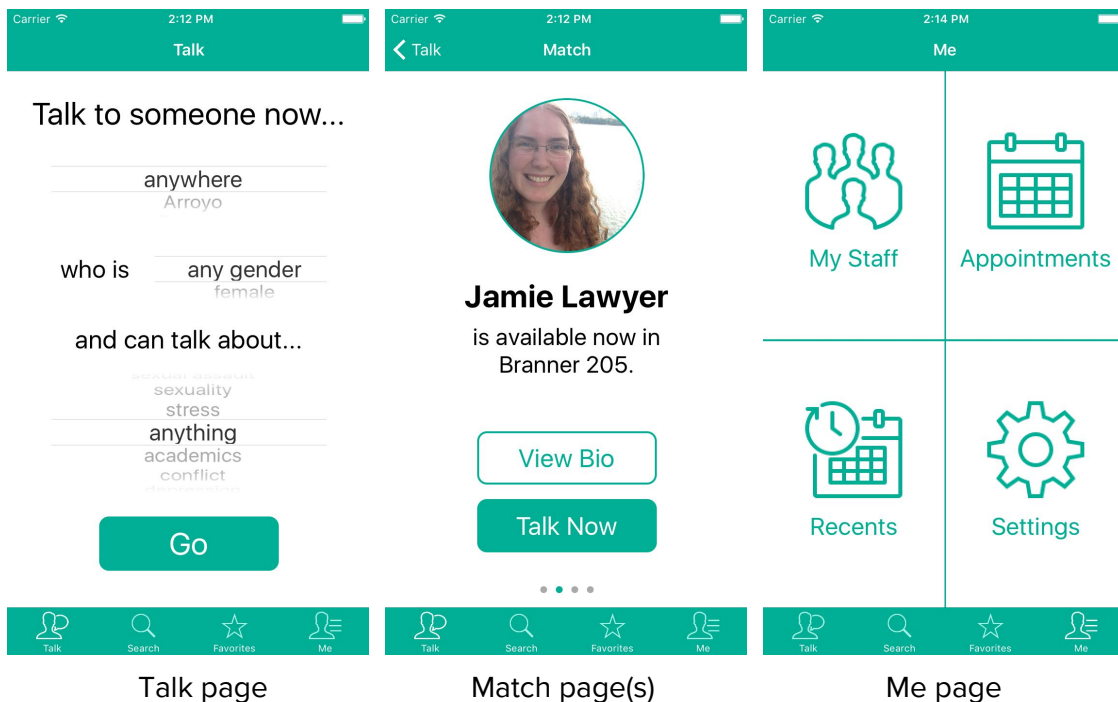# **moment**al

help the moment you need it

Juliana Cook, Adrienne Ivey, Meredith Marks, Nhien Tran

Problem and Solution Overview

Mental health is a prominent issue on college campuses, with students often struggling to get the help they need due to a reluctance to reach out and a shortage of health care providers. Our goal was to design an application that connects Stanford students to the support networks around them in times of stress or emotional difficulty.

Momental allows students to quickly and easily find someone to talk to in the moment. Students are matched with resources such as RAs and PHEs based on constraints such as location, gender, and issues they are knowledgeable about. Students can also search for specific people and schedule appointments to meet with someone in the future.

Following are a few of the main features of Momental:

Talk page   Match page(s)   Me page

| Search page | Profile page | Scheduling page |
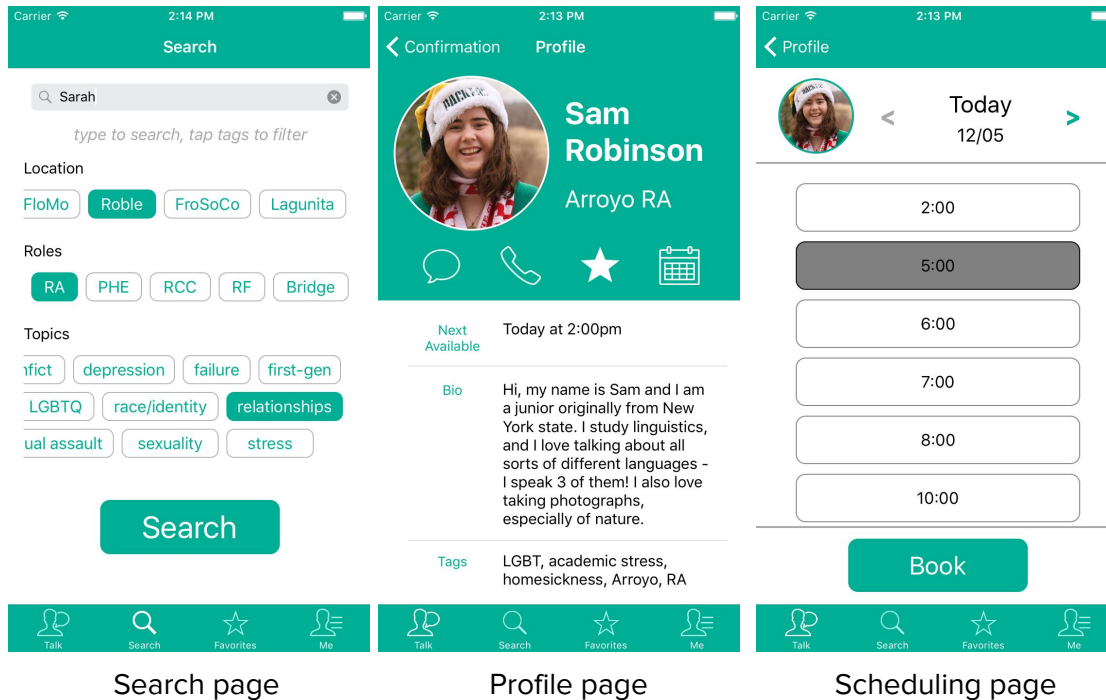
Tasks & Final Interface Scenarios

Our three tasks in order of complexity were "Talk to someone now", "Find someone specific", and "Follow up with someone".

Talk to someone now:
Talk to someone now is the core functionality of momental; this task connects students with a person who is available to talk right now and meets any special criteria they might have. In this task, the user wants to find someone who is available to talk in the current moment. We chose this task because when a person is under emotional stress, it can take a long time to get an appointment with a professional health service. From our user research, we discovered that students often felt apprehensive about going into an RA's room to talk about emotional struggles, worrying that they would be imposing on their time and feeling hesitant to take the first step. Thus, not finding someone to talk to in the moment, students can be in a far worse state by the time they get professional help, when what they might have needed was just someone to talk to. The user can find someone to talk to immediately from the Talk page. They can fill in preferences, then hit Go to move to a match results page. Any match can then be immediately requested by a specific mode of contact, after which a confirmation page will appear with details.
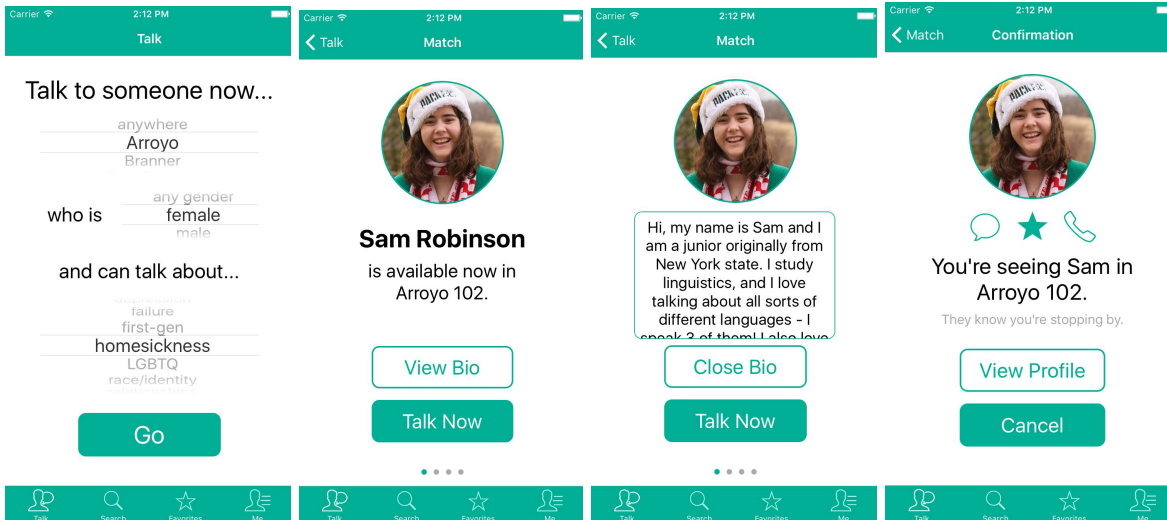
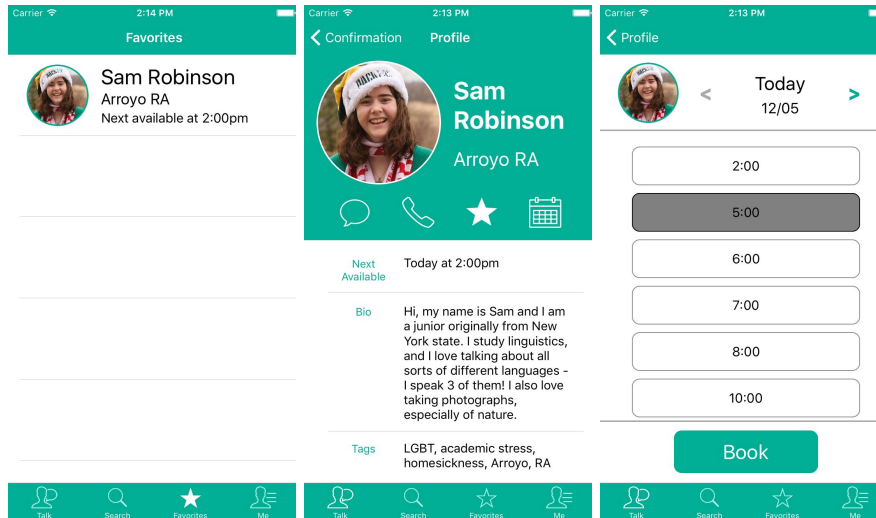"Find someone now" task flow in final prototype.

