

Assignment 5:

Low-fi Prototyping & Pilot Usability Testing



CS 147 Winter 2021

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2. Introduction

a (1). Value Proposition

Create with creators.

a (2). Mission Statement

Our goal is to bring the communities of creators together in order to leverage a larger group size to reduce the difficulties associated with navigating a lease for a physical space.

b. Problem / Solution Overview

Moving into a physical space can be hard to accomplish and for small businesses in the creative industry (designers, artisans, custom creators etc.) this struggle is only amplified. Often, these small business owners not only have a hard time sourcing a physical space to work in, use as a studio or to sell their products in, but these spaces are often too: expensive, large and are difficult to navigate as a single leaser with regards to taxes, levies and associated legal fees. Coalease, is a platform that aims to bring creators together under one roof to lease together, complement each other's products (synergize), and build a creative community.

3. Sketches

a. Overview of the 15-25 sketches

For each sketch, a 1-2 sentence description is included in the caption below.

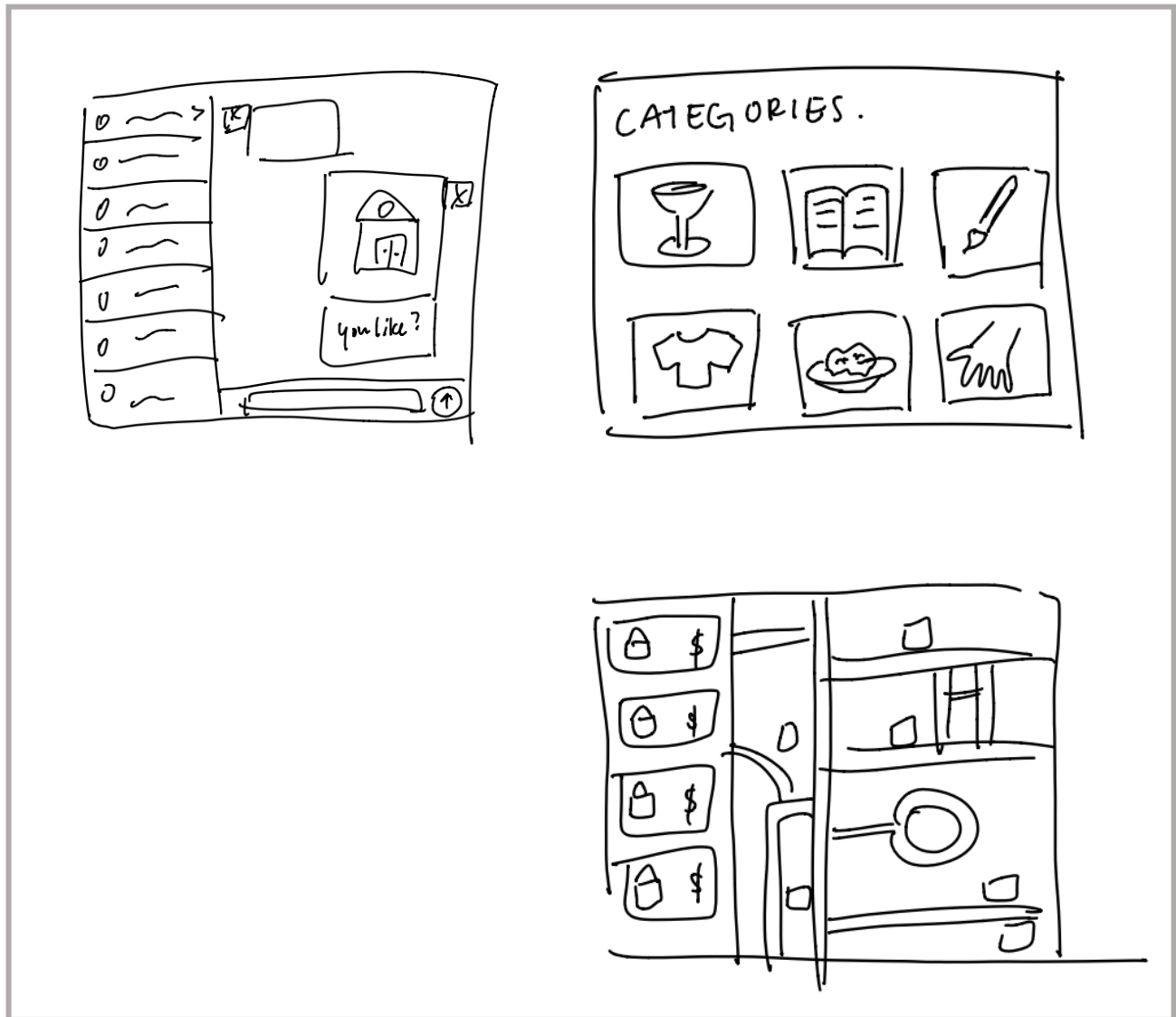


Figure 1: Tablet (based on creator categories find other creators and propose a location through chat from a map of options)

