

Momental

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Introduction

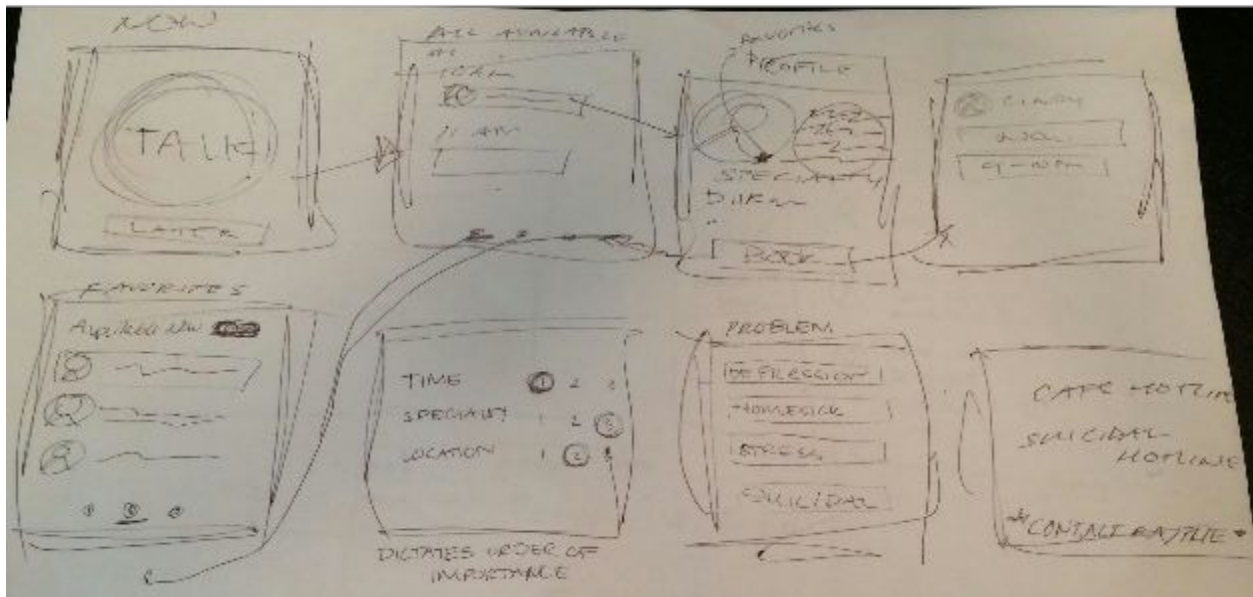
Momental - “Help the moment you need it.”

We are designing an application to allow Stanford students to use the support network around them to get emotional support when they need it. Students often experience times of stress or emotional difficulty, and the formal resources available on campus, such as CAPS or the Bridge, are not sufficient in meeting their needs. Our application is meant to increase the availability of mental health resources, such as conversations with RAs, PHEs, and other people who care, and make it easier to utilize them.

Sketches

We considered applications on several different platforms, including text-based, mobile, web, and Apple Watch.