Find someone specific:
In this task, the user wants to speak with a specific person or type of person, whether that is Sam the Cedro RA, any PHEs on East Campus, or a person who can talk about a specific topic, such as homesickness. We chose this task so that users can find people to talk to who are a good fit for them, whether geographically or conversationally. This task is accomplished by using the search page to search for a person type ("Wilbur RA") or name ("RA Taylor") using suggested tags or direct text input. The search will then display a list of search results, any of which leads to a profile page with a user bio and schedule access.
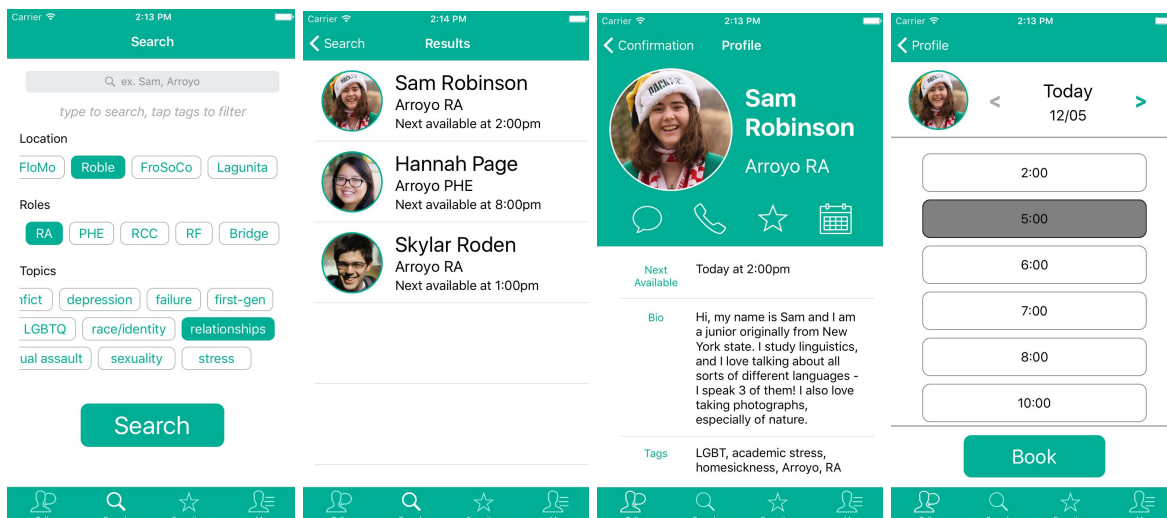
"Find someone specific" task flow in final prototype.

Follow up with someone:
In this task, the user wants to follow up with someone to whom they have previously spoken. We chose this task because we wanted users to be able to develop relationships with the people they find in our app, and to share updats when personal situations improve or change. This task can be accomplished by using the recents page, which shows a list of recent contacts, or the favorites page if the user used that feature. A list of recent or favorite contacts is displayed, from which profile pages can be accessed.

"Follow up with someone" task flow in final prototype.

Design Evolution

Once we had done our initial user research, we took a lot of steps to get to our final application prototype. We started designing our application around our "Talk to someone now" task, since that was what we found to be most important to our users during our research. We considered a few different designs and platforms, but ultimately decided on a standard mobile app in order to be able to provide appropriate features to the user and make it accessible to a large user base.
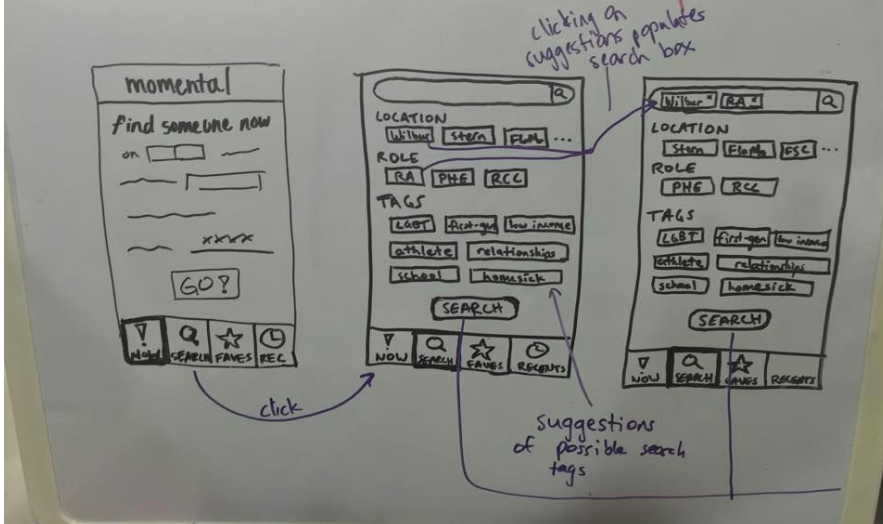
Storyboarding

We storyboarded the three main tasks of our app, as below:
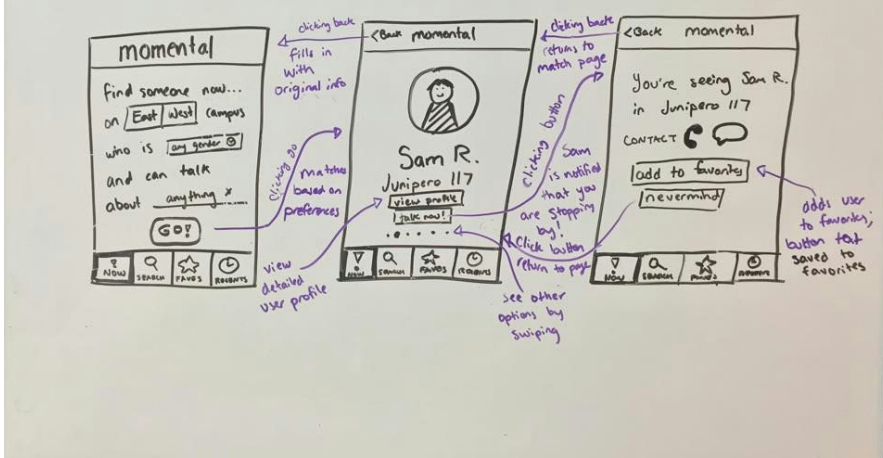
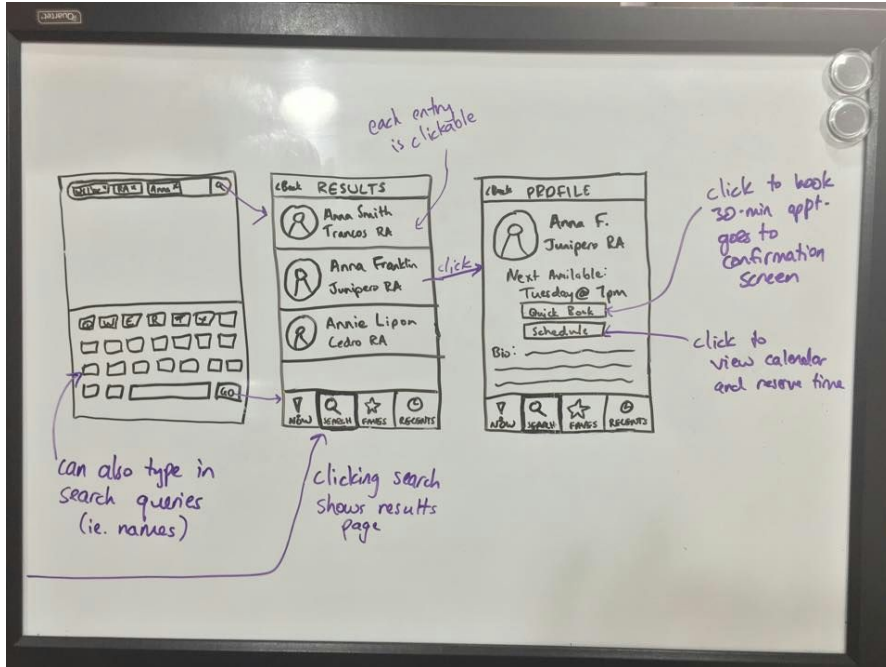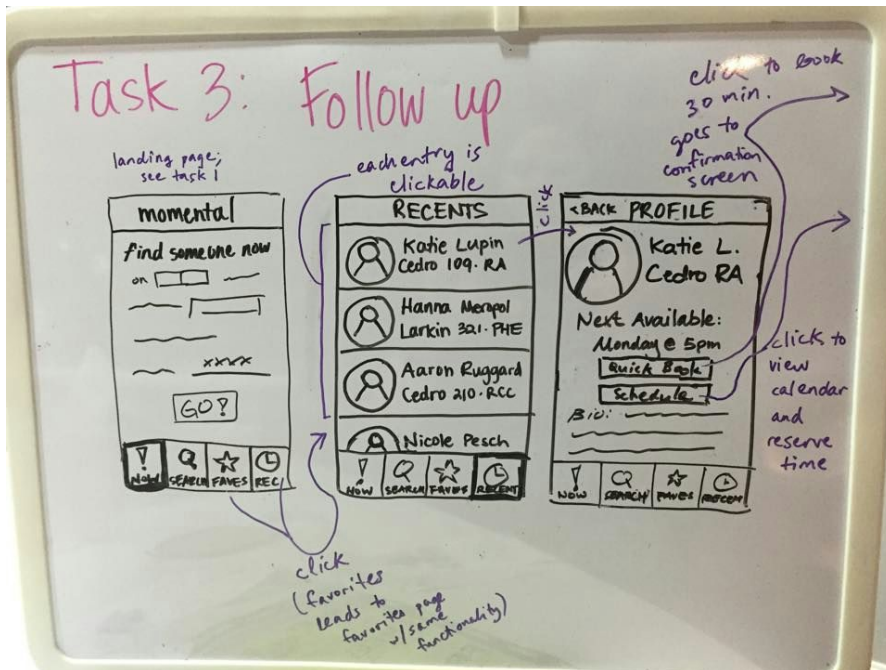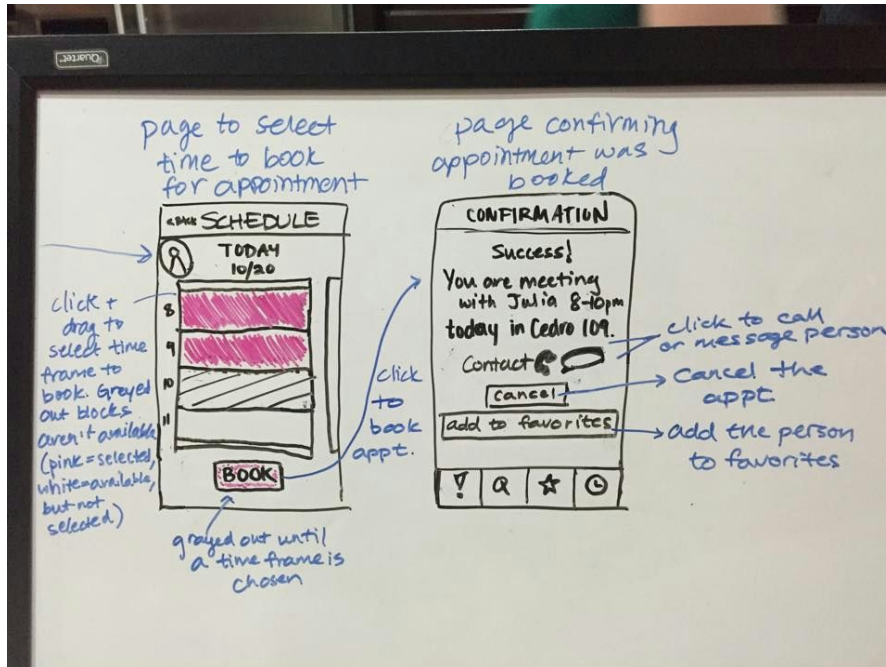Initial storyboard of "Talk to someone now" task.

