

CS 147

ShopCrawl!

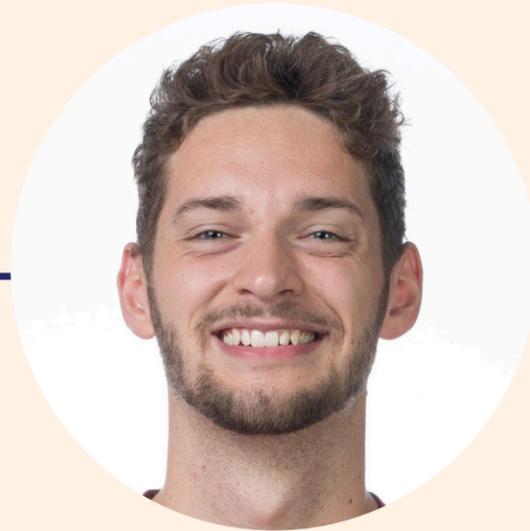
Shop with friends. Make it fun.



The ShopCrawl Team



Anthony



Luke



Isaac

The Problem

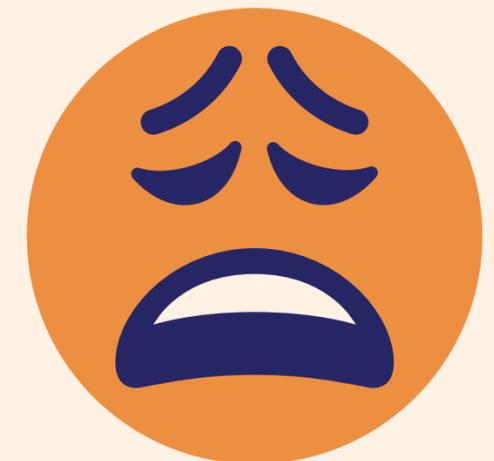
1. Chore shopping is boring and monotonous



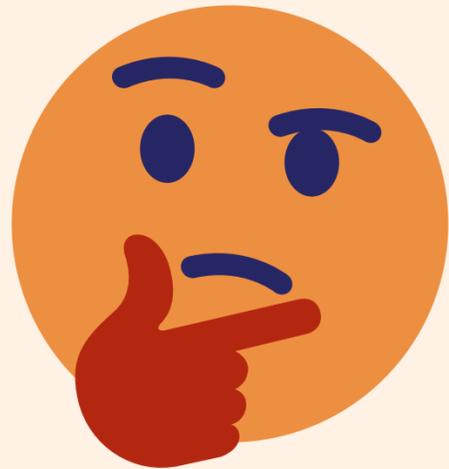
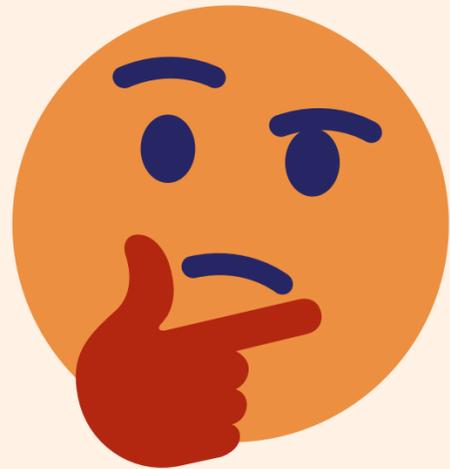
2. It's hard for people to meet new people



3. Time is valuable



The Solution?



Shop Crawl:



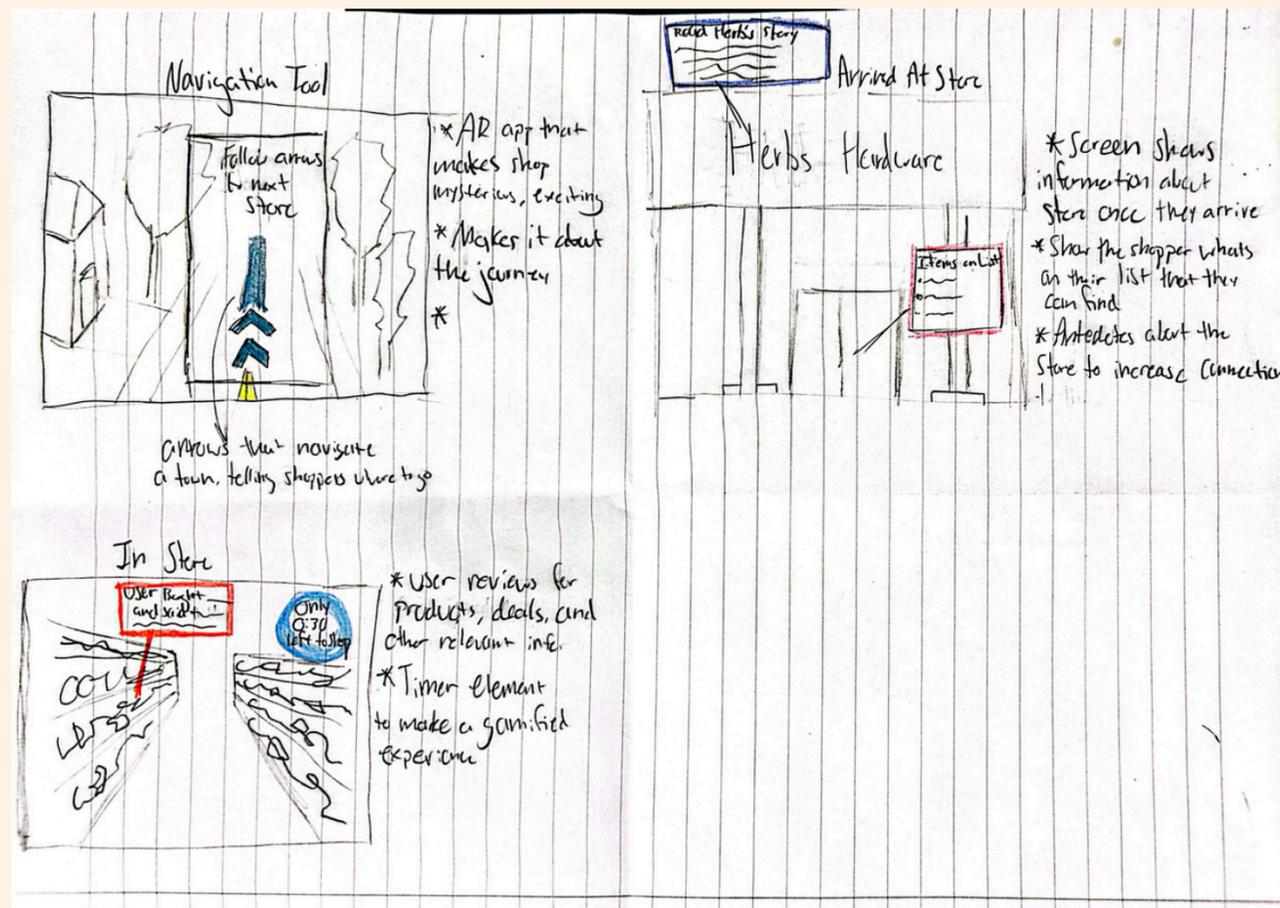
Make Shopping a party



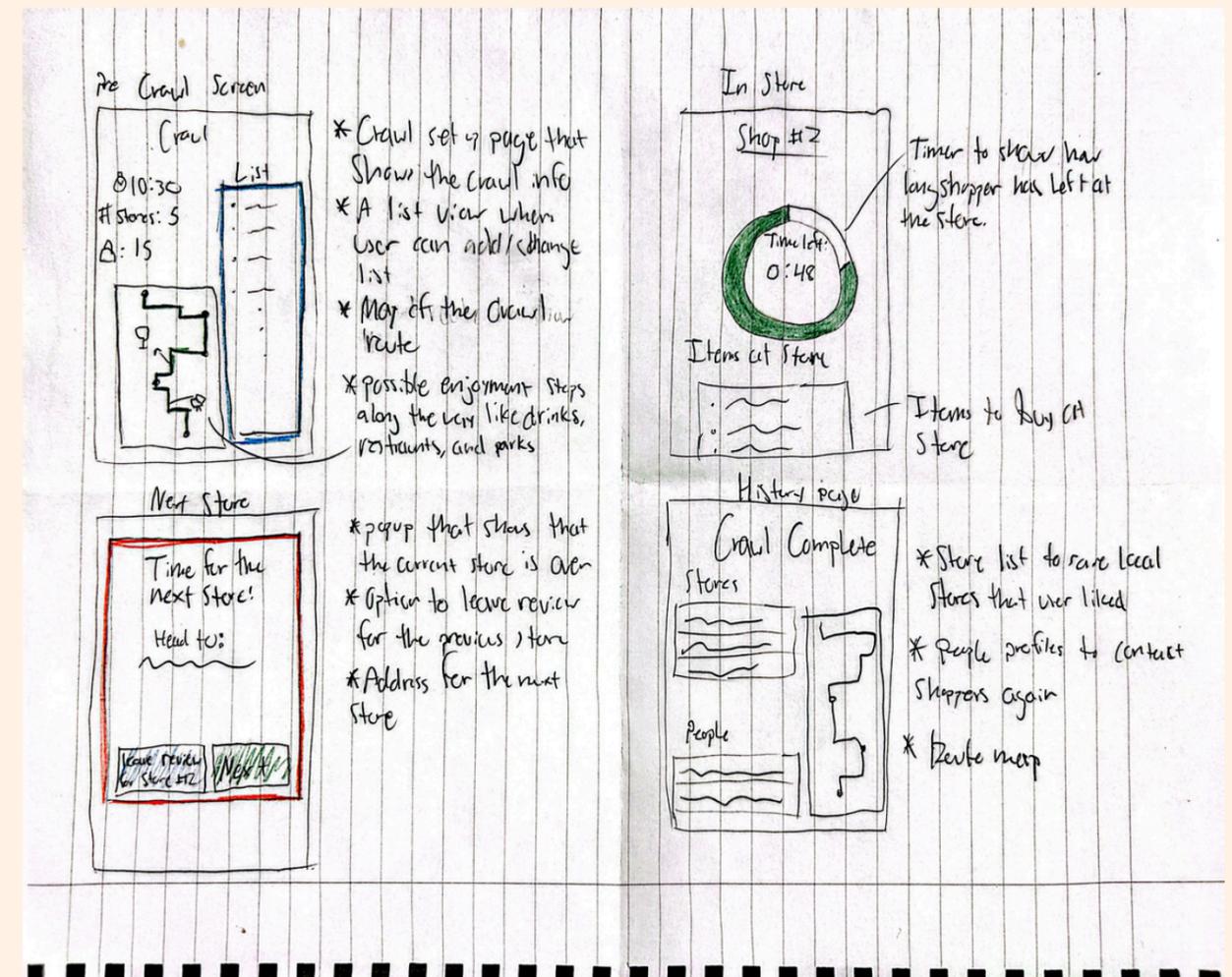
Sketching Explorations

Concept Sketches

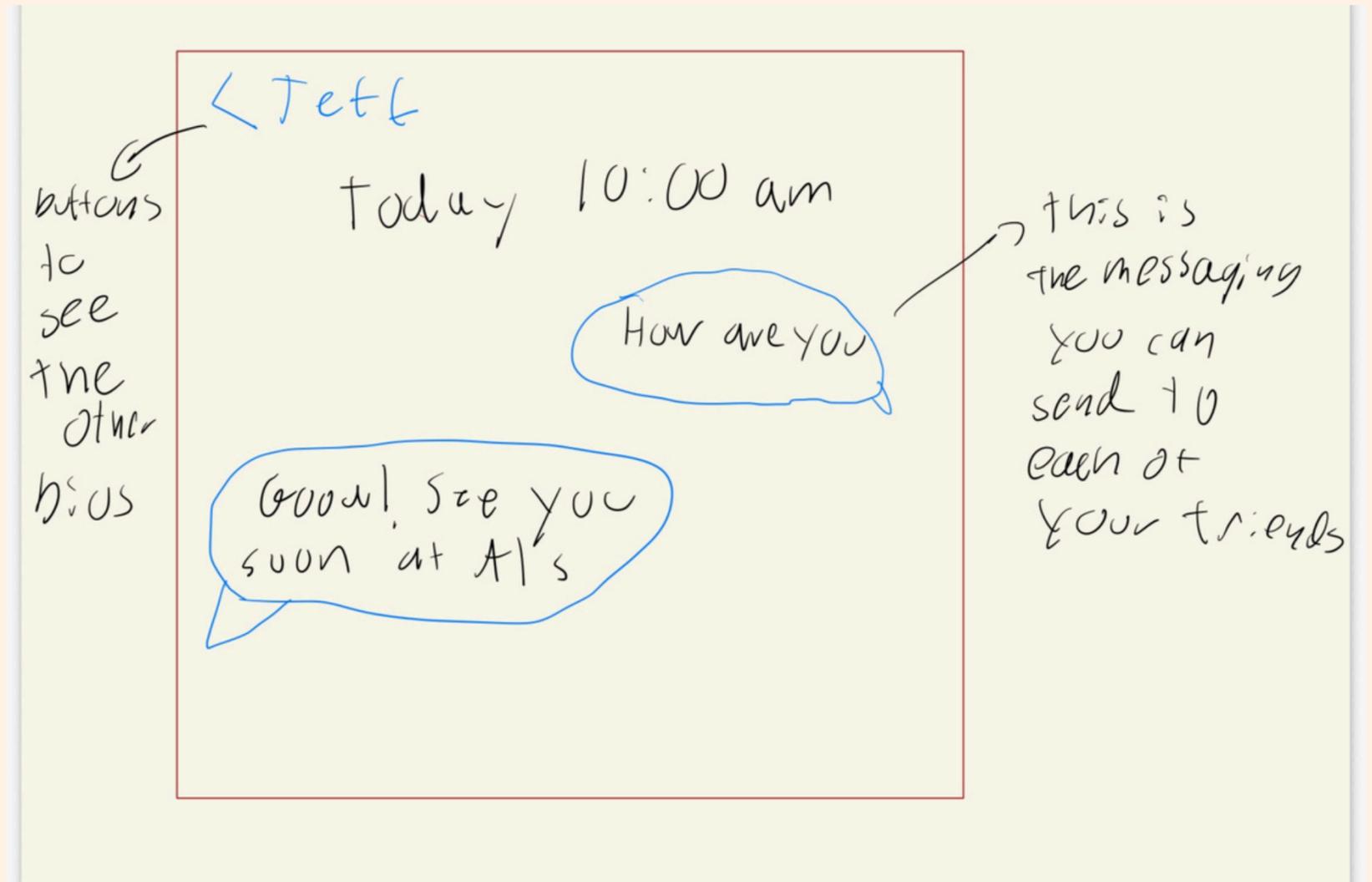
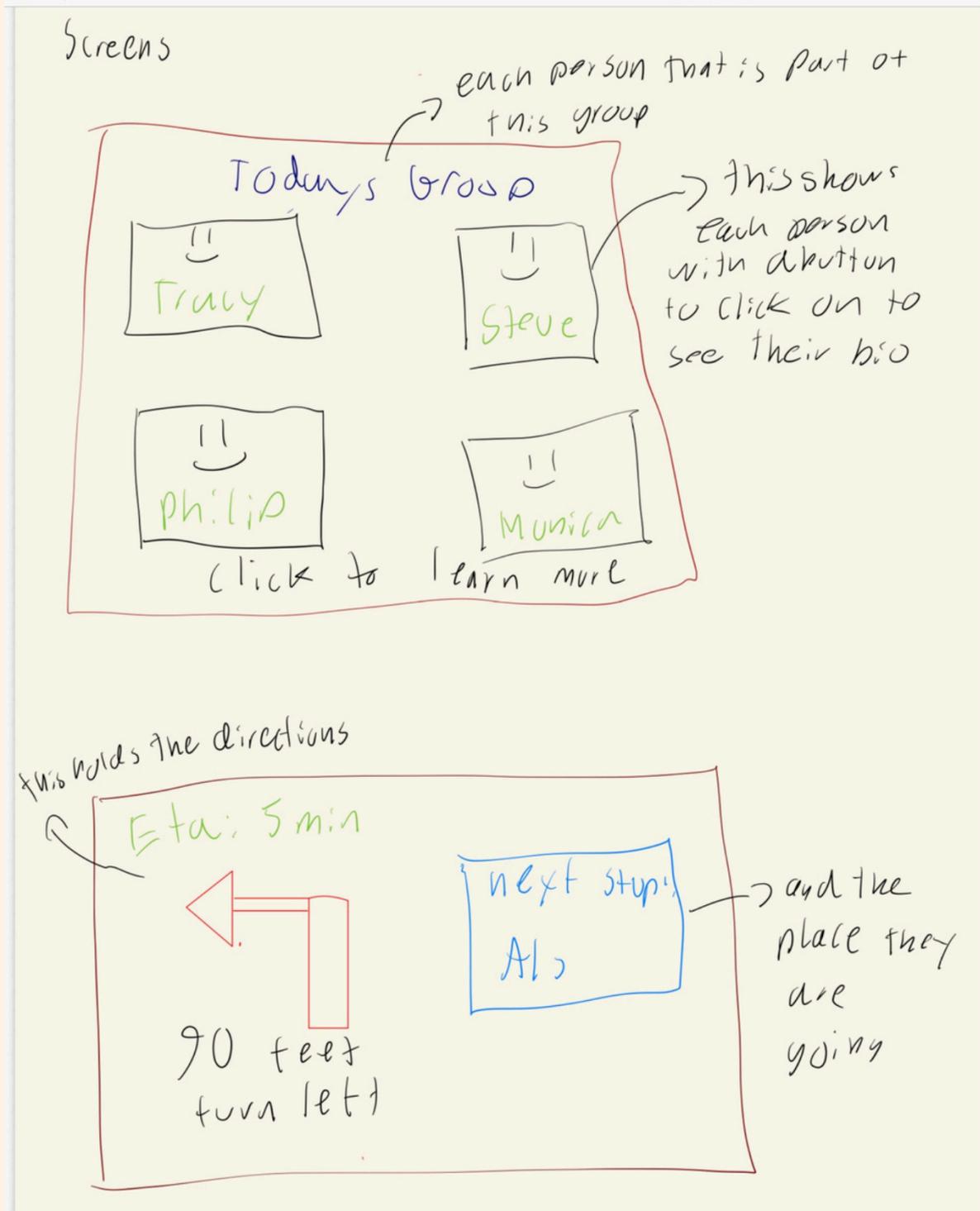
AR