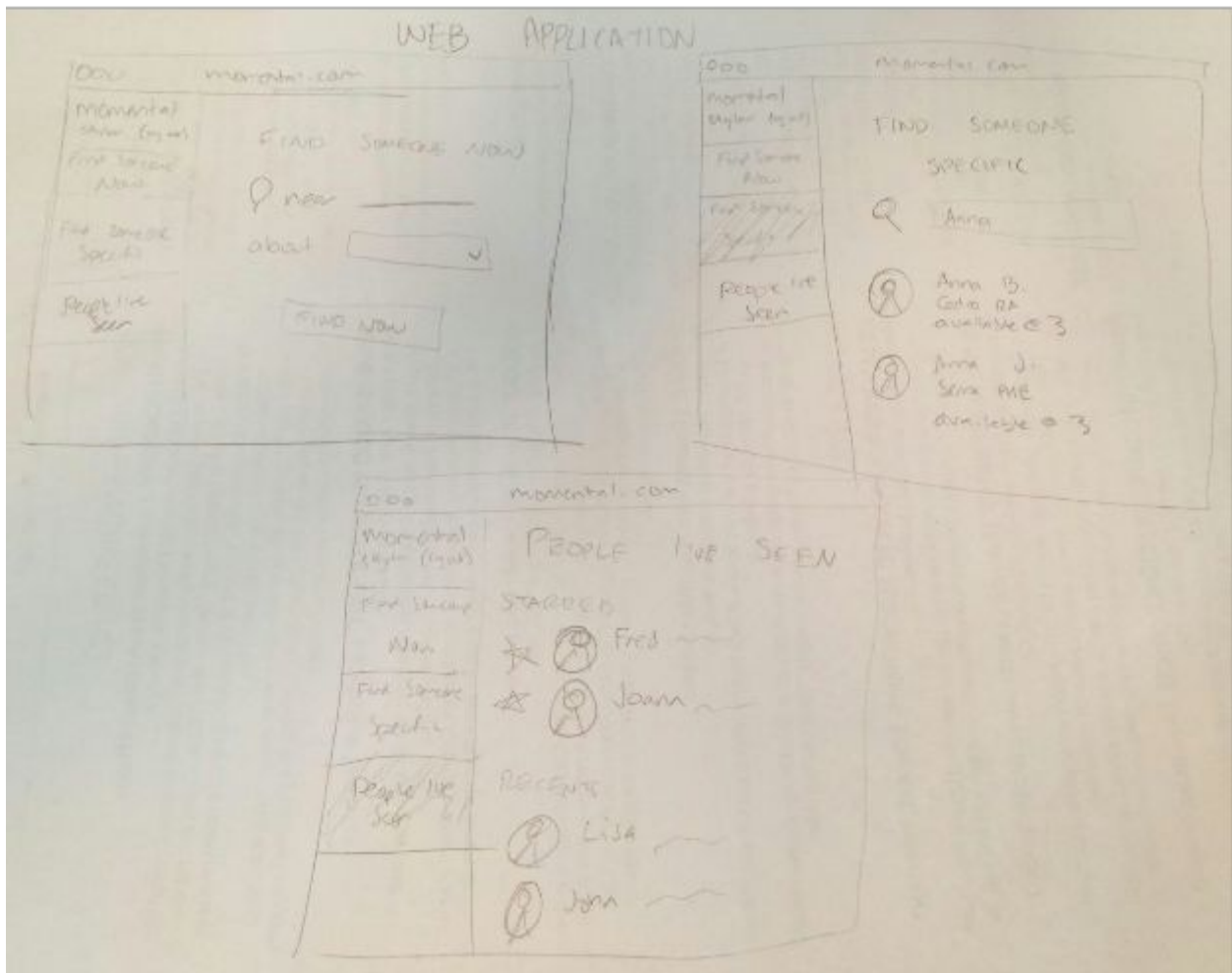
Image 1: Sketches for Apple Watch App



The above sketches are for an Apple Watch application that focuses on allowing students to find someone immediately. The start screen optimizes for this with a huge “Talk Now” button to find a person that is available to talk immediately. The rest of the

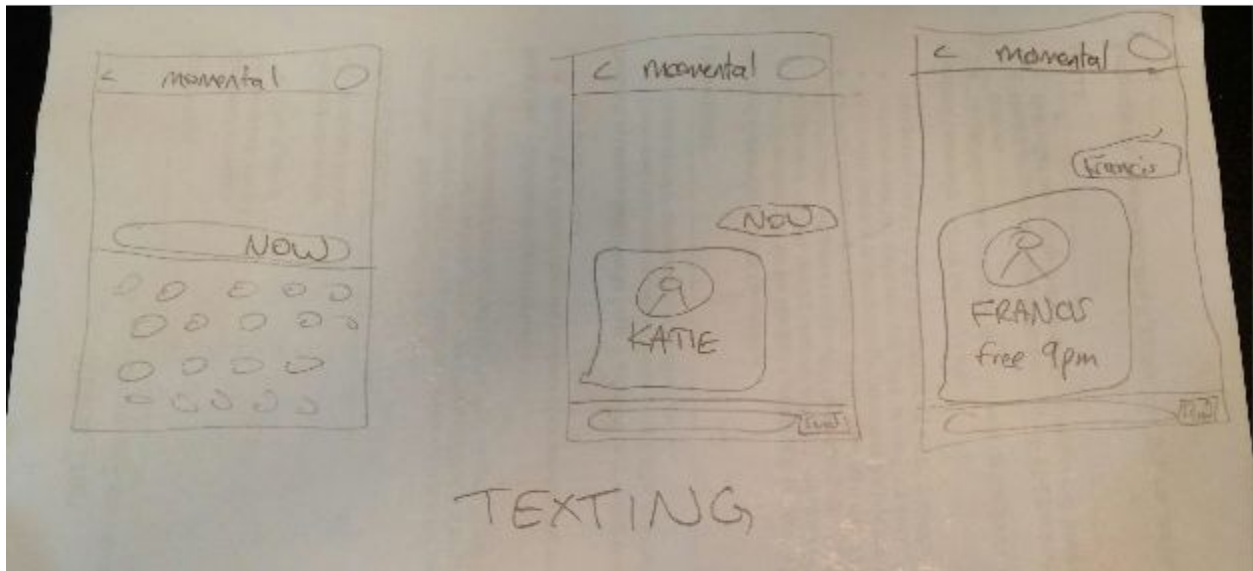
screens are simple representations of profile, confirmation, search results, settings, and scheduling screens.