Initial storyboard of "Find someone specific" task, part 1.

Initial storyboard of "Find someone specific" task, part 2.

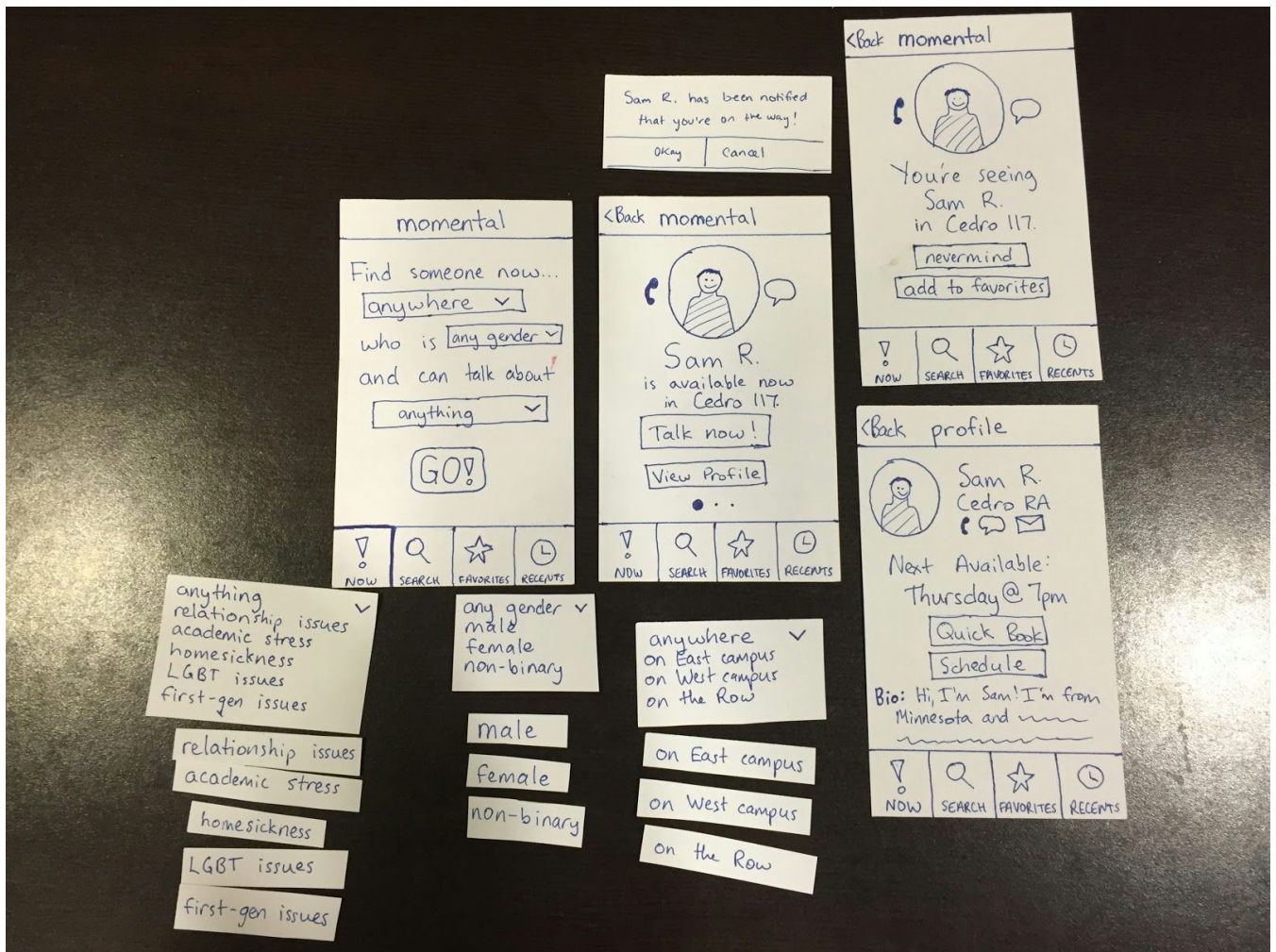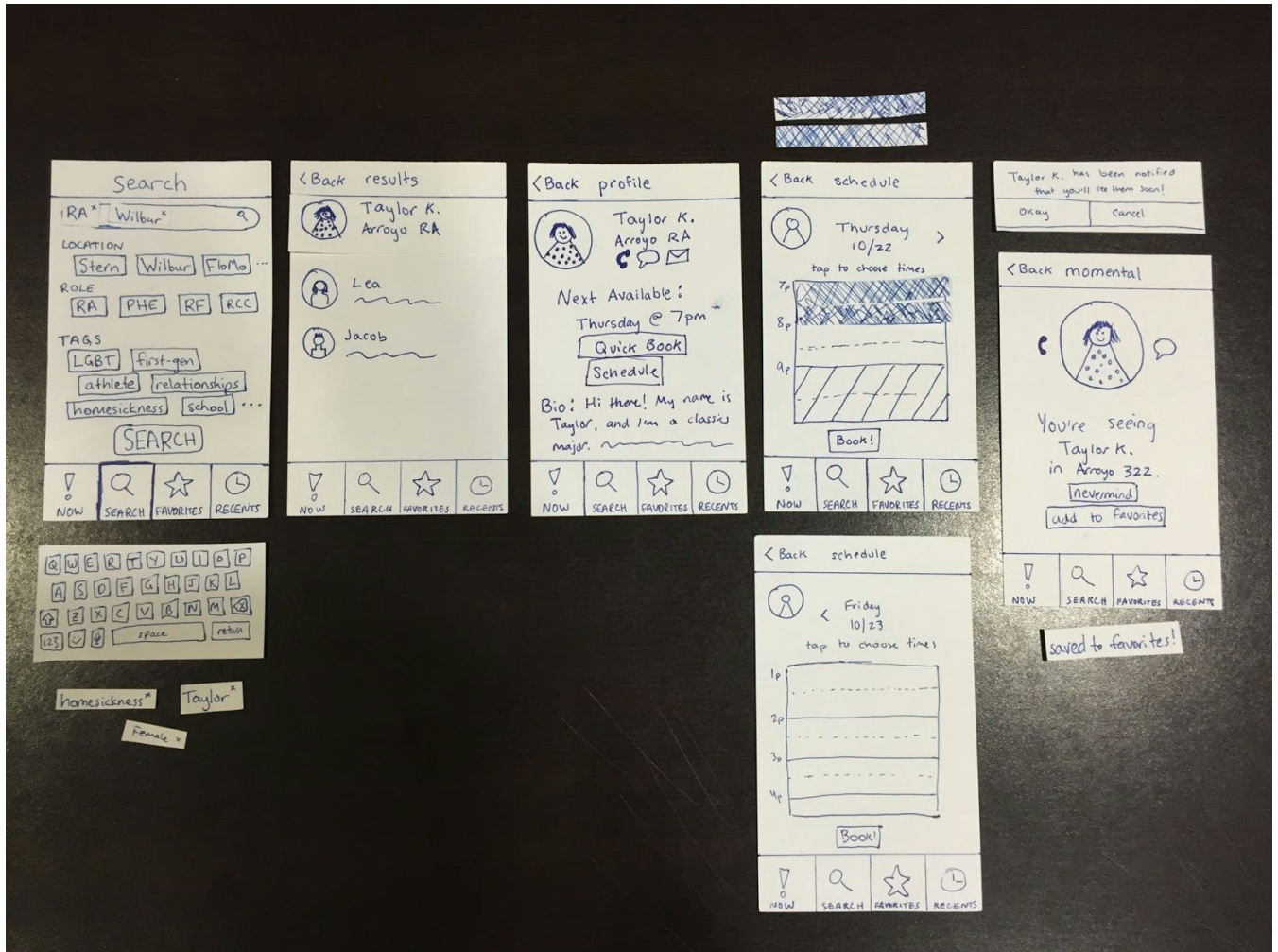Initial storyboard of "Follow up with someone" task, part 1.

