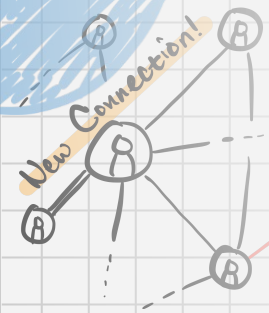


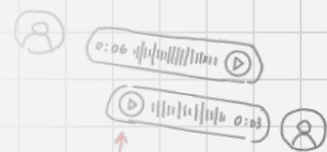


# Collide

Interactive Medium-Fi Prototype



COLLIDE!



tap to play/pause



# Our Mission

## The problem:

When transitioning to a new environment, people find it difficult to make meaningful connections and are fearful of reaching out.

## Our solution:

We want to solve this by creating opportunities for people, who would have otherwise passed by each other, to stop and talk.

## Value Prop

“ Your next best friend is just around the corner. ”

# Values Encoded

## Privacy

Providing users total agency as to how much information and when they would like to share about themselves on the platform

## Security

Information that users share with the platform should be encrypted and secure

## Efficiency

Making the UI as simple and intuitive as possible for as many audiences as possible

## Potential Conflicts

The addition of confirmation modals and permission notifications for the users certainly ensures privacy for all users, but sacrifices some user convenience.

However, user privacy must take priority, as interaction with strangers have numerous safety implications.

# Values Encoded: Design Features



## Privacy

Location sharing was the primary concern based on our user interviews. We added an explanation and a "Stop Sharing Location" button to increase the clarity and flexibility of information being shared.

## Security

Information encryption will occur in the backend in the hi-fi prototype

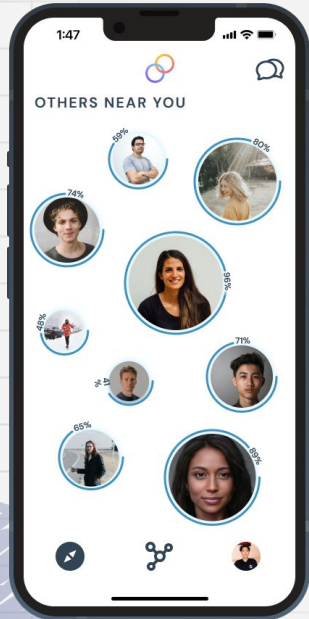
## Efficiency

Our tasks have multiple paths to completion and have clear action buttons progressing through the flow (refer to Figma prototype).

# Tasks

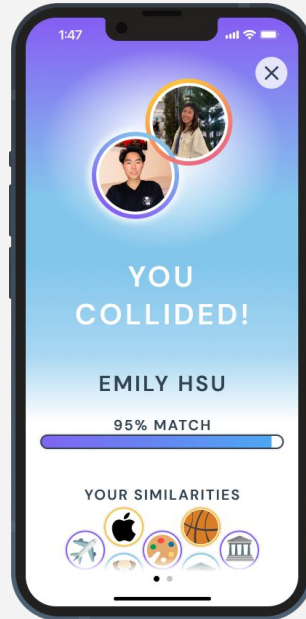
## Simple Task

Be friend someone near you with similar interests.



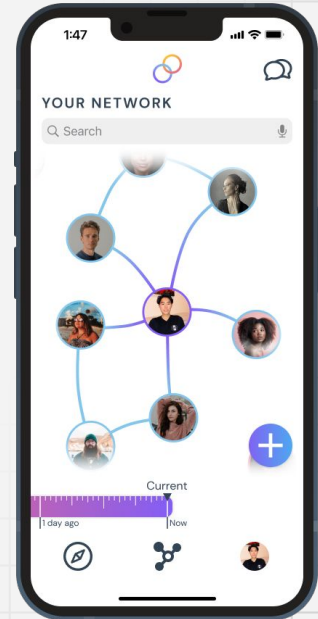
## Moderate Task

Start a conversation with someone in person.



## Complex Task

Add a past friend to your existing network.



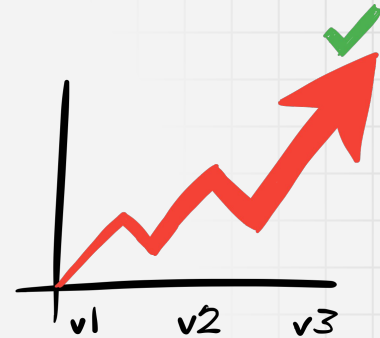
# Usability Goals & Key Measurements

## Usability Goals:

- Robust
- Efficient

## Key Measurements

- Observing how much **Level of Interference** was necessary for the user to complete the provided tasks
- Asking each participants on **intuitiveness of positioning, sizing, and form of objects** in each screen in conveying their purpose





# Usability Goals & Key Measurements

## How our product is hitting usability goals:

- Implementing minimalistic designs with each screen along with visual explanation(s) on screens where test users felt uncertainties in functionality, and placing permission modals in places where they felt unsafe sharing their information allow us to have a platform that is both robust and efficient.