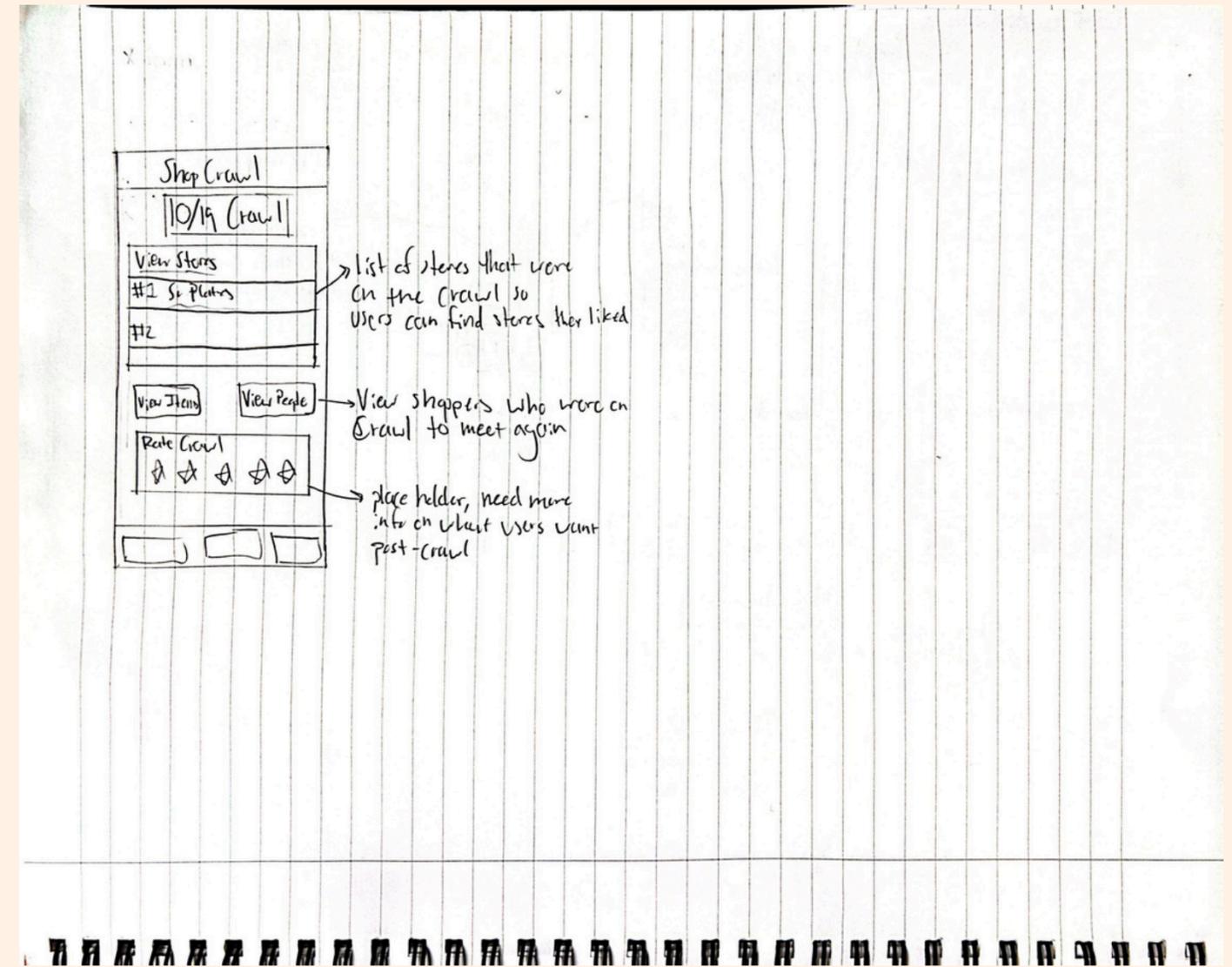
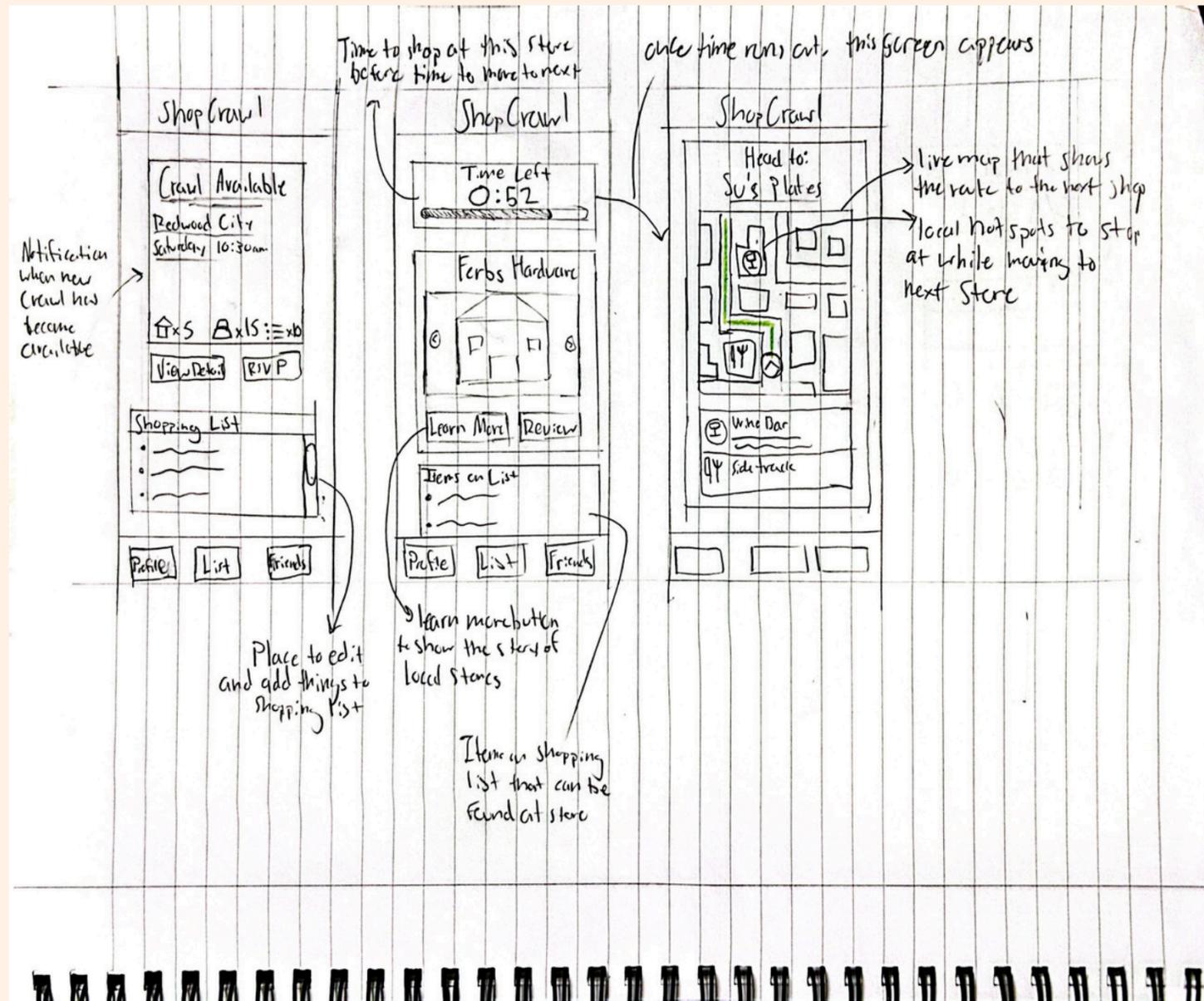
Tablet



