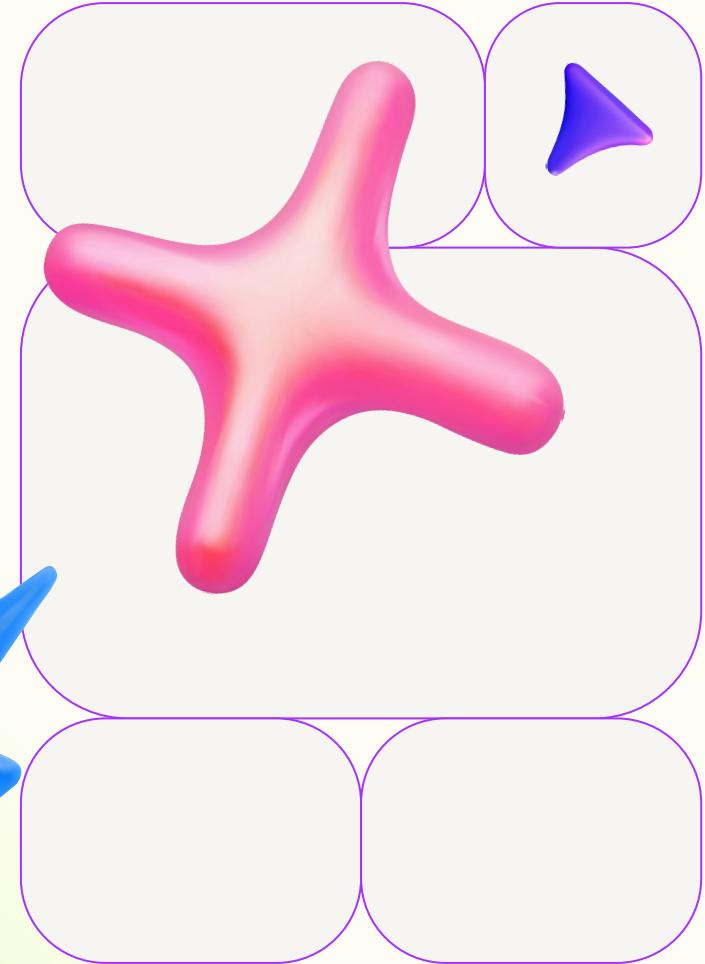
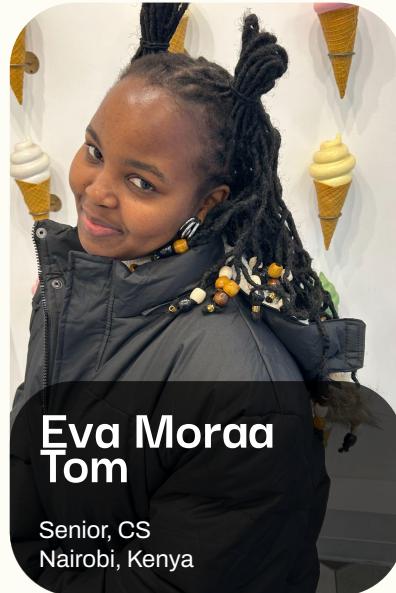


STITCH:

**A5 Sketching,
Low-fi Prototyping
& Pilot Usability
Testing**



Meet the Team



**Eva Mora
Tom**

Senior, CS
Nairobi, Kenya



**Maimuna
Muntaha**

Senior, SymSys
NYC, New York



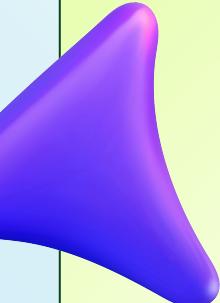
Sunny Sun

Junior, SymSys
Irvine, CA

Behind Stitch!

STITCH

**Stitch small businesses together
through community events.**



Value proposition

“Stitch Small Businesses Together Through Community Events”

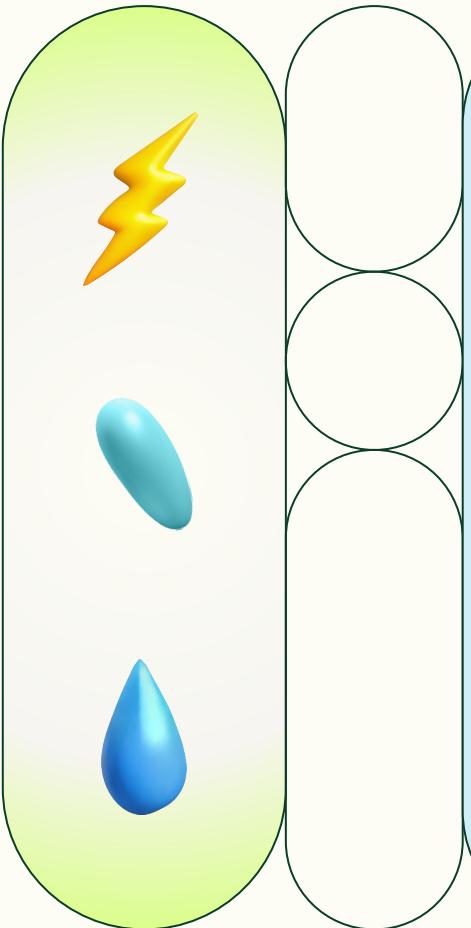
3 core pillars for Stitch:

small businesses, collaboration, & community events

Stitch supports small businesses by connecting them with each other, and with their local communities through co-hosted events.

Stitch strengthens communities built by small businesses and turns community gatherings into engines of shared success.





Problem/Solution Overview

New small businesses are trying to establish themselves.

Old small businesses are trying to keep up with the changing times.

For **all** small businesses, finding support, adapting to a new generation, and creating community has been difficult.

STITCH uses an AI matching algorithm to allow small businesses to collaborate on events to attract new customers.

Agenda

1.

1.

Introduction

2.

Sketching explorations

3.

Selected interface & rationale

4.

Low-fi prototype

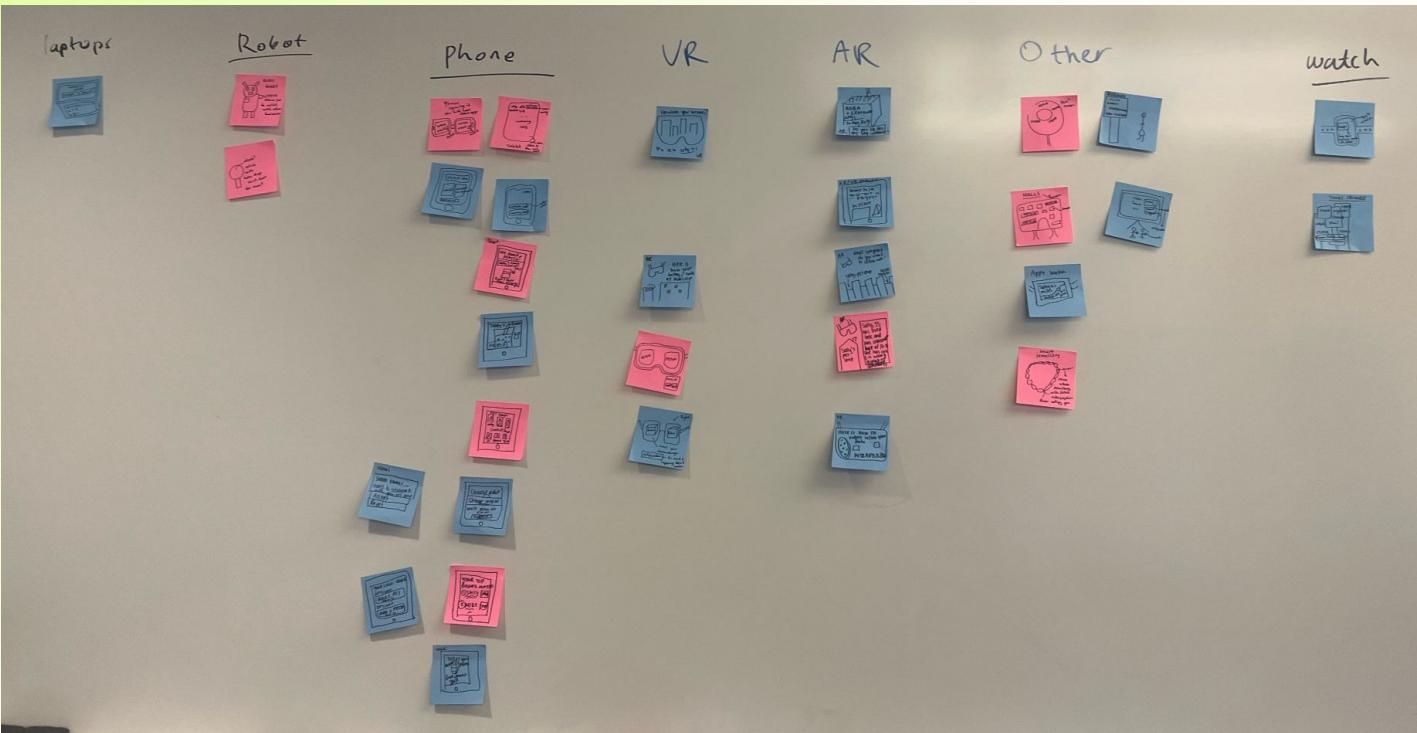
5.