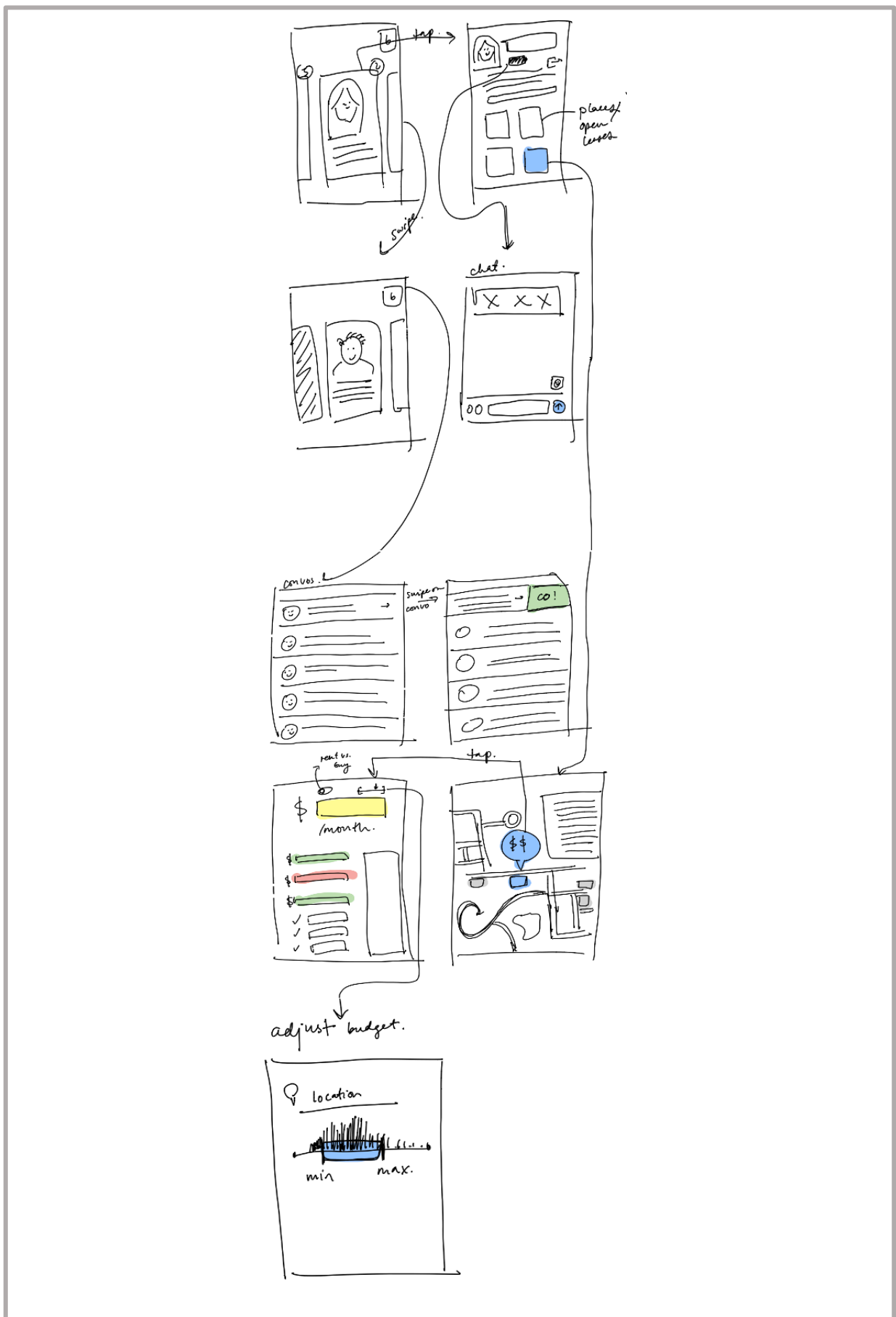


Figure 2: Native Mobile Application (matching first on people, then location is chosen)

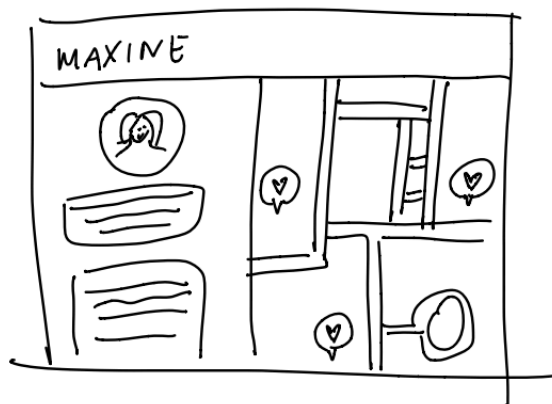
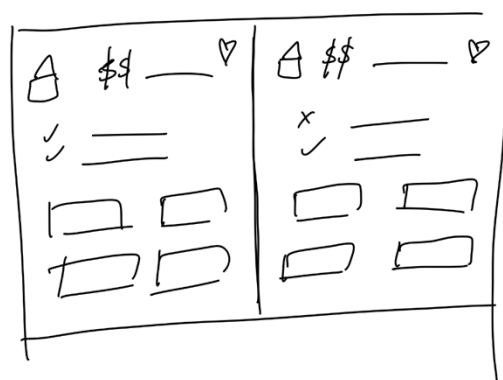
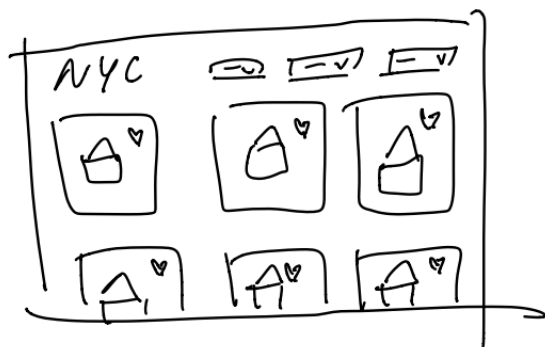


Figure 3: Desktop (matching on locations, then finding other people interested in that specific location)



Figure 4: LinkedIn Plugin (upon viewing someone's profile, directly see if they're a Coalesce match)

