

Chapter

Lo-Fi Prototype Report

Title and Team Roles

Dan G.	Designer
Melissa C.	Developer
Irving H.	Manager
David P.	User Expert

Introduction

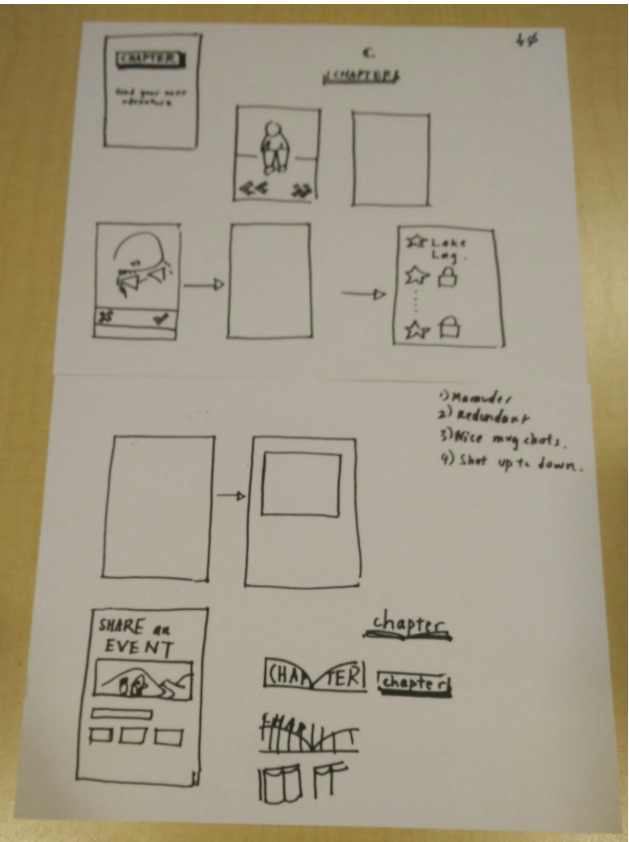
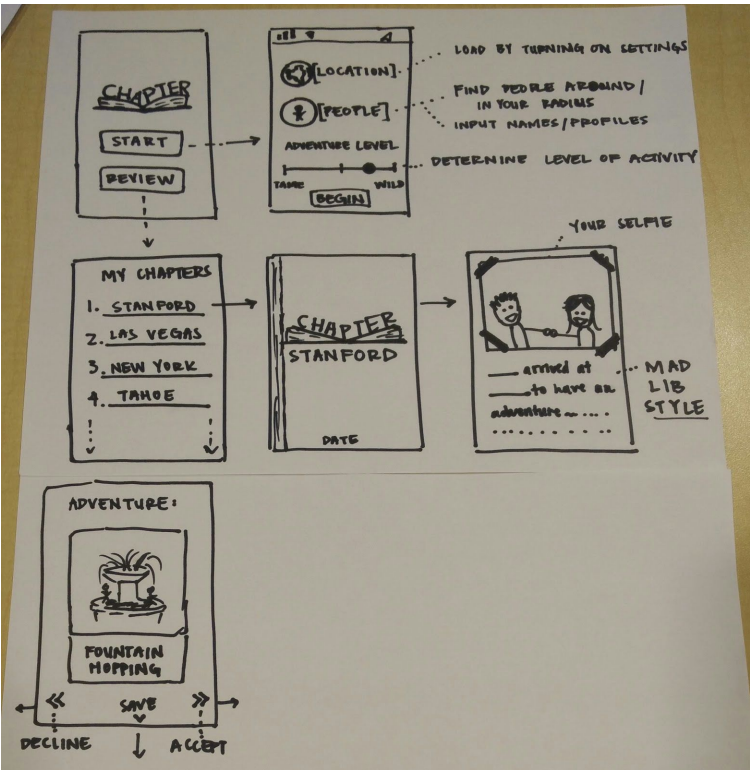
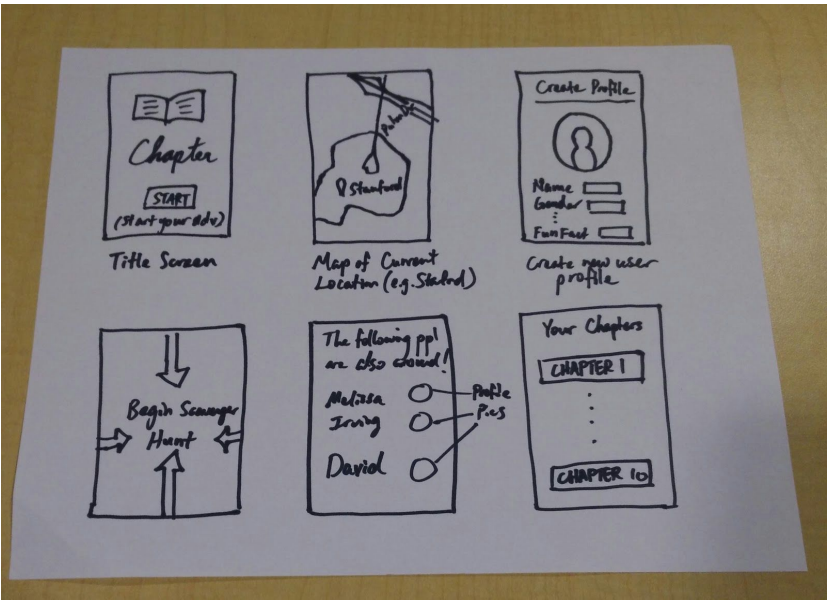
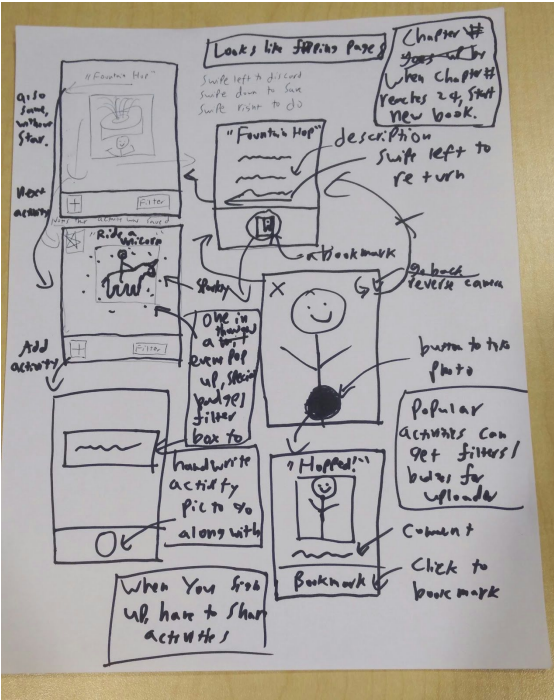
Mission Statement: Finding exciting and memorable things to do in a new settings is hard, and it's even harder to document all the meaningful interactions you have on a consistent basis. Whether you are a tourist in a foreign country or a local in your nearby town, *Chapter* allows you to experience new exciting activities to do. You can find locally crowdsourced activities that you can participate in with your friends and other strangers. After you're done, you can share and relive the memories you made by viewing your own personal scrapbook generated by *Chapter*.

Value proposition: Discover locally curated activities for a location and document personal memories.

Problem Solution: How do you find the best activities to do at a location? Because locals in the area know the coolest spots around, they can crowdsource fun, engaging activities to do. After doing these activities, *Chapter* creates a new story in your book of adventures for you to relive and share with friends.