Testing

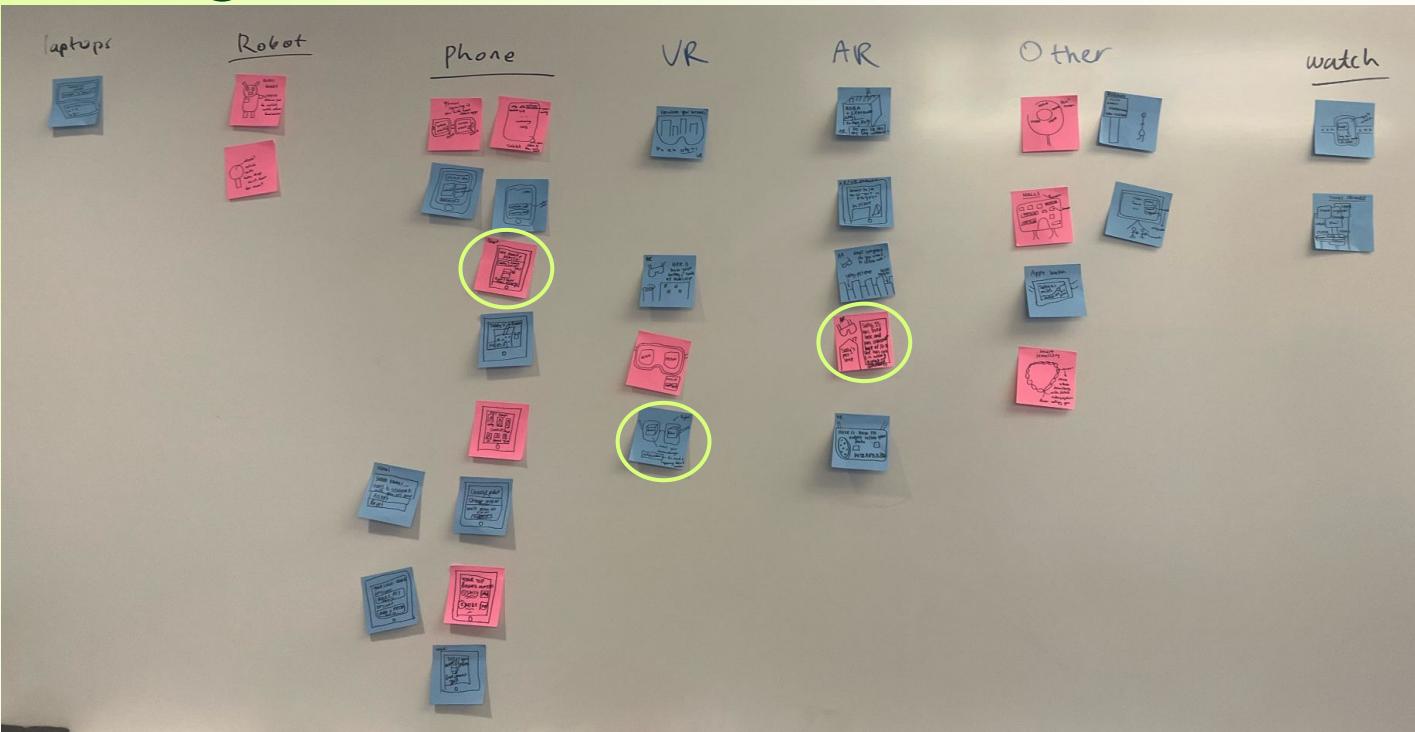
6.

Discussion

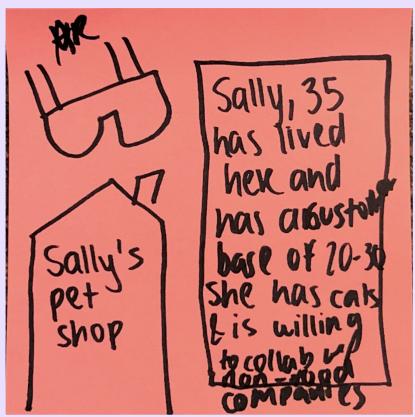
20-30 Solution Sketches



Choosing 3 realizations



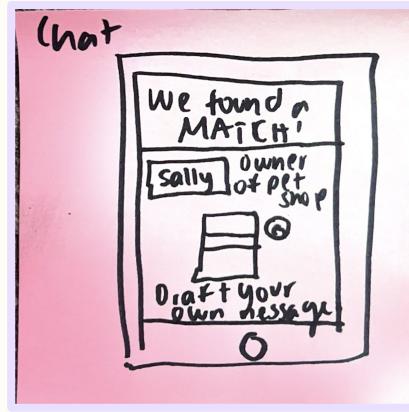
3 distinct realizations



AR

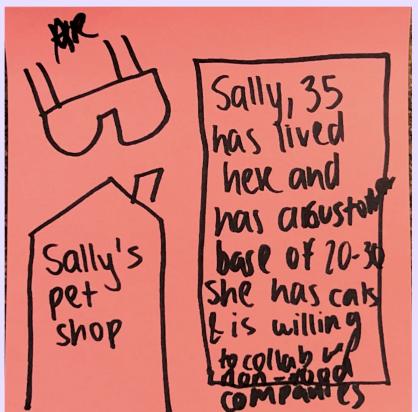


VR

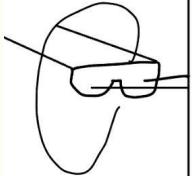


Mobile

AR Realization



AR option



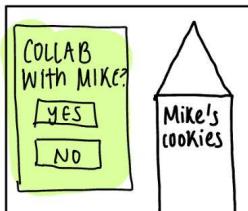
- The user sees stores
- The AR connects to Map to get information about specific shops
- The user can scan shops and select a shop to find information about



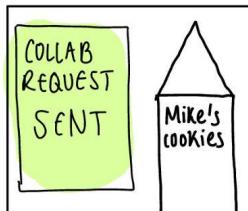
- The AR's UI adds an overlay of information about the shop's owner.
- Shows what type of business this business wants to collaborate with on events.



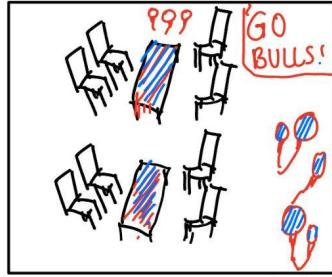
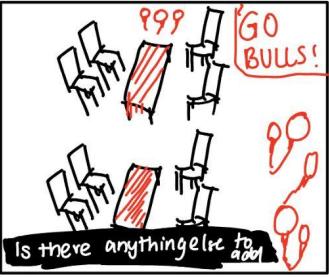
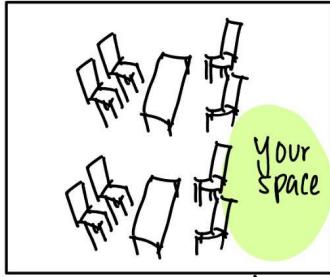
- The AR's UI uses small businesses' information to see whether they are compatible with your shop's!



- After finishing reading about a shop, you can choose to generate a message to send to the business owner about collaboration



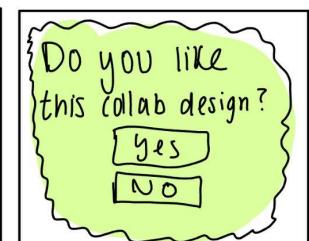
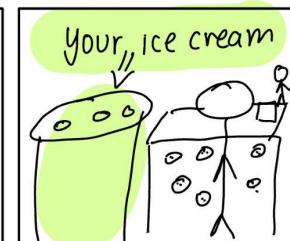
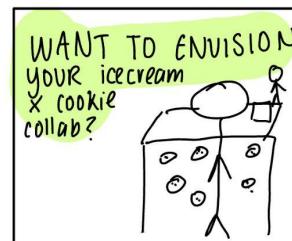
- The App UI has a success overlay to show how a message was sent



- Envision your own store decorated to celebrate community events e.g. local team wins
- Verbally explain what you're looking for
- E.g. the user says the restaurant wants to celebrate the local baseball team, Bulls, winning & use striped deer

- The UI generates simple edited designs of what the space could look like
- E.g. the user says "yes, the team's colors are red and blue"

- add human-added values to business design to envision room more accurately



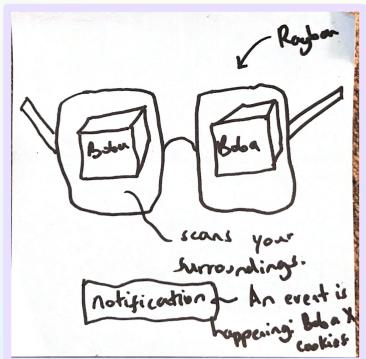
- When you walk into a store that you will/want to collaborate with, you can envision how an event can look with a pre-designed set up so you have an idea of how much space you have

- AR application scans room and thinks about where empty space is/can be made

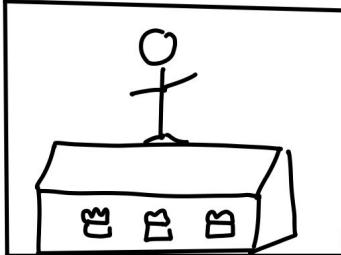
- There will be arrows to the 3d added set up to show where/how to set up event.

- AR UI overlay of Yes/No option to determine whether this design is liked or if UI should re-render room another way

VR Realization



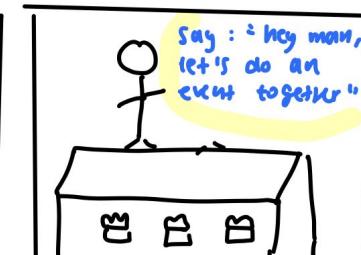
VR :
event
scanner
user puts on
VR headset :



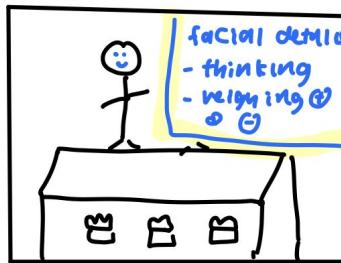
Customer walks into my business



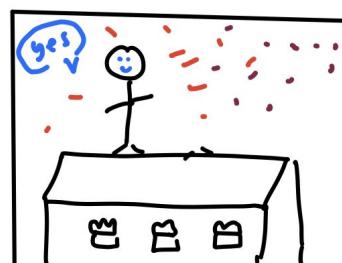
VR glasses tells me how we can collab



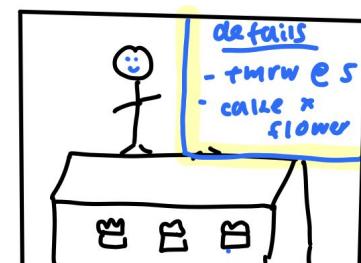
Say : "hey man,
let's do an event together"



VR analyzes facial expression to provide real time thinking



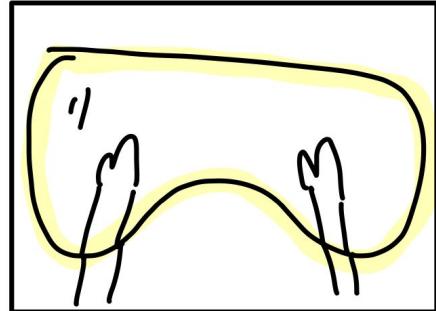
real time celebration confetti



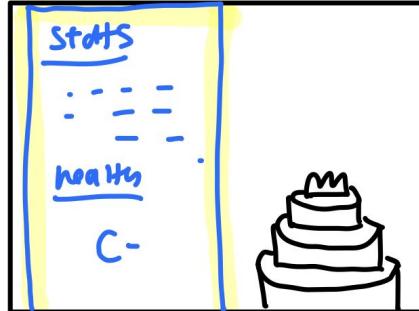
details
- thru e.s
- call x flower

VR
concept:
Collaboration
evaluation

User puts on VR GGT:



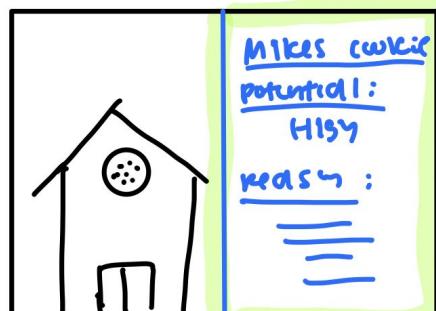
wear VR while
working



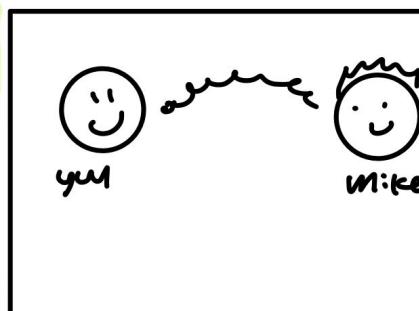
VR can analyze health of
business and propose plans



analyzes potential of
each business partner



looks like a match
is found



Setting up collab



generate guidance for
Poster & design

cake x florist
collab → next week!