Initial storyboard of "Follow up with someone" task, part 2.
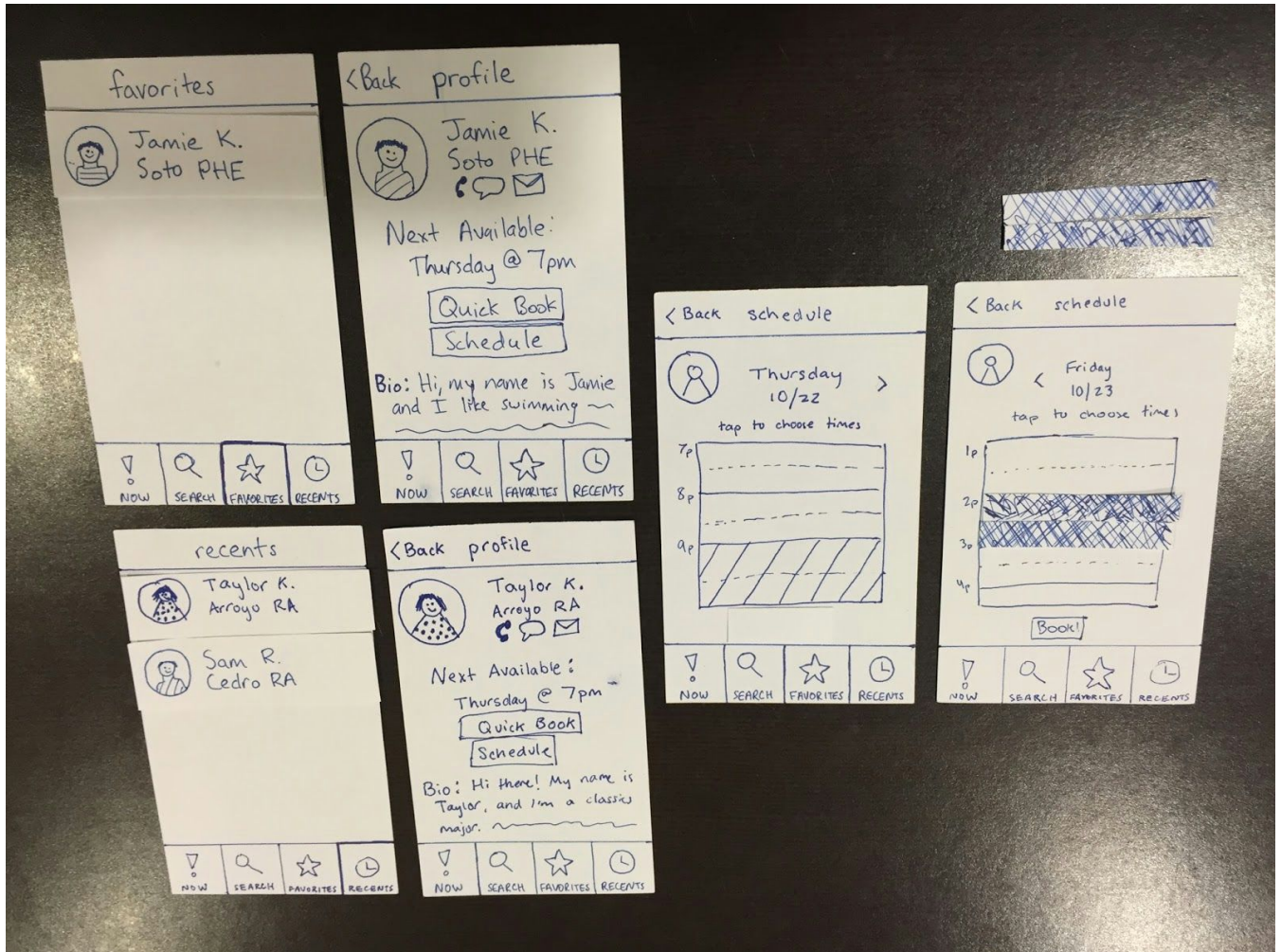
Low-Fidelity Prototype

After storyboarding, we moved to our low-fidelity prototype, which we made out of index cards, and which closely followed the design from our storyboarding.

Low-fidelity prototype: "Talk to someone now"

Low-fidelity prototype: "Find someone specific"

Low-fidelity prototype: "Follow up with someone"

Medium-Fidelity Prototype

We did user testing with our low-fidelity prototype to get feedback to move forward with in our medium-fidelity prototype.

We learned that users almost always wanted to visit the profile before making a talk now appointment, so we decided to provide subjects with more information directly on the match screen.

We also received feedback about an overly prominent "book" button when viewing the schedule during a "find someone specific" task, which caused the user to feel pressured to make an appointment. We decided to change that in our medium-fidelity prototype, making the book button appear only after the user had selected times.

One of our subjects was confused by match screen vs a profile screen. We made some changes to the profile to make it more distinguishable from the match screen.

One remark that came up more than once was that it would be useful to have one's staff readily accessible within the app, whether through the favorites page or through a "My Staff" list. We implemented that in our medium-fidelity prototype.
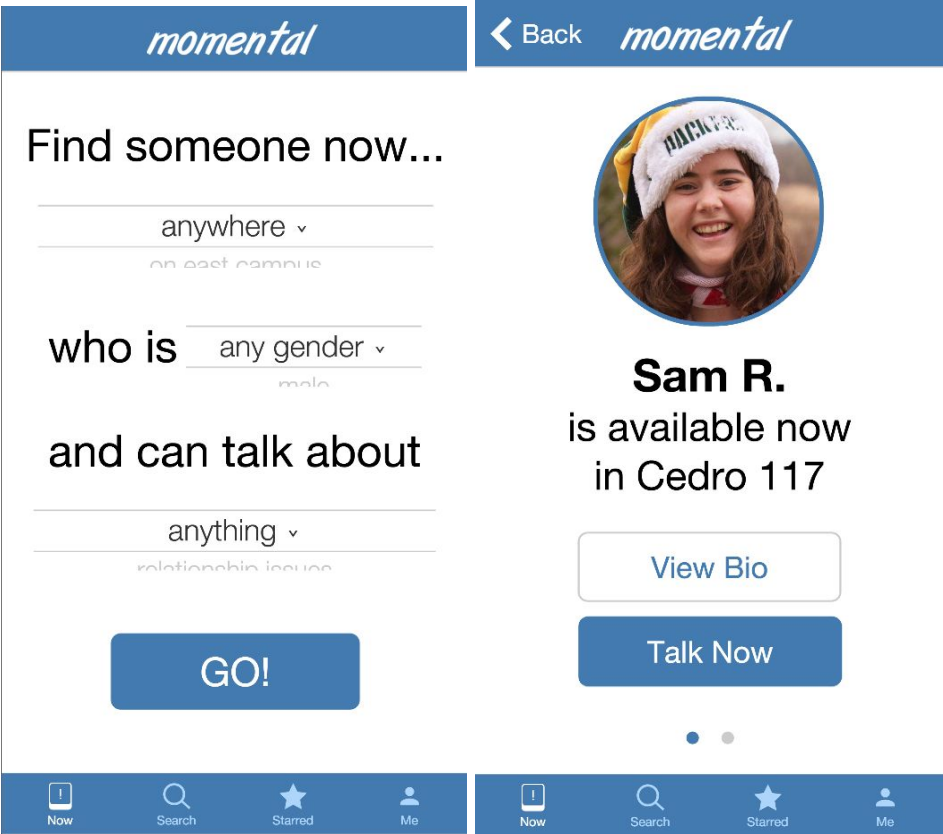
Medium-fidelity prototype: "Find someone now" part 1.
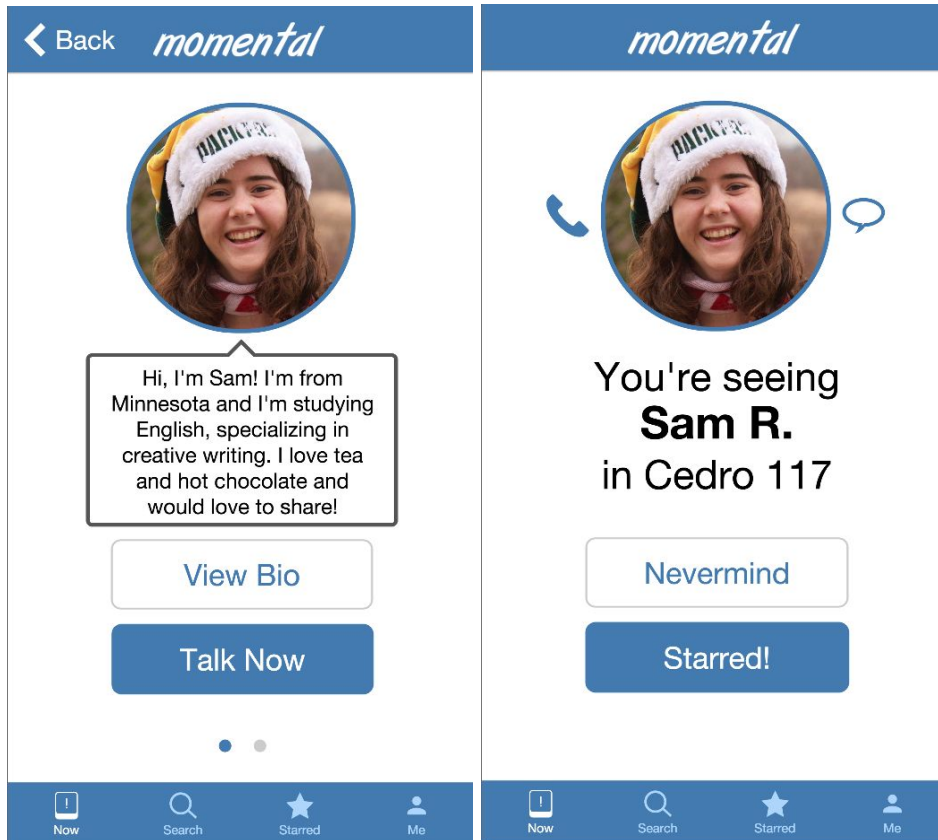
Medium-fidelity prototype: "Find someone now" part 2.