Sketches

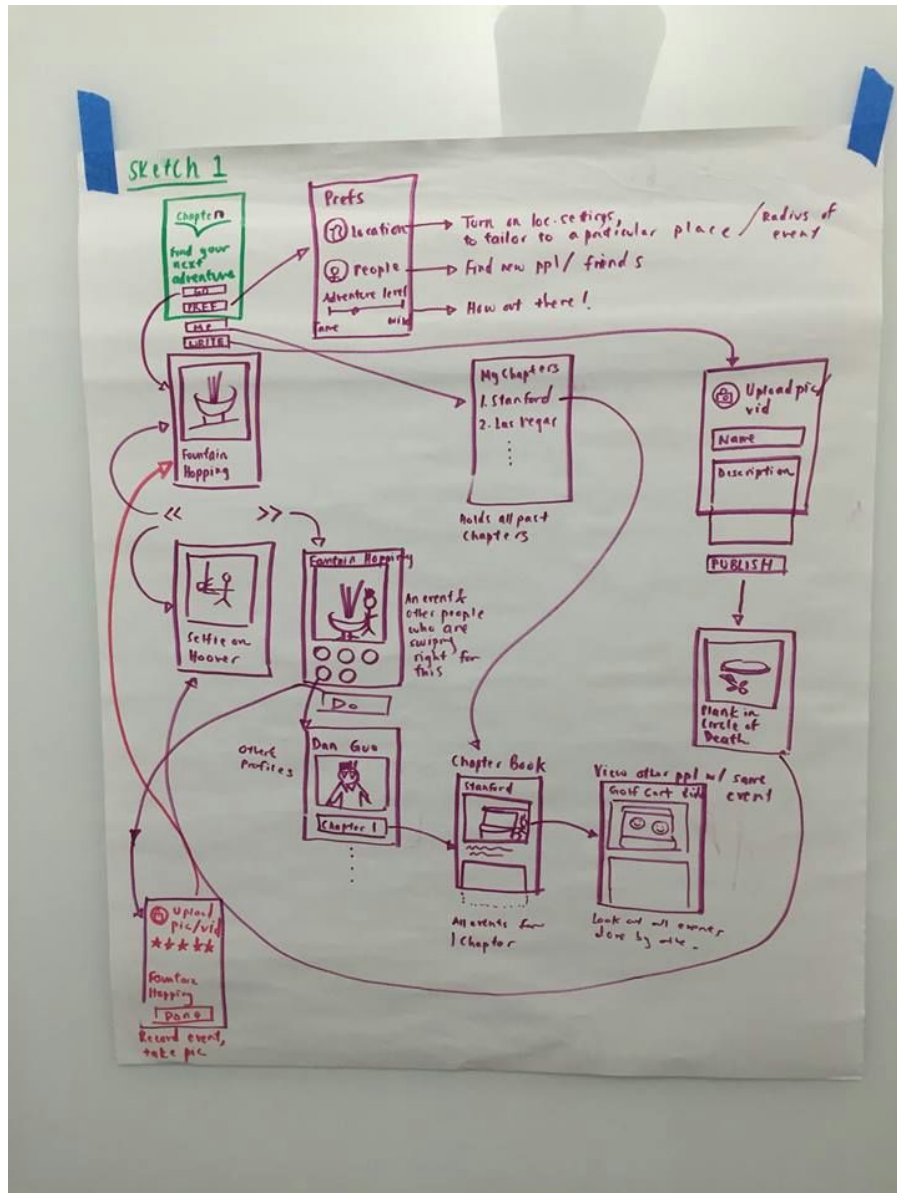
1. Sketch Overview



2. Top two sketched storyboards

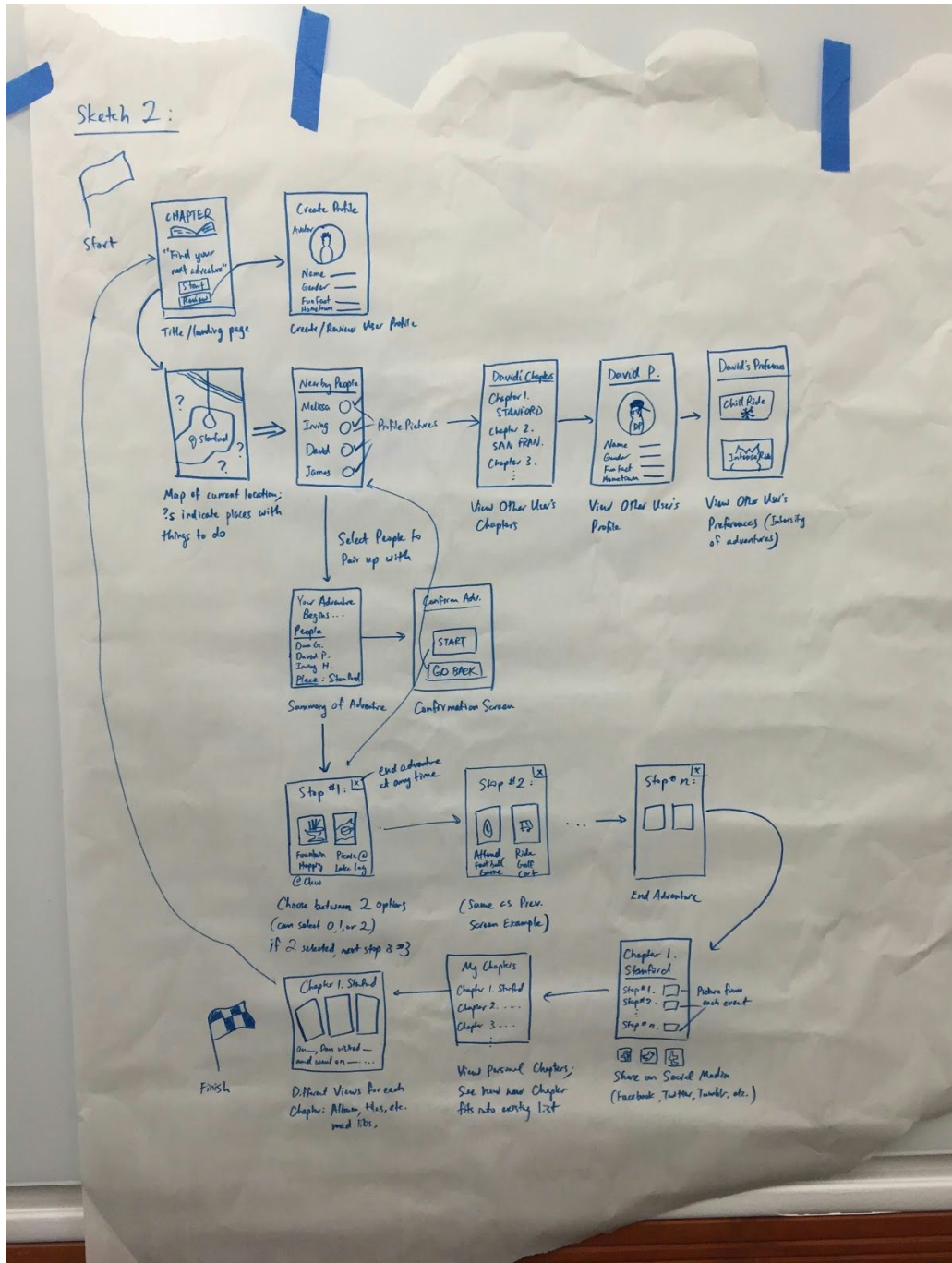
Sketched Design #1:

For our first design, we decided to make the UI very similar to that of "Tinder." Every activity will be on a card, and swiping will take you to new screens. Swiping left signifies not wanting to do the activity, swiping right is accepting to do the activity, and swiping down saves the activity for another time. The design is intuitive and easy to appreciate, especially given the spontaneity required in the app.



Sketched Design #2:

For our second design, the app takes a map centric style of navigation. The map pinpoints where you are, as well as question marks for suggested activities nearby. Upon approaching a question mark, you are able to see what the activity actually is. Furthermore the app highlights the locations of other nearby users of *Chapter*. We chose this design because even though it is less familiar, it appears logical given the location based nature of the app.