Image 2: Sketches for Web Application



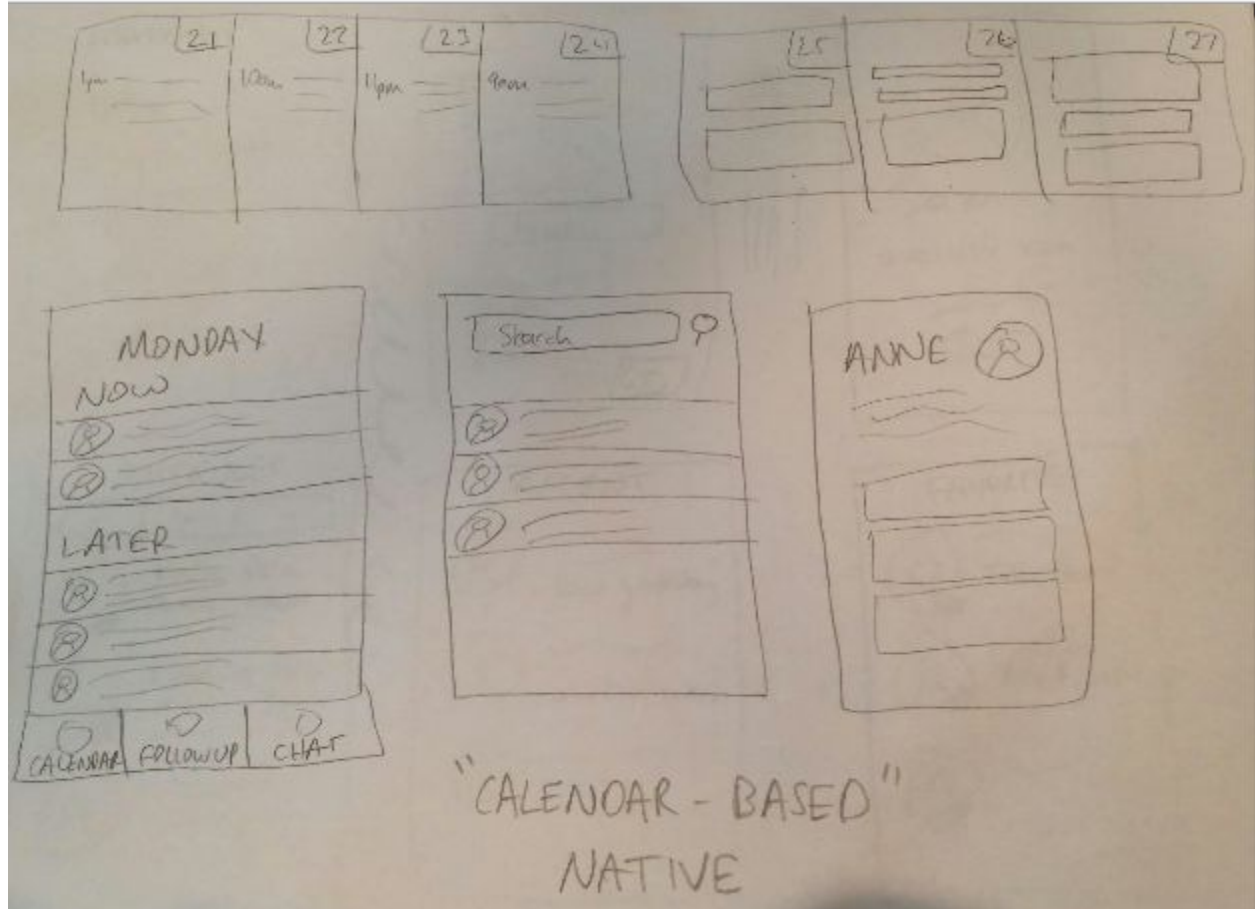
The above sketches represent a web application that allows students to find and schedule meetings with people to talk. It also allows users to search for people based on specific criteria (location, role, gender, etc.), see their favorite and recent contacts, view schedules, and find staff from their residence.