Realizations - Wearable



Realizations - Tablet



interface

Pros

Suitable and comfortable for users to conduct social interactions

Larger screen allows us to convey more information about crawls

Shopping and phone apps have become synonymous

Integrated easily into the digital side of shopping

Cons

Harder to stand out for social features

“just another” shopping app

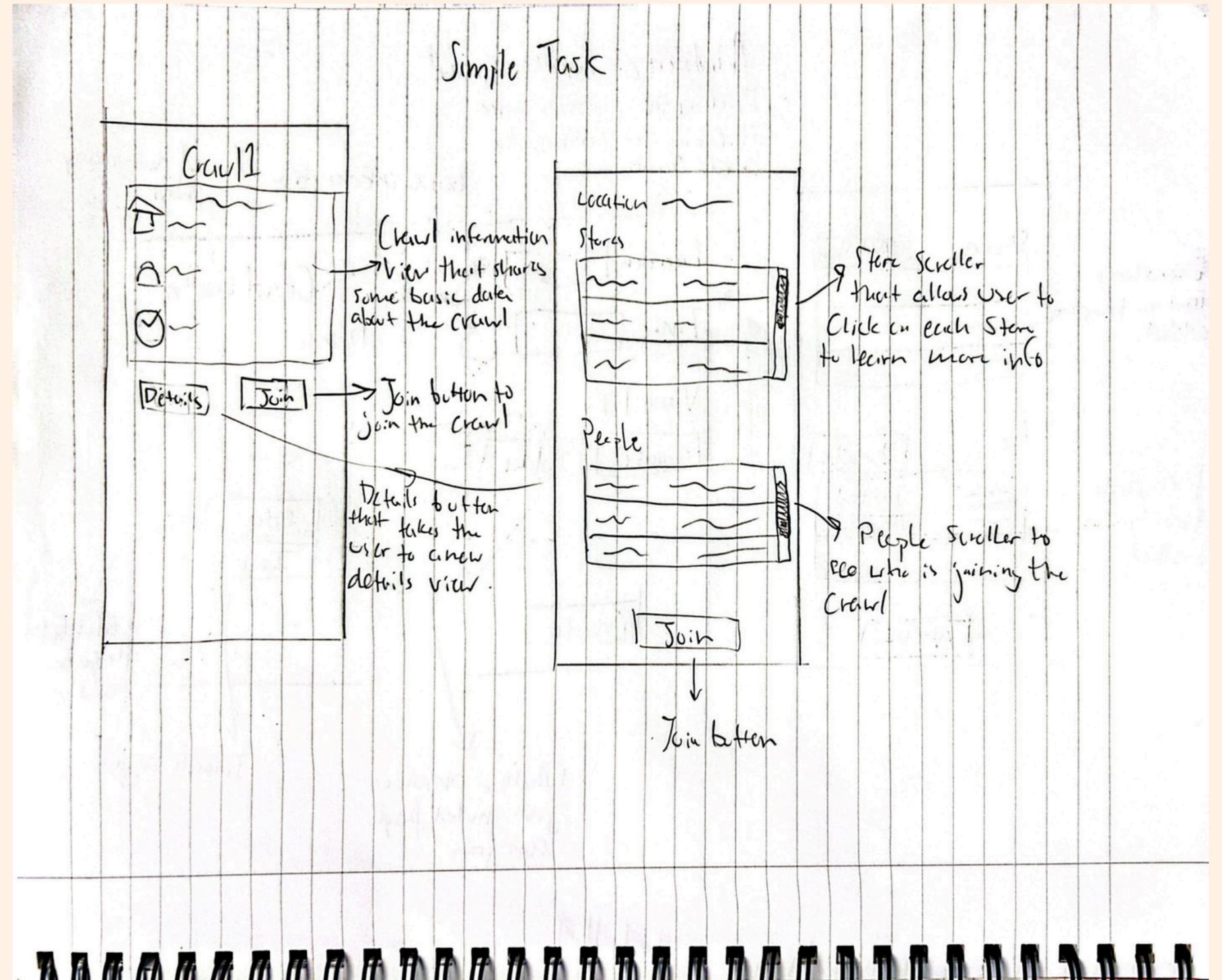
Lack of physical integration into the shopping experience

Veteran shoppers will be less willing to adopt a new shopping style



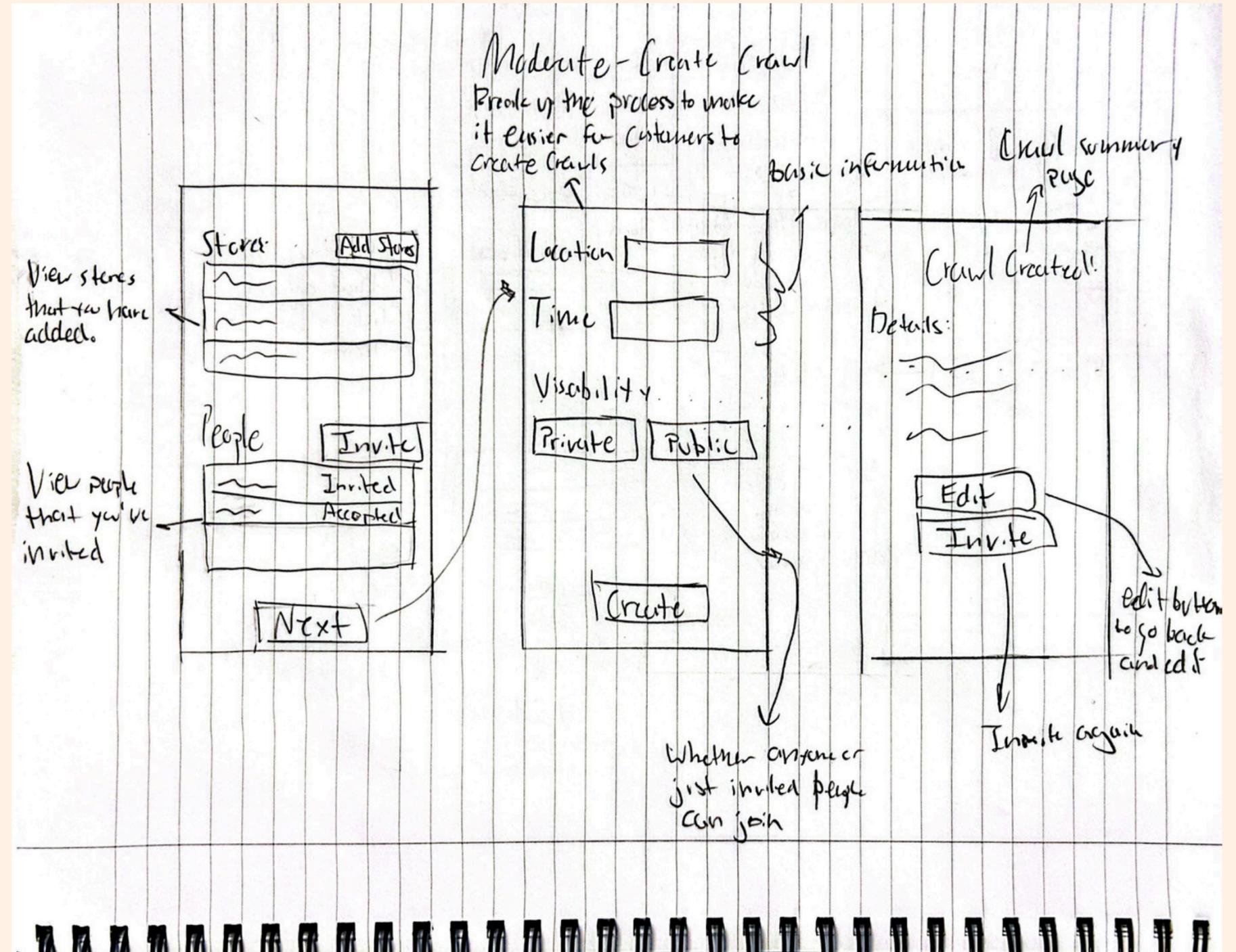
Task Flows

Simple:



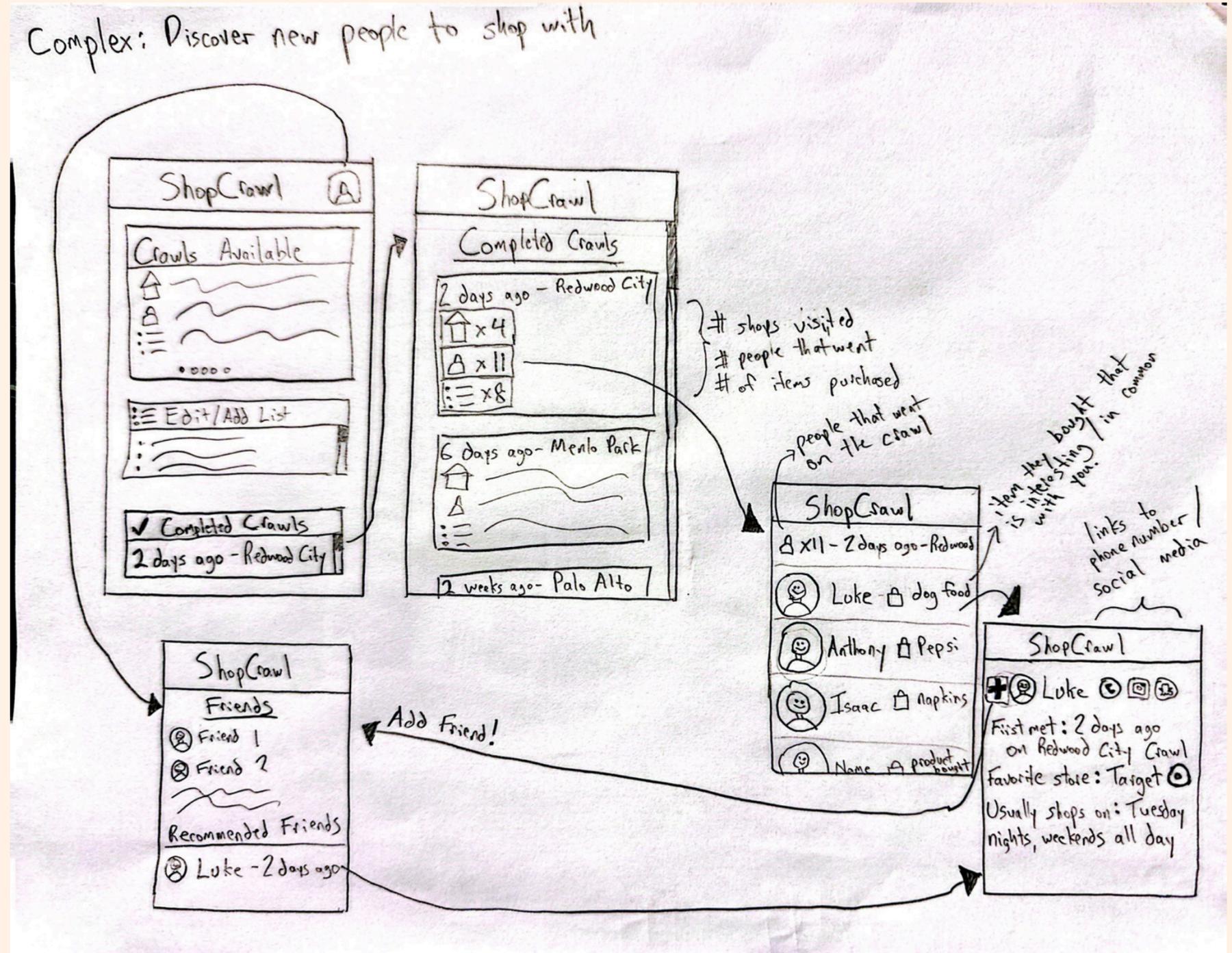
Task Flows

Moderate:

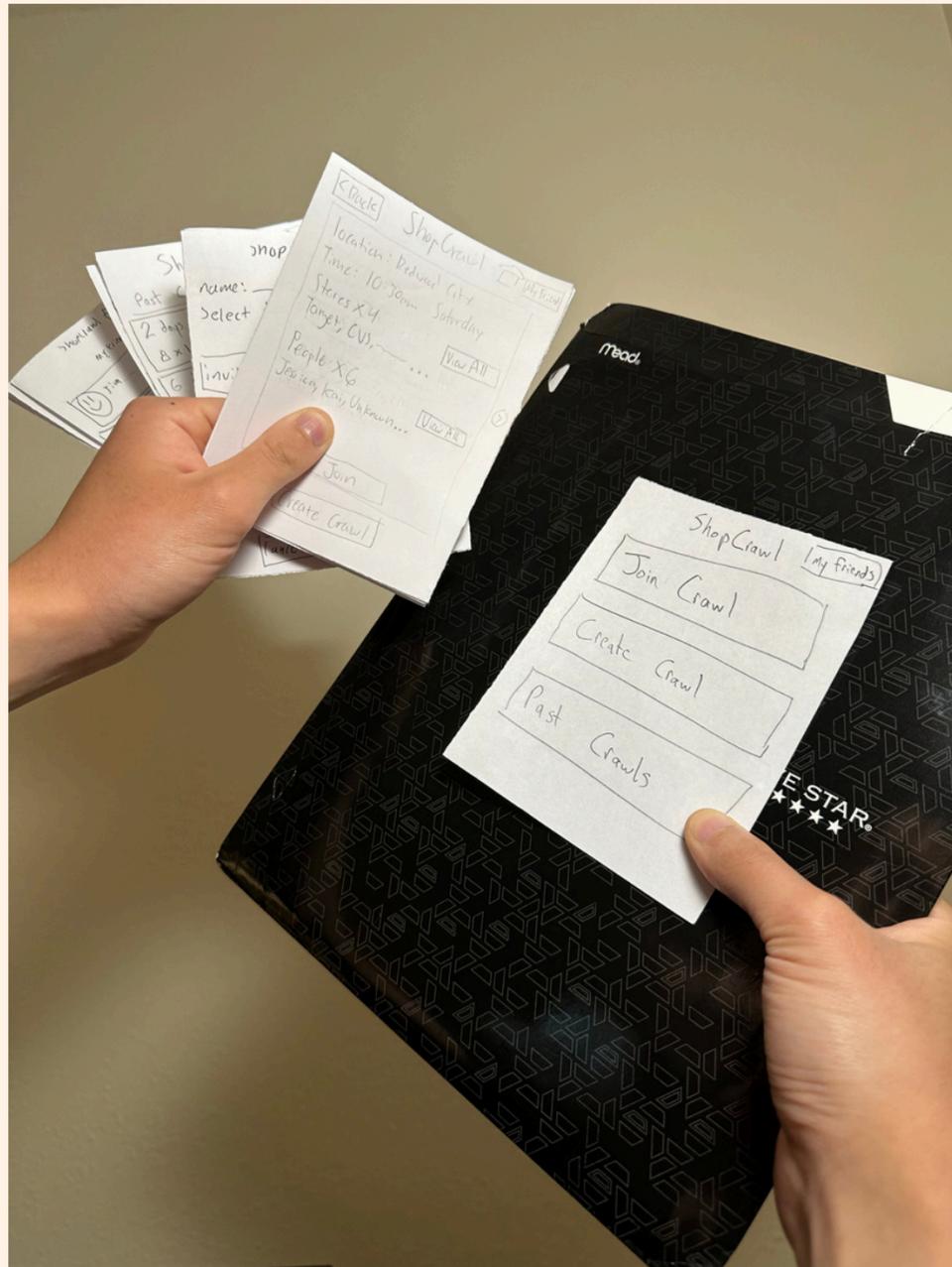


Task Flows

Complex:



Low-Fi Prototype Construction

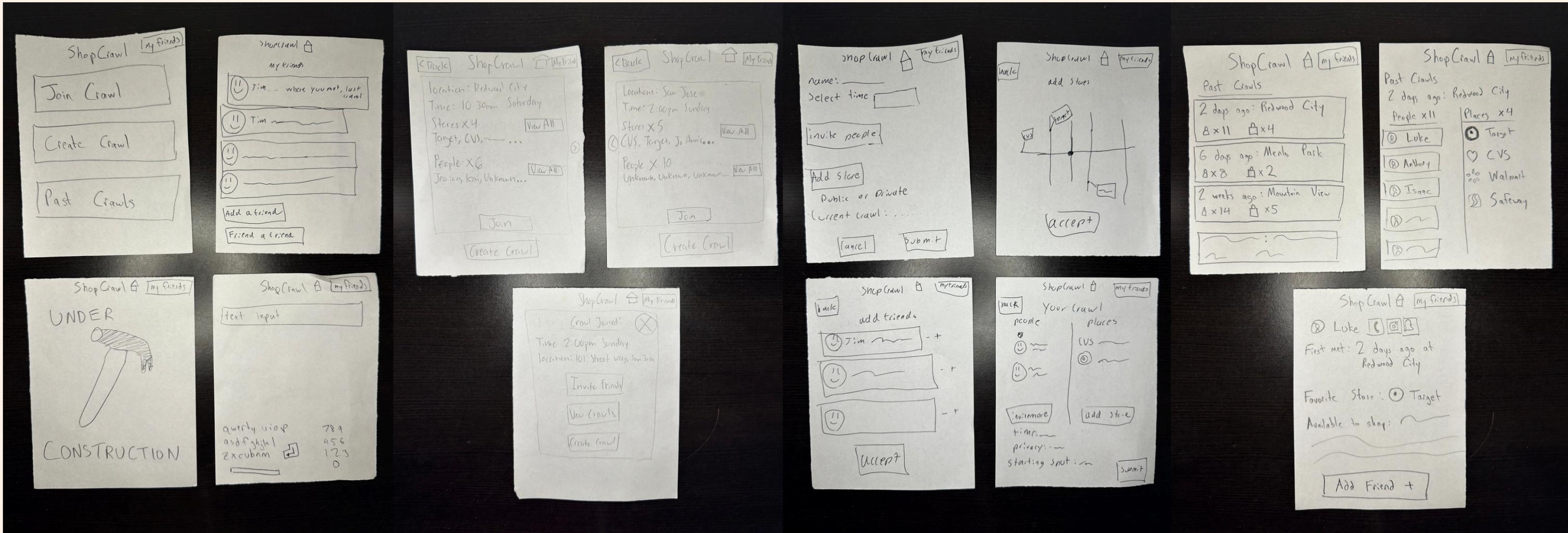


Built on quarter-size paper to simulate phone app size.

Organized sheets into the three tasks to streamline team member's execution of each task.

Prototype starts from the homescreen, and operates on a flat surface.

Low-Fi Prototype



Home and
Miscellaneous Screens

Join Crawl
Simple Task

Create Crawl
Moderate Task

Past Crawls
(Connect with People)
Complex Task

Testing Methodology

Participants, Environment, and Procedure

Who?

Chuck, Nate, and Blair

Wanted younger audiences, asked outside of popular chore based stores

No compensation or outside recruitment necessary

Where?

Nate at Tressider and Chuck and Blair at Sur La Table

Tested on tables outside stores

Tested after they had shopped

How?

For Tressider: Anthony did the prototype while Luke took notes

For Sur La Table: Isaac did prototype while Luke took notes

Showed them a quick demo before letting them play around with it

Testing - Usability Goals

Goal 1: Engagement and Eagerness

Goal 2: Efficiency and Ease of Use

Why test now?

Engagement lets us know if the concept sparks interest.

Long completion times show concept failures.

Meaning for solution?

High engagement = community potential.

Ease of use = less friction.

Testing - Key Measurements

	Goal 1: Engagement and Eagerness	Goal 2: Efficiency and Ease of Use
Process Data	Observations of enthusiasm and engagement	Time spent on the last task from "Past Crawls"
Bottom-line Data	"1-5, how interested are you in using ShopCrawl again?" Aim for > 4 average.	"1-5, how easy was it to complete the last task?" Aim for > 4 average.

Test Results - Engagement

Comments made by participants

Chuck

"[Seems like] a really interesting way to make friends when we're busy in life."

Blair

"I usually hate shopping so I always get it delivered. I like it cause it might make it actually fun"

Nate

"This is fire."



Test Results - Engagement

On scale of 1-5, how interested are you in using ShopCrawl again?

Chuck

4

Blair

4

Nate

5



Test Results - Efficiency

Time to complete complex task starting from "Home Page"

Chuck

21 Seconds

Blair

Did not complete

Nate

13 seconds



Test Results - Efficiency

Scale of 1-5, how easy was it complete the last task

Chuck

4

Blair

2

Nate

5

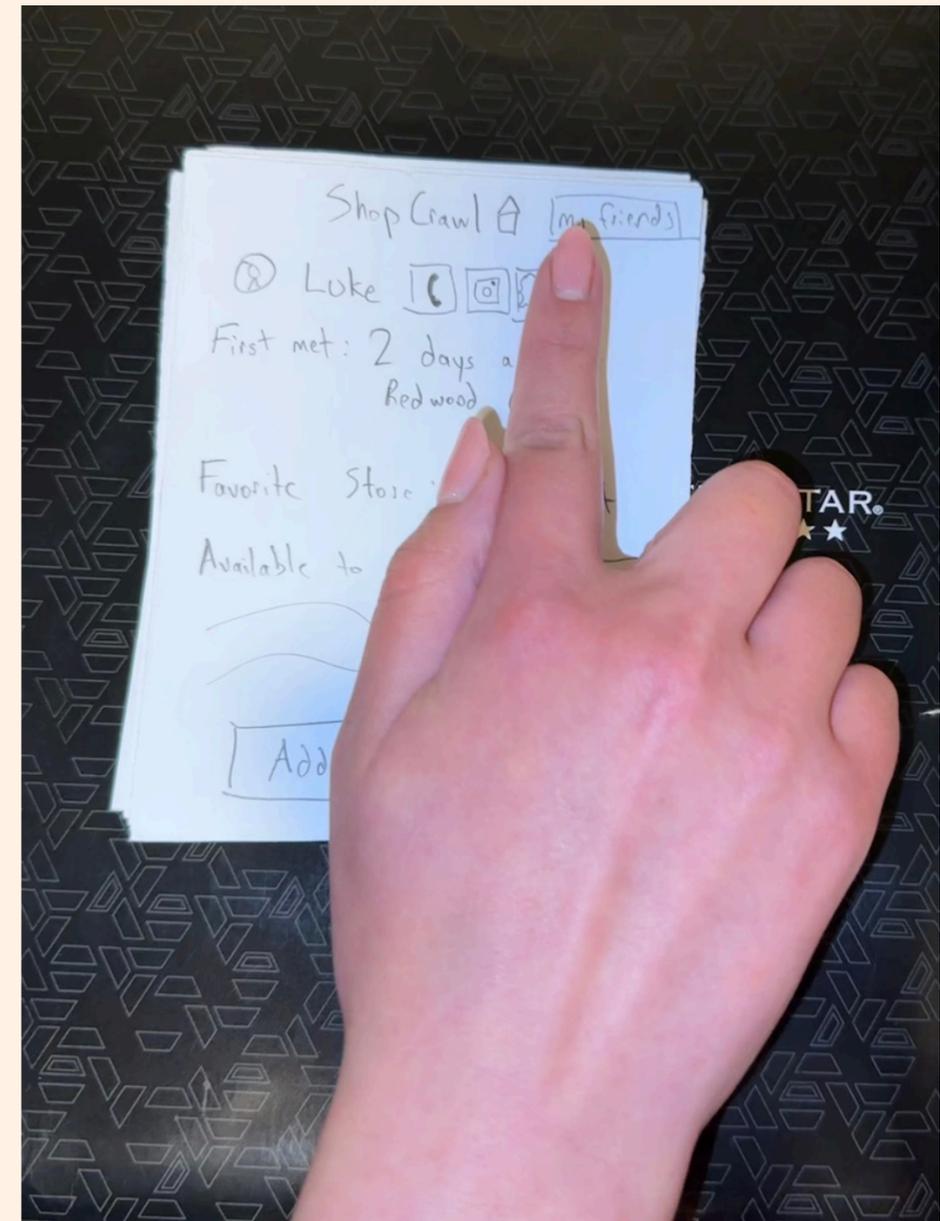


Test Results - Efficiency

Scale of 1-5, how easy was it complete the last task

Blair

"I don't want to add a friend if I don't know anything about them."



DISCUSSION

"I don't want to add a friend if I don't know anything about them."

Implications

Catastrophic issue: social safety and trust.
Blair refused to add a friend without knowing more about the person.

Changes

Implement a user reputation system (ratings and reviews) and a report feature.

What Testing didn't Reveal

Will physically meeting the person during a crawl create more trust?

DISCUSSION

"I don't think you need this [my friends] button on every screen."

"There's no back button here."

Implications

Issue: Inconsistent / unnecessary buttons broke task flow and increased frustration.

Changes

Simplify navigation by only keeping universal Back and Home buttons.