Medium-Fidelity prototype: "Find someone specific" part 1.
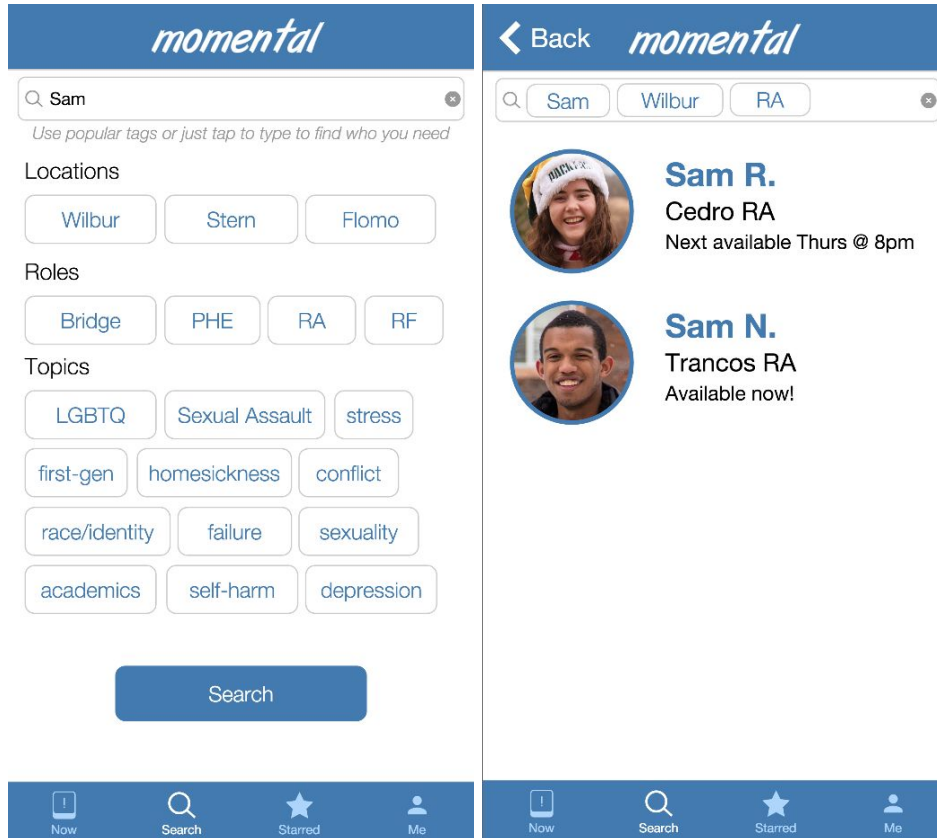
Sam R.
Cedro RA
Next Available: Th 8PM

Quick Book

📞 💬 ✉️ 📅

Tags: homesickness, academic stress, LGBT issues

Bio: Hi, I'm Sam! I'm originally from Minnesota, but my family moved to Maryland when I was 12. I'm currently a junior studying Physics with a minor in French. Happy to talk anytime!

< **Today** >
Friday, Oct 29

Tap to choose a time

| 3:00pm |
| 3:30pm |
| 4:00pm |
| 4:30pm |
| 5:00pm |
| 5:30pm |
| 6:00pm |

Book

| Now | Search | Starred | Me |

| Now | Search | Starred | Me |
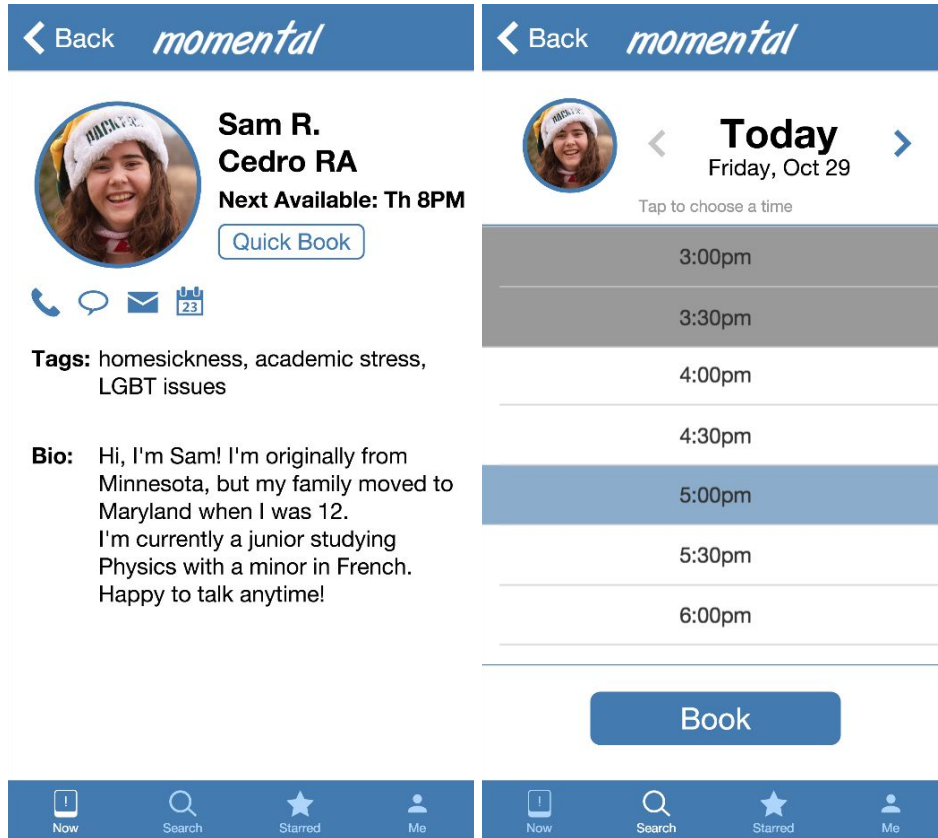
Medium-Fidelity prototype: "Find someone specific" part 2.
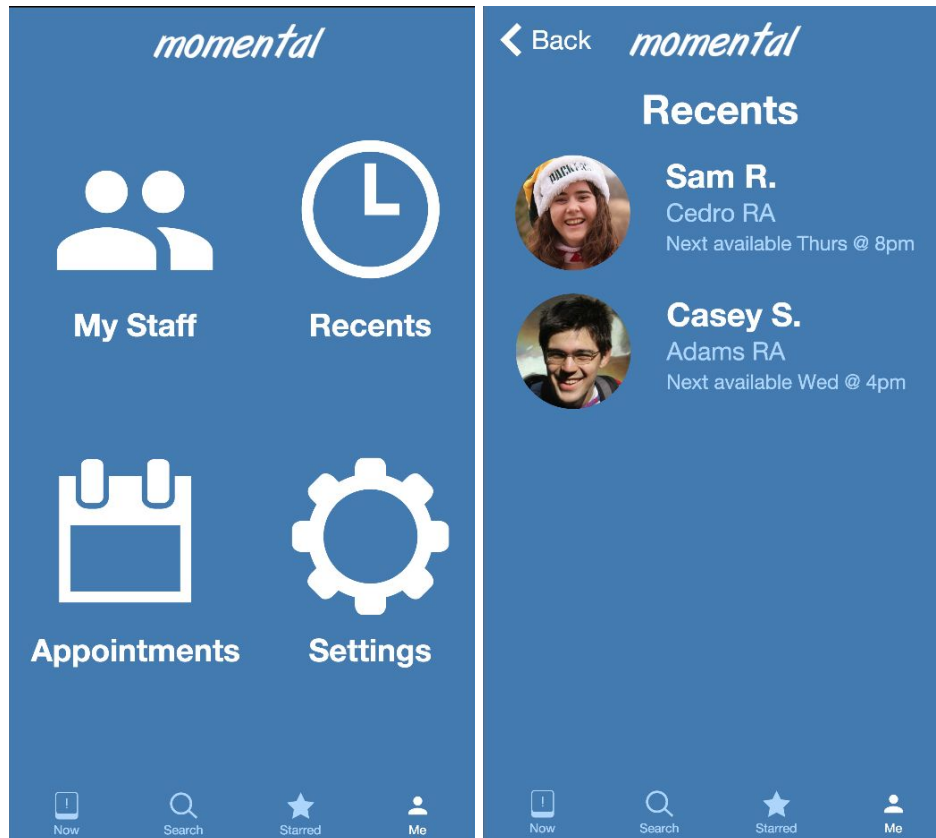
Medium-fidelity prototype: "Follow up with someone".