## To Continue Progression:

- The medium-fi prototype must be have consistent, immediately-intuitive UI across all the tasks.

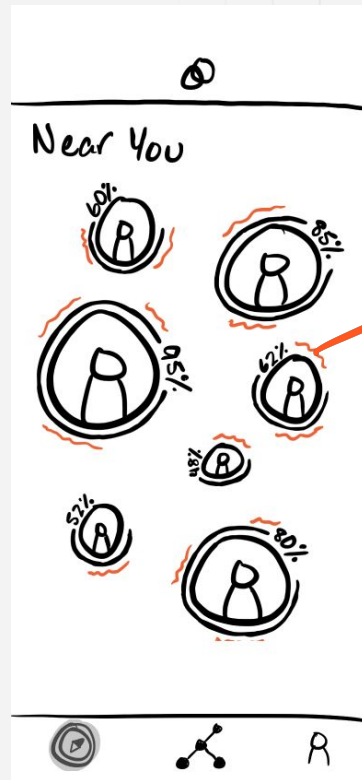
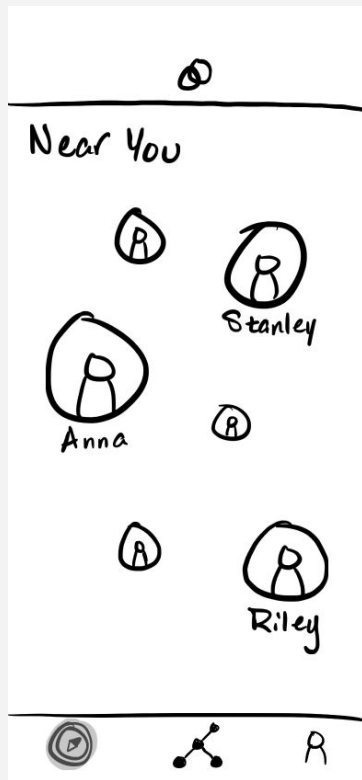


## Revised Interface Design



# Major Design Change 1

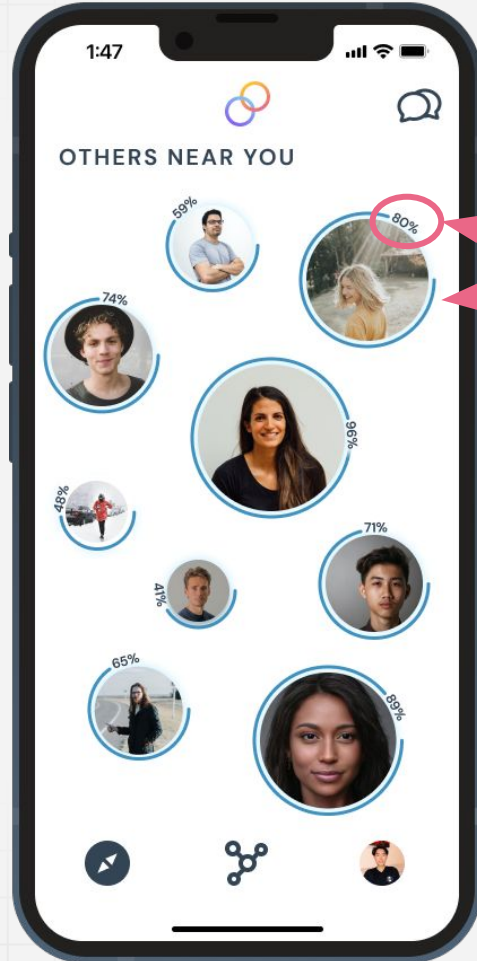
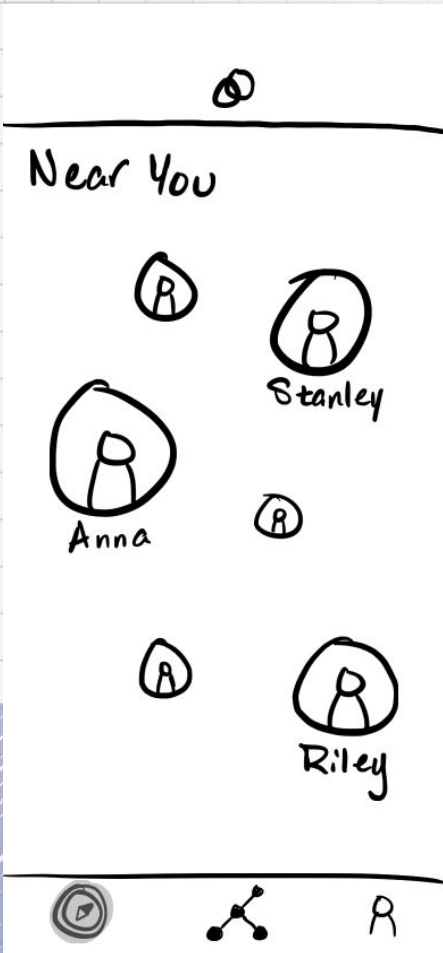
## Near You



