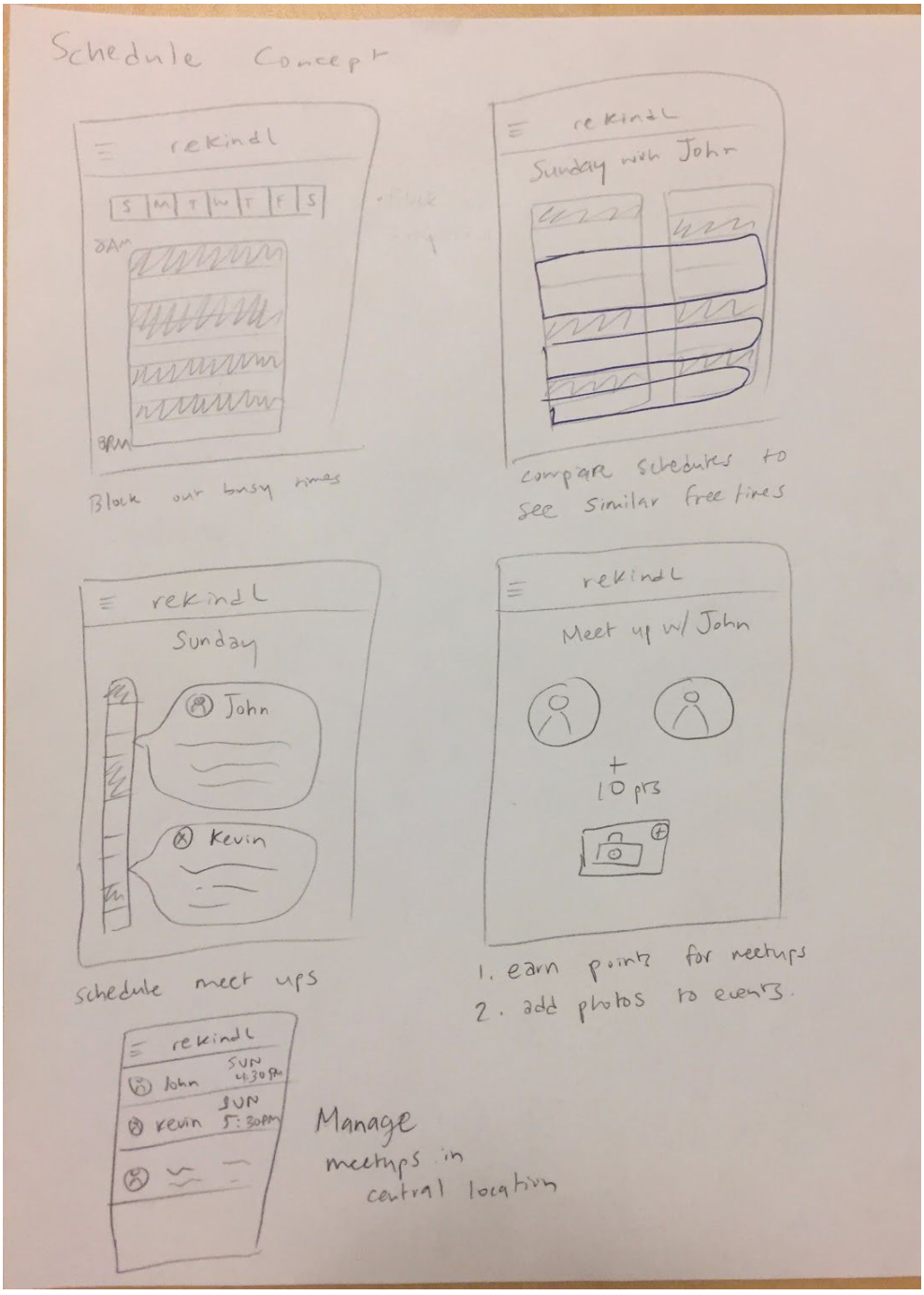


Figure 1: Schedule-Based Concept Design

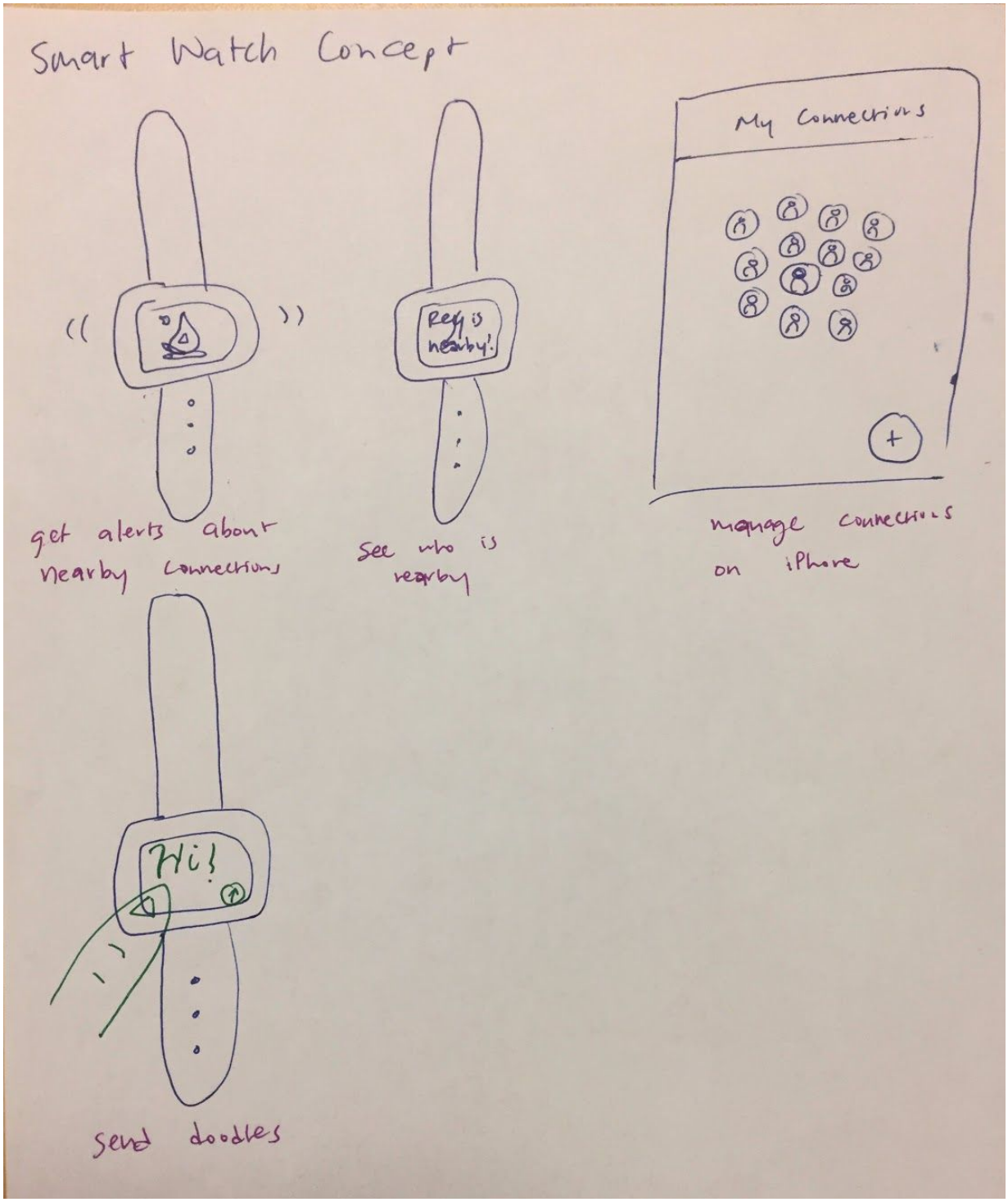


Figure 2: Smart Watch Concept Design

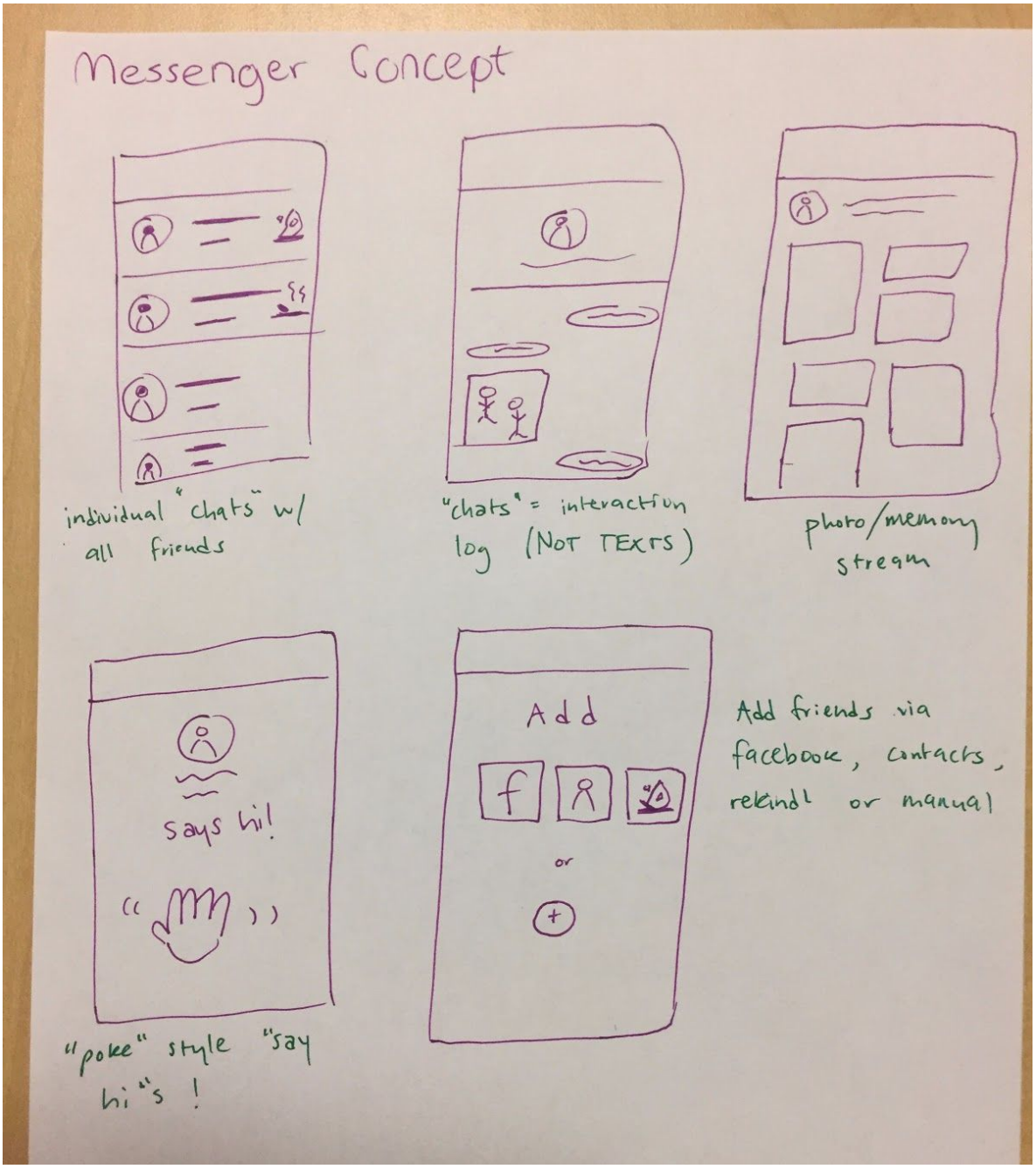


Figure 3: "Messenger" (Social Sharing View) Concept Design