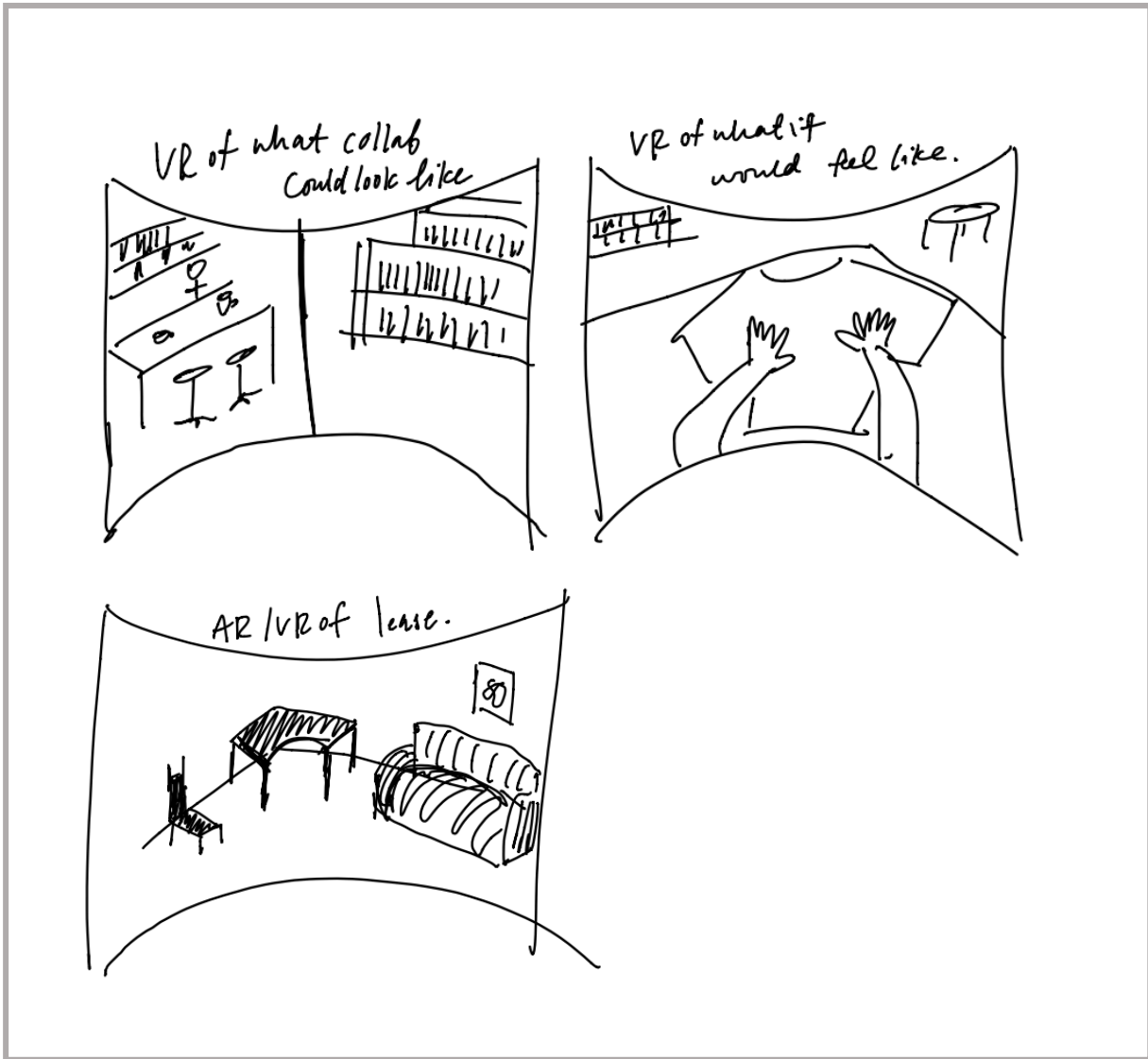


Figure 5: AR/VR (an app to visualize the studio space in collaboration with the Coaleaser)

b. Top 2 Designs with Further Storyboarding

The top two designs were the Web Application (matching based on location) and the Mobile Application (matching based on people). Below are the more detailed storyboards for these two designs.