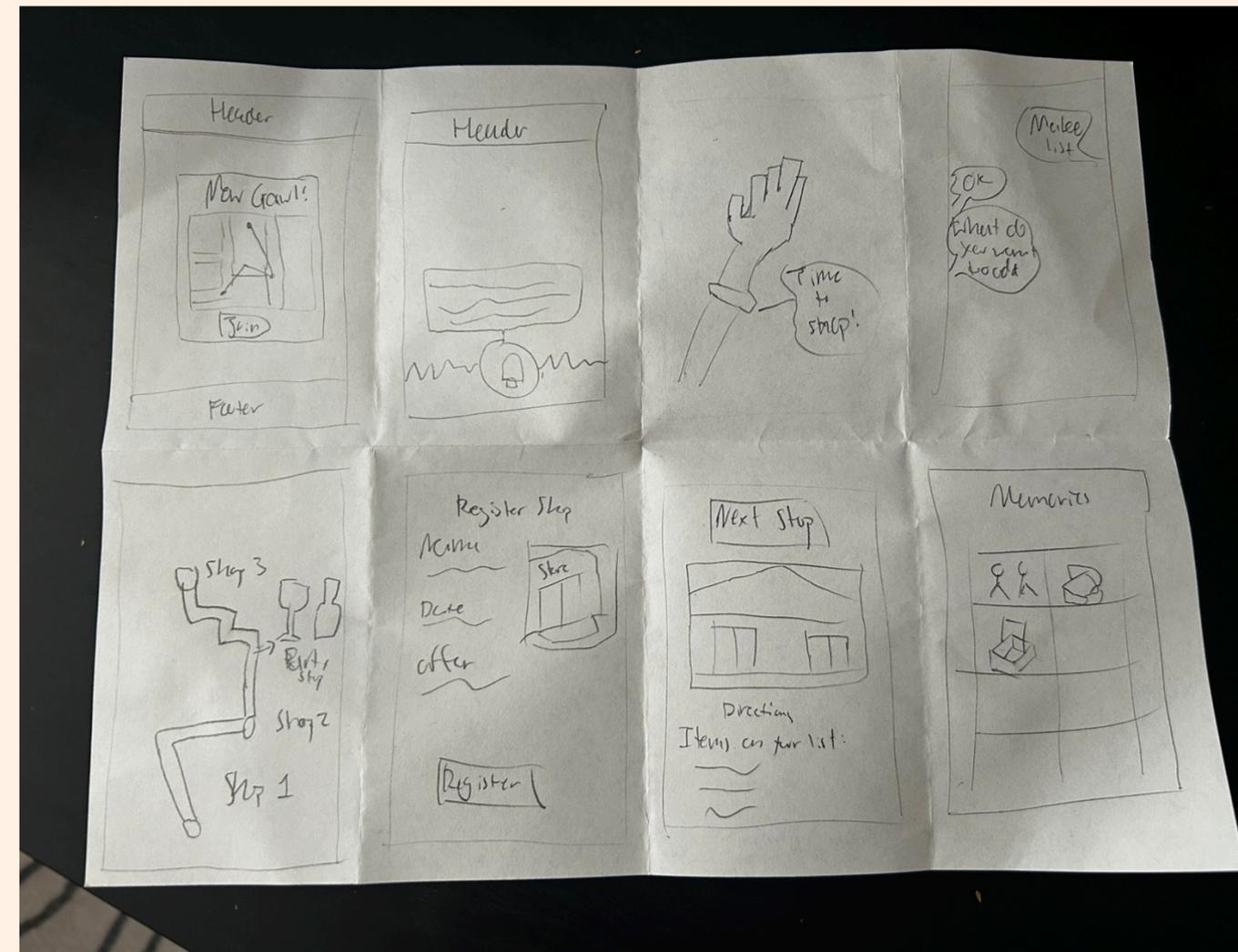
What Testing didn't Reveal

Will platform specific gestures (such as back swipe on iOS) further confuse users?

Appendix



Solution idea sketches



Pros and Cons of a wearable

Pros

Users can quickly check crawl routes, store check-ins, or deals without pulling out their phone. This enables smoother transitions between walking, browsing, and purchasing, all beneficial for in person shopping

A wearable can serve as a visible identifier which signals participation ("I'm on the Crawl!")

The watch form factor naturally supports lightweight, on-the-go engagement. It pushes users to stay active and visit multiple stores, aligning with the experiential, event-based nature of the crawl.

Because interactions are limited to quick glances or taps, users stay engaged in the in-person experience rather than being absorbed in screens supporting more in person connections

Cons

The small screen makes it nearly impossible to browse crawl options, view detailed maps, or compare store info

Adding or inviting friends, customizing crawl routes, and setting preferences require multiple inputs or visual fields, which are cumbersome on a smartwatch UI.

Relying on wearables can exclude potential participants who only have phones, reducing accessibility and making the crawl feel less inclusive to the broader audience.

Most core functions (setup, editing, joining, maps) would still need to happen on a phone. The wearable ends up as a "secondary interface," not a standalone product — limiting its independent usefulness.

Pros and Cons of a wearable part 2

Because of the downsides of a wearable (namely the small screen enabling difficulty to perform our tasks, and exclusivity it has by not being widely available), we decided against it

Justification of our Goals and

Goal

Measurements

Goal

Efficiency and Ease of Use

Why logical based on the current progress of the project: In our bare bones prototype, long completion times or confusing navigation show where our concept or wording fails.

What these goals mean for particular solution moving forward: Ease of use is key, since users will interact with this during chore runs. Early data helps us identify friction before investing in high-fidelity design.

Engagement and Eagerness

Why logical based on the current progress of the project: We are designing for social connection. Engagement helps us gauge whether the basic concept sparks enough interest to be adopted beyond a single use, even at its bare bones.

What these goals mean for particular solution moving forward: We need to ensure the app is not only usable but enjoyable, motivating users to return for future crawls. High engagement signals strong community potential.

Test Preparation

Script

Introduction

"Hi, we're testing a prototype of our app called ShopCrawl, which helps people join, create, and connect through social chore shopping crawls. I'll ask you to complete a few tasks in the prototype, one at a time. Please think aloud as you go. [Name] will observe and take notes, while [I] will be the facilitator and computer moving around the paper prototype. Before we begin, I'll briefly demo the system so you understand how the app works."

Brief Demo

"You've just opened ShopCrawl because you want to join a crawl happening near you. Your task is to find a crawl that looks interesting and join it. Remember to think aloud as you go."

Task Testing

Task 1 - Join a Crawl (Simple)

"You've just opened ShopCrawl because you want to join a crawl happening near you. Your task is to find a crawl that looks interesting and join it. Remember to think aloud as you go."

Task 2 - Create a Crawl (Moderate)

"Now, imagine you want to create your own crawl."

Task 3 - Connect with Someone from a Past Crawl (Complex)

"Now, imagine you want to reach out to someone you met on a past crawl, and then add them as a friend."

Wrap up

1. "On a scale of 1-5, how easy was it to complete the last task?"
2. "On a scale of 1-5, how interested are you in using ShopCrawl again?"

Overview of Each Page / Demo Flow

Start with the home screen:

- Join Crawl, create crawl, past crawls buttons
- My friends page button

Each screen can go back to the join / create / past or the my friends

My friends:

- My friends screen
- Add or find both lead nowhere

Join Crawl:

- Home screen (sliding view of different ones), arrow to others
- Join button ->
- Create -> create crawl