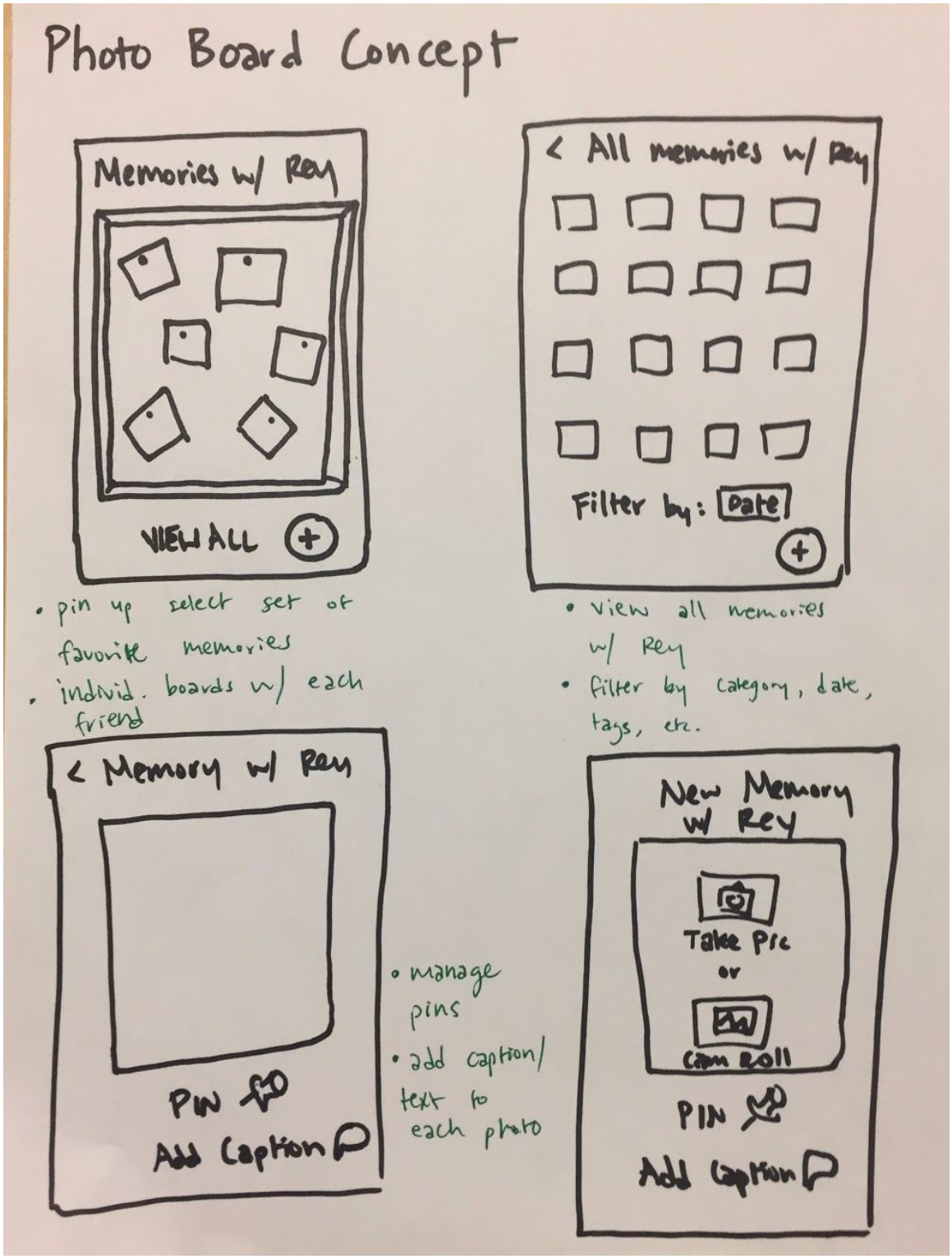


Figure 4: Photo Board Concept Design

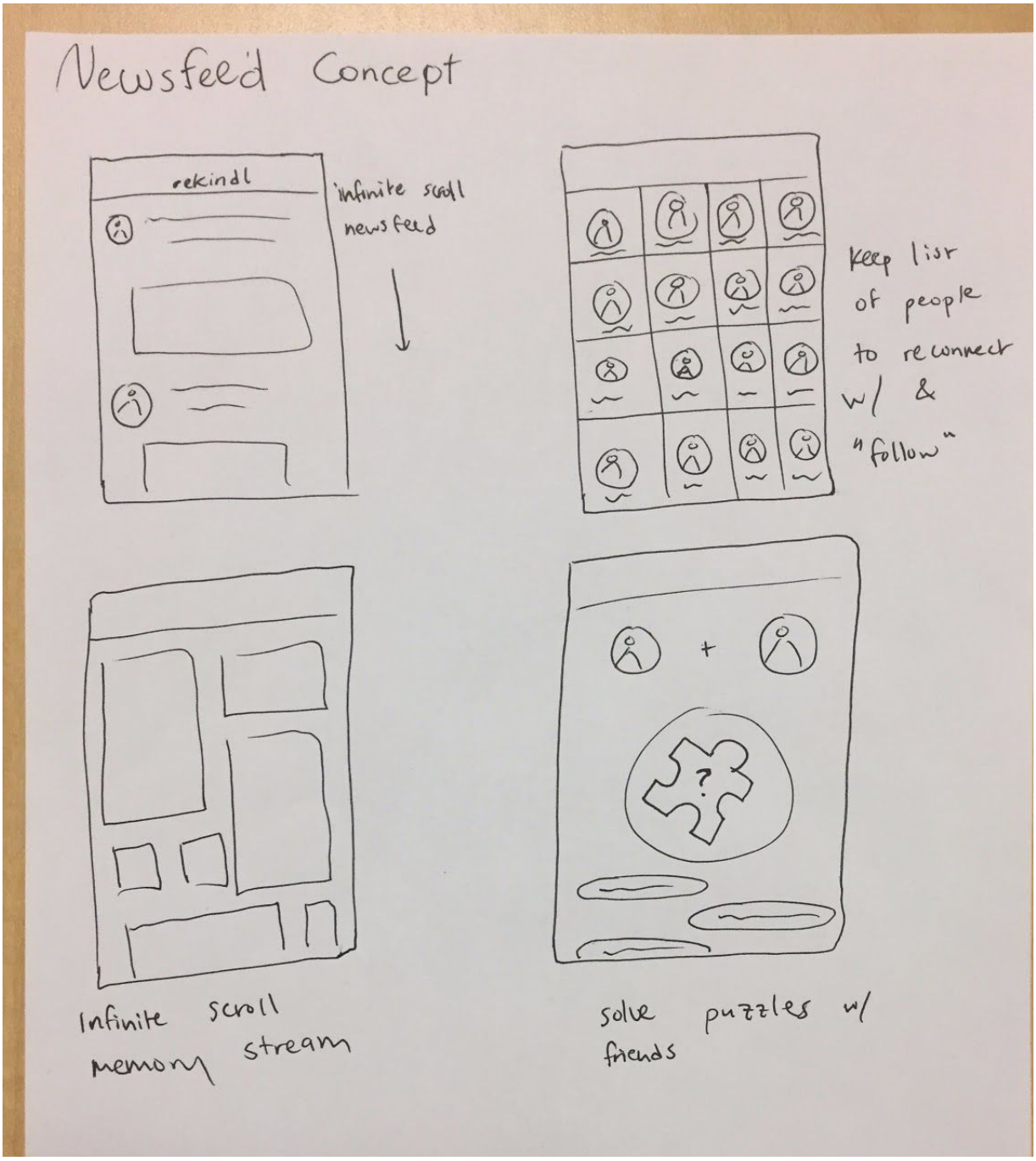


Figure 5: Newsfeed (Infinite scroll) Concept Design

Top 2 Designs (Detailed UI Sketches):

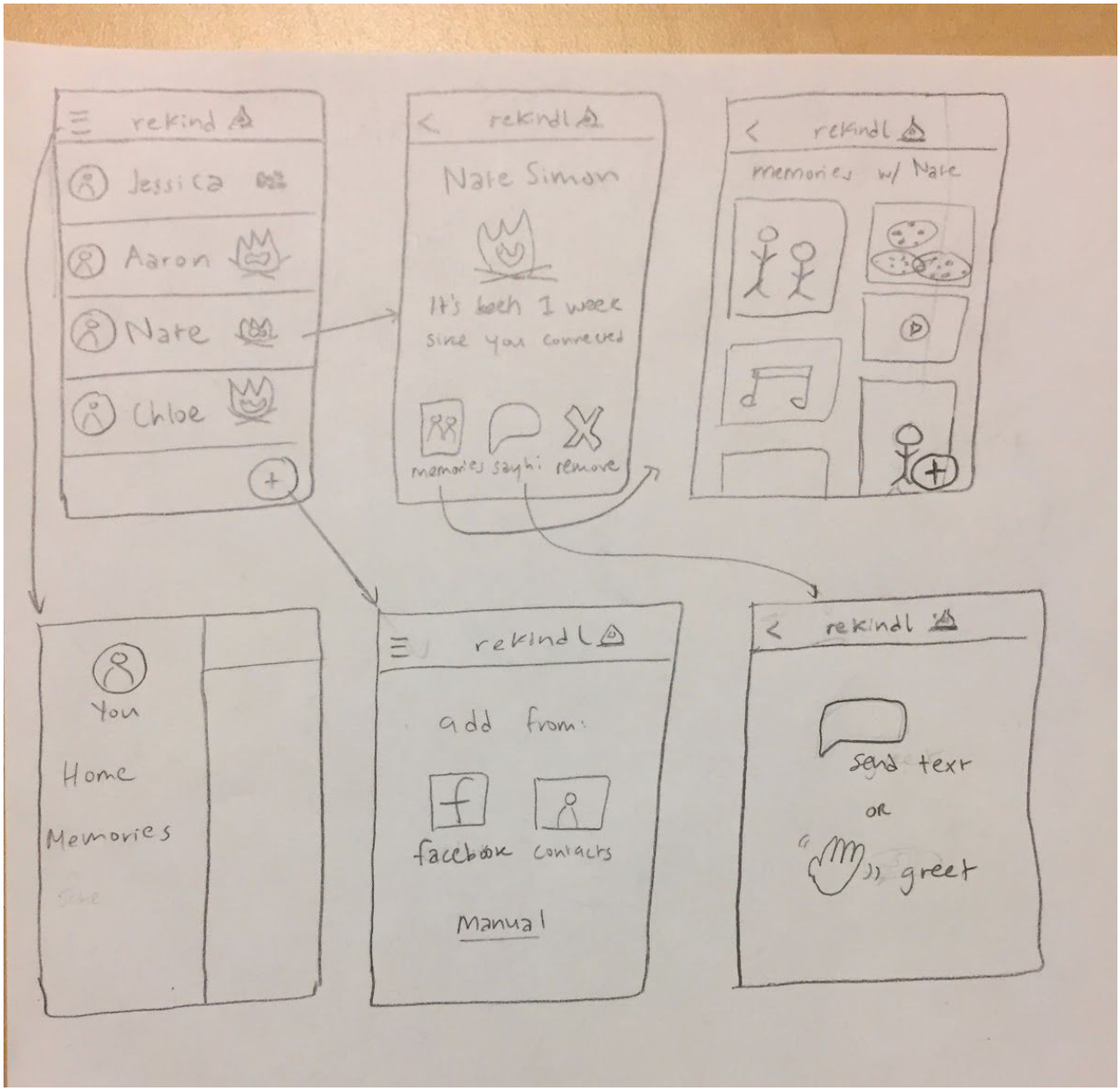