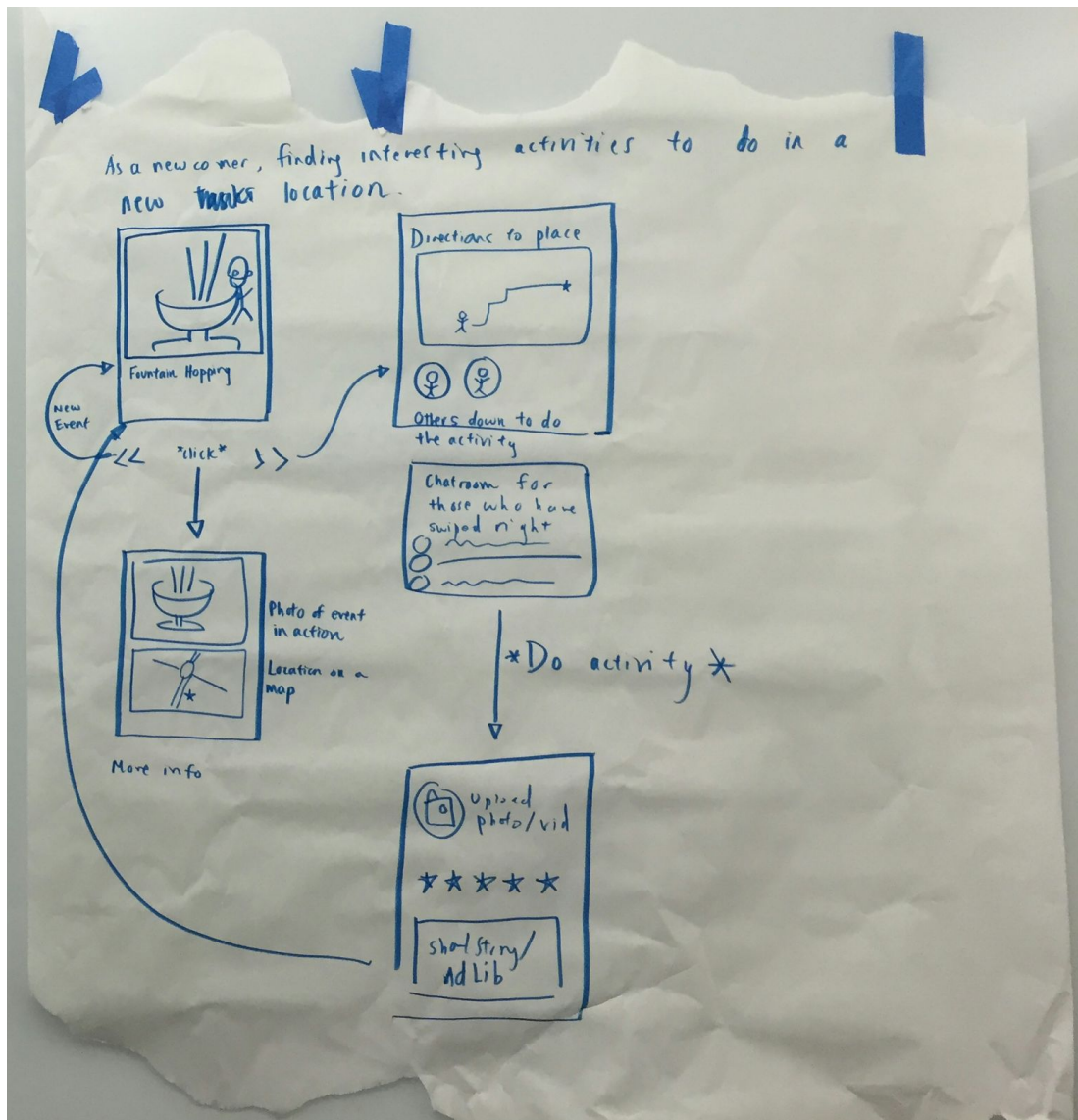


Selected Interface Design

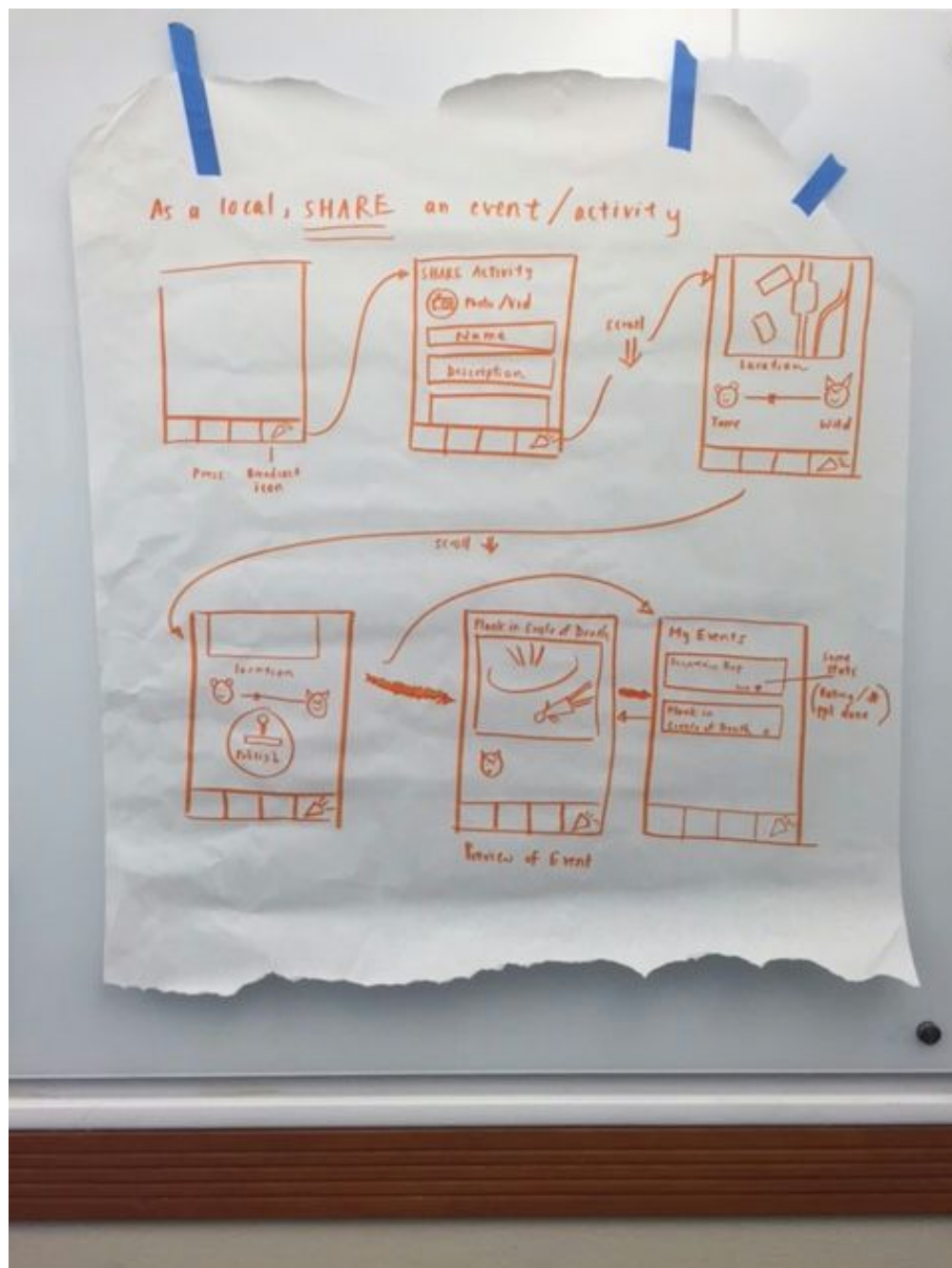
In the end, the natural flow of swiping in UI Design 1 was more compelling than the location centric design of Design 2. We heard from Cassandra's Experience Prototyping that she liked the idea of being told what to do. Design 2 did not have the aspect of the app controlling the destiny of the user. The map based design made us realize that doing anything extremely complex on a tiny smartphone screen will be awkward; this made us turn away from UI Design 2 and also amend some of our map based views present in UI Design 1.

Tasks	How It's Accomplished
1. As a newcomer, finding interesting activities to do at a location (i.e., Stanford)	The app presents activities one by one and users swipe left to pass, right to do, and down to save the event for later. Each swipe right gives the user detailed information about the locations of the event and others who are currently doing the activity.
2. As a local, suggesting interesting activities to do or places to go at a location	Users input the name, description, location, and a photo or video of the activity. After publishing the activity, the user is brought to a list of activities that he or she has suggested, along with statistics of how much the activities were liked and done.
3. Creating a story of memories when in a new place.	Completing an activities prompts the user to record a photo/video as well as a description. The app lists the completed stories in the format of a Table of Contents organized by location, so that the user can easily navigate and select what memories they want to review.