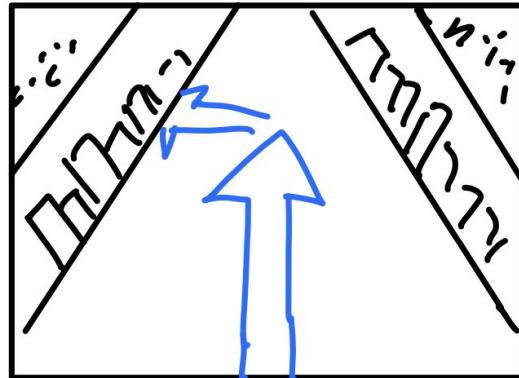
Hmm, how do I plan
for this collaboration?

to do

- make flyer
- marketing
- set up

visualize to do list →
like tasks

store



specific guidance for
real tasks

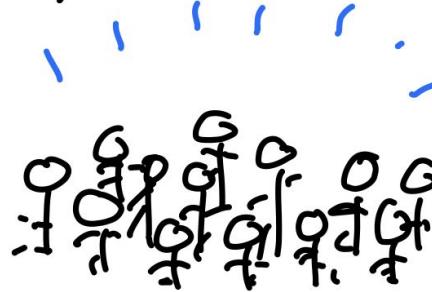
marketing plan

- word of mouth
- social media



even more specific
step by step plan

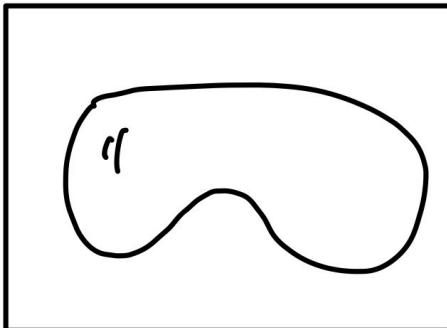
buy it:



success!

VNL concept:
surrounding
scanner

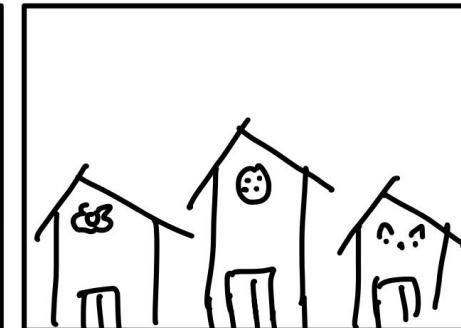
pair w/

Want new collabs? Put
on these glasses

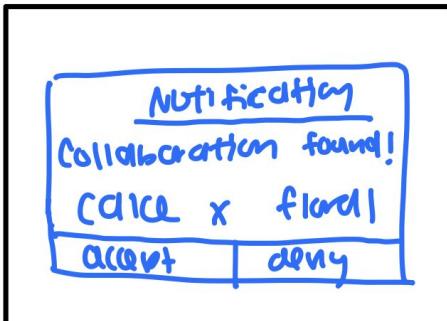


go to the mall
for a walk!



VNL will identify
potential opportunity

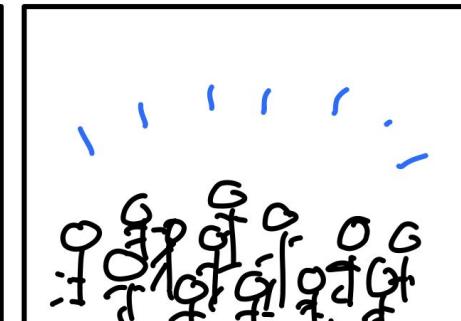
until



collaboration found!

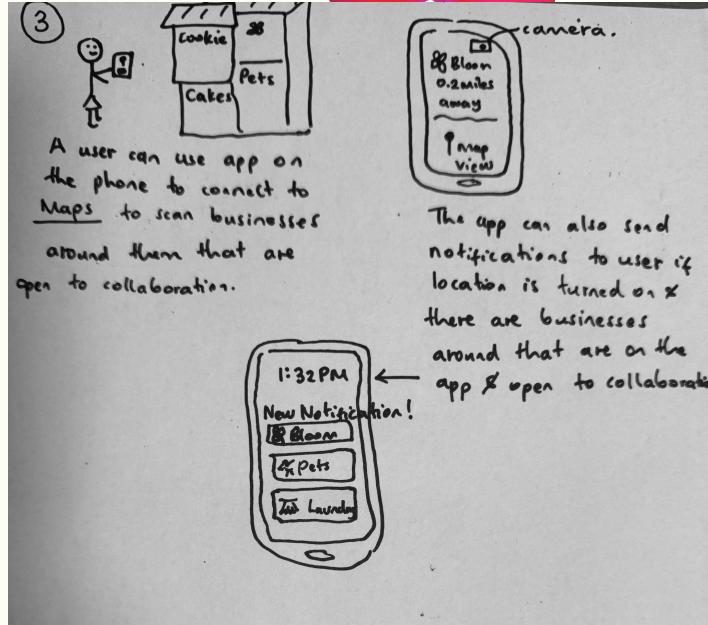
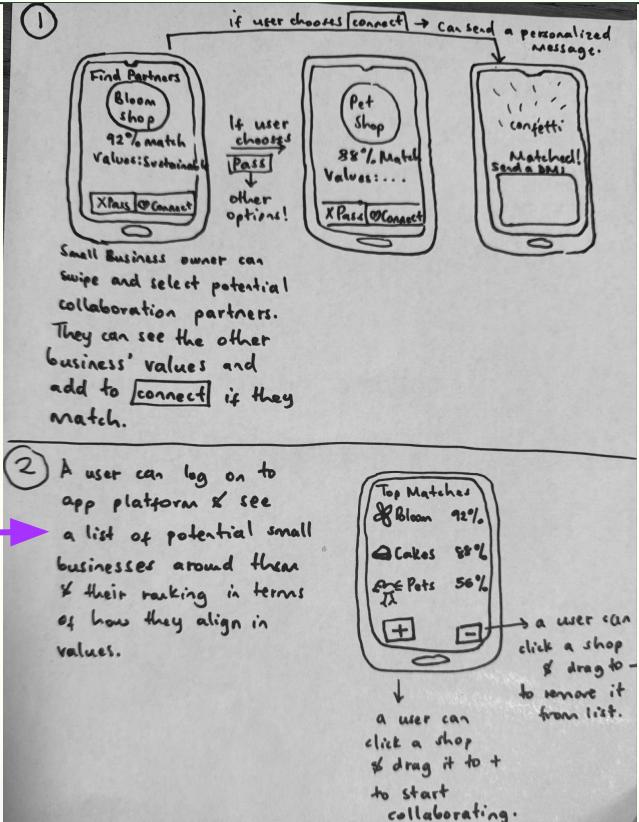
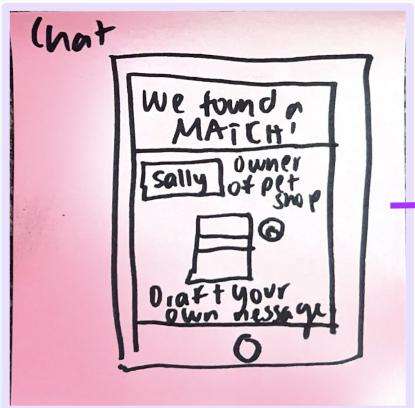


If deny, algo will
keep searching



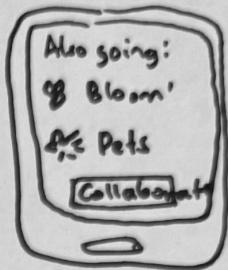
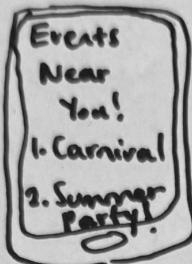
success!

APP Realization



(4)

The app could also have a list of events happening in the neighborhood.



User can sign-up for event as a vendor.

User can see list of other small businesses going and click on option to collaborate with them.

Top 2 diverse realizations



AR



UI overlay for choosing an activity on AR app. To choose, users can tap on the option in the physical world.

Choose Activity

-
-
-

If the user wants to scan a room, they get directions for how to scan, so the AR understands layout.

Scan Room

Stand where you are and slowly turn right until you have made a full 360°



If the user chooses to scan the outside of a business on Stitch, they can get business information to easily reach out for collaboration.

Business scanned for 15 seconds

Business name	Description:
Business owner	
Business type	
Collaborate?	
<input type="checkbox"/> YES	
<input type="checkbox"/> NO	

To visualize an event, the AR application has to understand what the event is & what details need to be added.

Visualize Event for _____ x collaboration.

User wants to add _____ to room.



Added features are in red.
Is there anything else? Yes No

AR: Pros and Cons

Pros

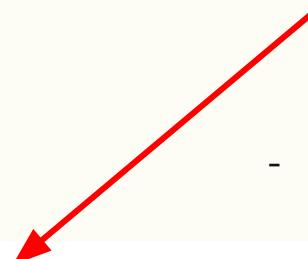
- Full visualization: AR can take into account the full extent of the room at 360 degree angle and create visualizations
- Brings imagination into reality through 3D visualization
- Higher emotional buy in when immersed in the world
- Business can experiment with layouts in real time
- Community planning ability to create more moments of virality

Why Older Phones Struggle

Most phones released before 2017 lack the processing power and sensors needed for AR. They might have cameras, but they're missing depth sensors, gyroscopes, or the computational muscle to track objects in real-time. iPhones older than the 6s are completely out of luck, whilst Android phones without ARCore support—which includes most devices from 2016 and earlier—simply can't run modern AR applications.