Figure 6: Individual List View UI Design

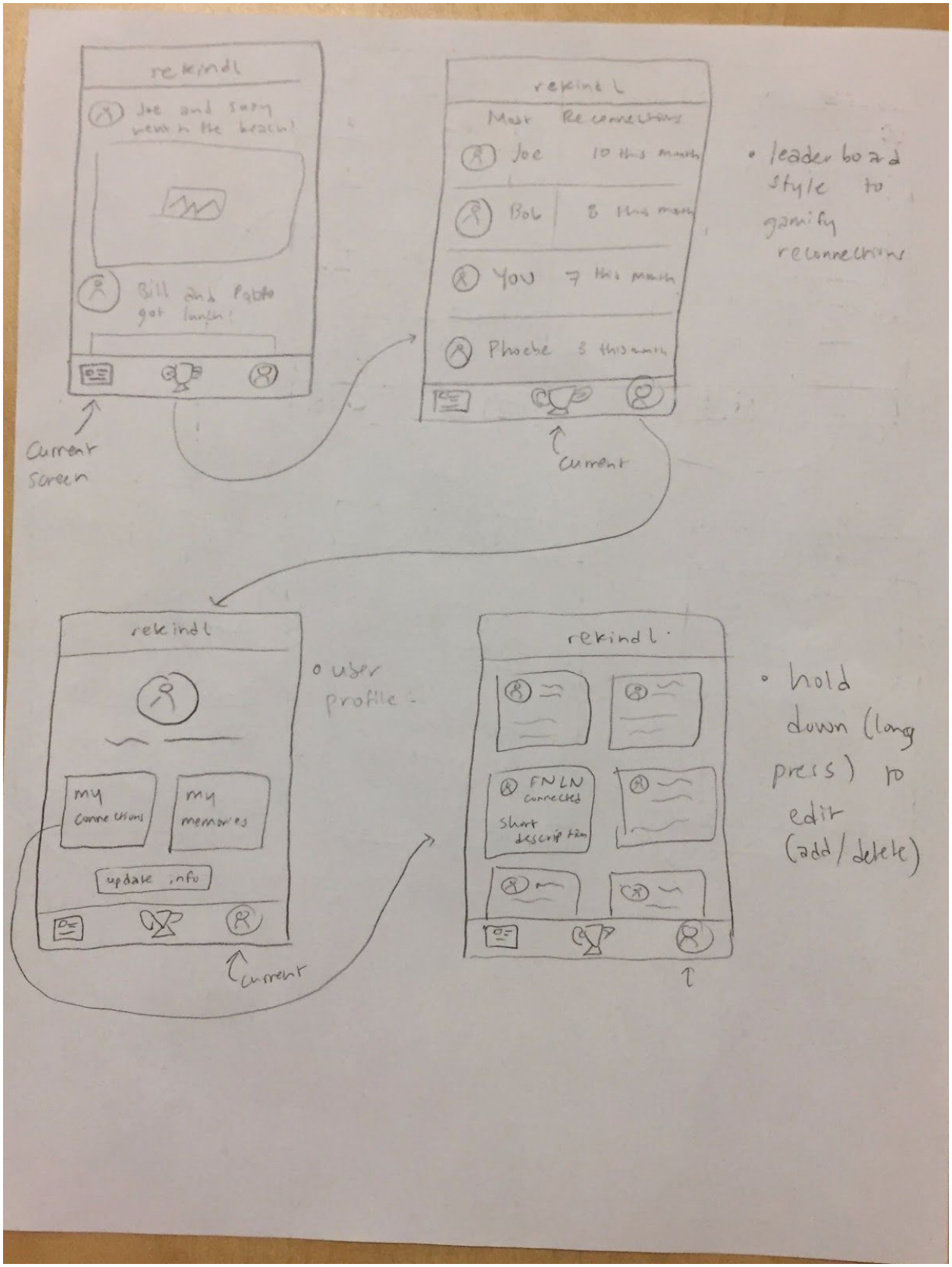


Figure 7: Friends Newsfeed UI Design

Selected Interface Design: Individual List View

Task 1: Get a notification and follow through and send the person you were notified about a text to plan a meet-up.