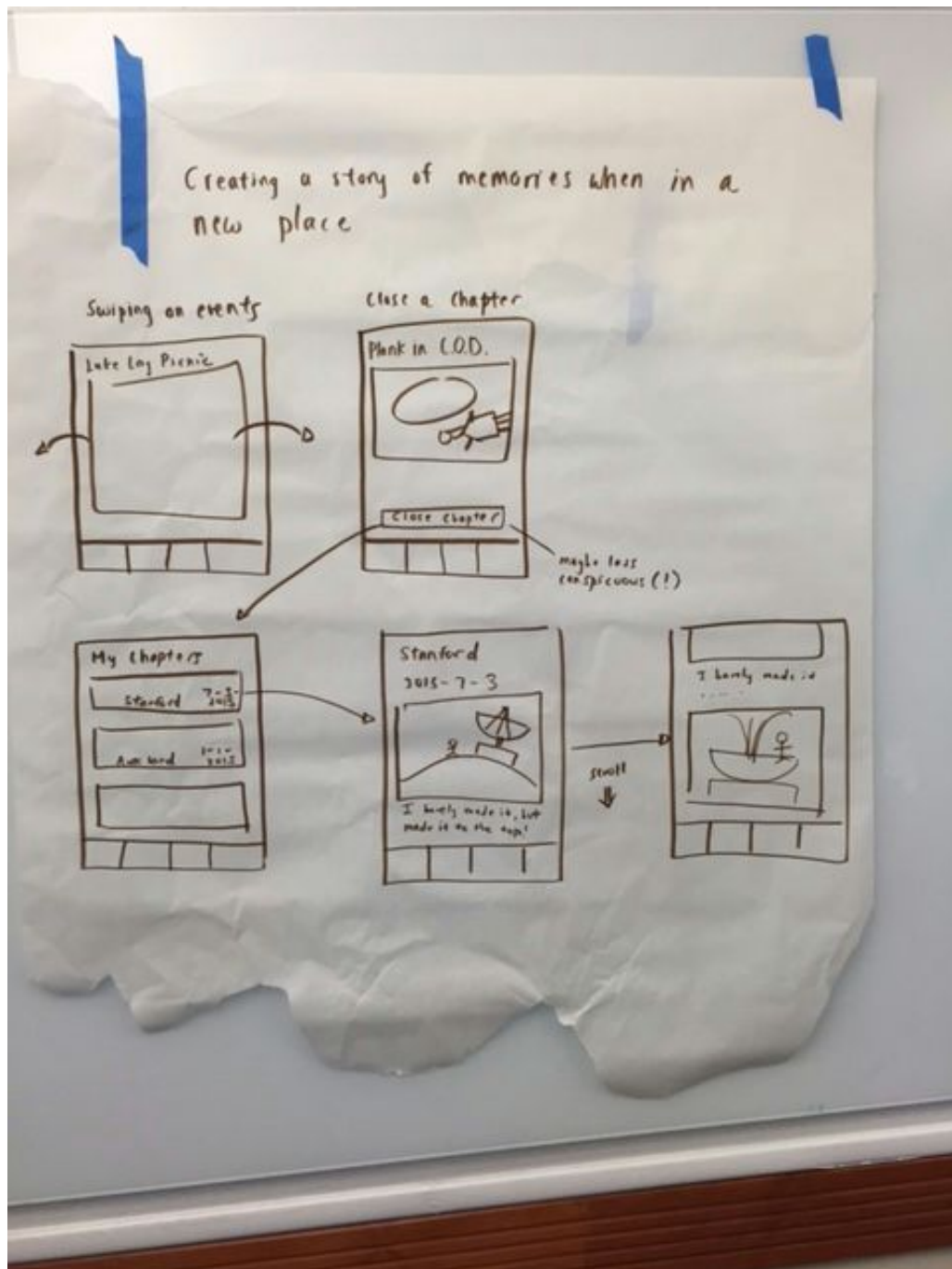
Task #1 Storyboard: As a newcomer, finding interesting activities to do at a location (i.e., Stanford)



Task #2 Storyboard: As a local, suggesting interesting activities to do or places to go at a location



Task #3 Storyboard: Creating a story of memories when in a new place.



Prototype Description

Our prototype has a home screen that contains our four main functions - selecting activities to do, updating your preference for activities, suggesting new activities for your location, and reviewing past activities you've completed. On the activity selection screen, you're welcomed with an activity that can be done near your area. If you swipe left, you decline that activity. If you swipe right, you accept the activity. If you swipe down, you save that activity for later.

After swiping right on an activity, you'll be transferred to a screen that shows you the location and a more detailed description of the activity. Also, there will be a list of other people using *Chapter* are doing the same activity as you. You can then start the activity, and after you've finished you can upload a picture or video of the activity. Each activity also has a rating so that everyone can see how enjoyable the activity was.

If you go to the preference screen, you will be able to input your profile information as well how adventurous you want to be. There's a slider that you can use to show how "Tame" or "Wild" you want your activities.

Lastly, the "Review" screen shows you all the past "Chapters" you've completed (past activities). Here, you can see where you did those activities along with the picture/video you uploaded. You can also share chapters with your friends as well as view your friends' chapters.