Slowly moving around

Before

After



Feedback: Users liked the different bubble sizes but was unsure if it meant **distance or compatibility**.

Change 1: We added **match percentage and proportional stroke** around bubbles.

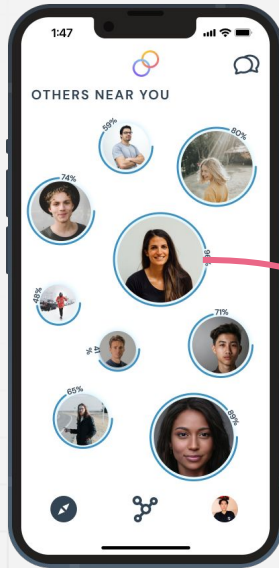
Users will know that bubble sizes are proportional to their match score instead of their distance by seeing bigger bubbles with larger scores.

Change 2: **Bubbles will bob around slowly** instead of staying fixed.

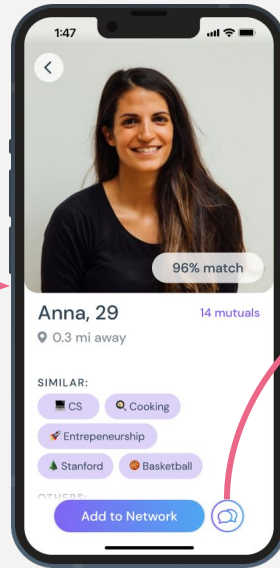
To further dissociate bubbles with distance (prevent the idea that the screen is a map), the bobbing will indicate that bubble positions are random, not fixed in place by distance as a map would be.

# Task #1

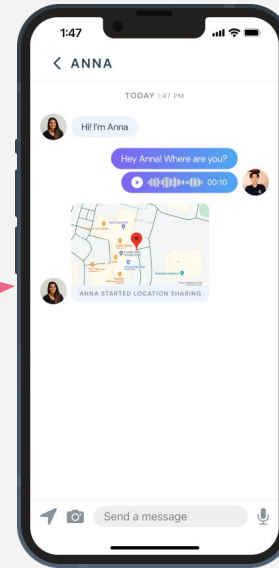
Befriend someone near you (Anna) with similar interests.



Click on a bubble to see someone's profile.



Select Add to Network to finish task (sends request). End of task.



Click Message icon to send a message to Anna (optional).