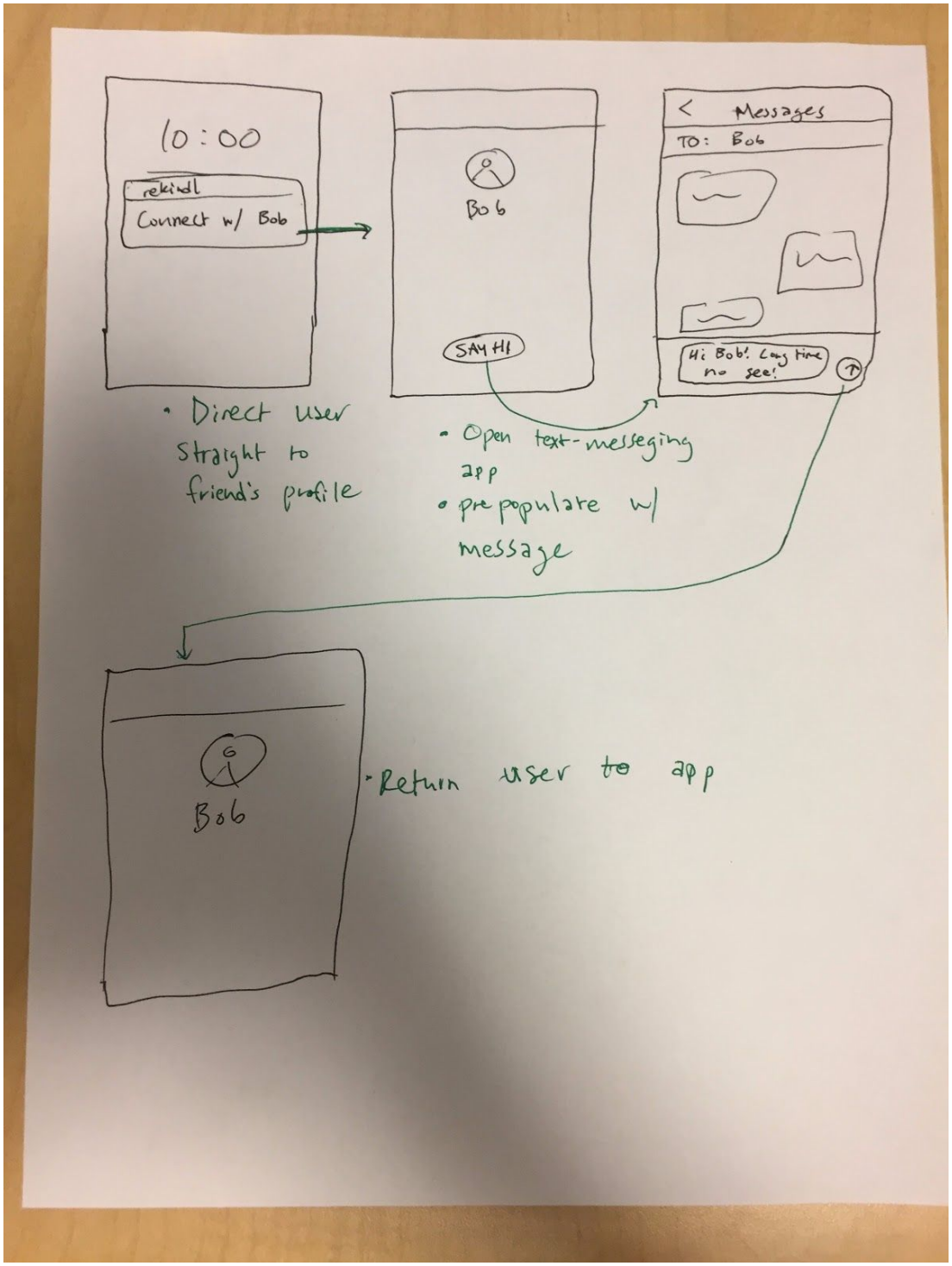


Figure 8: Task 1 Storyboard

Task 2: Add a photo from a recent reconnection to your memories with that person.

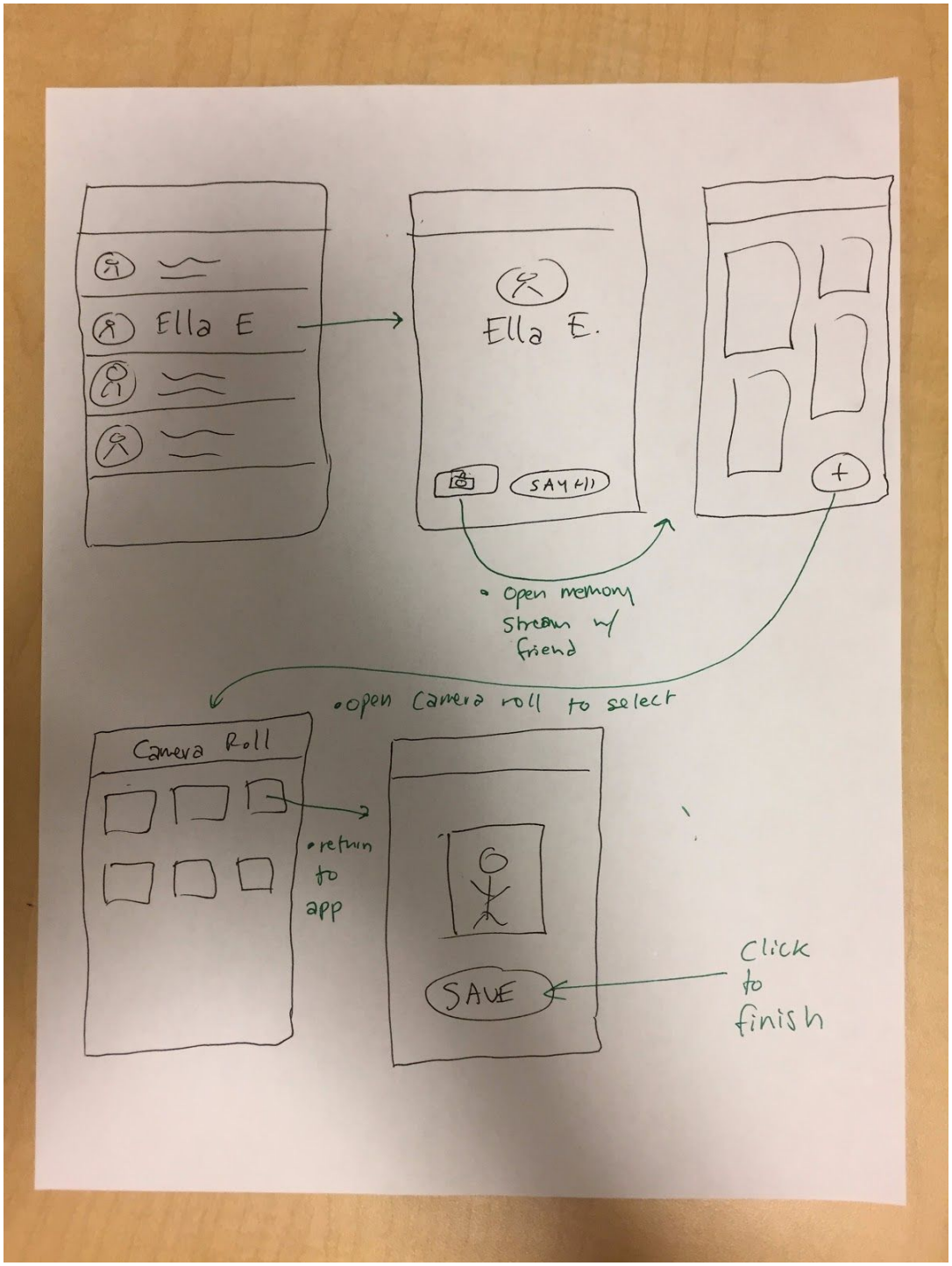


Figure 9: Task 2 Storyboard

Task 3: Add a friend from your contacts to your connections in the app.