Image 3: Sketches for Texting-Based Application



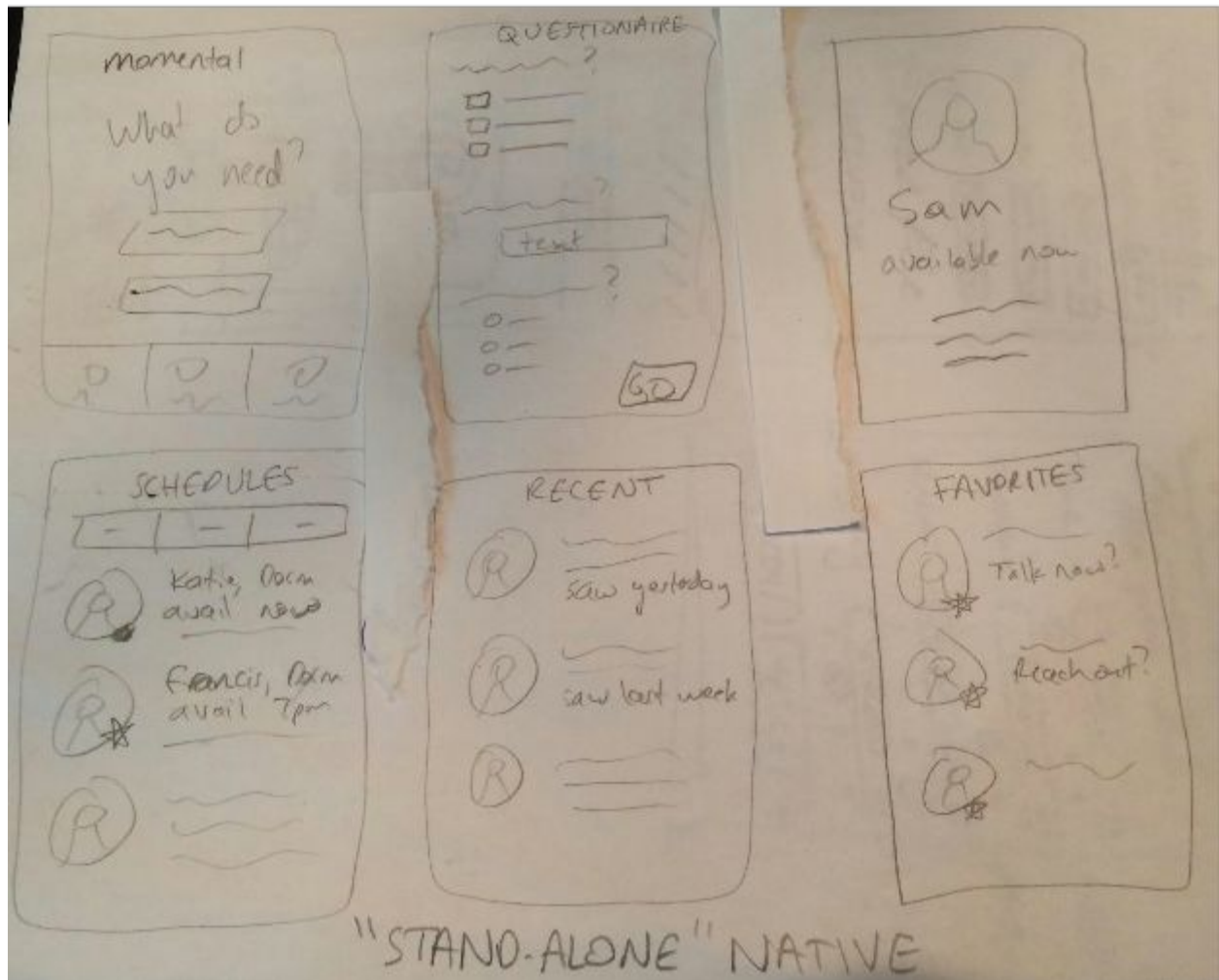
The above sketches are of a service that was entirely text-based. The user would use their normal text messaging interface to contact Momental for information and appointment bookings. Texting "NOW" would receive a response detailing a person who is free, and texting a specific name would lead to information about that person, and a way of booking an appointment with them.

Image 4: Sketches for Calendar-Based Native Application



This is a calendar view-based mobile application that allows users to find people and schedule time with them. This app presents the “therapists” in a calendar format and focuses on availability: the screen displays a day of the week, and lists people who are available at specific times. When “therapists” are clicked on, users can see their schedules and book times to meet with them.