Major Design Change 2

# Collision

You Collided! ⊕

Anna  
Smith

95% match

Similarities

⊕ College  
You and Anna both  
went to **Stanford**  
University for college

📖 Major  
You and Anna both

Accept



You Collided! ⊕

Anna  
Smith

95% match

⊕

📖

🏠

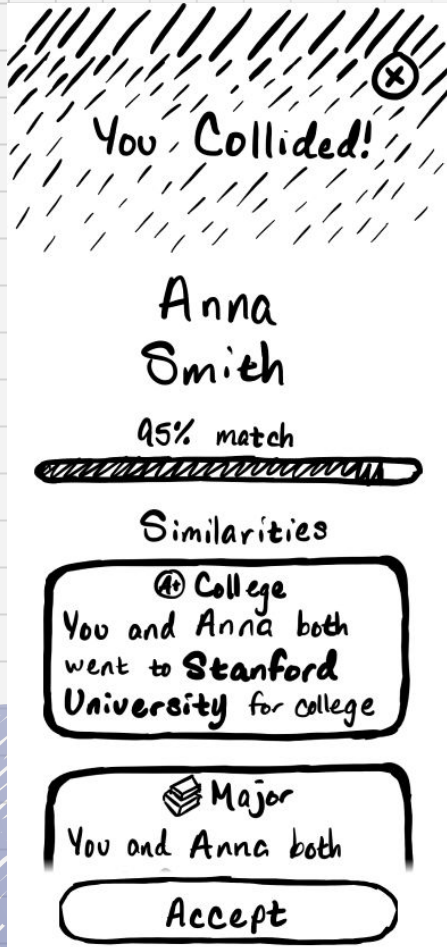
🎓

💻

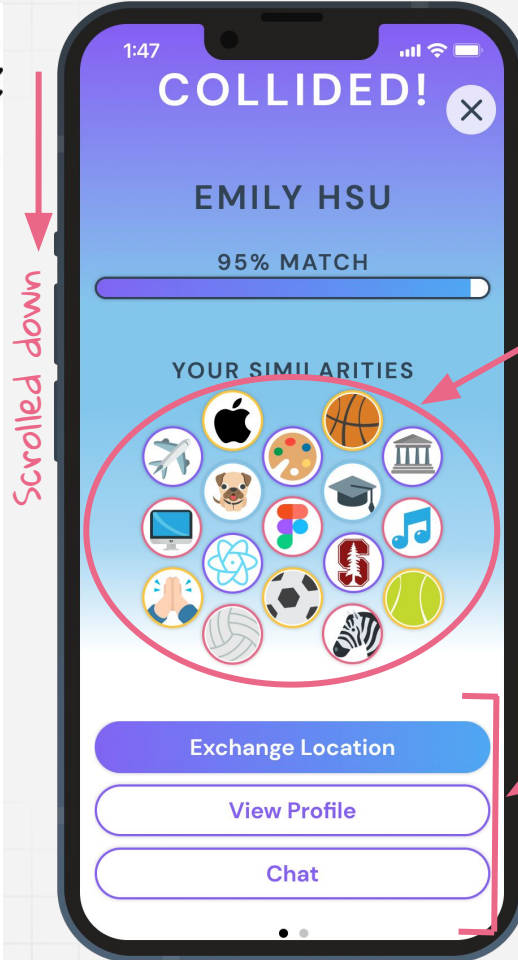
📱



Before



After



Feedback: Users said they would not **look down** at phone while talking.

Change 1: We replaced the similarities list with **icons** diagram.

While users are walking or talking to the other person, they are unlikely to look down at their phones for a prolonged time, so we want them to get a general gist with a glance.

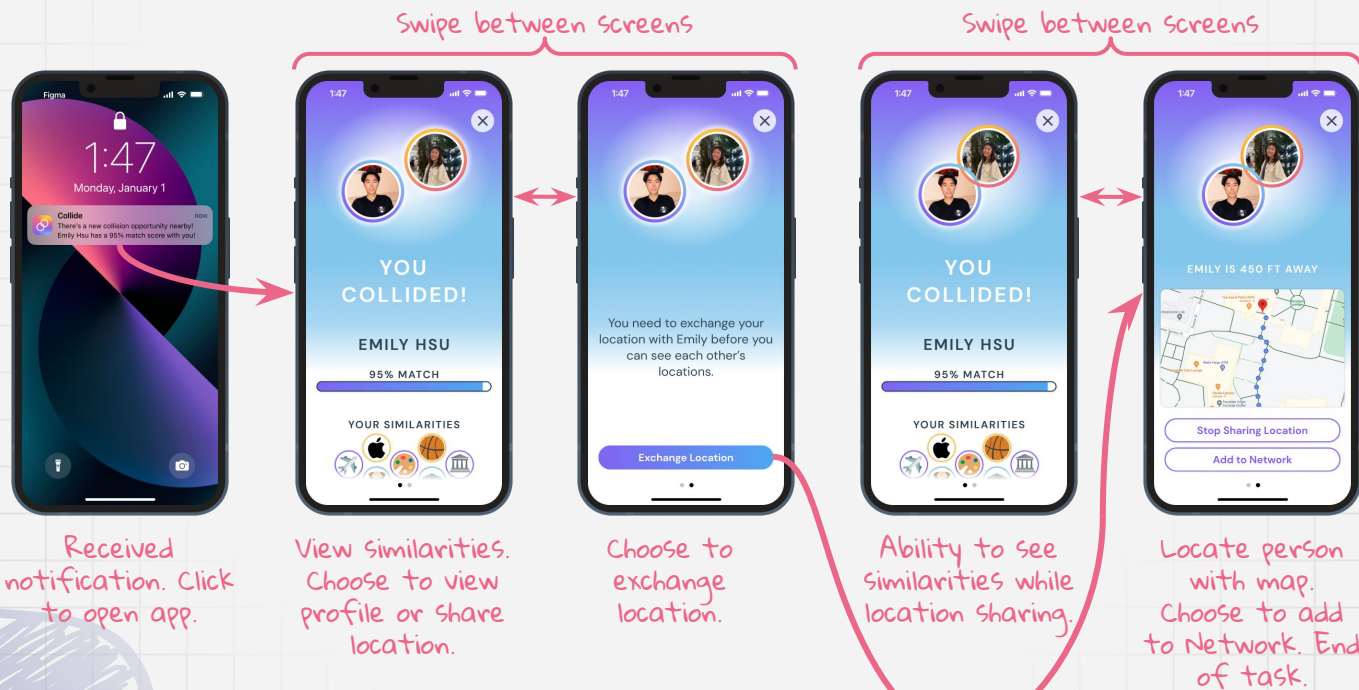
Feedback: Users were unsure what **"accepting"** a collision entailed.