Figure #1: Screen 1, 2, and 3

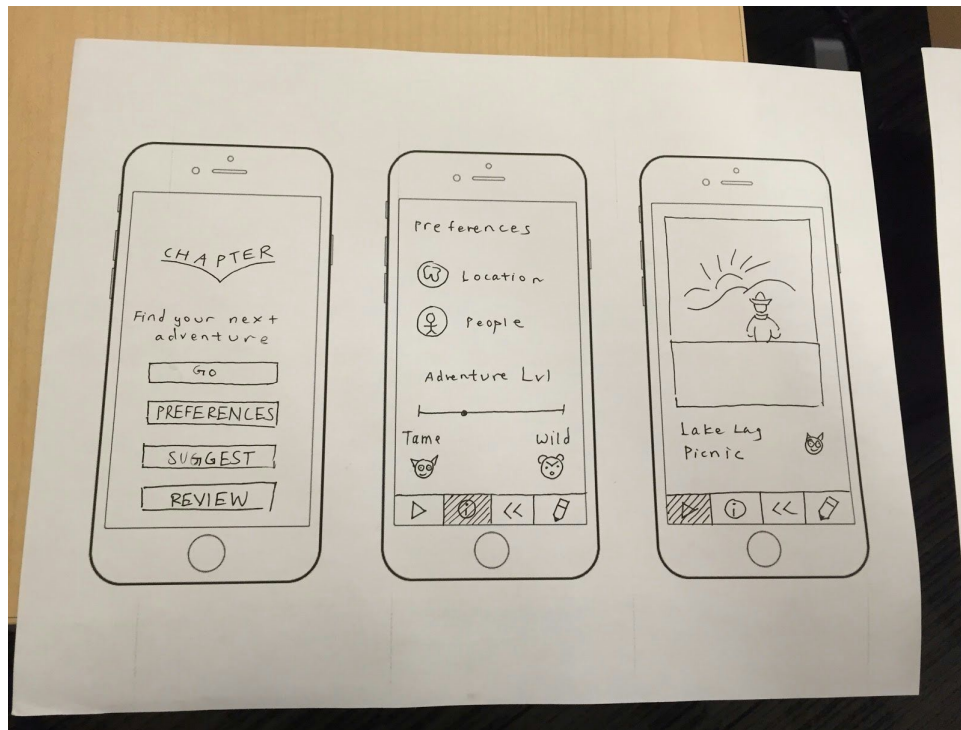


Figure #2: Screen 4 and 5

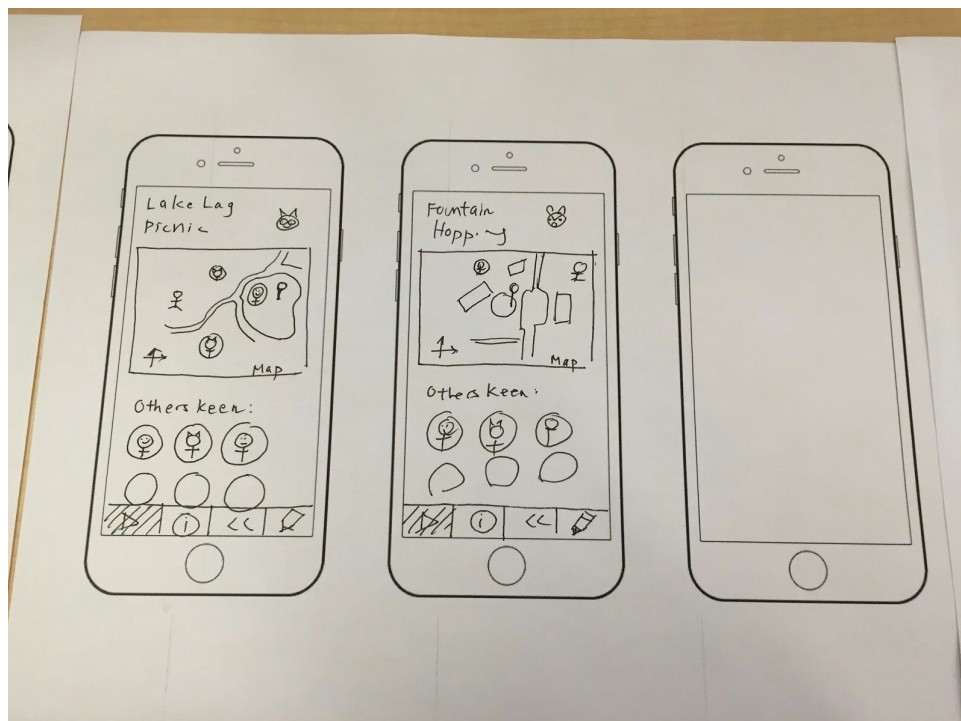


Figure #3: Screen 6, 7, and 8

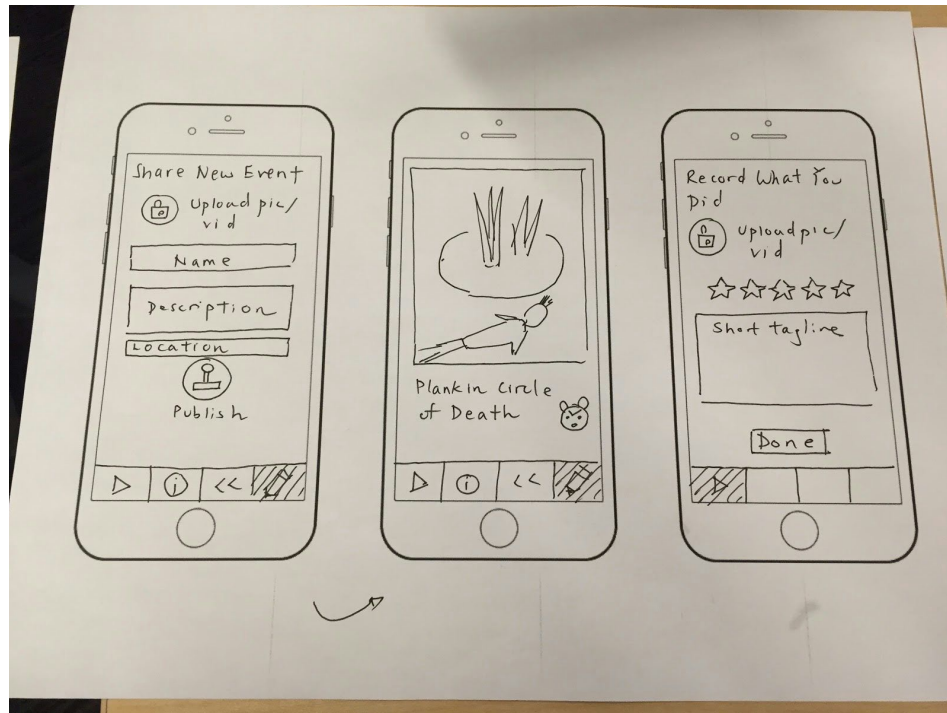


Figure #4: Screen 9, 10, and 11