High-Fidelity Prototype

After completing our medium-fidelity prototype, we handed our prototype to our classmates for them to conduct a heuristic evaluation on it. They suggested several modifications to our prototype, including a change in color scheme, clearer confirmation screens and labeling, better signaling in how to use the search feature, and other modifications for ease of use. Following are the main screens of our final prototype.

momental

Email

Password

Login

Login screen

Talk to someone now...

anywhere
Arroyo
Branner

any gender
who is   female
male

and can talk about...

depression
failure
first-gen
homesickness
LGBTQ
race/identity
relationships

Go
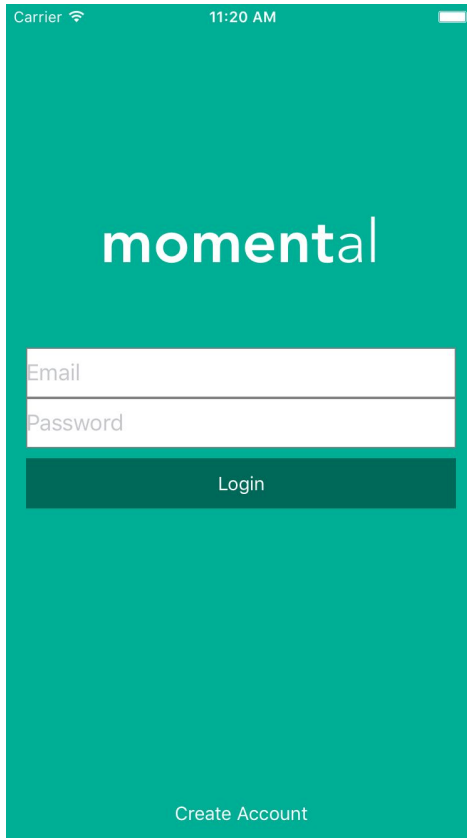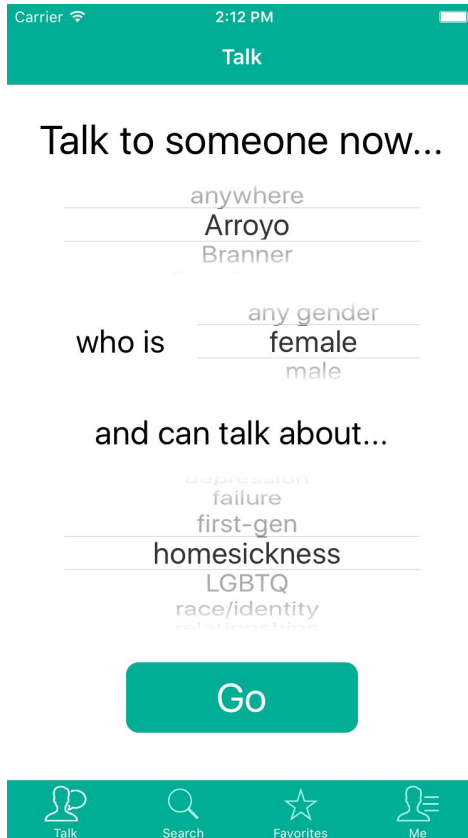
Talk now feature, criteria page

Sam Robinson

is available now in
Arroyo 102.

View Bio

Talk Now

● ● ● ●

Talk   Search   Favorites   Me

Match screen

Hi, my name is Sam and I
am a junior originally from
New York state. I study
linguistics, and I love
talking about all sorts of
different languages - I
speak 3 of them! I also love

Close Bio

Talk Now

● ● ● ●

Talk   Search   Favorites   Me

Match screen + bio

💬 ⭐ 📞

You're seeing Sam in Arroyo 102.

They know you're stopping by.

[View Profile]

[**Cancel**]

👥	🔍	⭐	👤
Talk	Search	Favorites	Me

Confirmation screen

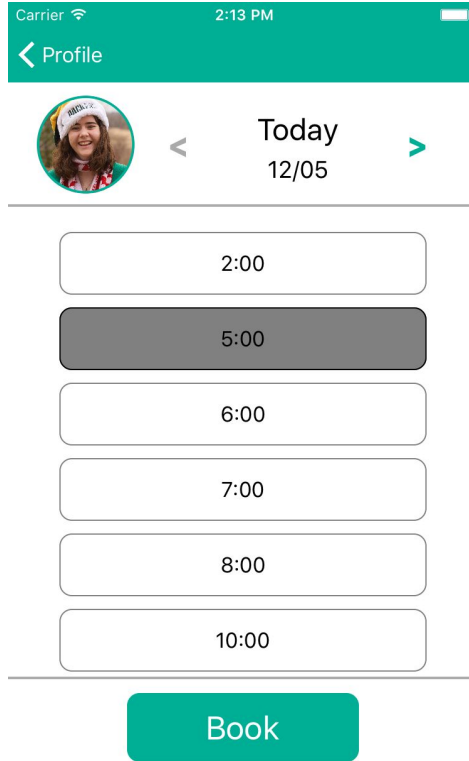---

Sam Robinson

Arroyo RA

💬 📞 ☆ 📅

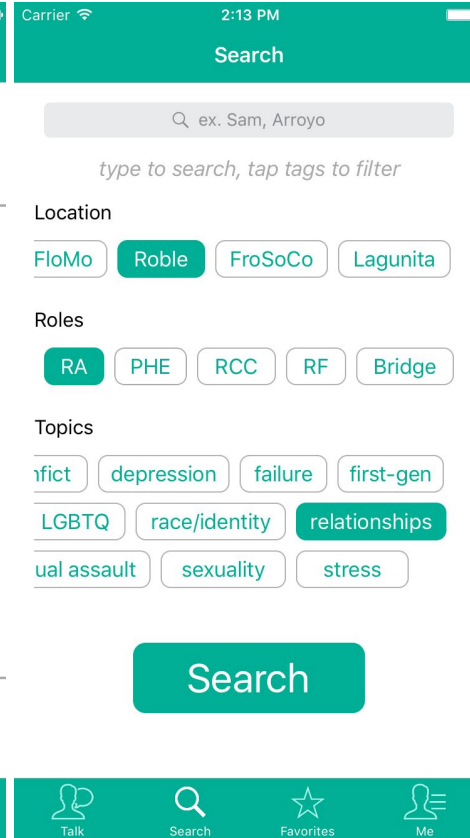| Next Available	Today at 2:00pm
Bio	Hi, my name is Sam and I am a junior originally from New York state. I study linguistics, and I love talking about all sorts of different languages - I speak 3 of them! I also love taking photographs, especially of nature.
Tags	LGBT, academic stress, homesickness, Arroyo, RA

👥	🔍	⭐	👤
Talk	Search	Favorites	Me

Profile screen

Today
12/05

❮   ❯

2:00

5:00

6:00

7:00

8:00

10:00

Book

Talk   Search   Favorites   Me

Scheduling screen

🔍 ex. Sam, Arroyo

type to search, tap tags to filter

Location

FloMo   Roble   FroSoCo   Lagunita

Roles

RA   PHE   RCC   RF   Bridge

Topics

nfict   depression   failure   first-gen

LGBTQ   race/identity   relationships

ual assault   sexuality   stress

Search

Talk   Search   Favorites   Me

Search feature, input/criteria page

Sam Robinson
Arroyo RA
Next available at 2:00pm

Hannah Page
Arroyo PHE
Next available at 8:00pm

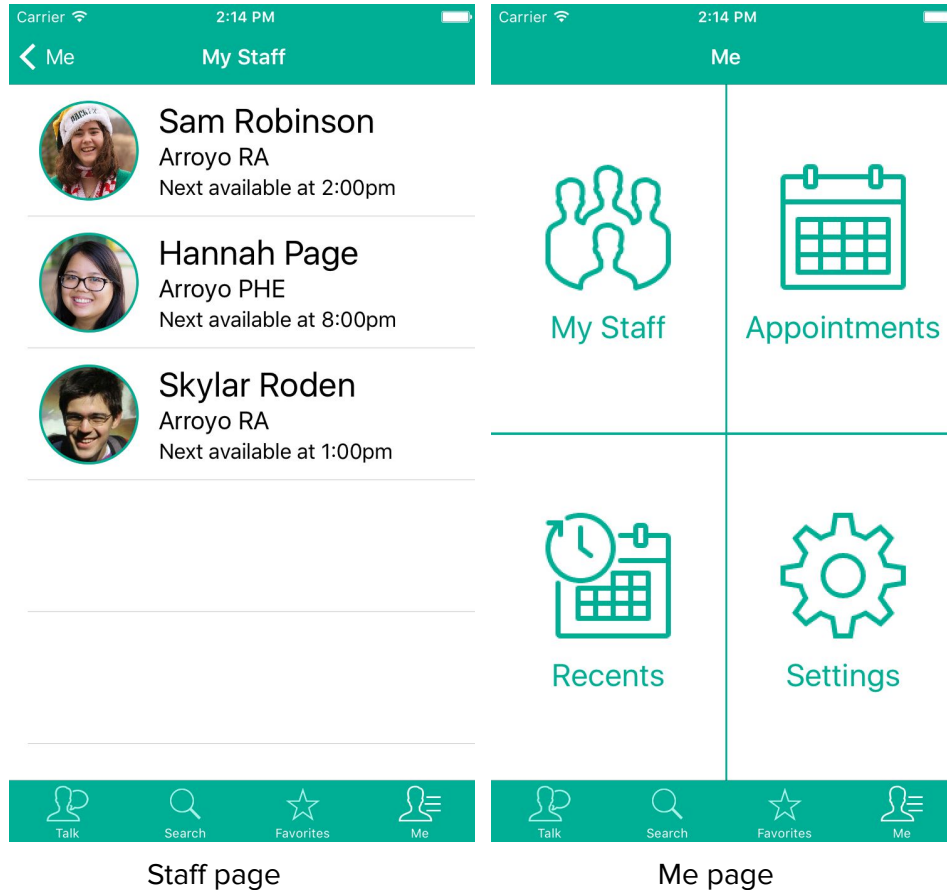**Skylar Roden**
Arroyo RA
Next available at 1:00pm

Talk   Search   Favorites   Me

Search results

Sam Robinson
Arroyo RA
Next available at 2:00pm

Talk   Search   Favorites   Me

Favorites

Staff page | Me page

Major Usability Problems Addressed

After building our medium-fi prototype in proto.io, we received feedback from four classmates through a heuristic evaluation. Though some of the issues found were simply due to the limitations of our prototyping tools, we also discovered many actionable issues to address in our high-fi prototype. Below, we list the high severity issues our evaluators found and how we addressed them in our high-fi prototype.

Meaning of "Now" tab bar item is unclear

The "Now" tab on the medium-fi app was confusing to our evaluators. The icon and name didn't give a clear idea of what the tab should be used for.

Medium-fi tab bar

This tab leads to the functionality to find someone to talk to now, allowing users to filter based on preferences and match with someone who is currently available.


HIgh-fi tab bar

On our high-fi prototype we changed the text from "Now" to "Talk" to more clearly signify the tab's purpose. We also changed the icon to better fit the description.