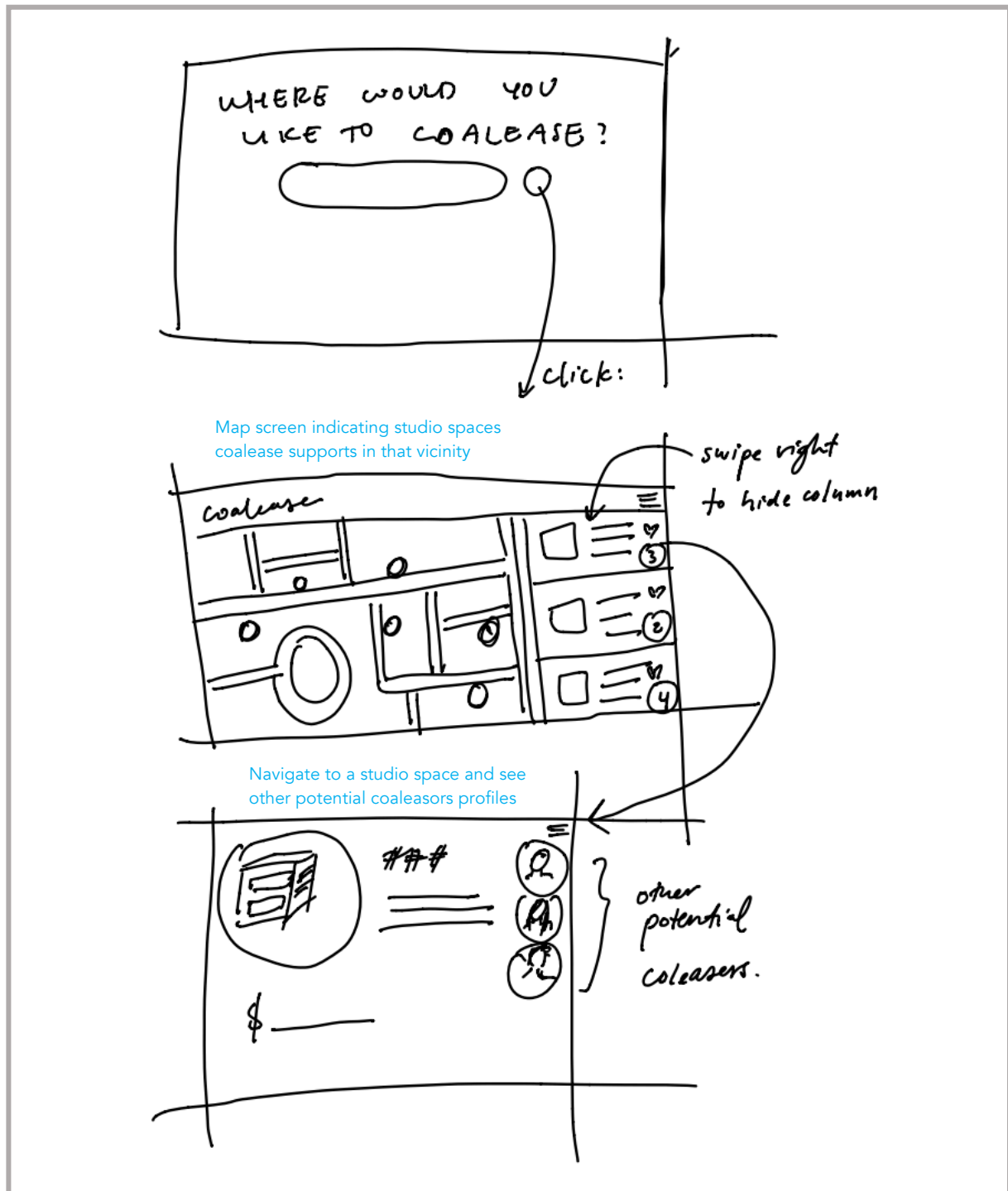


Figure 6: Web Application (matching based on location) – Storyboard

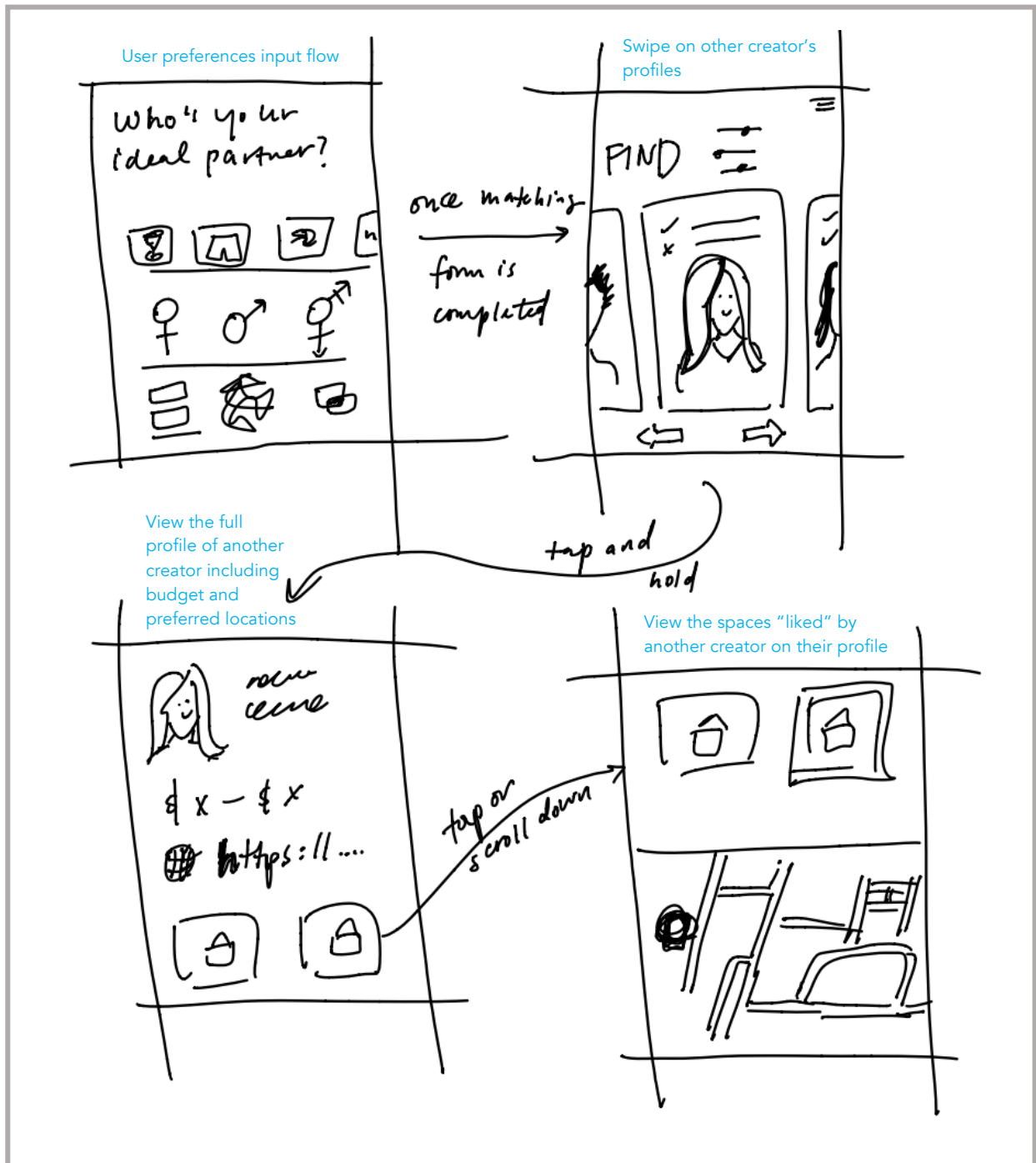


Figure 7: Native Mobile Application (matching based on people) – Storyboard

4. Selected Interface Design

a. Storyboard for 3 tasks