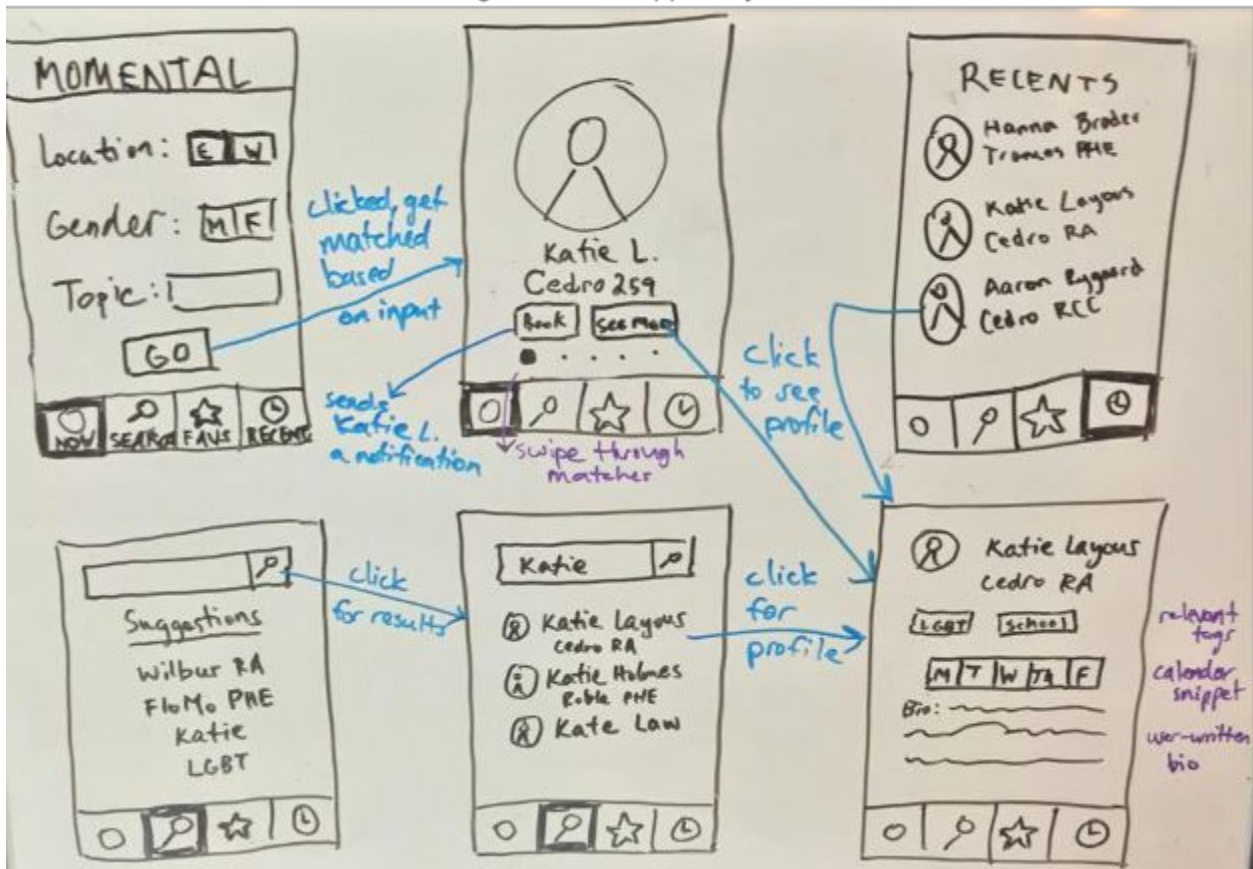
Image 5: Sketches for "Stand-Alone" Native Application



We sketched another native app idea, more stand-alone than the previous. It's implemented as a series of screens for matching and booking, keeps track of your recent appointments and favorite contacts, and allows you to easily view schedules.