Cons

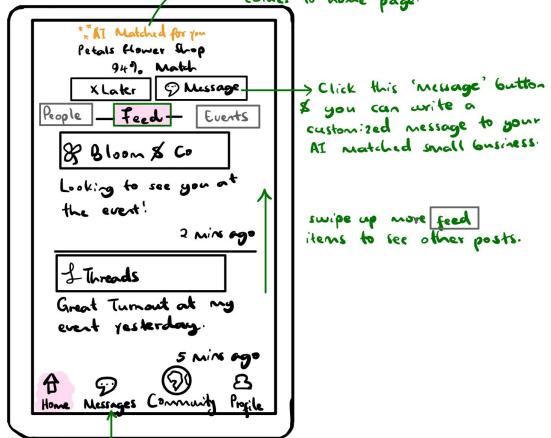
- The effectiveness and realisticness of visualization of event is questionable, with issues like latency and inaccuracy.
- High technical requirements to code
- **Accessibility:** many phones have limitations on AR, and since one of our pillars is accessibility, this can potentially exclude users who might not be fluent in tech
- **Privacy concerns:** scanning of the shop, where does this data go? How do we store this data?
- Cost for generating 3D assets





App: Home Page

① Home Page Screen | Feed Button is clicked.



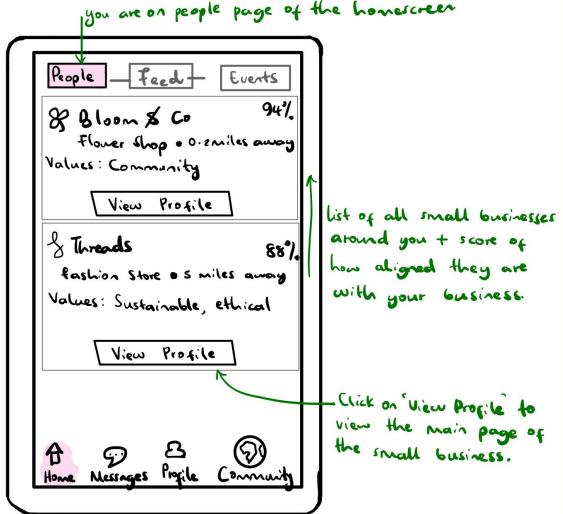
AI match shown here everytime user comes to home page.

Click this 'message' button & you can write a customized message to your AI matched small business.

swipe up more feed items to see other posts.

all your past messages to other businesses are stored here.

Home Page Screen | People Button is clicked.



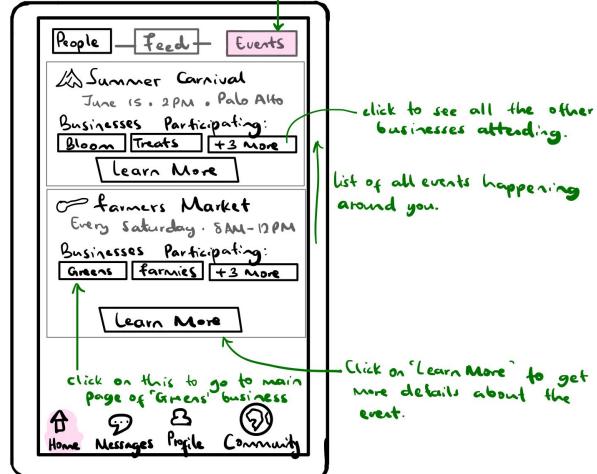
you are on people page of the homescreen

list of all small businesses around you + score of how aligned they are with your business.

Click on 'View Profile' to view the main page of the small business.

Home Page Screen | Events Button is clicked.

you are on events page of the homescreen



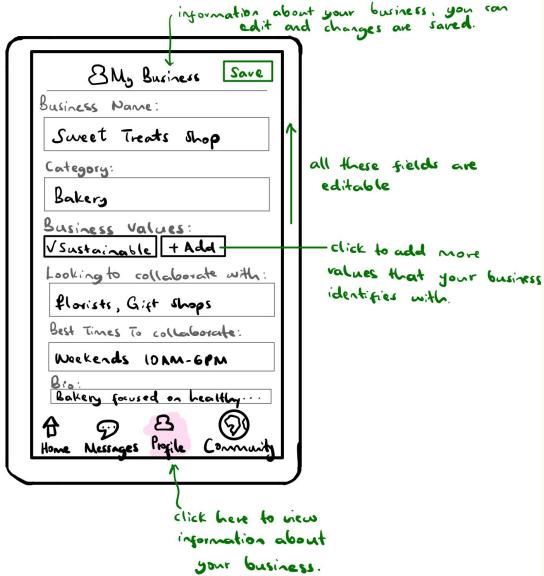
click to see all the other businesses attending.

list of all events happening around you.

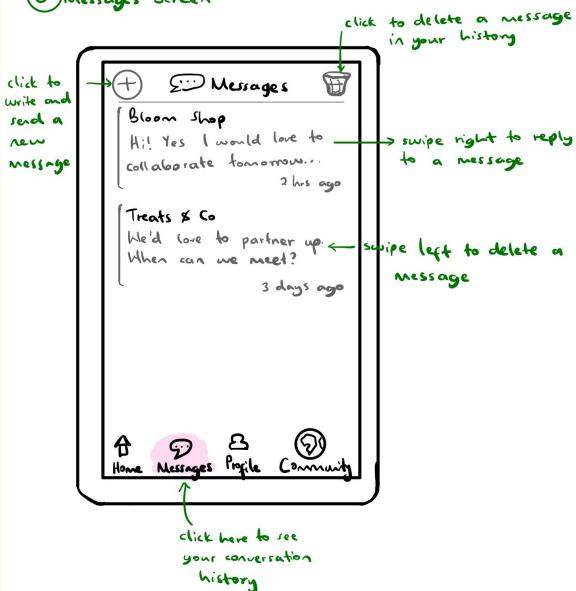
Click on 'Learn More' to get more details about the event.

App: Profile Page, Messages Page, Community Page

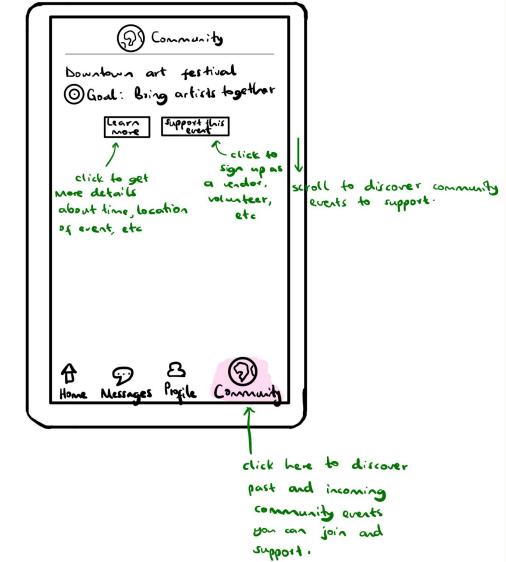
② Profile Screen



③ Messages Screen



④ Community Screen



Mobile: Pros and Cons

Pros

- Multi medium: can incorporate messaging features, community social features, and planning features all in one
- Lower lift of production to achieve the best results
- **Accessibility:** every phone is capable of downloading the app, and with our simplified UI, can achieve our core pillar of accessibility
- Can implement AI to create collaboration together
- Real time communication: In app messaging, convenient for users
- Geo location: Can use location to determine best actions

Cons

- Harder to visualize the collaboration, but AI feature can assist with set ups and marketing ideas
- Limited attention: how do we keep user's attentions with our features without something "new" like AR
- Privacy concerns: sharing locations, putting in information on business, have to be careful how we handle sensitive business data
- Only useful if enough people are using it around the area.

Final Choice: Mobile Application

Mobile application most aligns with our values:
transparency, empowerment, accessibility, and inclusivity.



Transparency

While information such as business & location data are a concern, our app can **ensure transparency by providing reasoning** for pairing 2 businesses together.



Accessibility

There are **no limits** on the phone mobile **to download an app**, whereas other modes such as AR would require newer phones made after 2017.



Inclusivity

Considering the limitations on tech savvy skills with other modalities such as AR and VR, we realized that mobile application is **the most convenient and easy to use.**

Empowerment

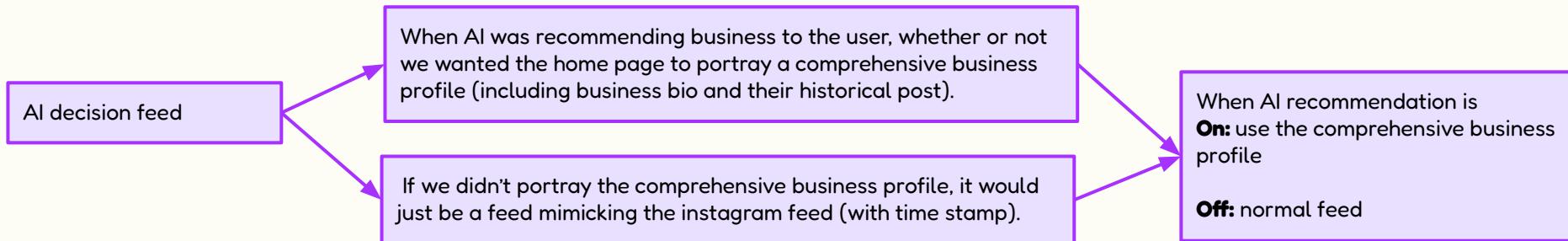
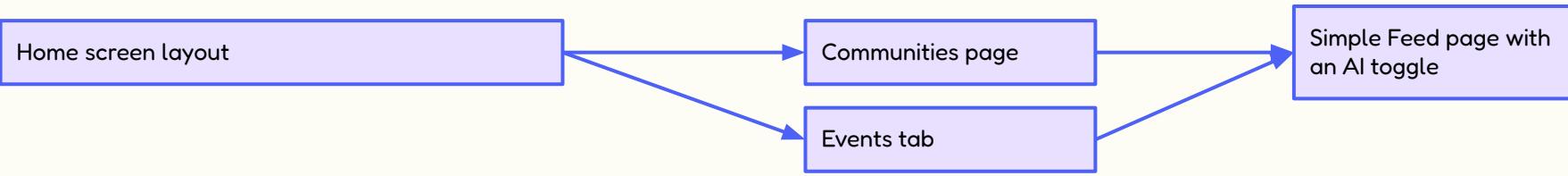
Through an mobile interface, we can have a community social tab, where businesses can post their successful collaboration to **empower other small businesses.**

How the prototype was built

We drew our prototype on an Ipad, and then printed each screen on paper.