Interactions to open bio on the match screen are confusing

Evaluators were confused with how to hide the bio on the medium-fi prototype. Tapping anywhere off of the bio would close the text box, but that wasn't immediately apparent.
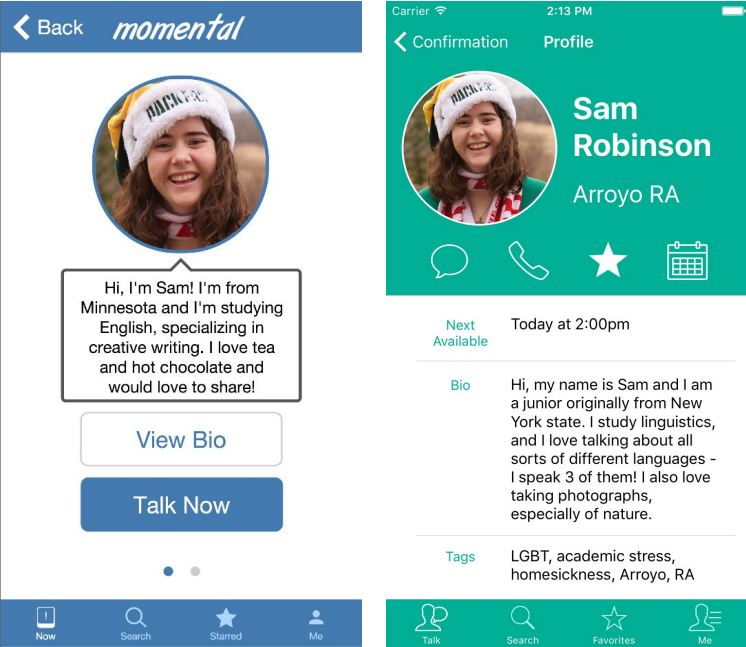

Bios on the match screen in medium-fi and high-fi prototypes

In our high-fi prototype, we changed to having a "Close Bio" button that appeared in the position of the "View Bio" button.

**Phone and message icons on the confirmation screen are confusing**

Once a user clicks the button to say that they want to talk now with someone in the medium-fi prototype, they are brought to a confirmation screen. A pop up states that the person has been

notified that the user is on their way, and the screen states that the user is visiting the person in their room. However, there are also two buttons for calling or texting the person if the user prefers. The usage of these is unclear, because of the emphasis on seeing the person face to face.
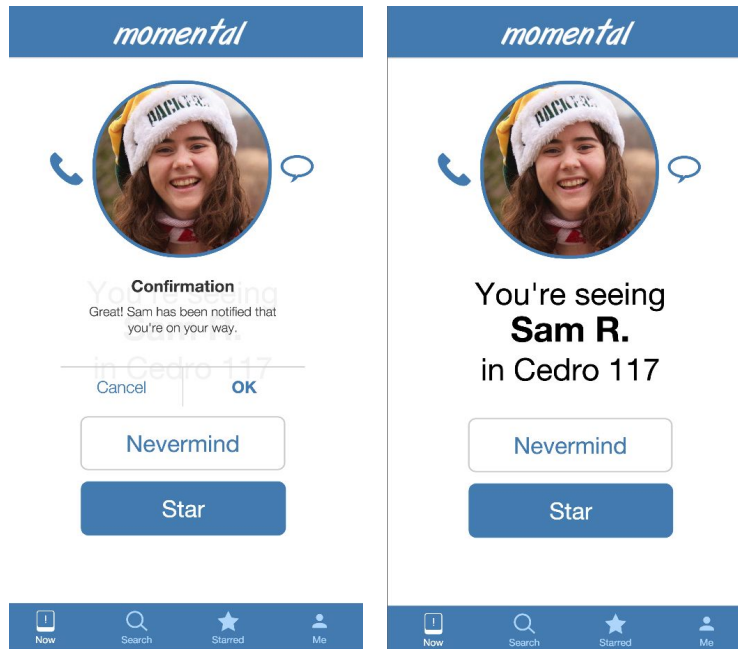
Confirmation alert and screen in medium-fi prototype

On the high-fi prototype, this was changed to allow the user to select how they would like to talk to the other person; over phone, text message, or face to face. If text or call was selected, the app would bring up a text message or phone interface. If in person was selected, a confirmation screen is displayed letting the user know where to go and that the person knows they are stopping by. The phone and message functionality remains, just in case they need to call or text to find the person's room.
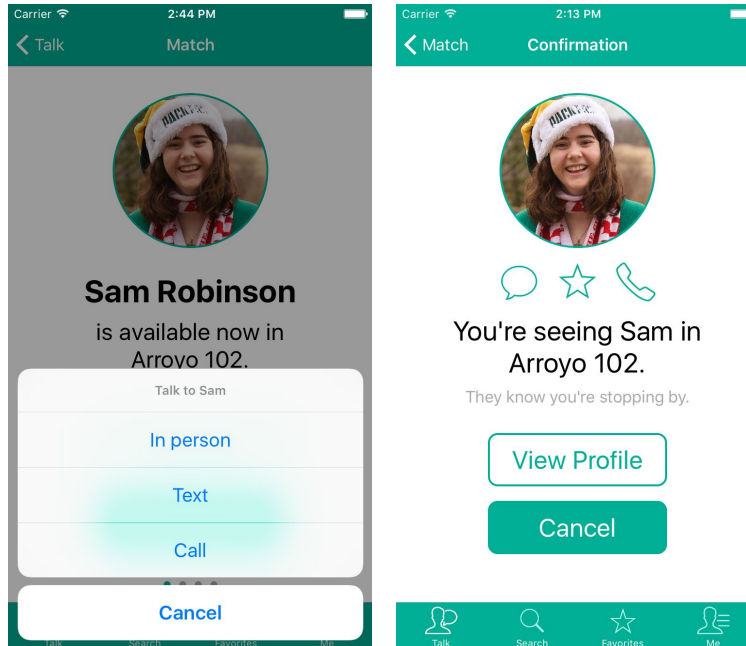
Selection and confirmation screen in high-fi prototype

Use of the search bar is unclear

The use of the search bar on the medium-fi prototype was unclear; users weren't sure what they could search there that wasn't already included below. We updated the description to let users know that they could use both the search bar and the tags simultaneously, and that the tags would serve as a filter. We also put example search queries, such as a person's name, in the search bar.
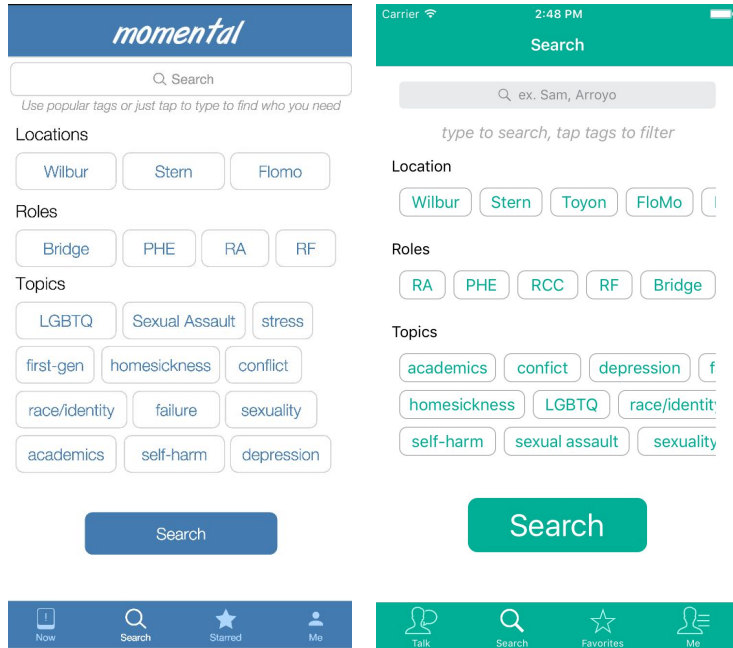
Search bars in medium-fi and high-fi prototypes

Disappearing tags are confusing

On the medium-fi prototype, when a tag was tapped it disappeared from the position in the list and appeared as a tag in the search bar. If a query was typed into the search bar, it was also created into a tag-like interface.
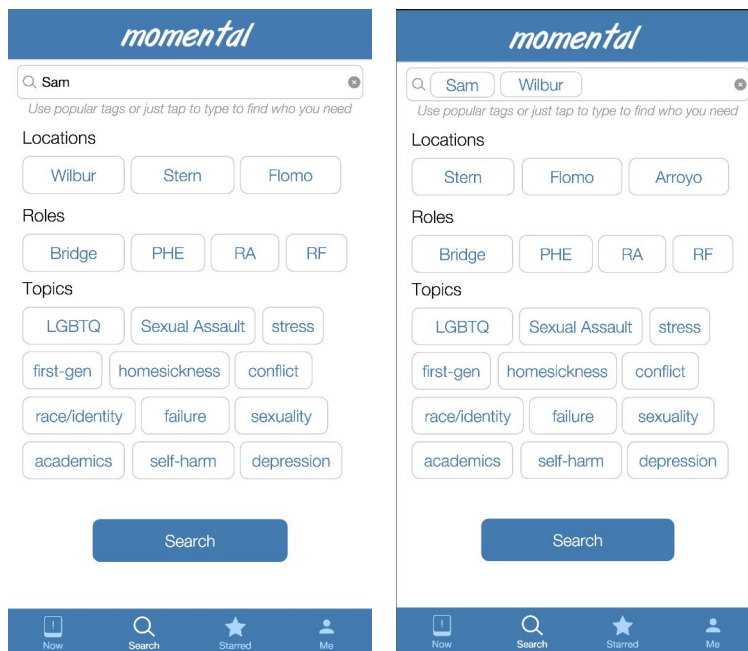
Disappearing tags on medium-fi prototype