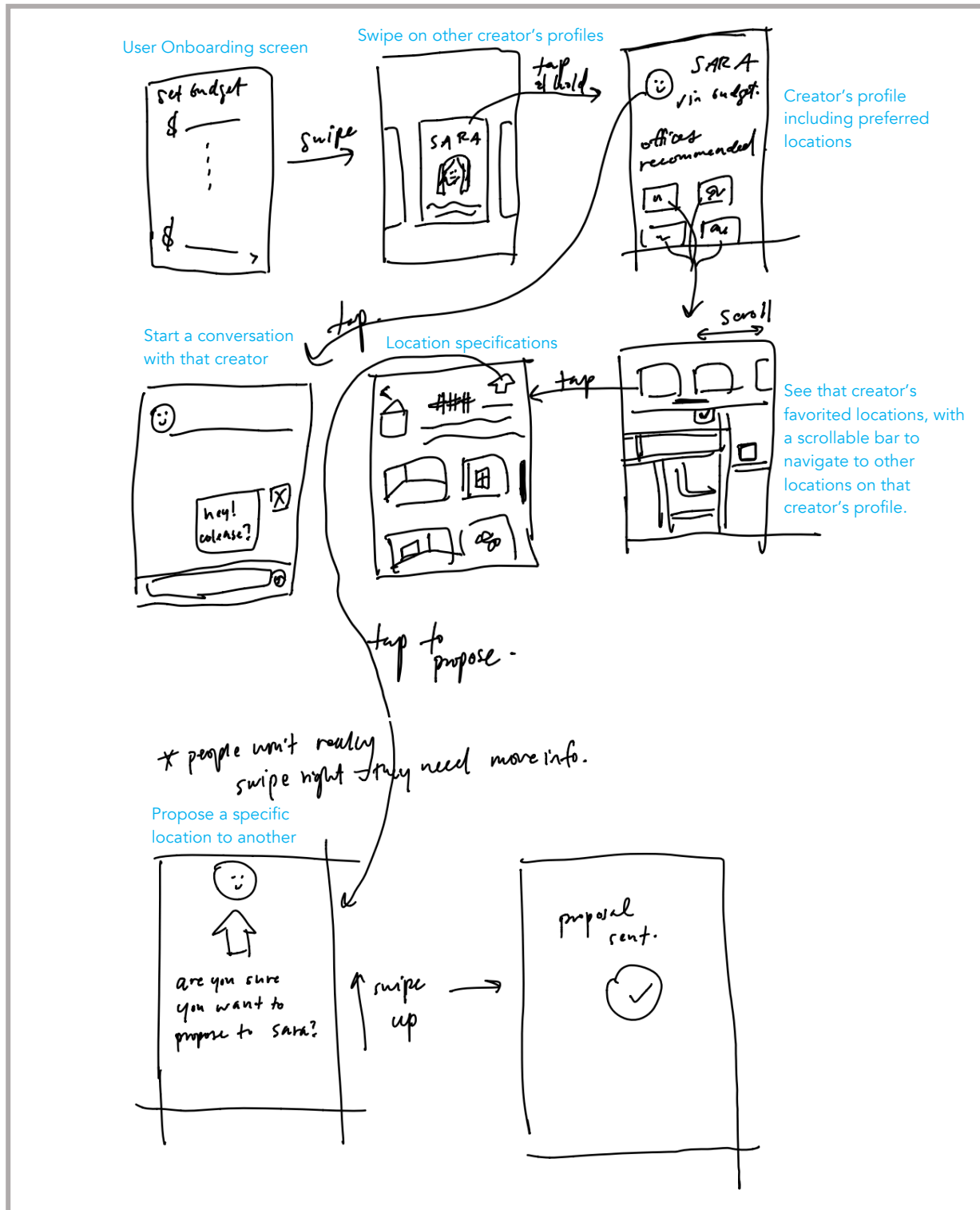


Figure 8: Task 1 – Find an affordable place to rent with other creative small business owners.

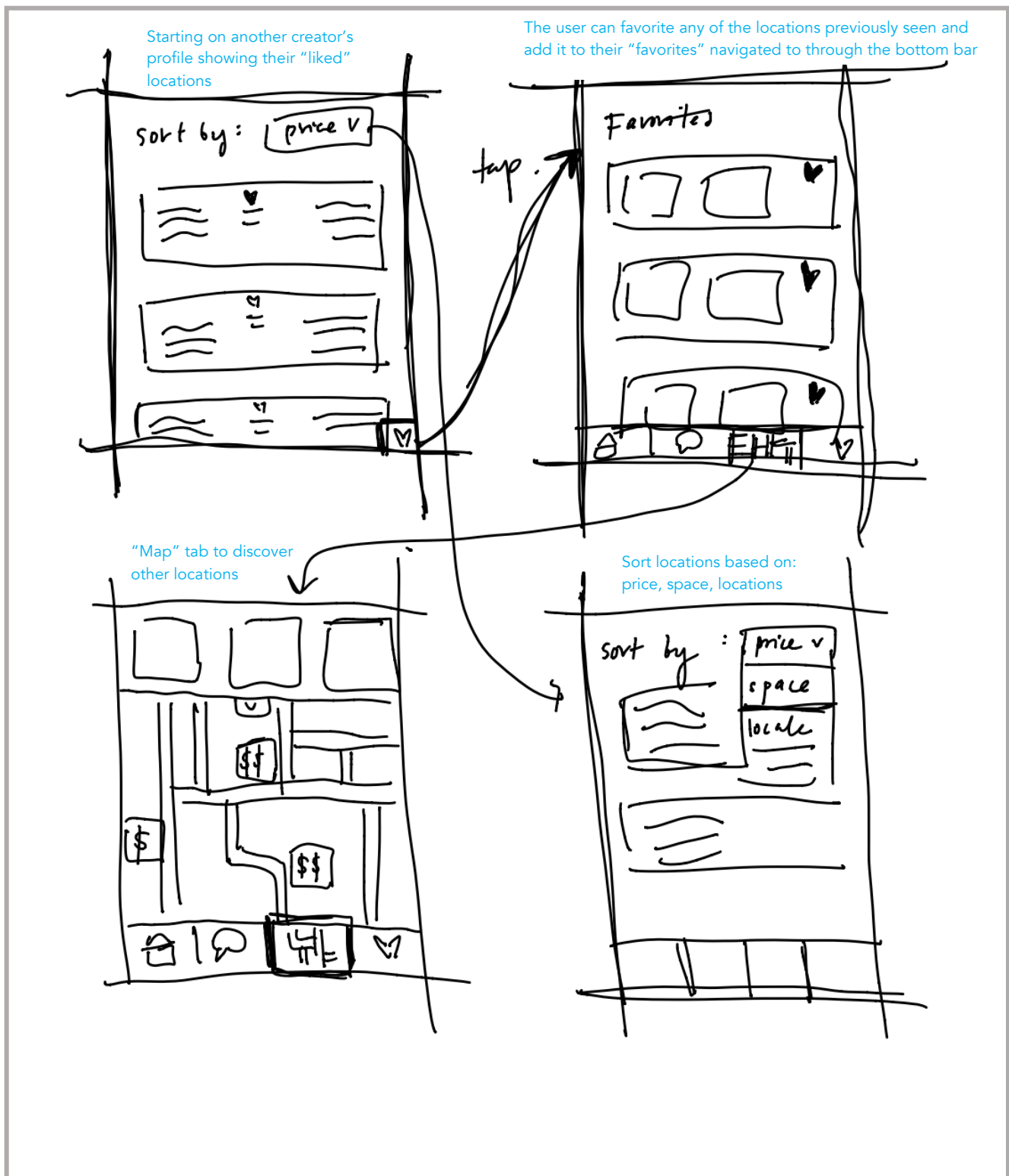


Figure 9: Task 2 – Compare different leasing options to determine what space is best for you and your fellow creators.