This is simple for testing, in which the participants can pretend to click a button on the paper, and we will hand them the next screen on paper based on what was given.

Design choices



How the prototype was built

Designed 2 feed modes:

- **When AI recommendations are on**

the feed displays comprehensive business profiles (bio, history, and posts) to support informed collaboration decisions.

- **When AI recommendations are off**

it reverts to a lightweight, Instagram-style chronological feed.

Supported multiple collaboration initiation paths

Built post-collaboration feedback features

Focused the main feed and community views around event status: active/upcoming items appear in the main feed; completed events surface in the Communities tab.

Explored **multiple** ways for users to create collaboration.

Develop post collaboration review & make recurring collaborations

How the prototype was built

In our prototype, we:

- Designed 2 feed modes:
 - **When AI recommendations are on**, the feed displays comprehensive business profiles (bio, history, and posts) to support informed collaboration decisions.
 - **When AI recommendations are off**, it reverts to a lightweight, Instagram-style chronological feed.
- Supported multiple collaboration initiation paths:
 - Direct messaging for outreach and coordination
 - “Stitch” (collaborative request) flow with a form, moderation, and approval notifications
 - Plus button leading to new event creation and related collaboration actions
- Built post-collaboration feedback features:
 - “How did your event go?” prompt after completion with simple good/bad responses
 - Option to repeat events and notify users of the next scheduled occurrence
 - Automated state transitions: pending approval → approved → posted → completed → feedback

Develop way for post collaboration review and for ways to make recurring collaborations

Explored **multiple** ways for users to create collaboration, through messaging and through posting about their requests on feed.

Focused the main feed and community views around event status: active/upcoming items appear in the main feed; completed events surface in the Communities tab. Notifications prompt users to act (e.g., give feedback, view approvals) when they log in.

Low-Fidelity Paper Prototype Description

Materials and construction:

Paper low-fi screens (21 total) printed from digital designs

simple, minimal elements to keep interactions clear

Tabs and overlays simulated with layered paper to show modals

Operation and testing setup:

Environment: in-person table setup
Facilitator advances through paper screens

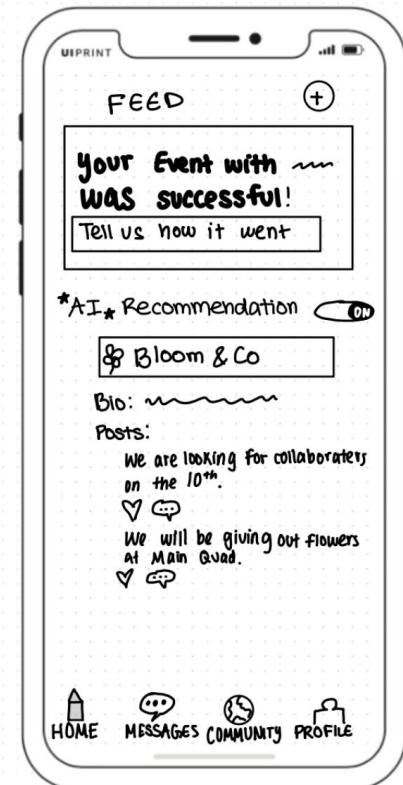
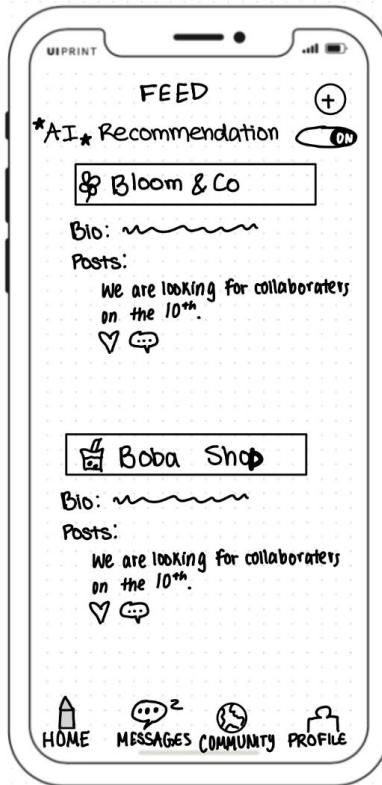
Roles:

- > Facilitator plays the system, revealing screens and notifications
- > Participant completes a sequence of tasks
- > Observer notes confusion points

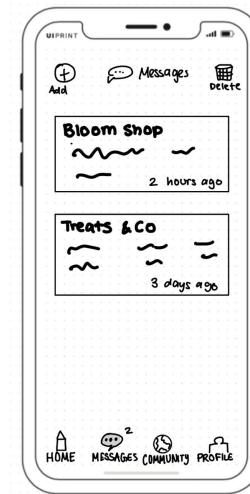
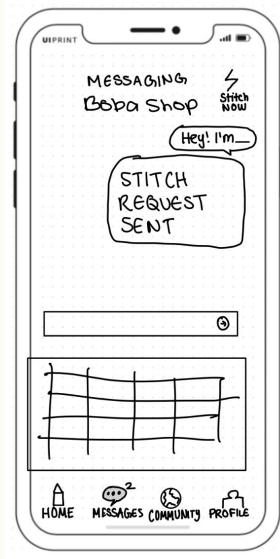
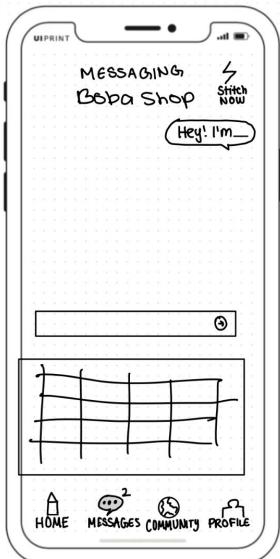
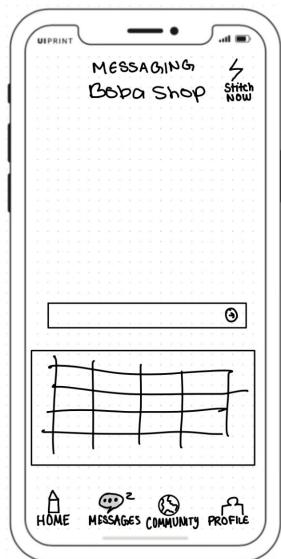
Key flow decisions and rationale:

- Plus button to create event
- Separated messaging from “stitch”
- Moderation step before posting
- Post-event prompt placed as a login notification and on first feed view
- Simple good/bad feedback

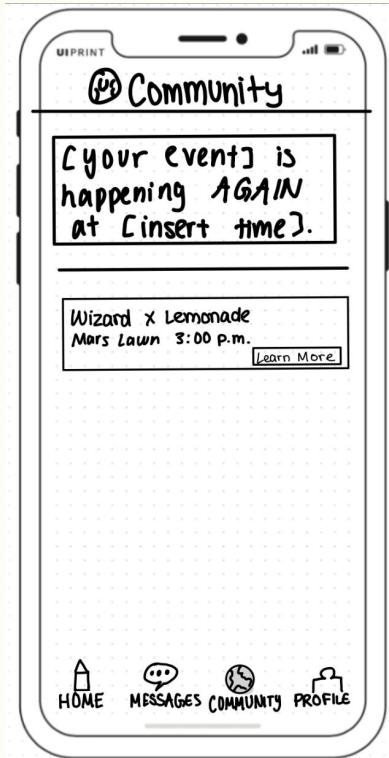
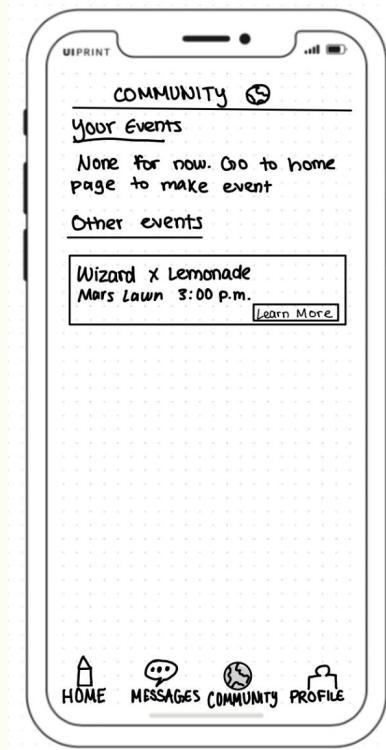
Home Tab



Messages Tab



Communities Tab

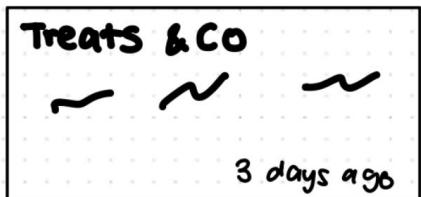
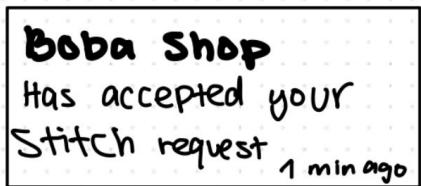


Profile Tab

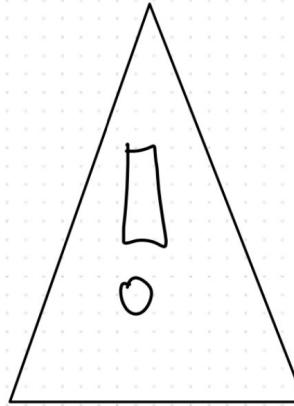


Overlays

TEXT MESSAGE OVERLAY

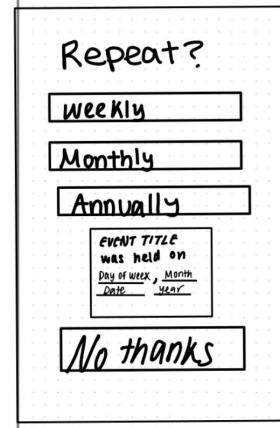


BAD MOVE OVERLAY



This screen
is UNDER
CONSTRUCTION

POST EVENT UI OVERLAY



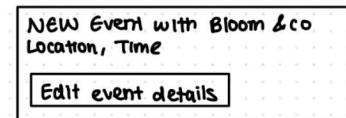
POST EVENT FEEDBACK WANTED OVERLAY



THIS ACTION IS SUCCESSFUL OVERLAY

POSTED

EVENT HAS BEEN POSTED OVERLAY



Low-Fidelity Paper Prototype Description

Materials and construction:

Paper low-fi screens (21 total) sketched by hand

simple, minimal elements to keep interactions clear

Tabs and overlays simulated with layered paper to show modals (e.g., stitch request sent, approval banners)

Operation and testing setup:

Environment: in-person table setup; facilitator advances through paper screens

Roles:

-> Facilitator plays the system, revealing screens and notifications (e.g., moderation approval cards)

-> Participant completes a sequence of tasks (all three: simple, medium, complex) to follow the full flow

-> Observer notes confusion points (e.g., differences between messages, stitch flow, and feed/community routing)

Key flow decisions and rationale:

- Plus button to create event creation
- Separated messaging from “stitch” collaboration to reduce confusion between chat vs. formal collaboration requests
- Moderation step inserted before posting to the feed to reflect realistic approval workflows
- Post-event prompt placed as a login notification and on first feed view to ensure feedback collection
- Completed events shown in Communities, while active/upcoming remain in the main feed, clarifying lifecycle stages
- Simple good/bad feedback kept intentionally minimal for speed in testing and to avoid derailing tasks if “bad” is chosen

Simple Task Storyboard

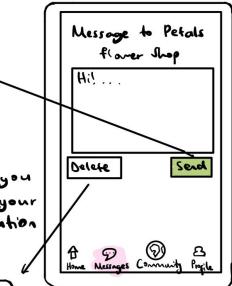
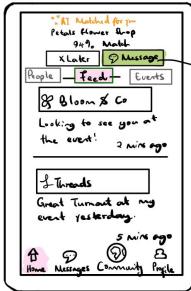
Simple tasks:

Message another small business for a collaboration.