Change 2: We replaced "Accept with 3 buttons stating **explicit actions**.

This eliminates users' confusion and concerns on privacy, and creates more options for them to evaluate and interact with the match before having personal interaction.

# Task #2

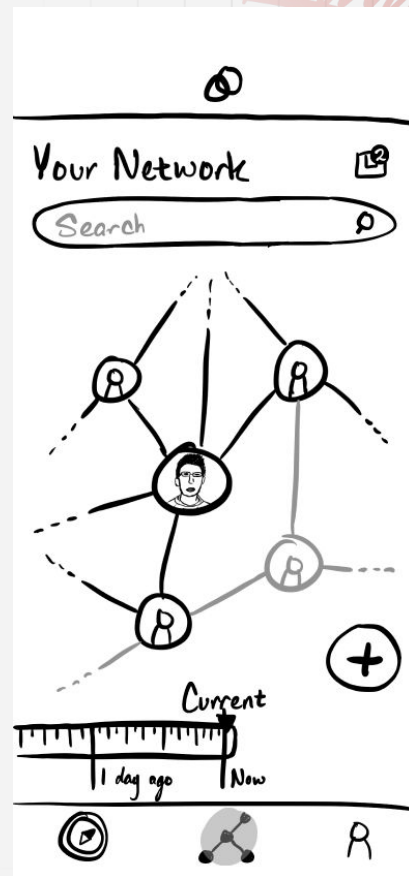
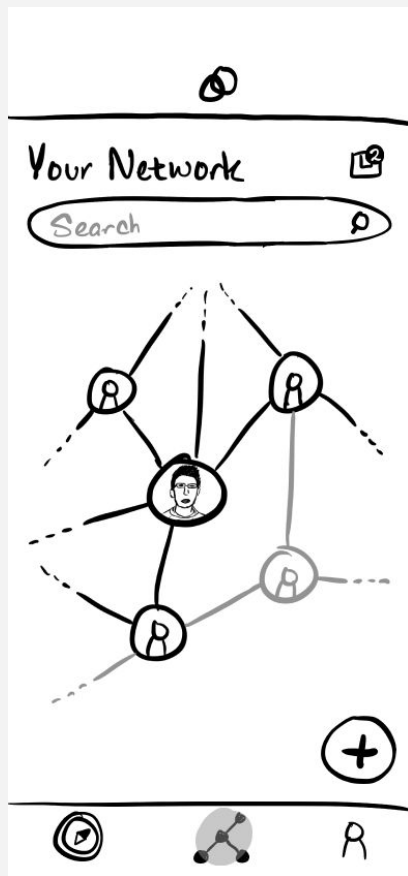
Start a conversation with someone (Emily) in person.