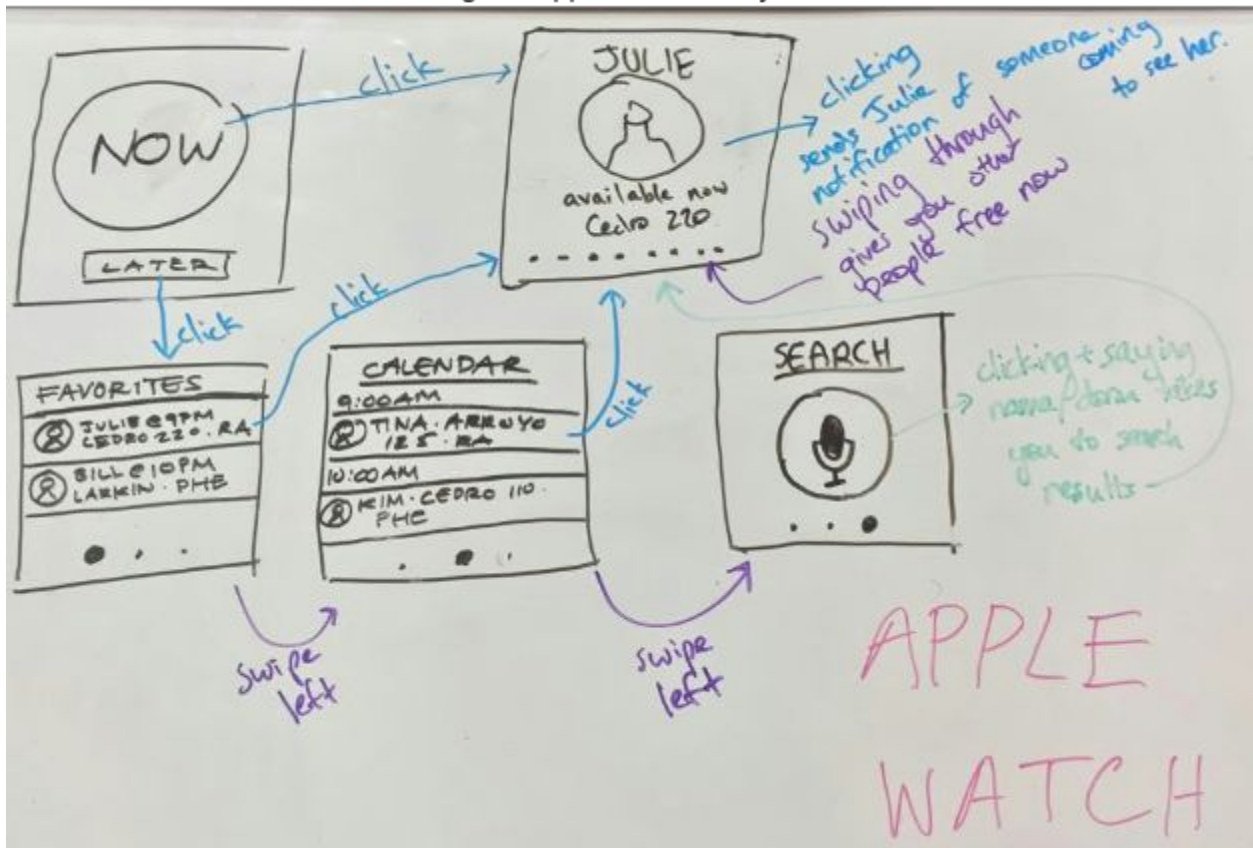
Of these sketches, we chose to move forward with the Apple Watch application and the stand-alone native mobile application into the initial storyboarding.

Image 6: Native App Storyboard



In the storyboard for our native mobile application interface, we had screens and task flows for talking to someone now, talking to someone specific, and following up with someone. We had a few key screens, including the “talk now” starting page, profile page, recents page, and search page. All the user input is physical.

Image 7: Apple Watch Storyboard



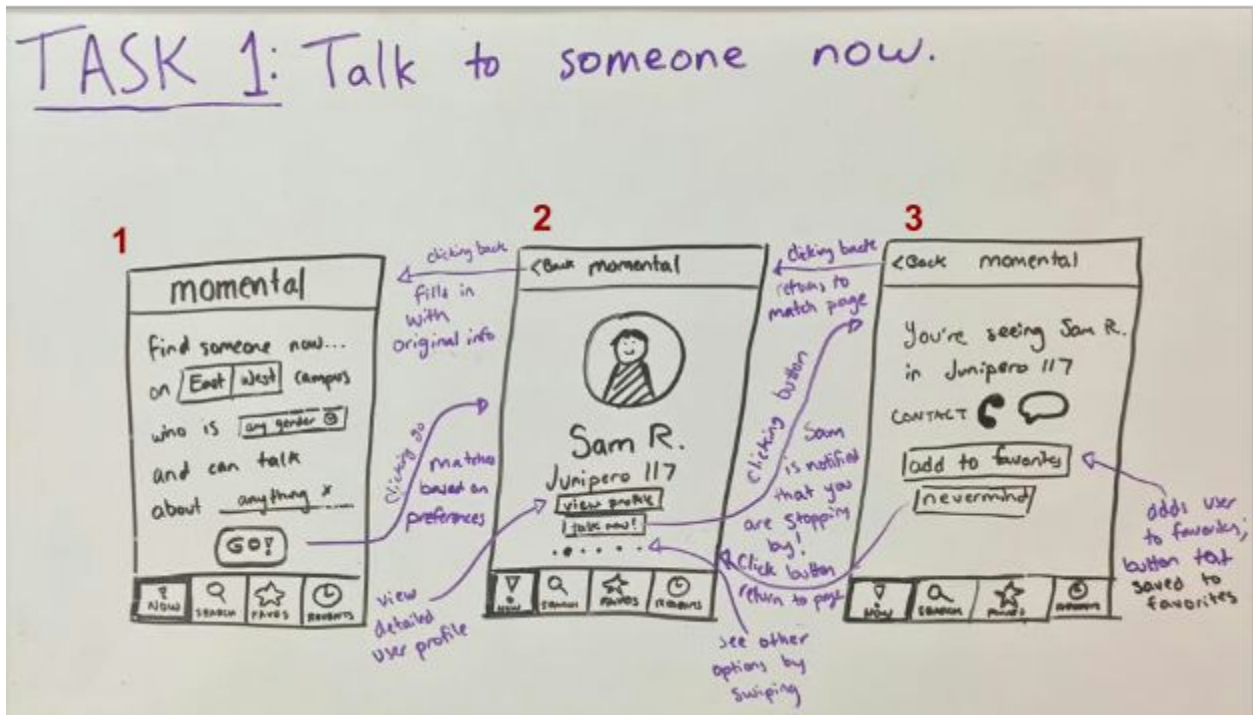
In the storyboard for our Apple Watch interface, we had only a few simple screens to match the size of the device. Task flows start from one main “now or later” screen and can move to a simple calendar or favorites screen. Searches can be done using verbal input.