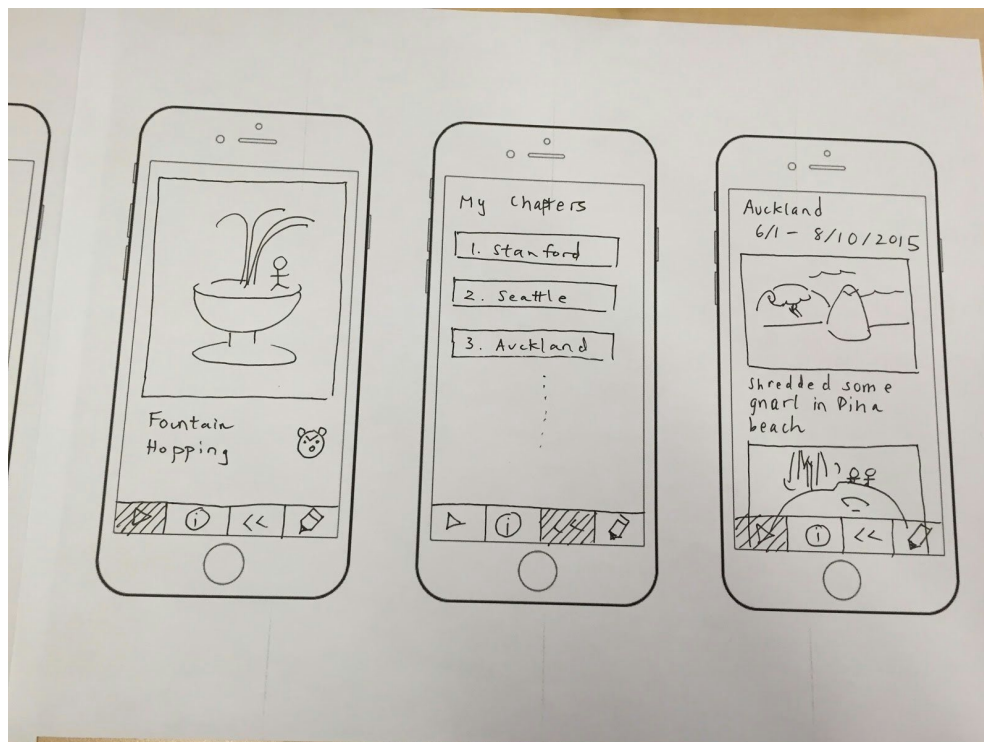


Figure #5: Task 1 Flow

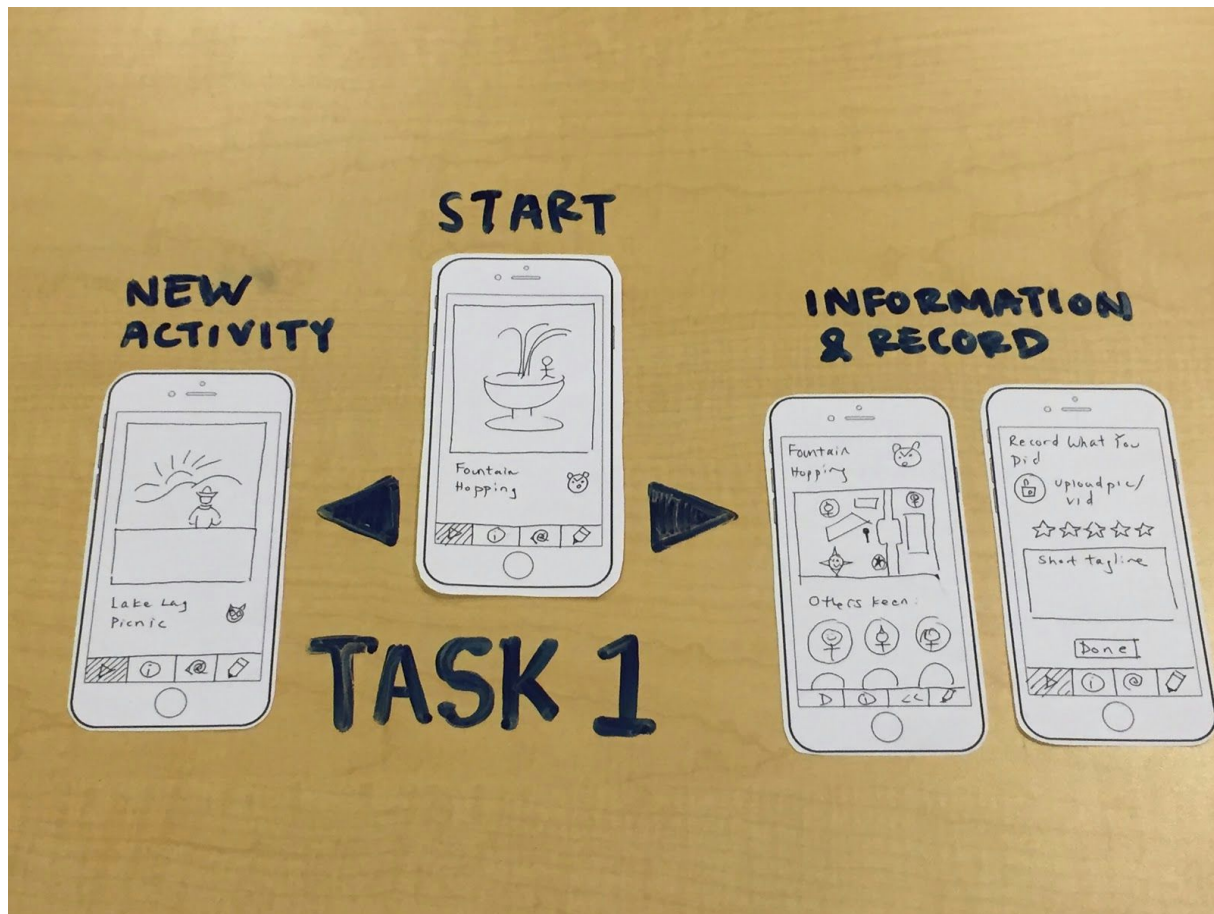


Figure #6: Task 2 Flow

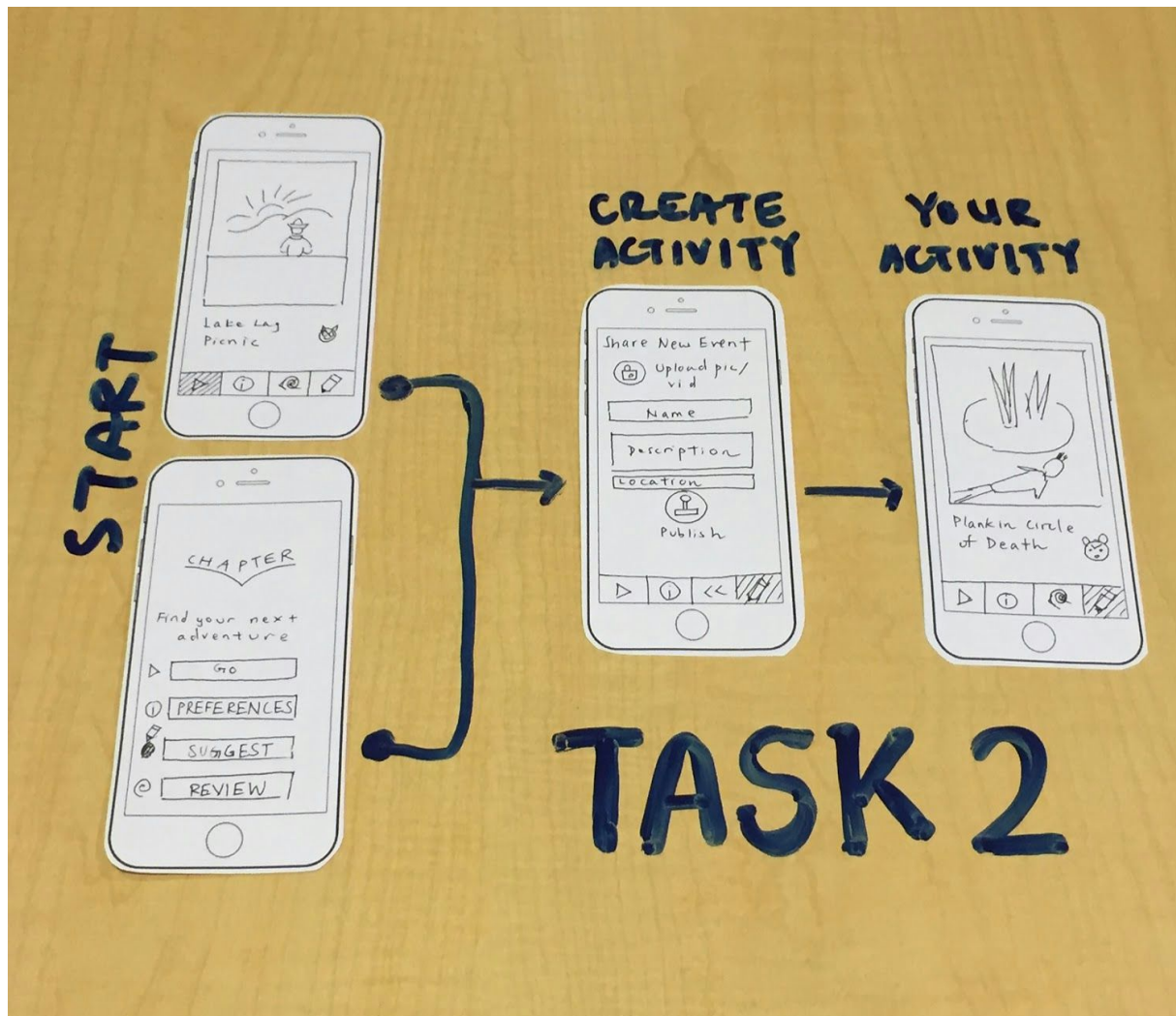


Figure #7: Task 3 Flow

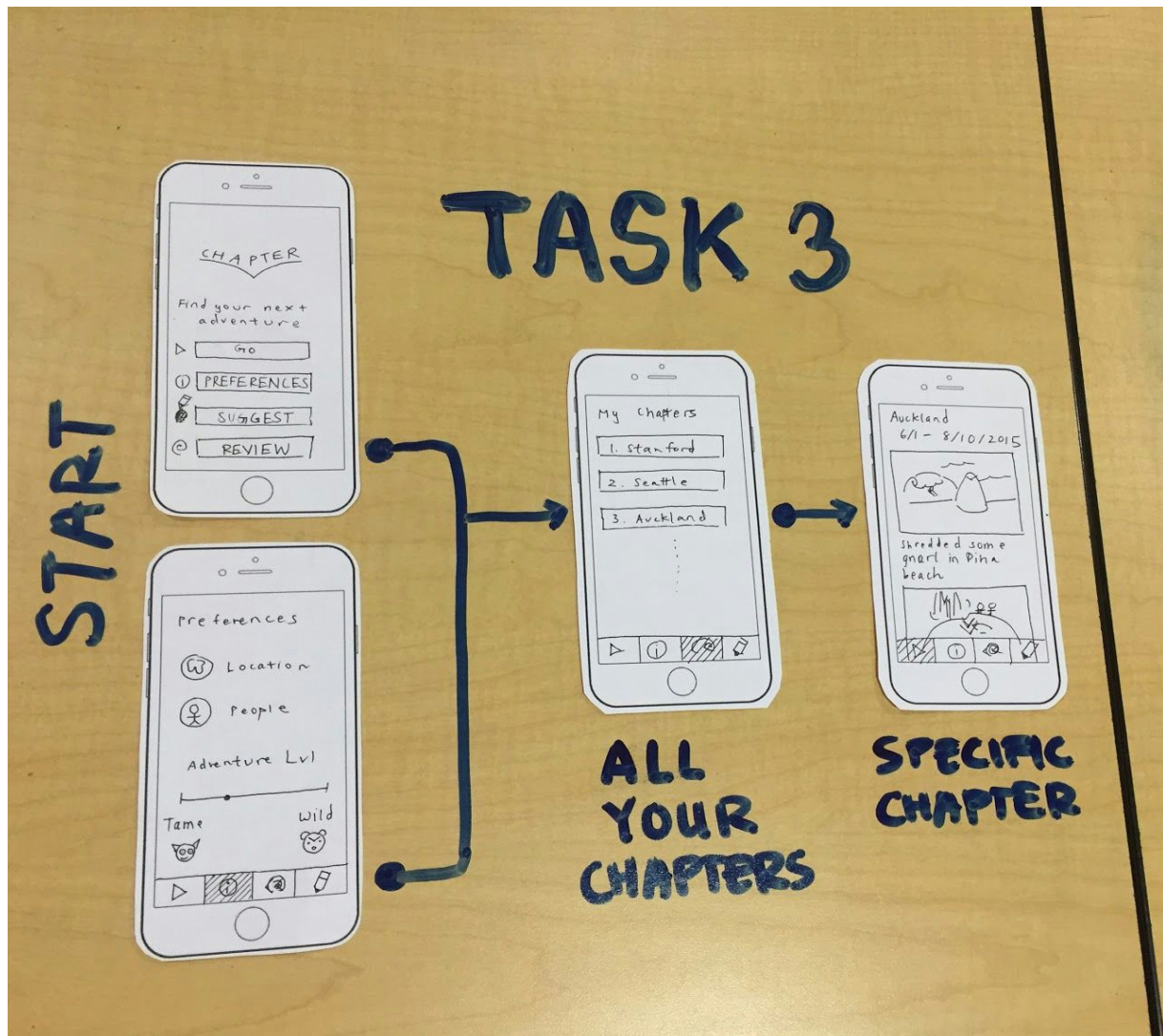
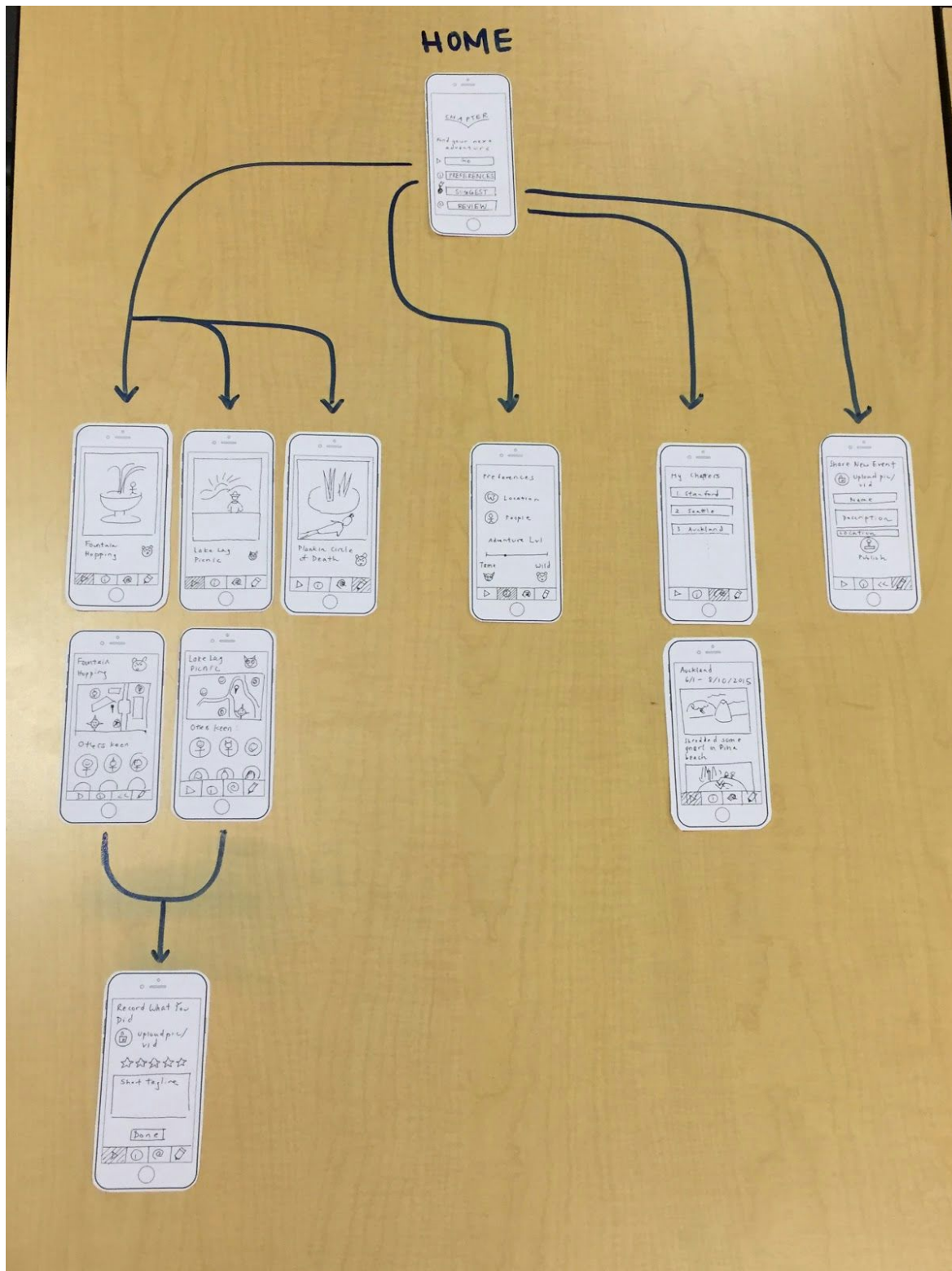