1. Open app and land on the home-page.

2. Open the feed by clicking on 'feed'.

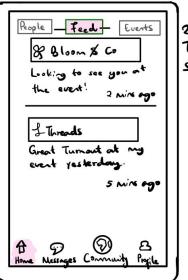
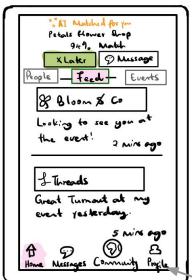
3. Click on 'message' button to send a message to the business AI has matched for you.



5. Click [delete] & you are returned to your messages conversation history.

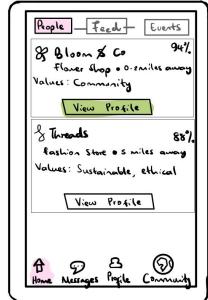


1. Open the app and click [later]



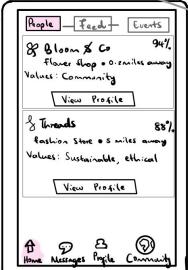
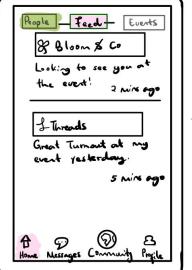
2. The AI matched suggestion disappears.

3. Click on [view profile] to see more details about that small business.



4. Tap on message if you want to connect with that business & collaborate on an event.

3. Click on [people] to discover small businesses.

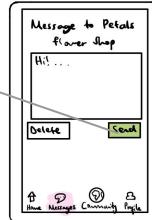


4. Scroll down till you discover a business you want to collaborate with.

5. Click [delete] & you are returned to your messages conversation history.

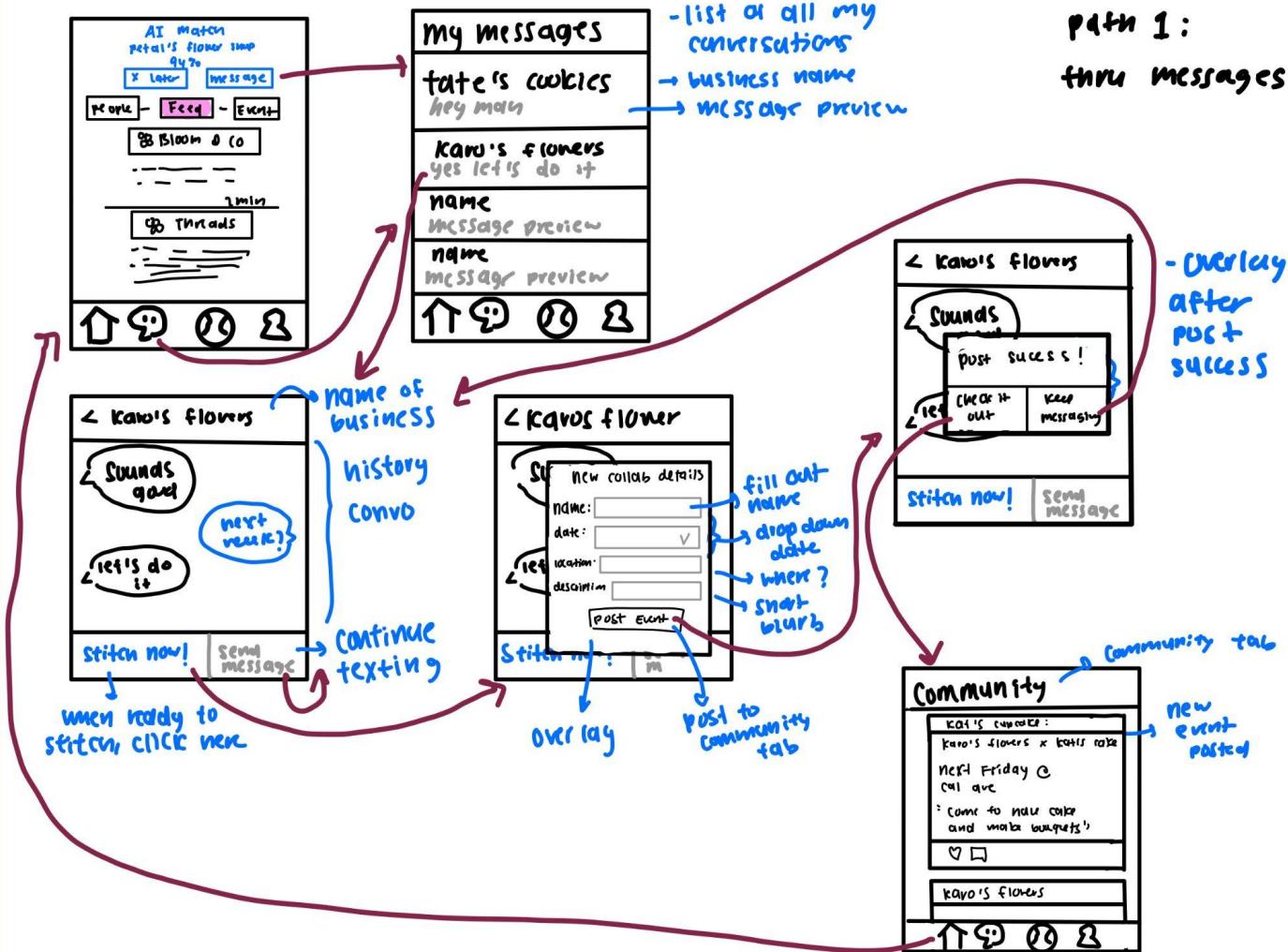


if you click delete

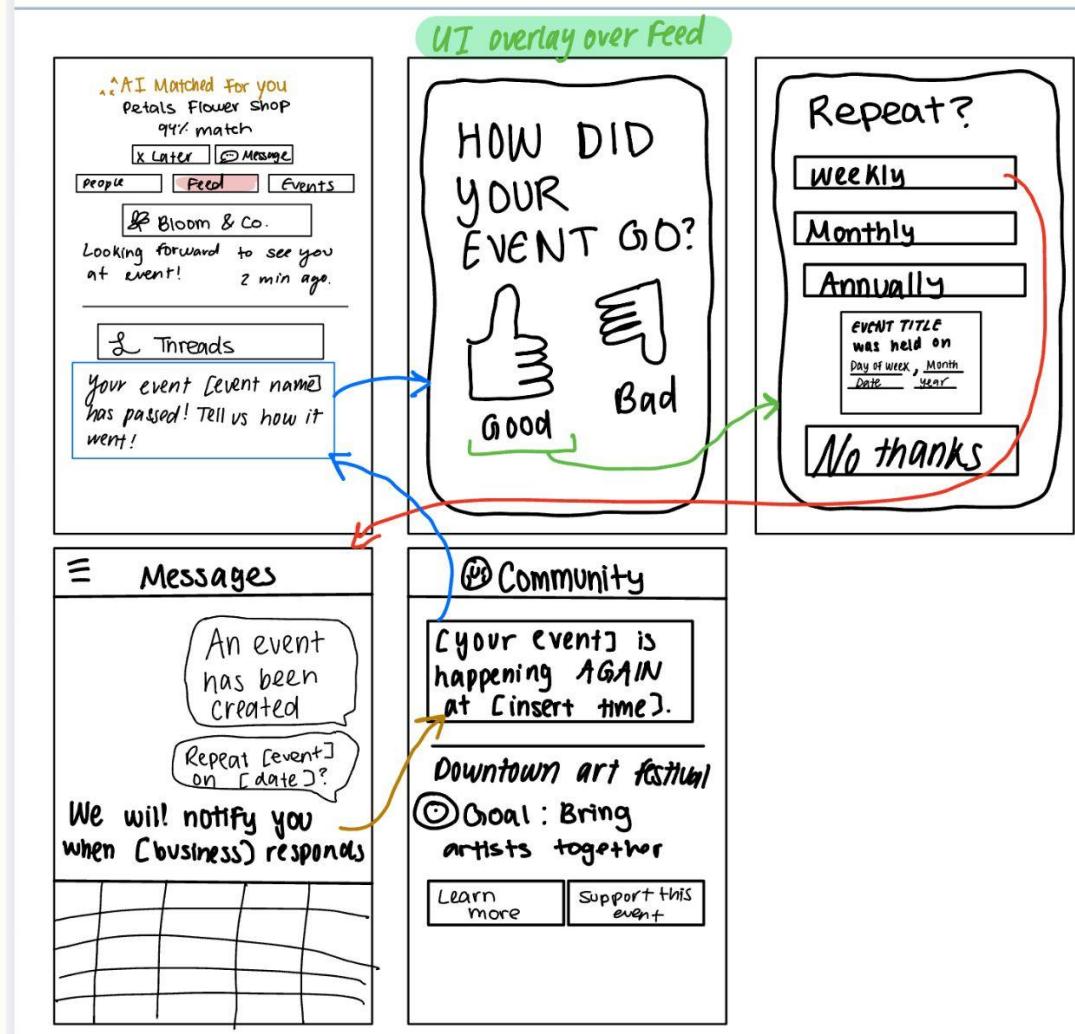


4. Click [send] to send your message to your matched business and you are all done! Taken back to home-page - feed.

Medium Task Storyboard:



Complex Task Storyboard



Team member roles!