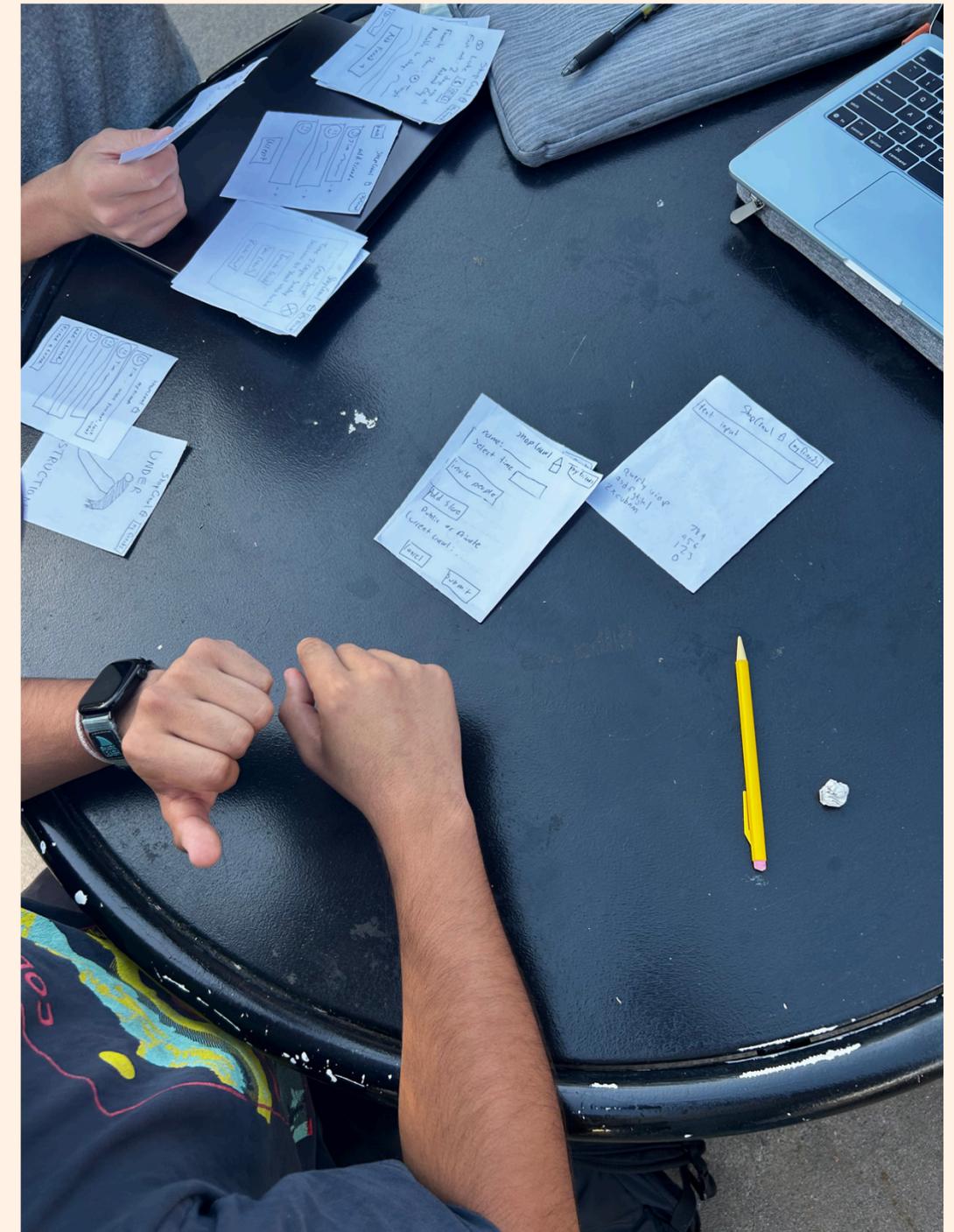
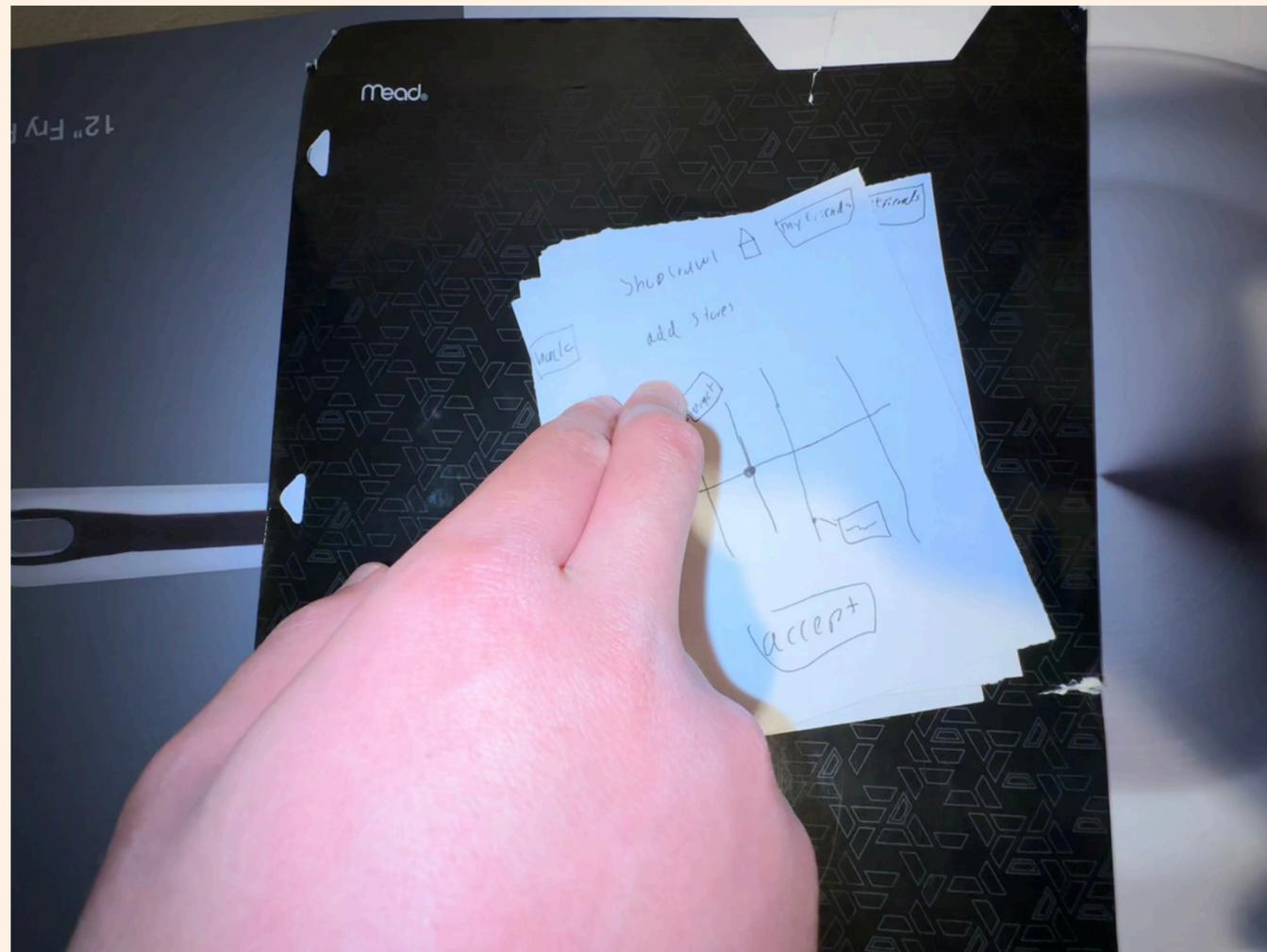
Past Crawl

- Past home: List view of all the past crawls you have been on, showing how long ago it was, location, number of people that went, and number of shops visited
- Click on a crawl -> Full view of that specific crawl. Has list below of the people that went and the stores visited.
- Click on a person -> View of that person's profile, with their number, social media, bio, and button to add friend.
- Add friend -> Friend added to friend list

Create Crawl:

- Home screen (information)
- Add people -> people page
- Add store -> store page
- Submit -> Preview / submit

Unused Photos of Testing in Action



Log of critical errors

Severity, Severity Level, Count, Examples

- 0 - No problem (Positive): 5 (navigating home, adding store)
- 1 - Cosmetic: 4 (remove go to my friends)
- 2 - Minor Usability: 5 (no labeling on view crawl page)
- 3 - Major Usability: 4 (missing info for editing friends)
- 4 - Usability Catastrophe: 1 (No safety/rating system)

Organized Log of critical incidents from Testing 1

Feature / Area	Incident Description	Severity (0-4)	Rationale / Notes
Friends List	No rating or report system for safety; one tester refused to add a friend without more info.	4	Critical trust failure: prevented core social interaction. Undermines safety, usability, and user willingness to engage.
Navigation / Layout	Inconsistent or missing "Back" buttons across pages.	3	Major usability problem: repeatedly broke navigation flow.
Navigation / Layout	No section for "Ongoing" or "Planned" crawls.	3	Missing functionality blocked user goals.
Create Crawl	Two submit buttons confused users — unclear which does what.	3	Major confusion; could lead to data loss or errors.
Join Crawl	Crawls didn't show public/private status.	3	Missing critical decision-making info.
Navigation / Layout	"My Friends" button on every screen was unnecessary.	2	Caused clutter; users expected simpler navigation.
Friends List	Confusion over "Add a friend" vs. "Friend a friend."	2	Ambiguous wording created uncertainty.
Create Crawl	Location input not clearly separated from name field.	2	Form clarity issue; delayed completion.
Create Crawl	"Current crawl" field unclear — users unsure it was for description.	2	Labeling issue increased cognitive load.

Organized Log of critical incidents from Testing 2

Create Crawl	No visual indicator for pending/confirmed invites.	2	Lack of feedback reduced user control.
Join Crawl	No "Request Join" option for private crawls.	2	Users expected interaction control.
Create Crawl	Store order unclear; participants wanted numbered list.	1	Cosmetic clarity issue; simple fix.
Create Crawl	Privacy field redundant; should be near crawl name.	1	Layout inefficiency.
Join Crawl	Extra "Create Crawl" button unnecessary.	1	Cosmetic redundancy.
Past Crawls	Wanted to rate past crawls and see averages.	1	Enhancement idea; low severity.
Create Crawl	Users liked seeing the map when adding stores.	0	Improved orientation and engagement.
Create Crawl	Participants liked having a starting "meeting spot."	0	Added realism and social coordination.
Join Crawl	Users appreciated checking people's profiles before joining.	0	Builds trust and social connection.
Overall Concept	Participants found making chores fun appealing.	0	Supports Engagement & Eagerness goal.
Privacy Options	Public/private crawl options were well-received.	0	Users valued privacy control.