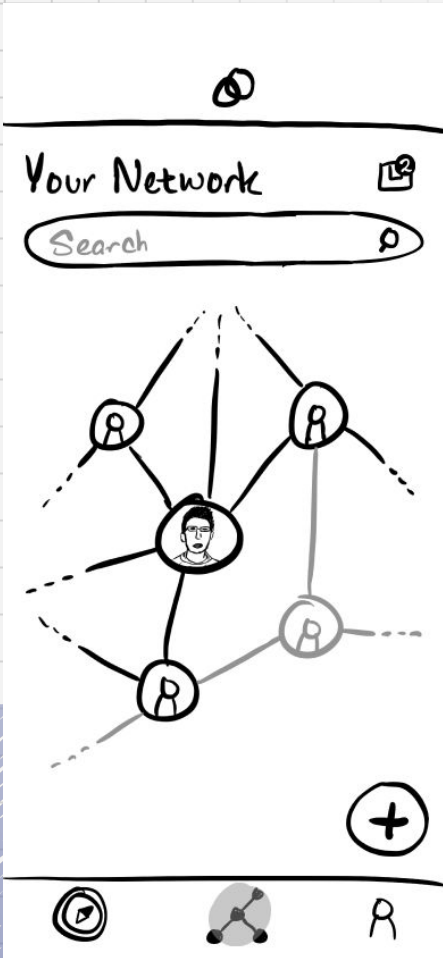


Major Design Change 3

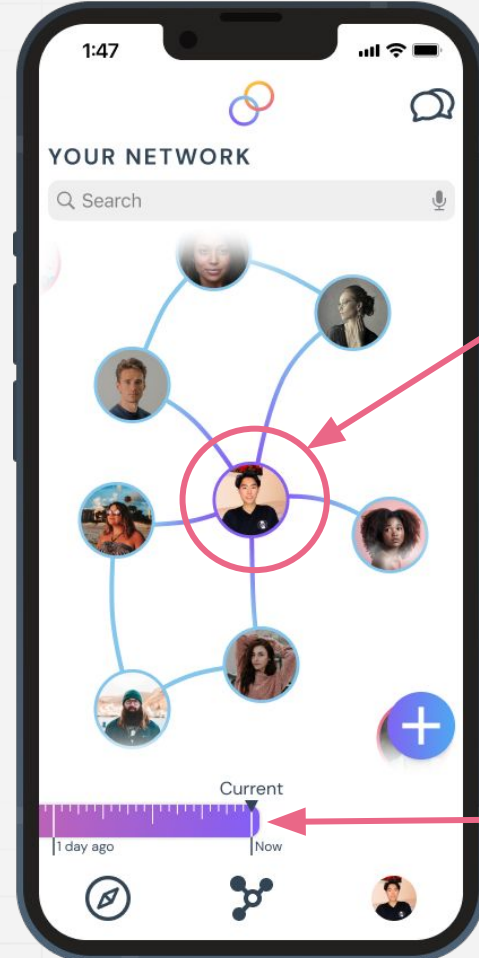
# Network



Before



After



Feedback: Users try to click on picture of self when adding a friend.

Change 1: We indicate yourself with a **different color**.

The purple differentiates the user from the rest of the people and makes the center of the network clear.

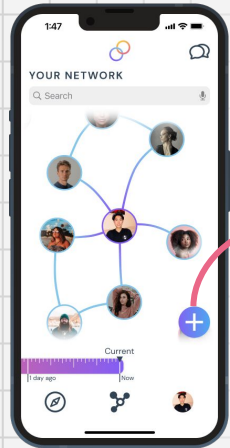
Feedback: Users really enjoyed the network concept

Change 2: Make interface more interactive (zoom, scroll, etc) and added a **timeline filter**.

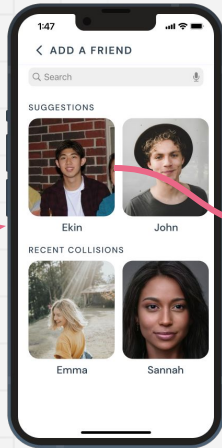
This makes the tree building process more fun and makes filtering out earlier connections easier

# Task #3

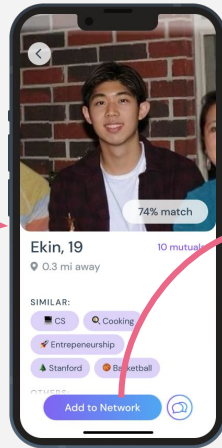
Add a past friend (Ekin) to your existing network



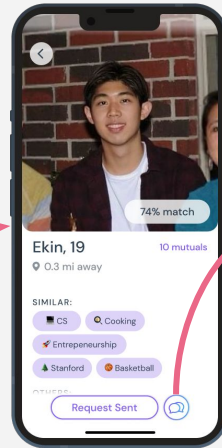
Click "+" button to add friend



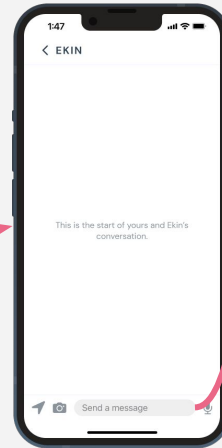
Click Ekin from suggestions.



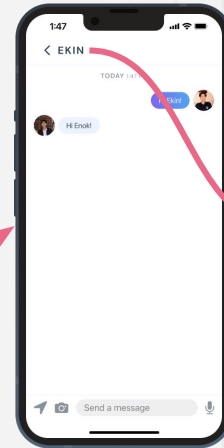
Request to add Ekin to network.



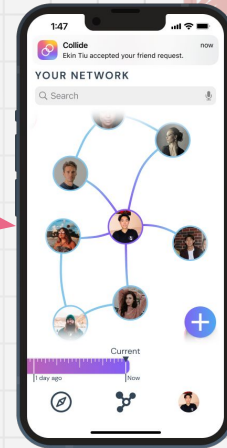
Use message icon to send message.