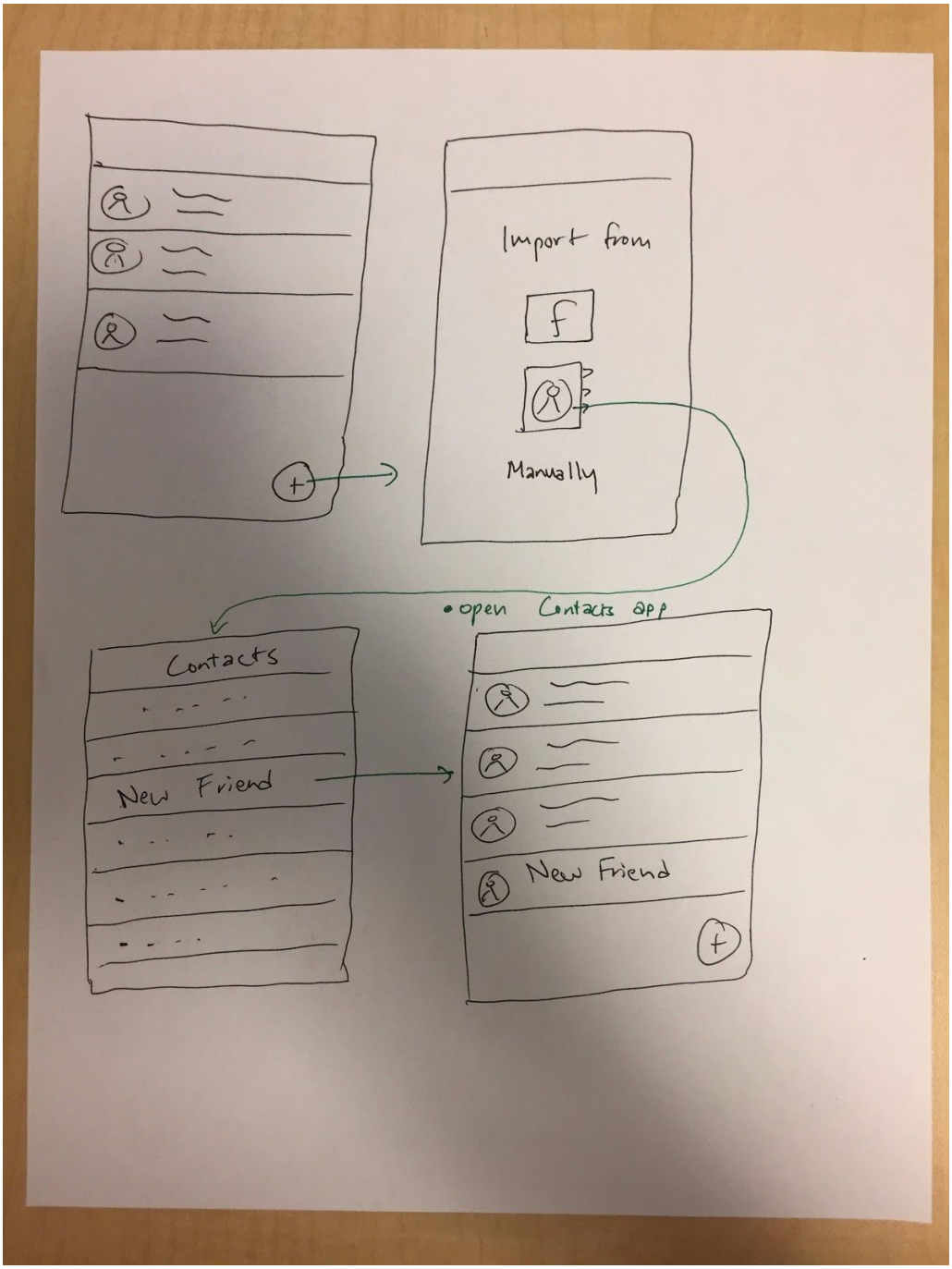


Figure 10: Task 3 Storyboard

Reasons for Selection:

Individual List View

Pros:

- More intimate (individual photos/messages/etc.)
- Clear representations of “hot”/”cold” relationships
- Works well if some people have app and others don’t
- Individually choose who you want to track
- Easier to integrate

Cons:

- Limited sharing ability
- Less peer pressure to motivate participation
- No groups

News Feed/Social Sharing View

Pros:

- Peer pressure/competition aspect
- Familiar format (similar to other social media sites)
- More personalizable than Facebook
- Could have groups

Cons:

- Less personal/intimate
- Potentially too similar to other social media sites
- Feels spammy
- Don’t care about others’ rekindlings
- Could be awkward to see others’
- Whose would you see?
- Don’t want to share some personal stuff

We ultimately decided to go with the Individual List View as our UI because we believe that it offers the means to create more intimate, personal connections with friends. While the News Feed/Social Sharing View could facilitate better group connections, the focus of rekindl is to reignite individual friendships, and we decided that the Individual List View does a better job of achieving this goal.

Key Functionality of App:

Personalize list of maintained connections	Store memories with specific individuals
Easily reach out to connected friends (within or outside of app)	Compare schedules with friends to find meet up times
Send user notifications to keep up “cold” relationships	Show visual representation of which relationships are being maintained well, which could use work

Prototype:

Description:
Our low-fi prototype is a paper layout of an app where the user can check in on their connections, see memories, and reach out to any friends whose fires are “dying down”. The user can also add memories or look at old ones and add new contacts to their list of connections. It is completely accessed through touch input and visual screens on a mobile device. Our in-app navigation is menu-based.

Screens:

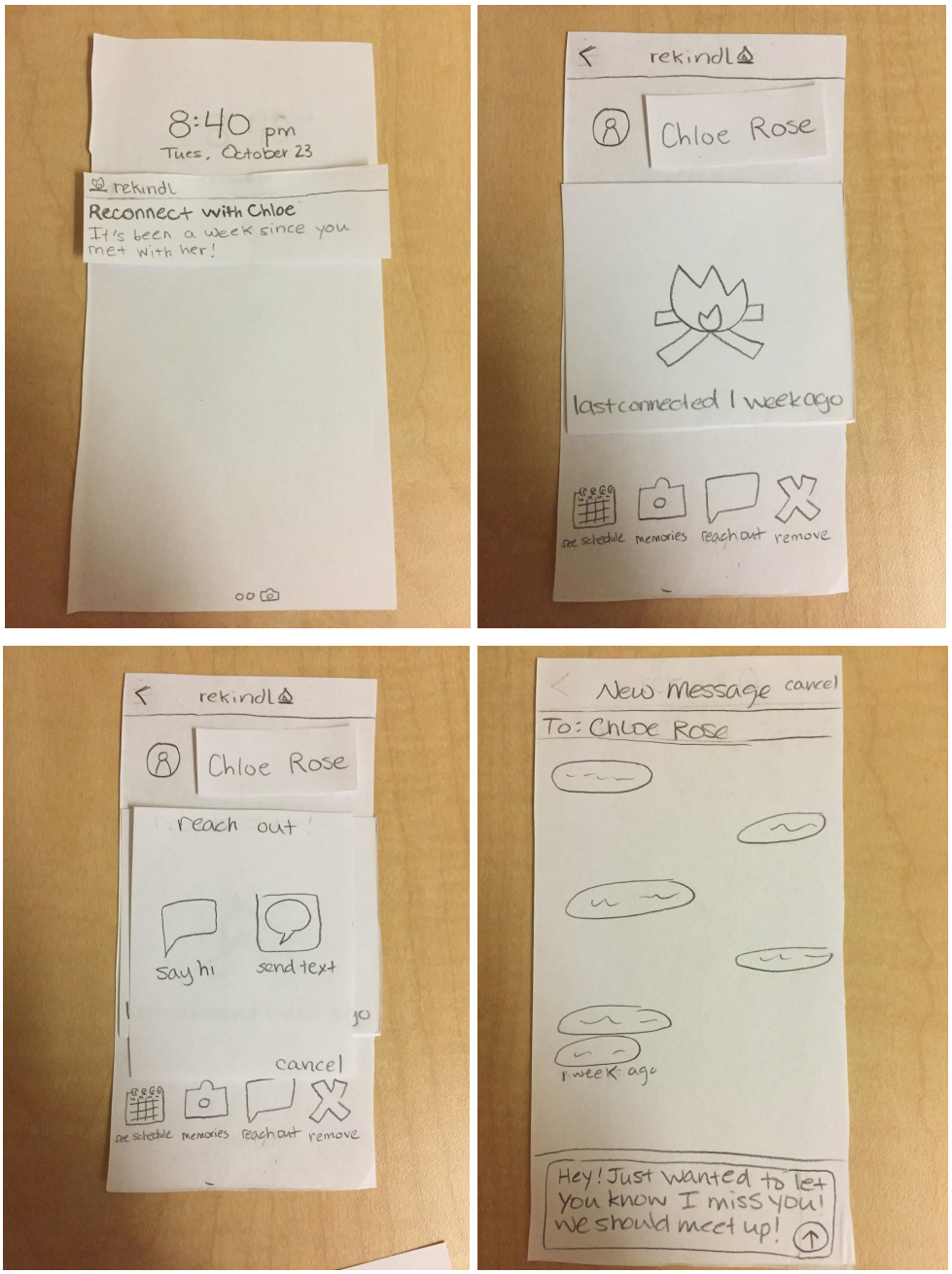


Figure 11: Screens for Task 1

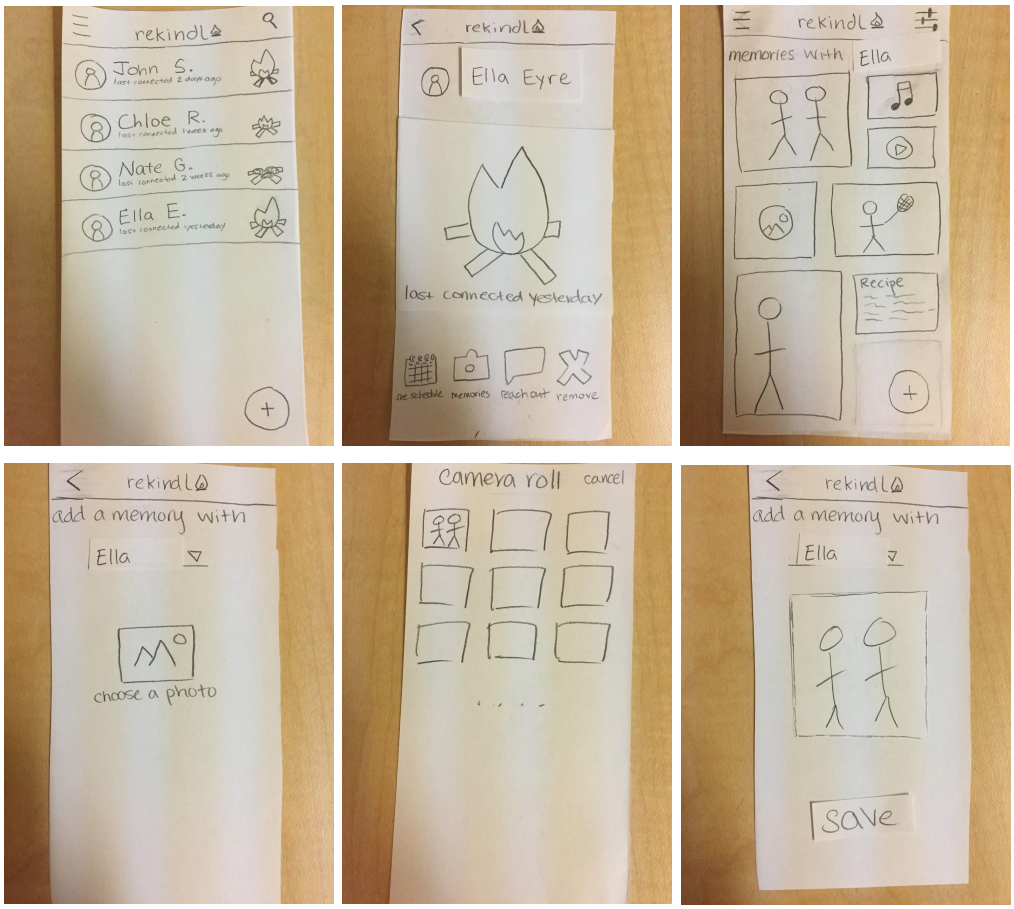


Figure 12: Screens for Task 2

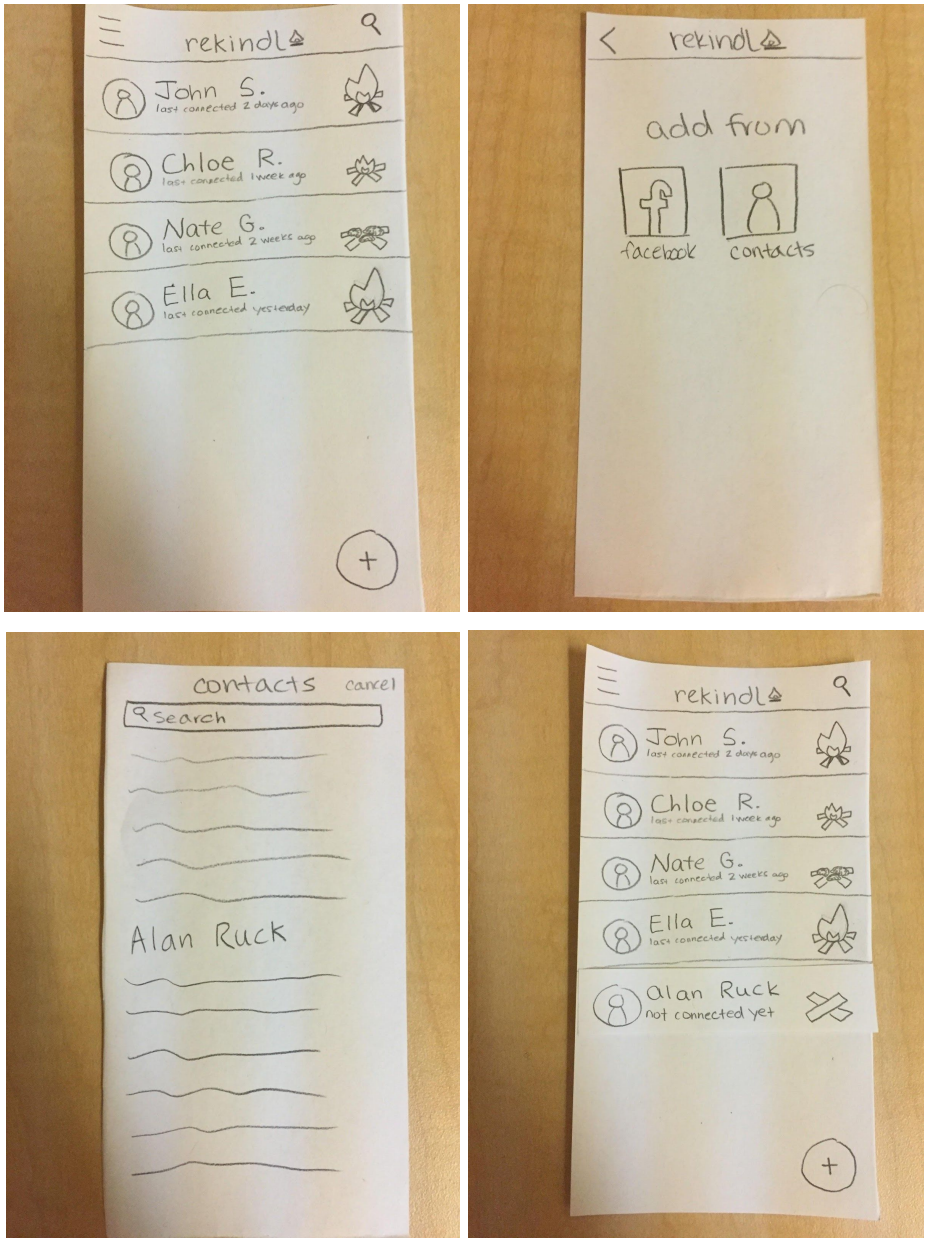


Figure 13: Screens for Task 3

System:

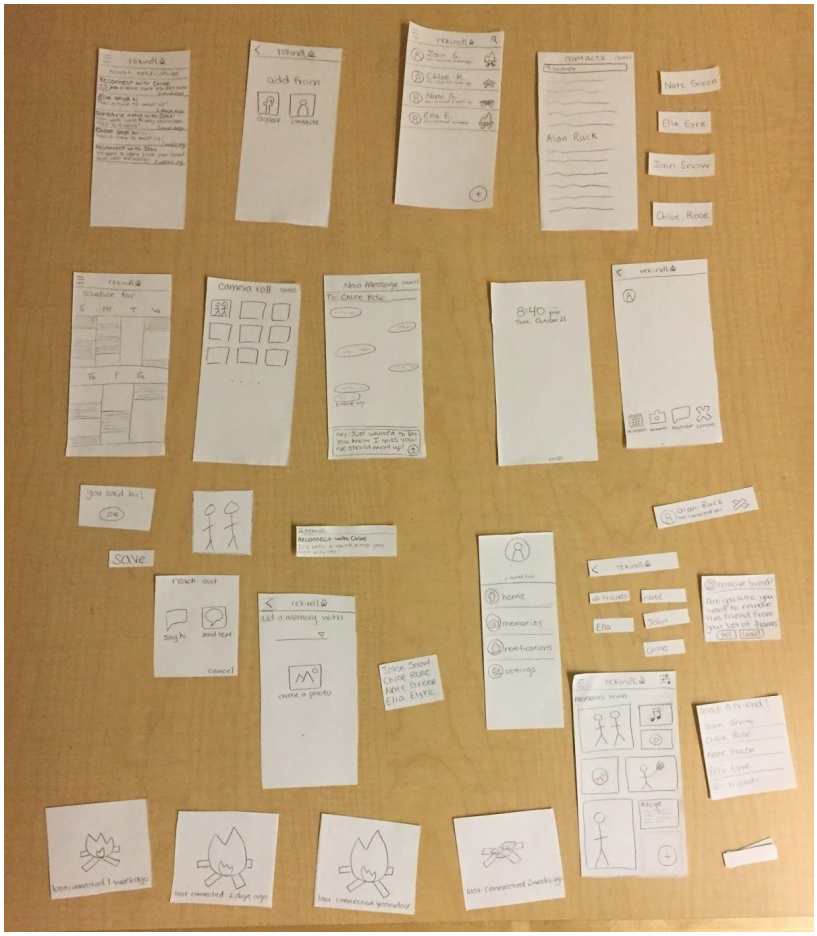


Figure 14: Entire Prototype System

Method:

Participants:

Our participants were all recruited through mutual friends. Two of them were Stanford students, one was a recent college graduate who now lives in Redwood City, and one is a student at Howard University who was visiting a friend on campus. We chose these participants because we believe that our target demographic is mainly college students and recent college graduates, as they are the most likely to be too busy to stay in touch with friends, despite living close to them. We were prepared to offer an incentive if needed, but we were able to find enough willing participants that this was not necessary.

Environment:
All interviews were carried out alone with the participants and our team in a lounge in FloMo.

Tasks:
Task 1: When you receive a notification, please navigate to the app and send the friend you were notified about a quick text checking in with her. This is a simple task, as it will be one of the core aspects of the app and should be fairly easy to accomplish.

Task 2: Yesterday, you reconnected with Ella and took a picture while you were together. Add this photo to your memories with her. This was a complex task, because it involves uploading from the Camera Roll and may ultimately include many different forms of media (picture, video, audio, text).

Task 3: You decide that you want to also reconnect with your old friend Alan Ruck. Add him to your connections. This was a moderate task, as adding more friends and expanding your network may take some effort to do, but also is a critical part of the app.

We added some more tasks mid-test to gain insights into what people would think to do to accomplish these further tasks — we had screens prepared for some, but not all of these. Task flows for these tasks can be seen in the Appendix (Figures 15-17):

Task 4: Show us what you would do to check a friend's schedule to see if you are both free at any times this week.

Task 5: Show us what you would do to set your own schedule in the app.

Task 6: Say you were in class and got a few notifications, and now you want to check these notifications. Show us what you would do in the app to check your notifications.

Procedure:
In all of our experiments, we used our paper prototype to test the product on our participants. We marked the table to consistently center the screens in front of the participant. The different prototype screens were swapped out as the participant interacted with the prototype. Participants were also asked if their hands and the prototype screens could be filmed to allow for more in depth analysis of interviews later. All participants agreed.

Test Measures:
We measured 4 details during our experiments:

1. *Ease of navigation*: How simple/difficult is it for users to navigate from screen to screen?
2. *Receptiveness to wording*: Do users understood what the text within our app meant?
3. *Ease of task completion*: How quickly/smoothly were users able to start and finish the assigned tasks?
4. *Ability to find UI components (buttons, etc)*: How much time does it take for users to locate necessary UI components on screen and interact with them?

Team Member Roles:
Due to scheduling constraints, 3 out of our 4 group members conducted the interviews. James acted as the introducer and facilitator, Ryan acted as the computer and demonstrator, and Sara acted as the notetaker.

Results/Discussion:

Overall, our prototype was fairly successful, and users completed all of our tasks without too much difficulty. Our ease of navigation was good, with no tasks taking more than a couple clicks to complete. One comment on this that a participant had was that adding a toolbar at the bottom of the screen with buttons for Home, User Profile, Memories, Notifications, and Settings could help streamline things and cut down even further on clicks to help avoid needing to go into the hamburger menu to access some of these components of the app. There were a couple of points of confusion related to our wording of certain features of the app. Some people were confused by the phrase “Reach Out” (could change to “Connect”), and others got tripped up on the difference between “Send Text” (outside of app) and “Say Hi” (in app — change name of it to clarify). Someone also expressed that having a “Add” button to confirm adding a memory instead of a “Save” button. The only time anyone really got tripped up in completing one of our main tasks was when someone went to Memories to try to send someone a message, thinking that they would want to use the memories to reach out and connect over a past event. This gave us the idea of adding the functionality of sharing memories from the Memories page and sending them to friends with a short message. Lastly, most people were able to find user components fairly easily, with the one exception of finding the “+” button on the Memories page to add a new memory. We believe, however, that this will be fixed in our actual app by having the button be the same color of the bar at the top of the screen so it stands out more from its surroundings.
(Word Count: 1461)

Appendices:

Consent Form:

The rekindl application is being produced as part of the coursework for Computer Science course CS 147 at Stanford University. Participants in experimental evaluation of the application provide data that is used to evaluate and modify the interface of rekindl. Data will be collected by interview, observation and questionnaire.

Participation in this experiment is voluntary. Participants may withdraw themselves and their data at any time without fear of consequences. Concerns about the experiment may be discussed with the researchers (Ryan Cole, Amanda Lim, James Carroll, and Sara Valderrama) or with Professor James Landay, the instructor of CS 147:

James A. Landay
CS Department
Stanford University
650-498-8215
landay at cs.stanford.edu

Participant anonymity will be provided by the separate storage of names from data. Data will only be identified by participant number. No identifying information about the participants will be available to anyone except the student researchers and their supervisors/teaching staff.

I hereby acknowledge that I have been given an opportunity to ask questions about the nature of the experiment and my participation in it. I give my consent to have data collected on my behavior and opinions in relation to the rekindl experiment. I also give permission for images/video of me using the application to be used in presentations or publications as long as I am not personally identifiable in the images/video. I understand I may withdraw my permission at any time

Name _____

Participant Number _____

Date _____

Signature_____

Witness name _____

Witness signature_____

Interview Script:

Introduction

Thank you for taking the time to try out our demo. We are asking you to test our product, a phone application called Rekindl, that aims to help keep old friends in contact with each other by reminding them to get back in touch when they have not done so in a while. In this demo, we will ask you to do a series of three tasks. Before we get started, please sign this consent form.

Directions

Our paper prototype is a very early draft of what our mobile application will potentially look like. Please interact with our paper prototype as if you were interacting with an actual application on your phone. One of us will be acting like a computer as you work through our prototype. As our user, all of your actions are correct and helpful. Please think out loud as you are going through the demo.

Task 1:

One of the main functions of this app is following through and reaching out to friends when you get notifications about reconnecting with them. When you receive a notification, please navigate to the app and send the friend you were notified about a quick text checking in with her.

Task 2:

Yesterday, you reconnected with Ella and took a picture while you were together. Add this photo to your memories with her.

Task 3:

You decide that you want to also reconnect with your old friend Alan Ruck. Add him to your connections.

We added some more tasks mid-test to gain insights into what people would think to do to accomplish these further tasks — we had screens prepared for some, but not all of these:

Task 4:

Show us what you would do to check a friend's schedule to see if you are both free at any times this week.

Task 5:

Show us what you would do to set your own schedule in the app.

Task 6:

Say you were in class and got a few notifications, and now you want to check these notifications. Show us what you would do in the app to check your notifications.