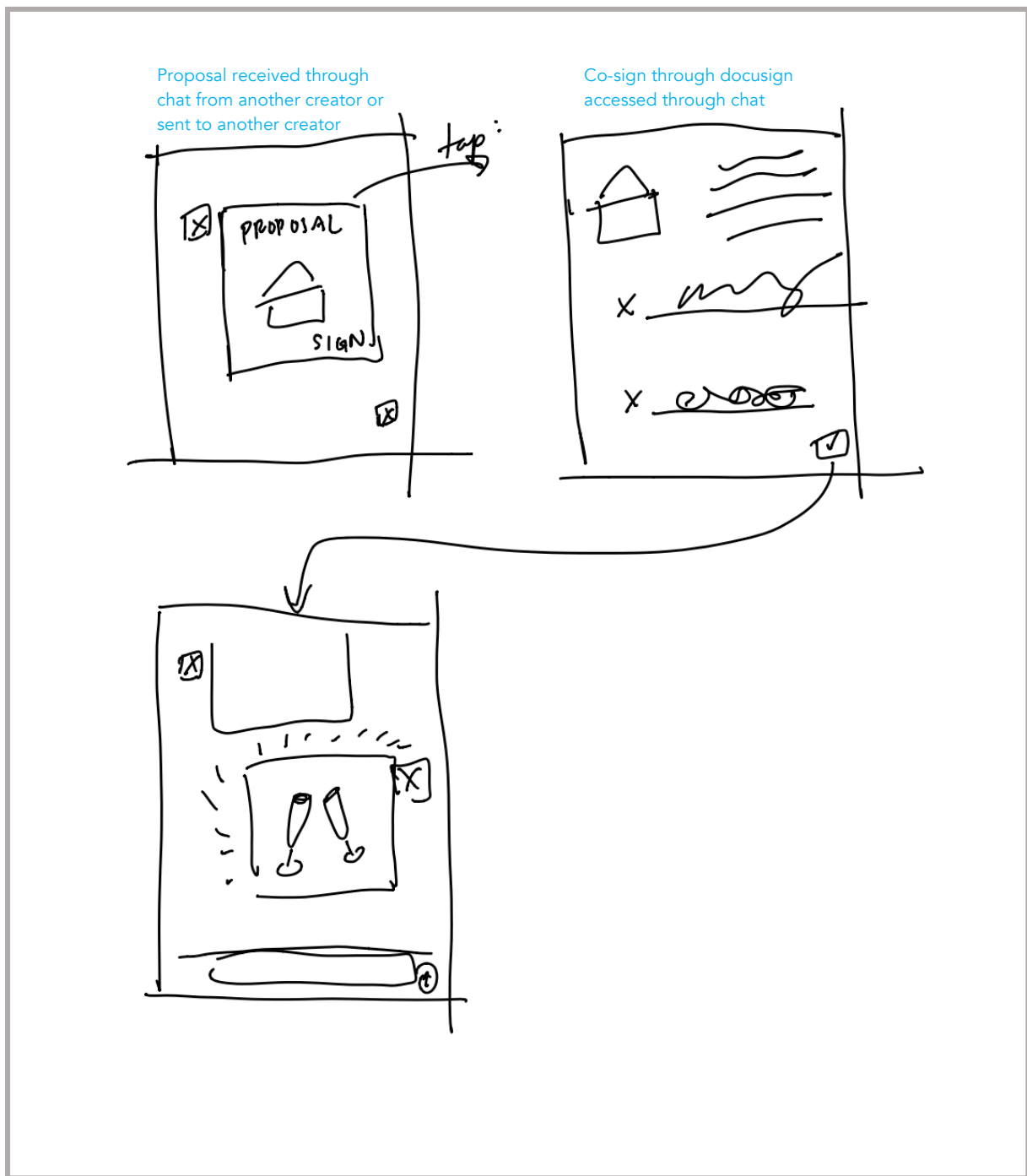


Figure 10: Task 3 – Navigate and finalize a leasing agreement along with the other creators sharing your space.

b. Reasoning for Selection

Web Application (matching based on location)

Pros	Cons
<ul style="list-style-type: none">○ Individuals that are grouped together might not prefer the same location, so prioritizing this would ensure any group is interested in the same studio space etc.○ Users would be more comfortable doing business on their desktops, often with other business-related information on hand○ Larger interface to display and inspect locations	<ul style="list-style-type: none">○ People might compare us to Zillow (and other leasing websites), therefore losing our niche as a creator-centered platform that aims to build a community○ Less additional services/data our platform could make use of e.g., current location, connect their profiles to other apps on their phone○ Push notifications not as helpful

Native Mobile Application (matching based on people)

Pros	Cons
<ul style="list-style-type: none">○ Within a city, individuals prioritize who they share a space with rather than the specific street they are on (the location can be ubiquitous)○ A mobile interface is more conducive to making connections (people are already comfortable interacting with social media networks on their phones)○ Enable push notifications○ Be more relevant to building a community of creatives as opposed to a leasing website	<ul style="list-style-type: none">○ Many individuals prefer to do business on their laptops/desktops as opposed to their phones○ A mobile interface would show less information at a time to our user○ The platform might be related to being similar to "Tinder" in that people are first judging other people they would like to connect with

We ultimately decided to combine both aspects of these designs. We maintained the fact that we would be creator-centered and focus on the people on our platform but indicated preferred locations on user profiles and made subsequent matches based on proposing options to coalesce with certain location photos. When opening up the app,

the user may want to see creators in their vicinity, therefore with a mobile application and location features we can also present a smaller subset of creators on the platform. The primary location focus design becomes rather unnecessary given the fact that we would still be able to allow users to connect with creators first, that may already be sorted based on location. This would also allow our platform to more efficiently synthesize synergies between our users with a mobile application, people focused design.

Listed in the following table is a summarization of the functionality of the artifact.

Interface Element	Functionality
Home Tab	Swipe through creator profiles in your specified location. Click on any creator profile to see a portfolio of their work and leasing preferences.
Profile Coalease Preferences	A creator's profile where their: budget, style, location preferences are shown.
In-app Chat Tab	Navigated to from a creator's profile page displayed with a chat icon, in order to reach out initially and start a coalease conversation. Also, will be used to facilitate the signing of the lease.
Preferred Location page	Navigated to from a creator's profile using the "see more arrow" in order to identify a potential creator's preferred studio spaces. A user may then also like this space for their own profile.
User onboarding flow	Welcome landing page, followed by a survey to collect budget, style, portfolio preference and other proposed synergies between users.
Favorites Tab	Display all locations and studio spaces that a user would have favorited in the past.
Single Location Page	When clicked on this will show a scrollable gallery of the studio, together with pricing, sizing and other facilities offered.