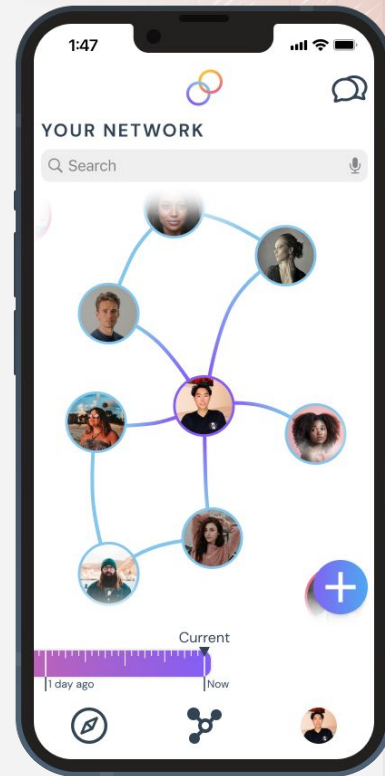
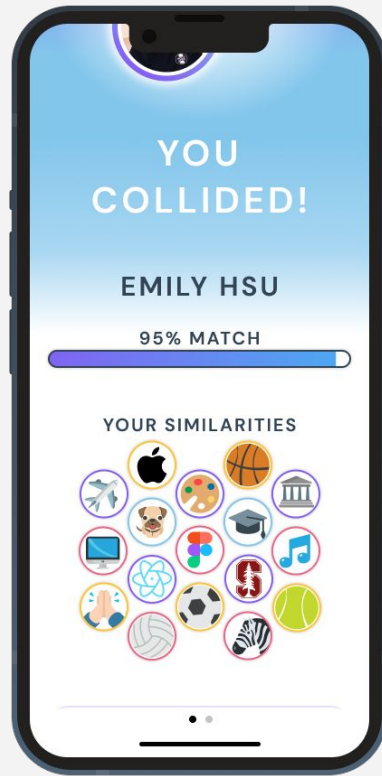
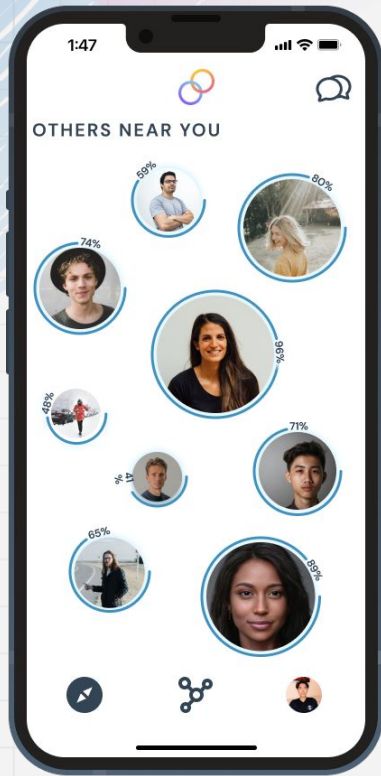
Send message by clicking text field.



Go back to main network page.



Ekin accepts request. End of task.



Prototype

# Design / Prototyping Tools

We used Figma to create the med-fi prototype, since it allows users to both:

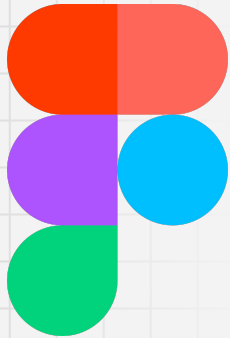
- explore our graphical user interface,
- and navigate through our intended task flows.

What was easy:

- Learning curve not steep, very accessible
- Experimenting and collaborating on UX design

What was hard:

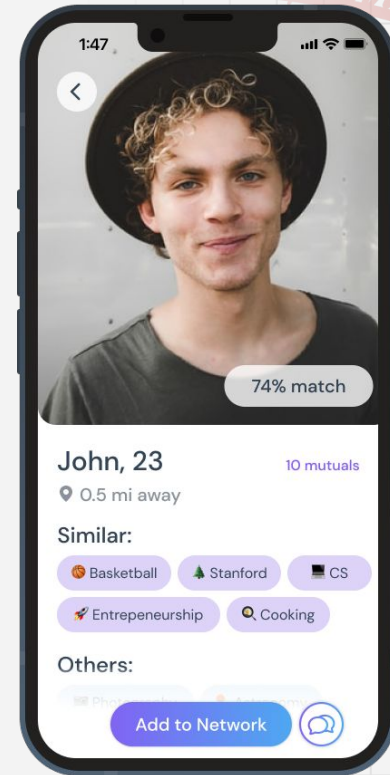
- Making animations - frame by frame
- Setting up swiping between pages





# Limitations / Tradeoffs

- Users can't add their own interests to the prototype
  - Not necessary since prototype cannot match users anyways
- All other profiles and locations (map) are *hard coded*
  - Hard (almost impossible) to obtain this information through Figma
  - Not required to test user experience with task flows