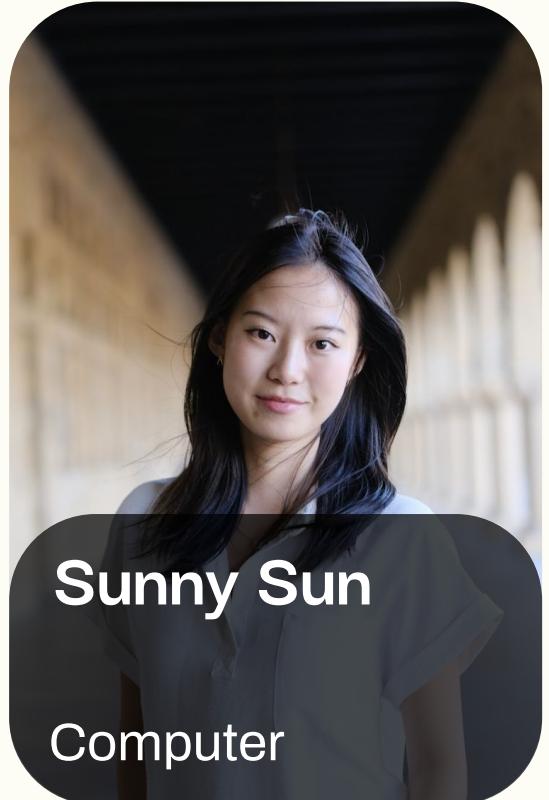
**Eva Mora
Tom**

Facilitator



**Maimuna
Muntaha**

Greeter & Observer



Sunny Sun

Computer

Testing methodology



We went to Tressider and White Plaza Markets to test our low-fi prototypes!

We aimed to get diverse range of participants from business types, gender, etc. targeting non-Stanford students.

Participants



1. Brian
2. Stanford Hair
Owner



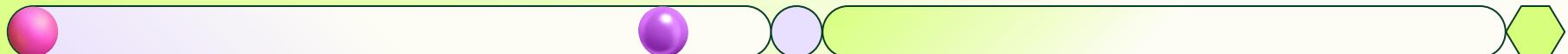
1. Haven
2. SFCU
Employee



1. Oliver Marcelo
2. Small Scale
Farmer



1. Leo
2. Chinese
restaurant owner

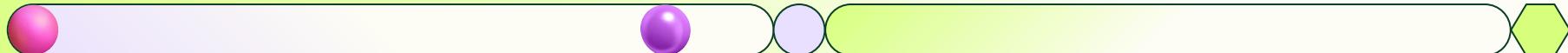


Participant Demographics

Demographics: Business owners/employees/farmer

Recruitment: Going around Tressider/uni ave and randomly going up to different businesses

Compensation: advertising for stanford hair, coffee/drink



Usability Goals

Efficient

How many clicks total did the user take to accomplish the intended task?

Flexible

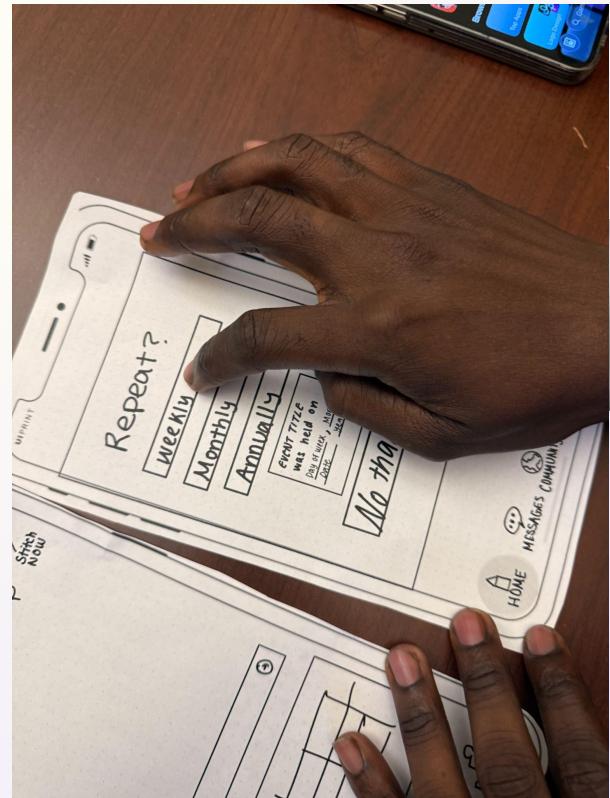
Can users devise multiple ways to complete a task?

Key measurements

To measure friction: How many clicks steps does a business need to take to create an event?

Trust/Credibility:

Would businesses trust this app to come up with collaborations for them?





Participant 1: Stanford Hair



Task #1 Results



Message a small business

- 0 misclicks
- Both pathways identified
- Suggested ability to select multiple businesses → start a group chat.
- Desired automated message templates (“Hi, this is...”) that can be auto-populated and edited manually.





Task #2 Results



Start a collaboration



- **2 misclick**
 - Confusion between Home and Profile for posting (misclick).
 - User pressed Messages instead of Feed + button to post (misclick).
- **The feed ‘+’ button was not obvious as the action point for creating a post.**
- **Wanted to easily send collaboration requests from the post.**



Task #3 Results



Repeat a collaboration with a new business or with multiple businesses



- 0 misclicks
- User checked Community to manage events.
- Wanted a reminder system for upcoming or repeated collaborations.
- Desired an automatic “Thank You” message after events – sent to all participants.
- Wanted to record private notes (“what went good or bad”) for future reference.
- Suggested a ‘Maybe’ / ‘Repeat Later’ option for tentative future collabs.



Incident Log (Participant 1: Stanford Hair)



Incident	Severity	Justification
AI recommendations unclear.	3(major usability problem)	User questioned AI recommendations ("What is this?") despite completing task successfully. Unclear purpose of core AI matching feature threatens Stitch's primary value proposition.
Feed '+' not discoverable.	3(major usability problem)	User struggled to post (Home → Profile → Messages → finally found "+"), calling button "NOT OBVIOUS." Hidden posting feature leads to stale feed and weakens network effects.
Home Tab Vs. Profile Tab Confusion	2(minor usability problem)	User hesitated between Home and Profile tabs when posting, indicating unclear information architecture. While recovered quickly, this friction compounds with the "+" button visibility issue, suggesting users lack a strong mental model of where posting occurs.
Feature request	1(cosmetic)	User wants bulk messaging for multi-business coordination (group chats, templates). Critical missing feature for community-wide initiatives like group discounts and multi-vendor events.



Participant 2: Small Scale Farmer



Task #1 Results



Message a small business

- 0 misclicks
- Directly completed task in 2 clicks
- Wondered why only messaging option, no email/calling options





Task #2 Results



Start a collaboration



- 0 misclicks
- Clicked on the '+' on the HomePage to make a post as a way to collaborate with other businesses.
- Was confused about the difference between the '+' button on the homepage and the make a 'stitch' request.



Task #3 Results



Repeat a collaboration with a new business or with multiple businesses



- 0 misclicks
- Followed the flow for giving feedback very well.
- Confused about why there were still AI recommendations at the Home Page if he had just completed an event.
- Mentioned that he would want to mostly collaborate with NGOs that gave farmers fertilizers more than other businesses, and would be interested in doing the collaborations during the rainy season mostly.



Incident Log (Participant 2: Small Scale Farmer)



Incident	Severity	Justification
User only used half the prototype cutouts to accomplish tasks	2(minor usability problem)	While the user completed core tasks successfully, they missed exploring Communities and Profile tabs, which are both important features. This is because these 2 tabs were not necessary to accomplish our tasks.
Wanted to have a calling/emailing option	1(cosmetic)	User noticed that the app only had a messaging option but this did not hinder task flow.
Confusion between '+' and stitch icon's functionality	3(major usability problem)	The '+' and stitch icons confused the user a bit and made them hesitate because the 2 icons seemed to accomplish the same goal to the user.
All Tasks Completed.	0(no problem)	User successfully completed all the tasks easily.



Participant 3: SFCU Employee



Task #1 Results

Message a small business



- 2 misclicks
- Directly completed task in 2 clicks



Task #2 Results

Start a collaboration

- 0 misclicks
- Was unsure of what “Stitch” meant given no context for what the button’s use case was



Task #3 Results

Repeat a collaboration with a new business or with multiple businesses



- 0 misclicks
- Completed task in 3 steps.
- Understood how feedback led to repeated event (complex task) and followed complex task easily.
- Never looked at Communities page for event details.



Incident Log (Participant 3: SFCU Employee)



Incident	Severity	Justification
User didn't know how to create an event (had to explain that Stitch button helped you make a task)	3(major usability problem)	Understanding the Stitch button's use case was important for our medium task.
Expected a way to understand what a button was.	2(minor usability problem)	<p>"I wish tappable buttons were clearly indicated"</p> <p>While user completed all tasks efficiently, she wanted more explicit labels for where to click.</p>
All Tasks Completed.	0(no problem)	User successfully completed all the other tasks easily.

Participant 4: Chinese restaurant owner



Task #1 Results

Message a small business

- 0 misclicks
- Identified the 2 paths successfully



Task #2 Results

Start a collaboration

- 1 misclick
- Didn't understand the difference between creating a post and creating a collaboration through messaging
- Wanted a way to filter collaborations by category or location



Task #3 Results



Repeat a collaboration with a new business or with multiple businesses



- 0 misclicks
- Understood that after an event, a form will automatically show up to repeat the collaboration
- Wish there was a area in profile to visit back in the future and repeat collaborations instead of having it be a once time decision



Incident Log (Participant 4: Chinese restaurant owner)



Incident	Severity	Justification
Confused between sending a message and creating a collaboration post	4 (Usability catastrophe)	"Wait, do I need to message them to make an event? Then why do I need to post"
Expected a way to filter collaborations by category or location	1 (Cosmetic problem)	"I wish I could filter this by type, like cafes or salons."
Wanted a "Collaboration History" section in profile to revisit partnerships	3 (Major usability problem)	"I'd like to go back and repeat collaborations easily because I might need more time to think and decide"

Process data

The home and messaging tabs were easy to understand:

participants knew the purpose of each tab

All participants successfully completed all 3 tasks:

even if they were stuck in the beginning, they quickly resolved questions by exploring the low-fi prototype more

Some participants were confused by the Stitch button:

participants didn't understand that the stitch button was one way to form an event with a business

All participants were engaged by each task:

participants were thoroughly excited to work and collaborate with other businesses, with the Stanford Hair owner saying, "I wish more businesses in Tressider worked with each other"

Bottom line

Efficiency

11 clicks

On average to navigate workflows.