These interactions were puzzling to our evaluators, who felt the movement of tags was strange. In our high-fi prototype, the tags stay in place and change color when tapped. Text in the search bar remains plain text.
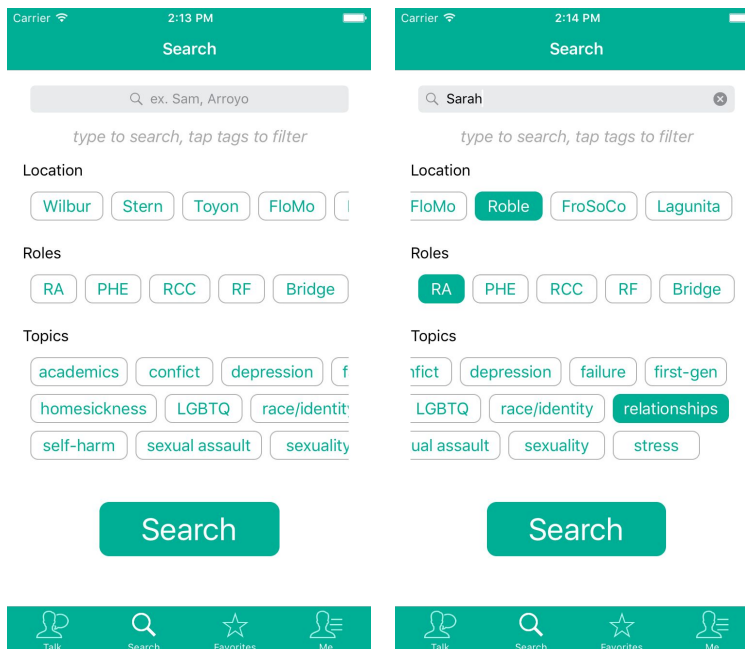
In-place tag filters on medium-fi prototype

Meaning of "Quick Book" button is unclear

On the profile page in the medium-fi prototype, we had a "Quick Book" button that would reserve time for the user to speak with the person at their listed next available time. This wasn't well documented, and evaluators felt the meaning was unclear.
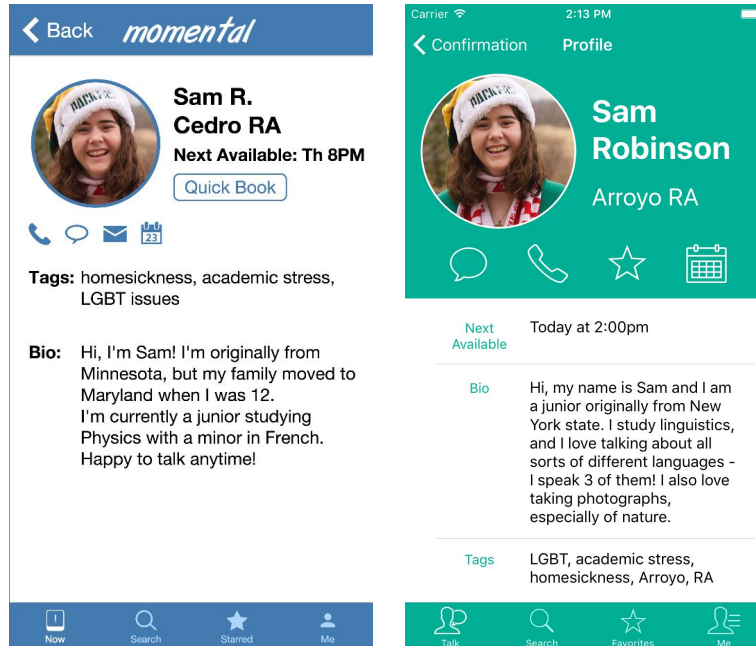
Quick Book button on the profile page

This functionality was removed entirely in the high-fi prototype, instead having users book whatever time they wanted via the calendar booking function.

**Buttons on the profile page are small and difficult to use**

The buttons on the medium-fi prototype were small and hard for users to hit. On the high-fi prototype we made the buttons much larger for ease of use.
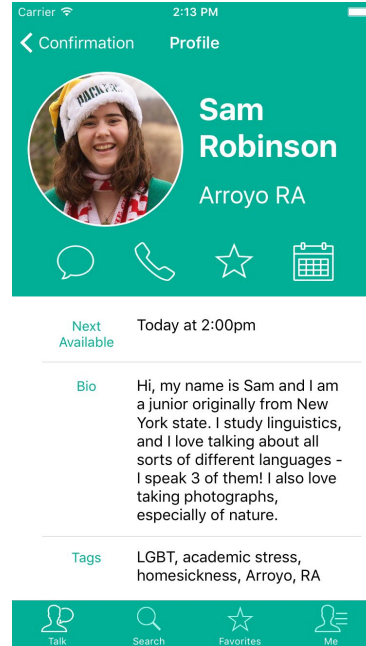
Profile pages on the medium-fi and high-fi prototypes

**Alphabetize ordering of topics on search page**

On the medium-fi prototype, the topics weren't alphabetized in any particular way, making it difficult to read. On the high-fi prototype we added even more roles, and alphabetized them for ease of reading.
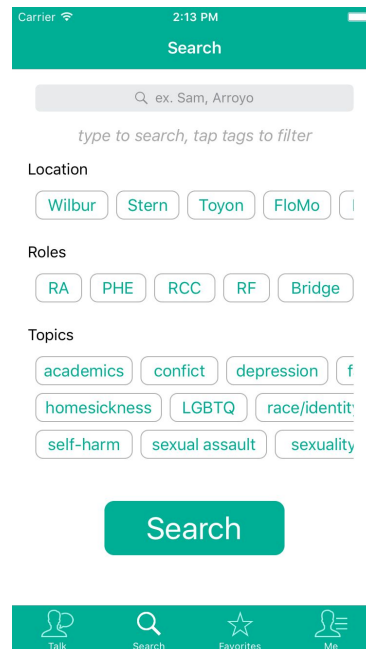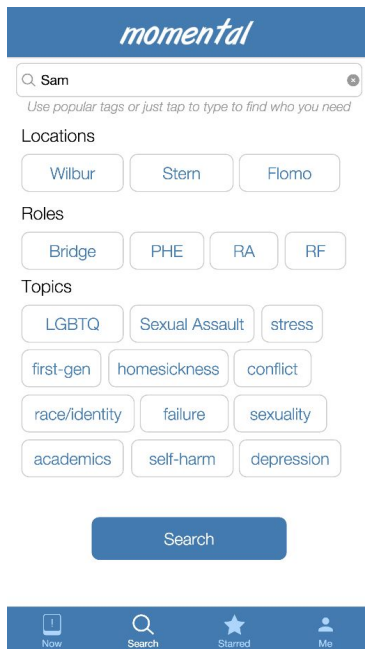
Search pages on the medium-fi and high-fi prototypes

Color scheme is too cool of a color

Our evaluators commented that the color scheme in the medium-fi prototype
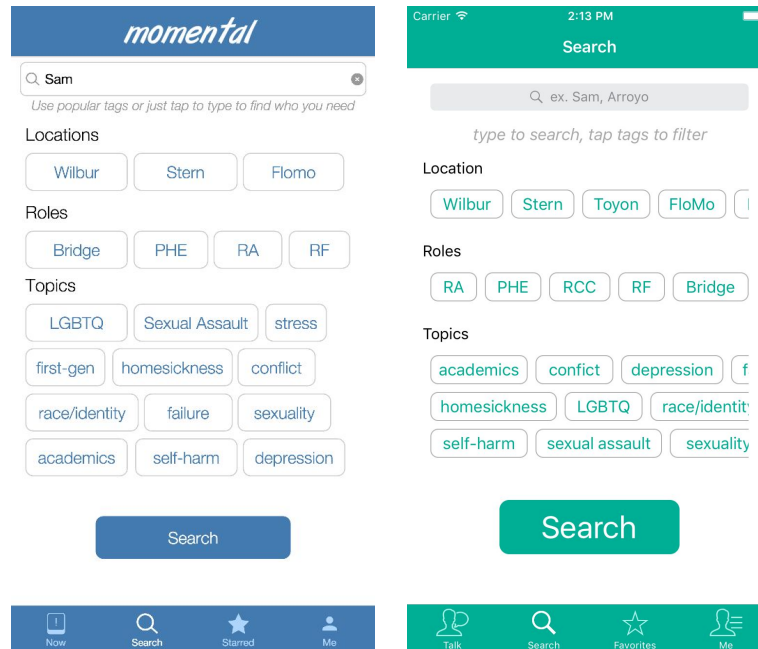
Search pages on the medium-fi and high-fi prototypes

Prototype Implementation

We used Swift to implement our high-fi iOS app, along with XCode's storyboard functionality for building user interfaces. We benefitted immensely from the many tools Apple gives developers to create applications, and could use their implementations for basic pieces such as buttons without needing to implement our own.

While the storyboarding tools certainly helped us make visual user interfaces more simply than it would have been to create them programmatically, the storyboarding tools are fairly complex and the visual constraints can be finicky and hard to get right. Collaborative editing of storyboarding isn't well supported, and we sometimes had to manually edit the files describing the storyboard when there were merge conflicts. Luckily several of our team members had previous experience with iOS programming and Swift, which helped us move quickly in the limited building timeframe.

The app is still a prototype, so there are several places where functionality is not complete. All of the data is fake and the matches and search results are all hard coded, so no matter what you input the same results are always returned. The app is also designed specifically for an iPhone 6, and will look a bit strange on other sizes.

Currently the app is only designed from the user's perspective. Were this to be a complete application, it would also need a way for helpers such as RAs and PHEs to put their information into the app. If this were to be launched on the Stanford campus, it would also make sense to create Android and web versions in order to fully support all students who wish to use Momental.

Summary

At the start of the quarter, we brainstormed and narrowed down a pain point that we wanted to address in wellness. Through user interviews in the domain of mental health, we discovered that students have a hard time finding emotional support when they need it, and often have to resort to seeking professional help at a later date. This resulted in us working on Momental, a mobile application designed to allow students to more easily connect to the mental health resources and support around them during times of emotional distress. We developed our application iteratively, through sketching, storyboarding, and finally prototyping. In between our low-fidelity, medium-fidelity, and high-fidelity prototypes, we sought out feedback from our users and our peers in the form of user testing and heuristic evaluation. The final result is an application that allows students to seek emotional support immediately, or at a later date, as well as allows them to build up their support network on campus.