Sample profile with fake interests



# Limitations / Tradeoffs cont.

- User can't interact with his/her own profile screen
  - Not included since this is not related to any of our three primary tasks
  - **CON:** Many buttons in our task flows could navigate to profile screen, but we are forced to restrict navigation since the screen is not yet developed
- Can only add certain people to their network (not all profile buttons are clickable)
  - Would be time-consuming to create med-fi screens for each fake profile
  - One fake profile is enough to see how users engage with another person's profile
  - **CON:** Users forced / restricted to a subset of possible task flows

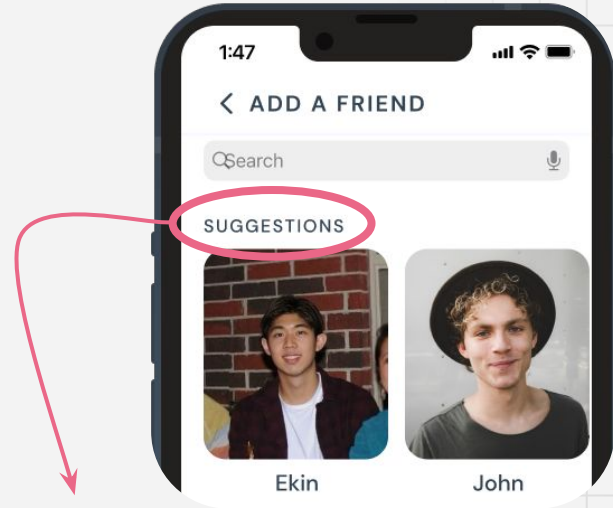
# Wizard of OZ Techniques

## Matching Algorithm



No matching algorithms, so we act as the matching algorithm by hard coding fake match scores.

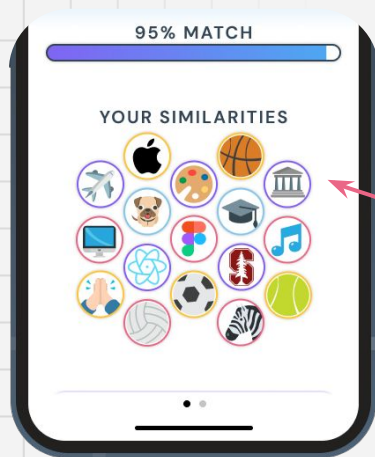
## Suggestions to Add to Network



A suggestions algorithm would be impractical without having existing users, so we make fake suggestions for past friends to add on the platform.

# Hard-Coded Features

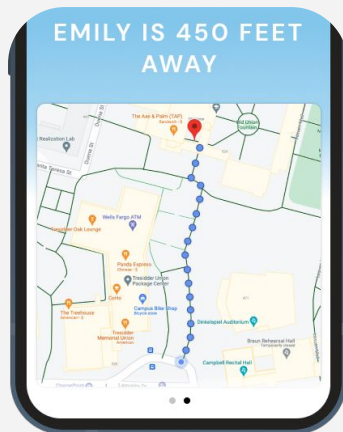
## Profile Information



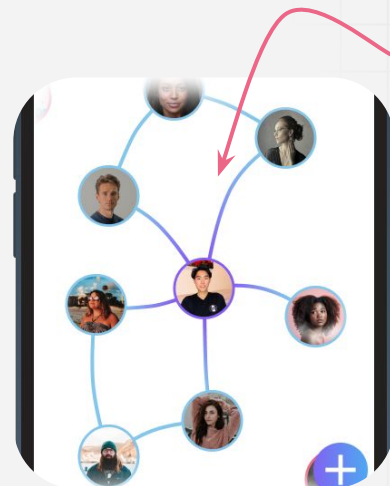
All profiles, shared interests, and match scores are hard-coded elements in all screens.

## Map to Find Match

We use a screenshot from Google Maps, and do not use any real location information.



## Network



All connections to other users on the platform at each time stamp are manually created.

## WHY Hard Coded?

- No users on the platform,
- No way to extract this information (profiles and location)
- not necessary to test user experience and task flows.

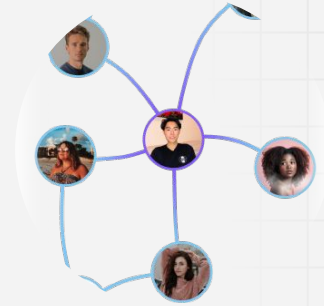
# Summary of Improvements



Added match percentages to people's bubbles on potential matches Home Screen



Replaced "Similarities" list with bubbles showing similarities with icons



Indicated self with a different color to help users distinguish between bubbles, and made network interactive (e.g. scroll, zoom, etc)