9 clicks was the least number of clicks needed by a participant.

Ease of Navigation

5 misclicks

Across all participants

8.25/10

Average rating across all participants.

Participants gave ratings of 8, 9, 9, 7.

Eagerness to use app

9/10 eagerness

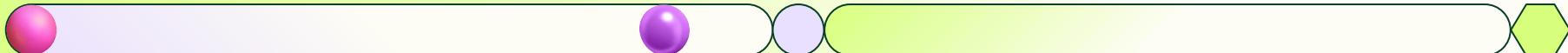
Average rating across all participants.

Participants gave ratings of 8, 9, 9, 10.

Usability goals

- Participants were able to complete tasks with few to no misclicks, indicating **strong navigability** and **understanding** of prototype screen flows.
- Lack of labeling **could be improved** to reduce confusion and support user expectations around how the app facilitates collaboration.

Overall, we achieved our usability goals, but identified opportunities to clarify feature meanings.



Discussion

Implications

- Users were unclear about the distinction between posting ("+") and starting a "Stitch," suggesting lack of feature comprehension.
- Participants wanted more efficient ways to manage collaborations (group chats, reminders).
- The Community page's purpose was not obvious.
- Users expected the system to update dynamically after events.

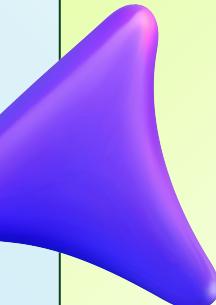
Design Changes

- Clarify the difference between "+ Post" and "Stitch" through clearer labels.
- Add multi-business collaboration support, message templates.
- Make the Community page discoverable for event management.
- Update the Home feed to reflect completed events and evolving AI recommendations.

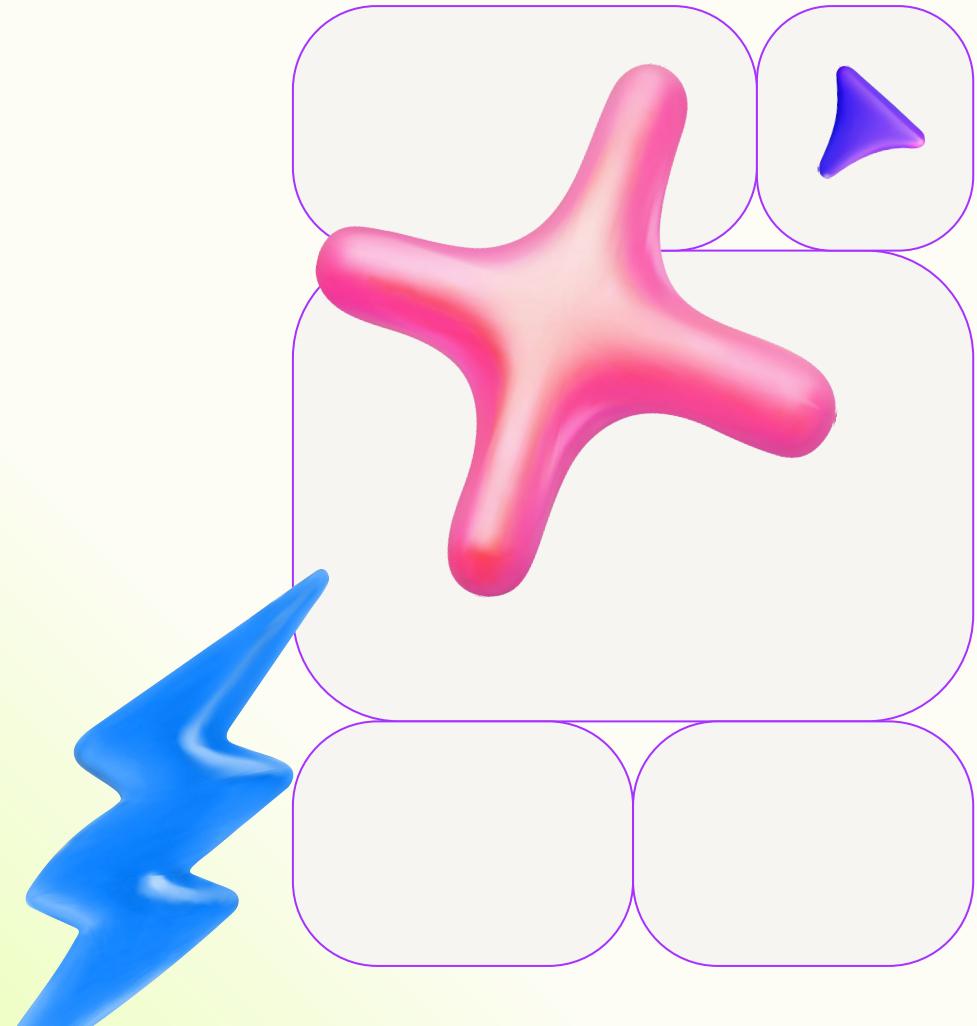
What testing did not reveal

- Whether users would sustain collaborations over time or repeat events.
- How automated reminders and messages would affect real-world engagement.

Thank You for listening!



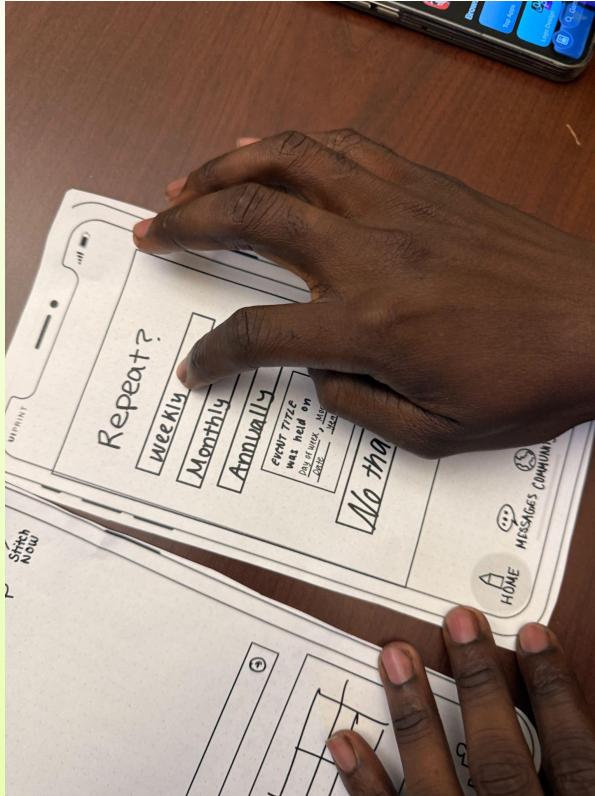
Appendix



Additional artifacts



Additional artifacts



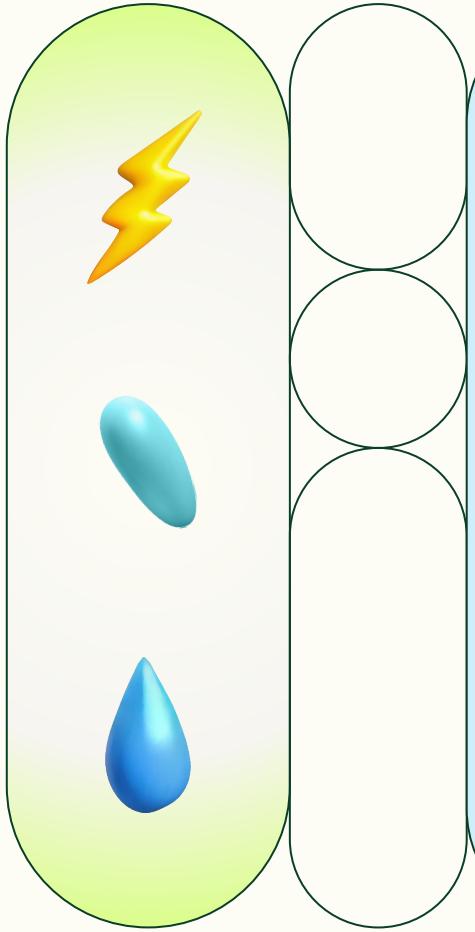
Mobile: Pros and Cons

Pros

- Multi medium: can incorporate messaging features, community social features, and planning features all in one
- Lower lift of production to achieve the best results
- **Accessibility:** every phone is capable of downloading the app, adn with our simplified UI, can achieve our core pillar of accessibility
- Can implement AI to create collaboration together
- Real time communication: In app messaging, convenient for users
- Geo location: Can use location to determine best actions

Cons

- Harder to visualize the collaboration, but AI feature can assist with set ups and marketing ideas
- Limited attention: how do we keep user's attentions with our features without something "new" like AR
- Privacy concerns: sharing locations, putting in information on business, have to be careful how we handle sensitive business data
- Only useful if enough people are using it around the area.



Script

1. **Introduce ourselves:** Who are we? What is Stitch?
2. **Explain project:** Provide context to our app including purpose, goals, tasks.
3. **Give consent form** to participants after providing context.
4. **User Interaction Demo:** Give participants demo of how to press buttons, how they will navigate screens on a low-fi prototype.
5. **Give simple task:** After demo, prompt users with simple task we want them to complete: Message another business
6. **Give medium task:** After users have messaged, prompt users with medium task to create an event.
7. **Give complex task:** After users have created an event, prompt users with complex task to repeat an event.
8. **Reflection:** Ask participant to give feedback on tasks and navigating the low-fi prototype.

AR: Pros and Cons

Pros

- Full visualization: AR can take into account the full extent of the room at 360 degree angle and create visualizations
- Brings imagination into reality through 3D visualization
- Higher emotional buy in when immersed in the world
- Business can experiment with layouts in real time
- Community planning ability to create more moments of virality

Why Older Phones Struggle

Most phones released before 2017 lack the processing power and sensors needed for AR. They might have cameras, but they're missing depth sensors, gyroscopes, or the computational muscle to track objects in real-time. iPhones older than the 6s are completely out of luck, whilst Android phones without ARCore support—which includes most devices from 2016 and earlier—simply can't run modern AR applications.

Cons

- The effectiveness and realisticness of visualization of event is questionable, with issues like latency and inaccuracy.
- High technical requirements to code **Accessibility**: many phones have limitations on AR, and since one of our pillars is accessibility, this can potentially exclude users who might not be fluent in tech
- **Privacy concerns**: scanning of the shop, where does this data go? How do we store this data?
- Cost for generating 3D assets