Figure #8: Entire Prototype System



Method

1. Participants: demographics, how recruited/compensated

Participant #1:

Demographics: Female; front desk assistant at Lathrop

How recruited: Asked if she was free for a little to prototype our app. She did not have much exposure to using mobile apps and was not familiar with many of the mainstream apps, so it was immensely useful for us to test on such a user.

Compensated: Gave her a chance to experience using an app with modern features (i.e., natural flow of swiping); a fun and engaging break from her Lathrop job.

Participant #2:

Demographics: Senior; Physics major, Math minor. We wanted someone who is a self proclaimed techie to see how quickly he could understand and appreciate the app.

How recruited: Asked if he was free for a little while to prototype our app.

Compensated: Irving invited him to BOB for dinner.

Participant #3:

Demographics: Junior living in Robinson, Product Design major. We wanted someone whose background is in design to give a more critical approach to the User Interface and Experience.

How recruited: Asked if he was free to prototype in Axe and Palm. He was sitting alone and working on a design exploration exercise.

Compensated: He is genuinely interested in design and was really keen on sharing his experiences in design.

2. Environment

For our first participant, we had our test in the Tech Lounge in Lathrop. For both our second and third participant, we had our test in the couches of Old Union. We decided to have these tests in a natural setting where the application would be actually used. We set up our prototype on a flat surface since it was designed on paper, but optimally everything would be an interaction on a phone itself.

3. Tasks

Our three main tasks were:

1. As a newcomer, finding interesting activities to do at a location (i.e., Stanford) (**Simple**)
2. As a local, suggesting interesting activities to do or places to go at a location (**Moderate**)
3. Creating a story of memories when in a new place. (**Complex**)

4. Procedure

Member Roles:

Dan - Facilitator/Computer

Irving - Recorder/Facilitator

David - Computer/Greeter

Melissa - Greeter/Recorder

Our testing methodology was to first show a small demo of the application itself, and also ask whether they were familiar with the “Swipe left, Swipe right” UI that was prevalent in apps like Tinder. After showing a very simple demonstration of the personal profile, we went on ahead and asked the participant to try the three tasks above.

For the simple task, the participant had the option of discarding, saving, or doing the activity that appeared on the activity selection screen. We wanted to see if the swiping for events was intuitive to them. We then asked them to visualize them doing the activity (e.g. Fountain Hopping), and take a mock picture to upload the memory to the application.

For the moderate task, the participant had to think of an activity they liked to do and write a title, description, and location for that activity. We saw whether or not they had any go-to activities that they thought were fun, and also asked whether they would actually do such a selfless deed.

Finally, for our complex task, we had the participant go to the review section so that they could see the picture and activity they did in the simple task. We wanted to gauge how keen they were in looking through their past chapters and importantly, assess whether they actually have a desire to do so.

5. Test Measures

We wanted to know in a big-picture way if the participants were intrigued to use our app. When we first demoed the application, users’ reactions were taken into account to see if they found our idea interesting. Throughout an actual prototyping session, we noted how many times the subject made incorrect assumptions about a particular button or feature (thus needing to clarify with us). In addition, we kept track of how many functionality-related questions were asked. This includes questions like deleting activities, viewing other people’s chapters, and adjusting the intensity level of activities.

Results

Participant 1

Navigation: The participant was not immediately clear how to navigate the event swiping interface before we introduced the motions to her. The participant thought that the four buttons at the bottom of the screen were the only way to interact with the app.

Button Icon: The participant was not clear about the icon for reviewing previous Chapters. We had a (<<) button go to completed Chapters, but the participant pressed on it thinking it would bring her back to the previous UI page.

Participant 2

Lowly Rated Activities: The participant asked us about what would happen to activities that consistently received lower ratings. He asked if it was possible to show them with less frequency, or simply delete them from the system.

Scrolling Down: On the landing page for the first activity the participant was shown (Fountain Hopping), the participant had the correct intuition that the map was displaying the locations of other people who were also interested in doing / already doing the activity. When we asked him what he would do next, he told us that he didn't see anything else obvious on the screen. In reality, however, if he had scrolled down, he would have been taken to a section that allowed users to record what they did - uploading a picture/video, rating the activity, and adding a short tagline/description for the activity.

Saving Activities for Later: When we showed the participant a more intense event (Planking in the Circle of Death), he told us that he didn't like the activity, but wanted to save it for later. He suggested that we could add a feature for saving events.

Viewing Other User Profiles: On the landing page of an activity, the participant also pressed on the pictures / avatars of other users who had expressed interest in doing the activity, thinking that it would bring up a page of their profile information and Chapters. We realized that this was a feature that we hadn't thought about before.

Participant 3

Intuition: As a Android user, we wanted to test how intuitive the interface was, give that the UI is not the same. We learned that we need to tighten up our icon choices in order to make sure that anyone who uses the app, regardless of device, will be able to use it the first time based on the icons.

Directions: The participant asked how to get to the activity when after swiping right on the activity. The activity sounded fun and he could see what people around him wanted to do the

activity as well, and where they were located, but had no idea how to navigate to the activity location.

Scheduling Activities: The participant inquired about how to create new activities that were one time events (ex. concert or Jazz night) or recurring events that only happen on a certain day/time. From this, we also discussed that if it is a location-based activity, some locations are public areas, while others may be in a restaurant, store, or park that has specific operating hours that would need to be filtered in/out by the app.