Screens for Extra Tasks:

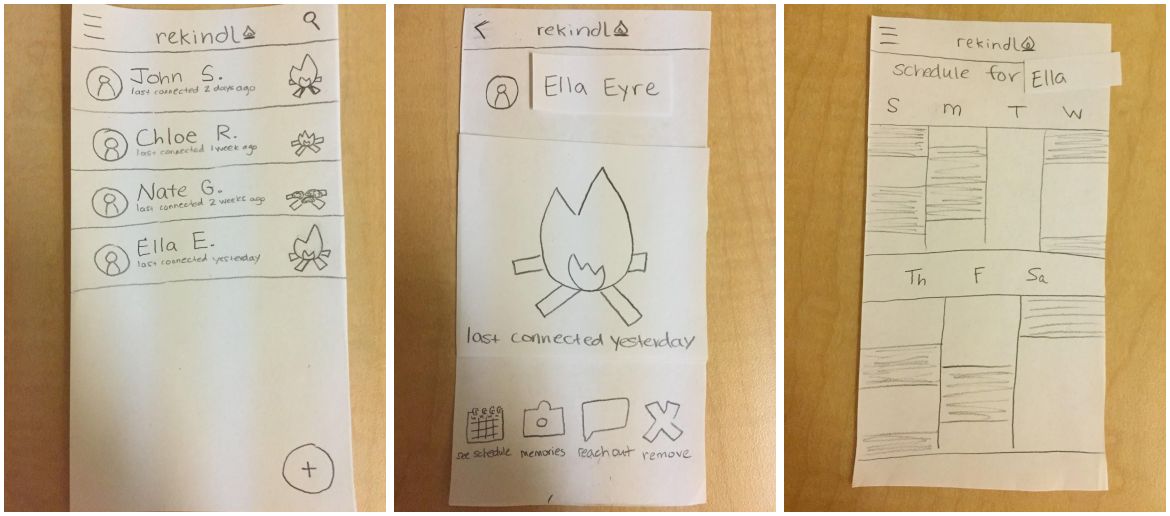


Figure 15: Screens for Task 4

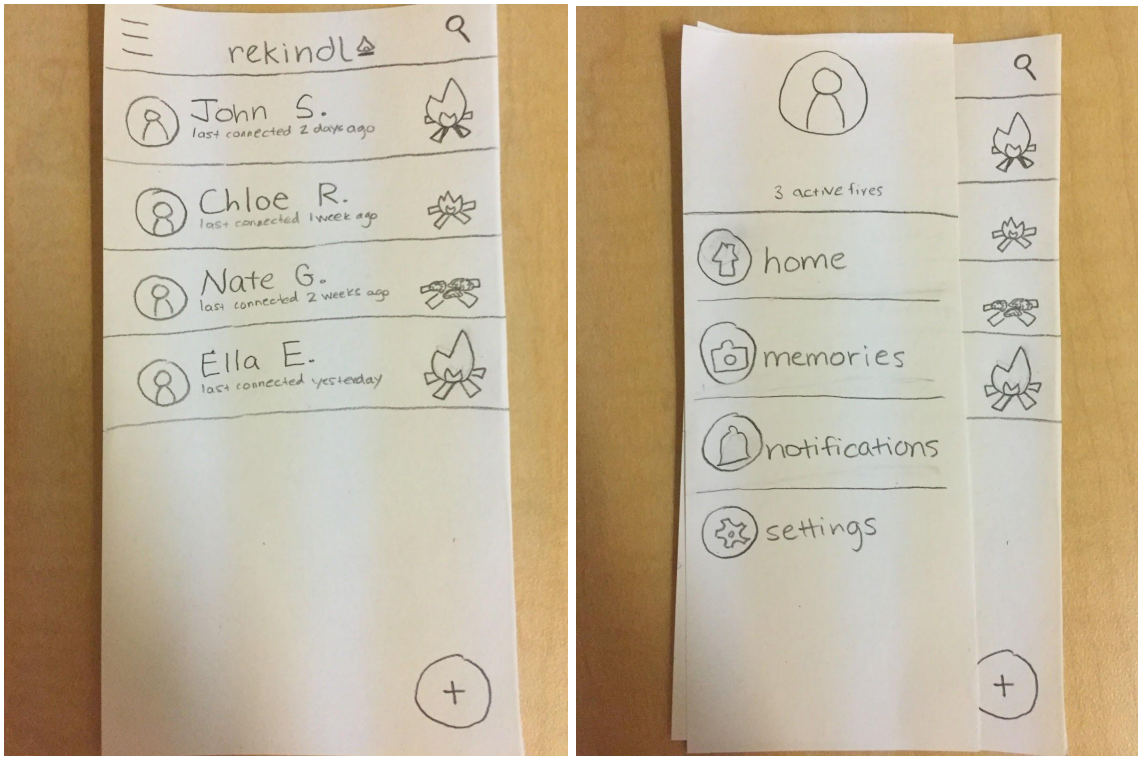


Figure 16: Screens for Task 5

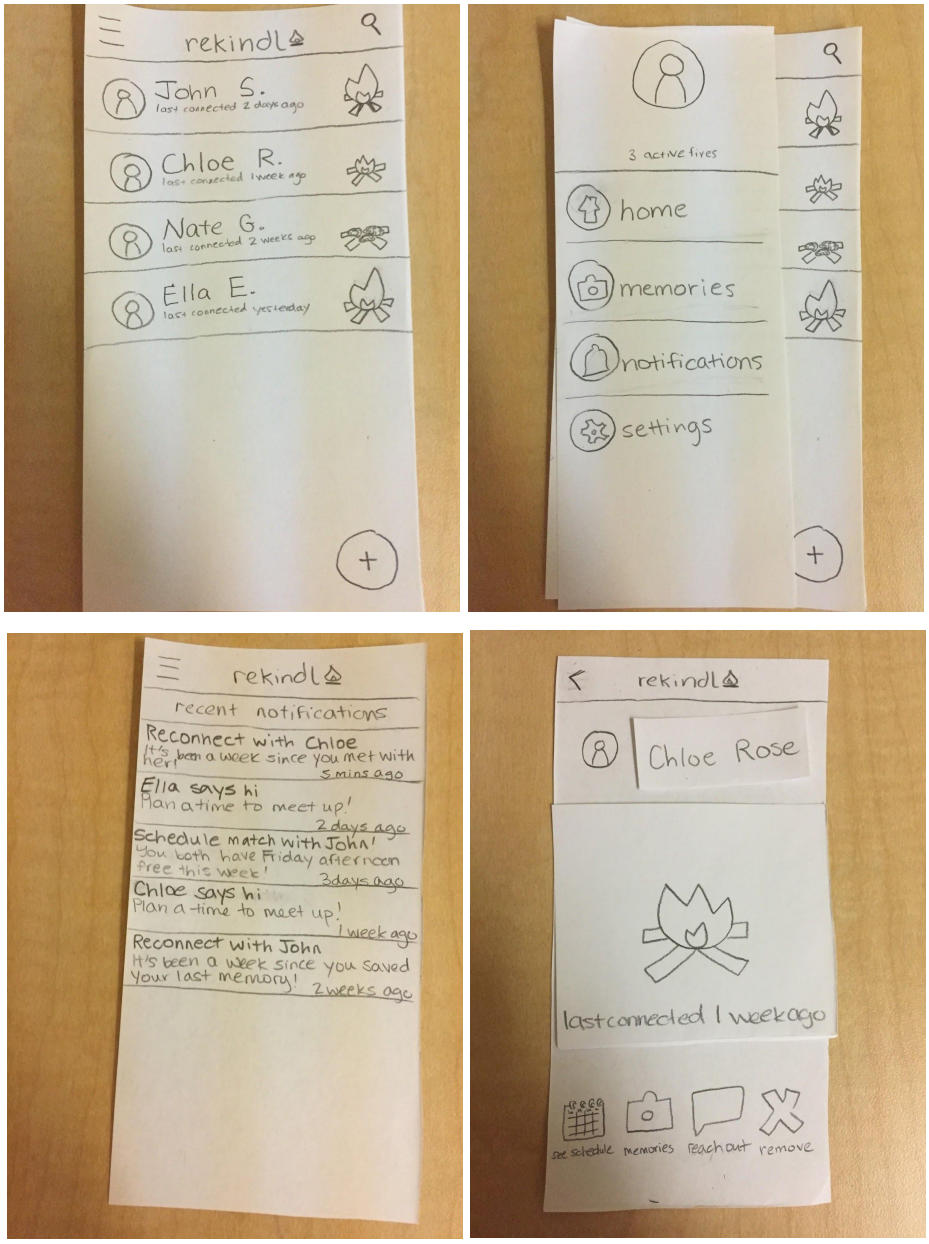


Figure 17: Screens for Task 6

Raw Data/Log of Incidents:

Problem	Location	Task	Severity	Possible Fix
Confused about “say hi” vs send text	Friend Profile Screen	1	3	Change wording to make the difference more clear
Went to Memories page to try to reconnect over pictures	Memories page	1	2	Add a way to click on pictures in memories and send them to friends with a message
Couldn’t figure out how to add a memory (kept clicking on existing ones)	Memories page	2	2	Should be more clear in final product if add button stands out (match color of top bar)
Everyone figured out how to add a connection!	homescreen	3	0	Nothing! Just excited about this :)
Organization of schedule not most logical	calendar	4	1	Put F, Sa, Su first since those are the days that most people will be free to meet
Where to add in one’s own schedule was not clear	Menu/ homescreen	5	2	Should figure out a way to make the location of the calendar/account more logical
Couldn’t figure out how to check notifications	Homescreen (list of all connections)	6	2	Bold names that have notifications and put badge next to profile picture

Severity ratings: 0 = no problem, 1 = cosmetic problem, 2 = minor usability problem, 3 = major usability problem, 4 = usability catastrophe