Selected Interface Design

We decided to move forward with the stand-alone native mobile app over the Apple Watch app. We chose this interface because of its accessibility and possibility for detailed task flows. Apple Watches aren't as common as smartphones on college campuses, and they have much smaller screens, which would allow for only a limited amount of information for the user. We thought that the ability to view lists of people to talk to, as well as a bio for each, would be helpful to the user trying to find a person with a specific expertise.

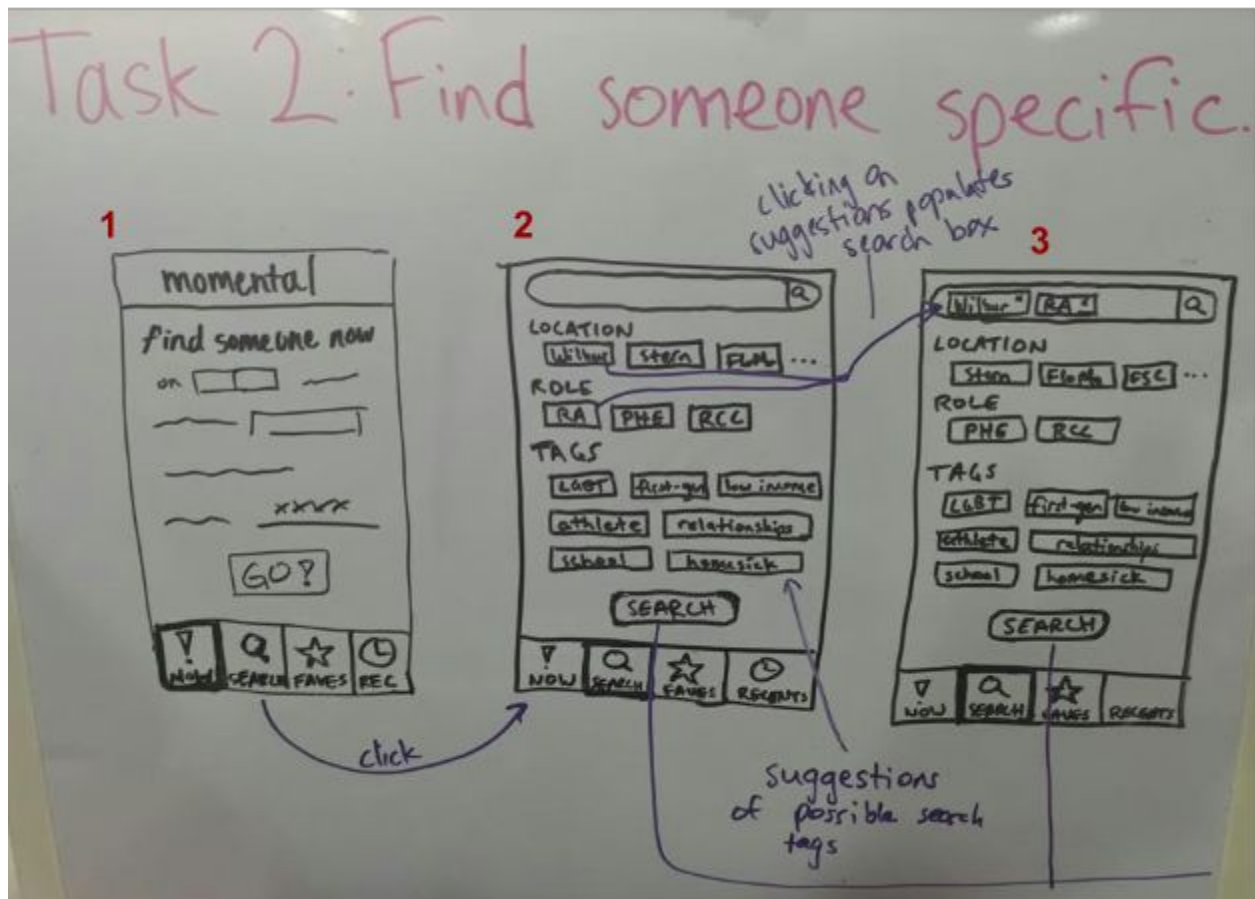
Task	Interface Functionality
Task 1: Find Someone Now	This task is accomplished by filling in preferences on the first page of the application, then hitting "Go!" to move to a match results page. Any match can then be immediately requested, after which a confirmation page will appear with contact details and a meeting location.
Task 2: Find Someone Specific	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 display a list of search results, any of which leads to a profile page with a user bio and schedule access.
Task 3: Follow-up With Someone	This task is accomplished by using the recents page, or favorites page if the user used that feature. A list of recent or favorite contacts is displayed, from which profile pages can be accessed.