Map Tab	Allow a user to search and find studio within a certain vicinity and add to their favorites, which will show up on their user profile.
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5. Prototype

Description

We designed the prototype in Marvel, using screens sketched out on an iPad. This allowed us to easily conduct interactive tests remotely with our lo-fi prototype. The accessible link to the Marvel project is:

<https://marvelapp.com/prototype/g0i77b4/screen/76670787>. Additionally, the screens have been grouped based on relevant flow below:

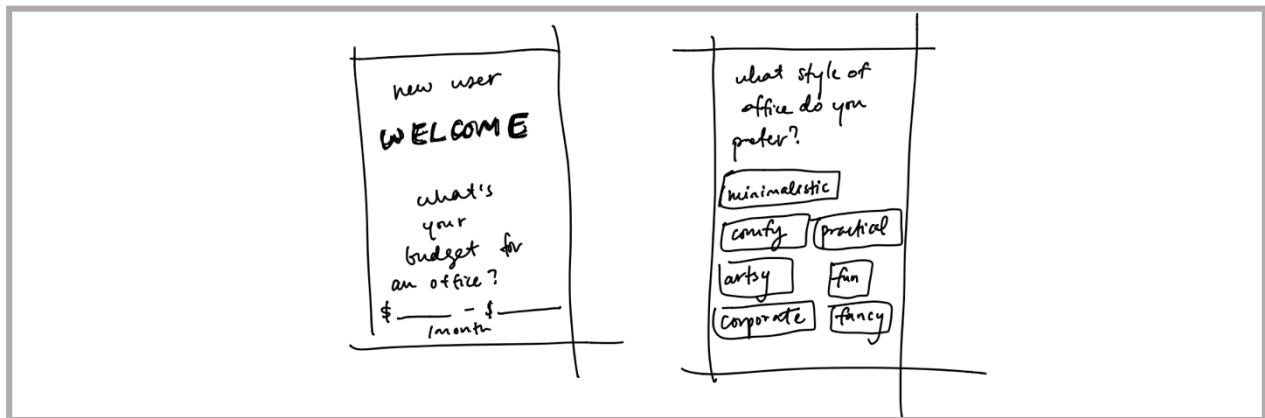


Figure 11: User welcome/onboarding Flow



Figure 12: Coaleasor discovery and Profile Flow



Figure 13: Location Discovery Flow

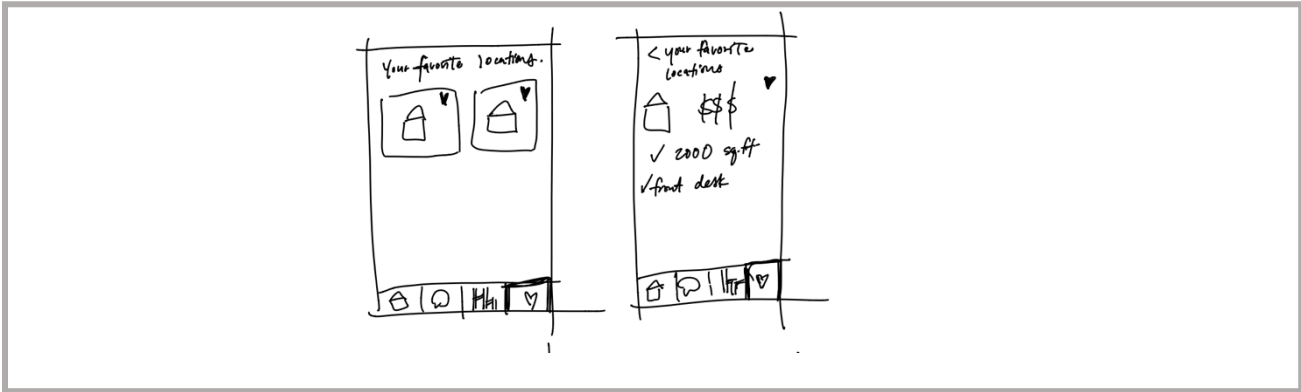


Figure 14: Favorites Tab (on locations) Flow



Figure 15: Conversation/chat Flow

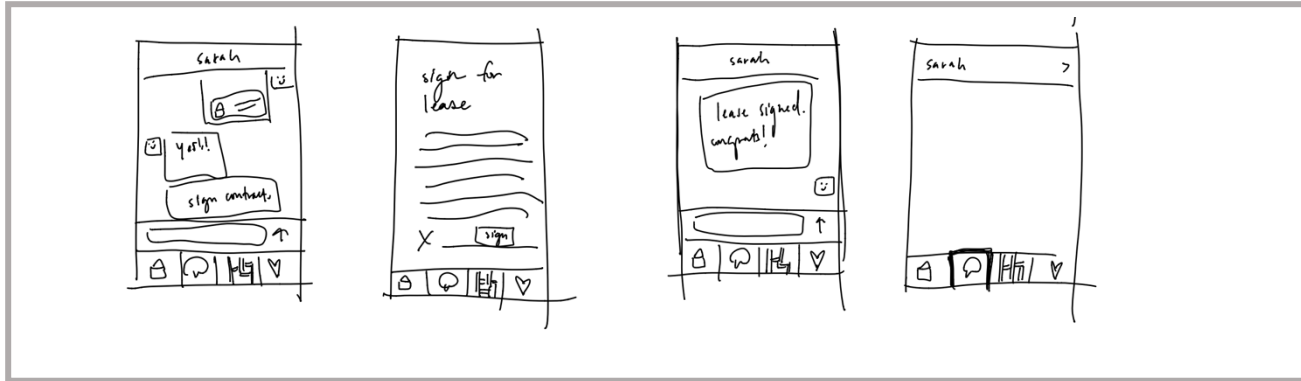


Figure 16: Lease signing/confirmation Flow

6. Testing Methodology

a., b. Participants and Environment

- We wanted creators. We attempted to get in contact with creators in multiple spaces, such as musicians or fashion designers, but ultimately settled on visual artists (one graphic designer and two photographers) as we believe these are the bread and butter of our target market, and all three expressed the view that galleries are in short supply and difficult to search for.
- Our first participant was a landscape photographer from Aspen, Colorado named Cameron Allan. Cameron is not currently looking for gallery space but expressed interest in using our service in the future; we chose him because we wanted to get a youthful perspective of someone in the photography industry who wasn't currently looking for gallery space but would potentially use our service in the future.
- Our second participant was a portrait photographer from Jacksonville, Florida named Jesse Myers. We wanted the perspective of someone a bit older as they would provide good context about how helpful our app would be in showing them where gallery space was located in different locations. Jesse has used gallery space many times in the past and is quite knowledgeable about the industry, so his perspective was invaluable.
- Finally, our third participant was a graphic designer from Denver named Abel Ramirez. Abel has helped Jesse on some projects in the past so has a bit of experience with finding gallery space, but more importantly is relatively well-connected within the art scene at his school and so could provide context for what his classmates would find useful.