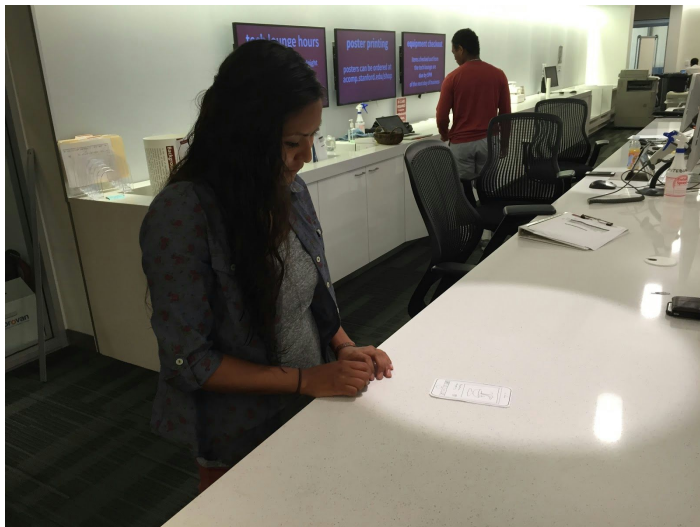
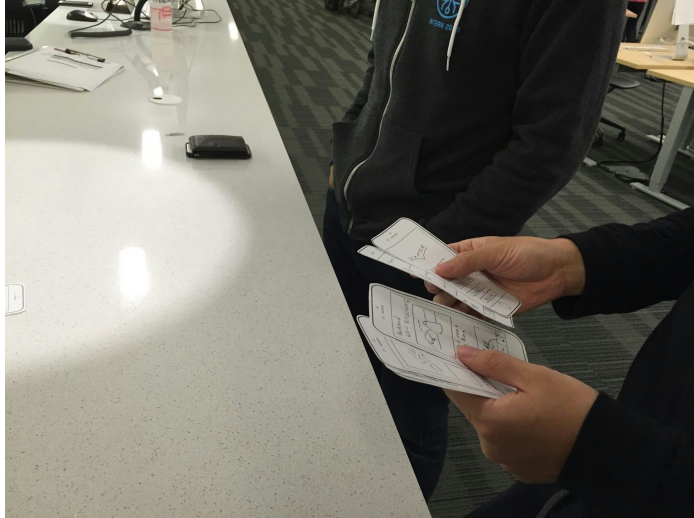
Distinguishable: The participant made the astute observation that there are two main functions of the app: finding an activity and recording a memory. With these two different functions, he noted that it would be important to make sure that the user could easily tell which function he was currently presented with.

Discussion

Based on our first interview, participant needed a walk through of the app to understand how to effectively swipe right and left the events. We decided that we would include a “walk-through” feature for new app users. Secondly, we understood the confusion of our “completed Chapters” button and changed it to a time machine icon, which represents going back in time to relive previous Chapters.

Based on our second test, we realized that we could automatically delete activities that received over a certain number of low (i.e., 1-star) ratings from the database. Additionally, we realized that we could prioritize higher-rated activities to be shown more frequently. Furthermore, we used the feedback we got about making scrolling down more intuitive to redesign the UI of certain screens that had additional content that can be revealed via scrolling down. For the landing page of activities, (for an example, see “Fountain Hopping”, “Others Keen” in Figure 8), we decided to make the profile pictures at the bottom of the screen partially cut off so that it would be readily apparent that there was more content below. Another insight we gleaned from the participant’s suggestion was on being able to save activities. We decided that it would be convenient if one could swipe *down* to save activities for later. Last but not least, the participant’s question about viewing other user profiles made us realize that we could incorporate a social networking component to the app. This would be done through two additional features. First, tapping on a profile picture underneath the “Others Keen” label for an event would bring up a screen with that person’s Chapters (see “Bob’s Chapters” in Figure 8). Second, users should not be restricted to only being able to see profiles of others who are keen on doing an activity; they should also be able to send/receive friend requests and look at their friends’ profiles and “chapters”.

Based on our third study, we learned directions to get to the location directly through the app was helpful. We used the map that is already included on the landing page that the user is directed to once they swipe right on the given activity. Another insight we gained was the need for additional parameters in creating/suggesting a new activity, including whether or not the activity is recurring (daily, weekly, annually), within operating hours, or a one time event that expires after an event date. For the app to be “relevant,” we would need to be able to take in specific parameters and only present activities to the user that are currently available at that given time. Finally, in seeing that there are two main functions of the app, we looked into the best ways to distinguish these two functions, such as including a tracking icon in a corner or to have different color backgrounds that were tied to the specific functions.







Appendix

Raw Data

Participant #1:

Kenaba Yikaitaah Hatathlie

Computer: David

Greeter: Melissa

Facilitator: Dan

Recorder: Irving

Clicked on Go

Brought her to Auckland page

Clicked on the "Write" button

"Share new event" page → press play

Dan: mentioned that it had a Tinder-like UI (swipe right for like, swipe left for dislike)

Fountain Hopping UI

Notes:

We should number the screens the next time

Name: Roof-climbing

Description: Find things to climb

Location: Stanford

Decided to go in between Tame and Wild

Suggestions: can have a more social aspect - review other people's feeds?

Lake Lag Picnic

Pressed the "<<" (Review) button, took her back to the "My Chapters" screen

Selected "Seattle" (but we don't have that), so took her back to the Auckland screen

General feedback for the icon and for what was challenging:

1) So the pencil means to create your own event based on that location?

Answer: Maybe your hometown or something

2) I think this is pretty cool - a useful app. Say your friends are bored/busy, it's helpful for finding things to do

3) Like a library - viewing other people's "books"

Notes:

- You have your own personal “book”
- every new adventure is a new “chapter”
- your network/friends = “library”

Participant #2:
Brendan Corcoran

Computer: Dan
Greeter, Facilitator: Irving
Recorder: Melissa

Task1:

Start screen -> Go
Intensity level: Tame to wild

- Tiger is not intuitive

Task 2:

Tinder UI - swipe right/left
When you swipe are you completing the activity or agreeing to do the activity

Swipe right (fountain hopping) = See what people also swiped right on the activity
Scroll down = upload picture/selfie + rate the activity
**rated 4 stars*
**tagline: just went fountain hopping*

Swipe left (planking on the circle of death) = don't do it
Swipe right (picnic in lake lag) = See what people also swiped right on the activity
Scroll down = upload picture/selfie + rate the activity
how do I see other people's selfies??
view other people's Chapter -> more comfortable with a username

- *it would be best/cool to see their actual face*
- *be able to recognize them in real life - would prefer to be able to connect with a real person through the app*
- *careful: don't make it too much like Tinder*

Chapter: scroll through your pictures and stories to view the memories

Do the Icons go with the home page of the app?

Task 3:

Suggesting the new event
What does "event" mean?
Uploading the new activity -> write, suggest, post

Can you delete an activity?

- Activity will be deleted if <1 stars for X amount of ratings
- Higher rated activities are higher in the queue?

How do you know if it is scrolling down?

- intuitive features built in - half the icon of people's faces
- blinking arrows?
- walk through tutorials for new users - can exit out/set preferences

Can you save events/activities for later?

- Swipe down to save and store for later

Participant #3:
Rylan Edlin

Computer: Dan

Greeter, Facilitator: Irving

Recorder: Melissa

Each memory is a new chapter of your life.

Apps will give you suggestions of what new activities to do.

Home screen: *intuitively -> would want to see if there is anything more to scroll through*

Go -> Lake Lag picnic

Curious as to what the cute kitten does....

click Location

setting radius - what kind of transportation you have

access to transportation gives you a different view of what activities you would want to do

People - does that give you a heat map of your friends using the app?

What would a wild adventure look like?

Planking -> left swipe (too wild)

fountain hopping -> right swipe

Fountain hopping -> landing page -> scroll down

Recording your own reaction? OR are the reactions based on what other people thought?

If you tap on the map with people and locations -> would it give me the directions?

- Your location
- Other people
- Where the event is

Consistency in user interface - used to Android design

Review icon -> *not intuitive - not really straightforward*

is it a portal?

Scrapbook like function

Scroll down to see more...

Auckland memories -> click on the map -> should have a different interface for memories vs. activities

Suggest

time it with store closing/opening times

what about one time events?

how do you set that time - expire? weekly? daily?

Chapter Consent Form

The *Chapter* 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 *Chapter*. 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 (*Chapter*) 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 *Chapter* 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 _____