c. Tasks

1. "Like" a specific place on the map
2. Find a person to coalesce with
3. Start a chat with that person
4. Compare places that you and that person have liked
5. Propose one of those places to the other person
6. Sign a lease agreement

d. Procedure

We began by giving a brief overview of our application to our participants, including our target demographics and intended uses. We then gave them a task at a time to perform using our application in Marvel, asking them to be as verbose as possible while walking through the app and taking note of where they thought they should go to complete each of the tasks. We timed each of the tasks to get a sense of which was the most difficult and which was the easiest.

e. Test Measures

- Successes – The tasks and subtasks that our participants executed with a lot of ease
- Errors – The points in our app that confused our participants, specifically parts of the app that generated many questions
- Timing – How long it took for our participants to execute our tasks

f. Team Member Roles

- Computer: Kaili
- Recorder: George
- Greeter: Kiara
- Facilitator: Robert

7. Results

- All tasks successfully completed
- “The process is so archaic – I would definitely use the app to find gallery space when I need it” - Participant #2
- Desire to include other aspects on a coaleasors profile instead of a typical picture etc.
- Verification concerns on potential coaleasors
- Confusion on what the map logo on the bottom bar represented
- Feature Suggestions
 - Profiles used to incorporate the overall aesthetic and portfolio of coaleasors
 - Include a Verification flow

Task execution timing

	P1	P2	P3
“Like” a place on the map	1:27	1:48	:42
Find another person with similar vibe	1:23	1:02	:20
Chat with the other person	0:23	:05	:03
Compare common “liked” places	0:27	:03	:05
Propose a place	0:14	:15	:04
Sign lease agreement together	0:09	:10	:07

Discussion

All three participants found the app intuitive and an exciting prospect. Jesse in particular stressed how difficult it was to find gallery space in the past and how archaic the process felt to him; he thought that our idea would make the process considerably easier. Additionally, the most confusing aspect to most participants was the map logo at the bottom; the rest of the bottom bar was very intuitive and easy to navigate.

One common theme we found was that all three of our participants wanted some form of verification for both other creators and the people selling galleries, similar to an Airbnb “verification” system. They worried that the person on the other end of the line might be untrustworthy or looking to scam them, so they wanted some means of ensuring that people in the app were legitimate. We plan to include a verification system in future versions of our application.

Another common theme was the information included on the card; all of our participants provided valuable insight into what information they would find helpful in searching for a potential co-leasor. Cameron was satisfied with the information we included: Abel asked if we could include a specific medium within the art (i.e. landscape photography within photography) and Jesse thought that including the expected lease length would be helpful for creators.

We may have to reconsider the flow for “liking” a place- two of our three participants were not immediately clear as to how they would go about “liking” a place, as they thought that they should go to the heart at the bottom of the screen in order to “like” somewhere. We will consider changing the heart to a more general “profile” tab where you can navigate to your “liked” places.

Ultimately, all three participants were pleased with the initial design and thought the application had promise, and all three said they would use the app if it were released and they were looking for gallery space. This was encouraging to us and will provide foundation for us to make changes going forward.

Appendix

Incident Severity Ratings

Red text denotes errors, green text denotes successes.

Participant 1:

Incident	Severity
Looking for chats before finding a person to lease with	3
Wanted to be able to go back from someone's profile to the list of other creators (currently no button)	4
Wanted to be able to tap places directly on the map, not just up above the list of places	3
Tried to swipe right on someone to say he was interested instead of tapping/chatting	3
Thought bottom bar interface was intuitive	2
Really enjoyed having an entire tab dedicated to "liked" places, very easily accessible	3
Enjoyed being able to see other peoples' bios in their profile page with desired locale traits	1

Participant 2:

Incident	Severity
Thought you should press the bottom right heart to "like" a place	4
Would like rental length to be a feature of the profiles	4
Wanted tapping the top row of places to correlate somehow to a place in the map (hover turns red)	3
Would like something like Airbnb "verified" user for other profiles	4

Comparison tool for places they've both liked is incredibly useful	4
Liked the design of the profiles, thought the occupation was the most important aspect so liked that that was highlighted	3
Liked that the profile cards weren't too cluttered- enticed him to click on them to learn more	2

Participant 3:

Incident	Severity
Thought you should go to heart tab to like a place before he looked at map	4
Would like specific medium (landscape photography, surrealist painting) to be a feature of the profiles	3
Speech bubble icon next to "propose" would be helpful	1
Liked that the top of the "both liked" section was both liked followed by each individual's likes, good way to explore	4
Liked that you could specify the style of office you wanted- thought that was helpful in finding matches	3

Consent Form

This student team is interviewing and observing as part of the coursework for Computer Science course CS 147 at Stanford University. Participants provide data that is used to understand the possible opportunities of the design. Data may 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 (George Younger, Kaili Wang, Robert Ross, Kiara Nirghin) 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 maintained 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 research and my participation in it. I give my consent to have data collected on my behavior and opinions in relation to Coalease's research. I also give permission for images or audio/video recordings of me being interviewed to be used in presentations or publications, as long as I am not personally identifiable in the images/video. I understand that I may withdraw my permission at any time.

Name: Cameron Allan

Participant Number: 1

Date: 2/10/2021

Signature: Cameron Allan

Witness name: George Younger

Witness signature: George Younger

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Name: Jesse Myers

Participant Number: 2

Date: 2/10/2021

Signature: Jesse Myers

Witness name: George Younger

Witness signature: George Younger

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Name: Abel Ramirez

Participant Number: 3

Date: 2/10/2021

Signature: Abel Ramirez

Witness name: George Younger

Witness signature: George Younger