Image 8: Storyboard of Task 1 on Native Mobile App



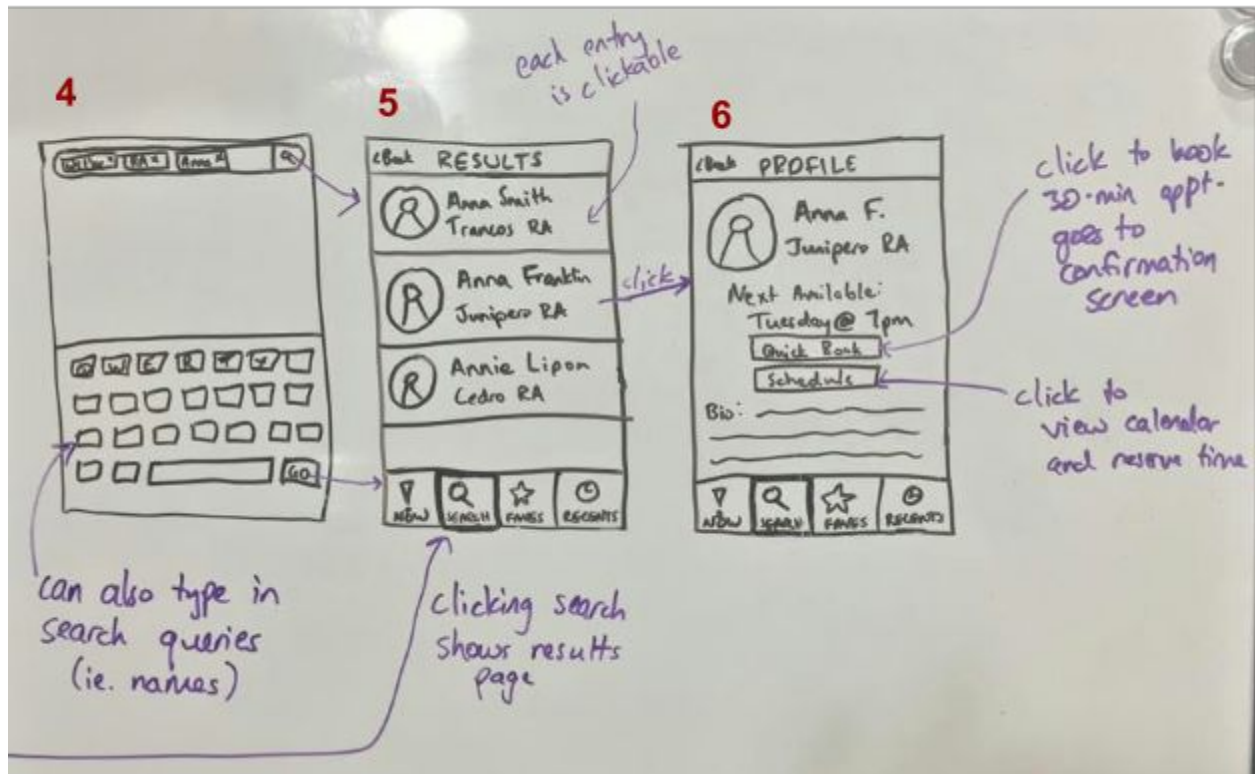
For Task 1, the user can use the dropdowns on screen 1 to indicate preferences in whom they would like to talk to. Once they hit “GO!”, they are directed to screen 2, where they can view the people they can talk to by swiping sideways. They can click “view profile” to see more information about the person, and click “talk now!” to set up time to chat immediately. After clicking “talk now!”, a confirmation screen (3) appears with the necessary location and contact information, as well as the option to add this person to favorites. The confirmation screen also allows for cancellation.

Image 9: Storyboard of Task 2, part 1, on Native Mobile App



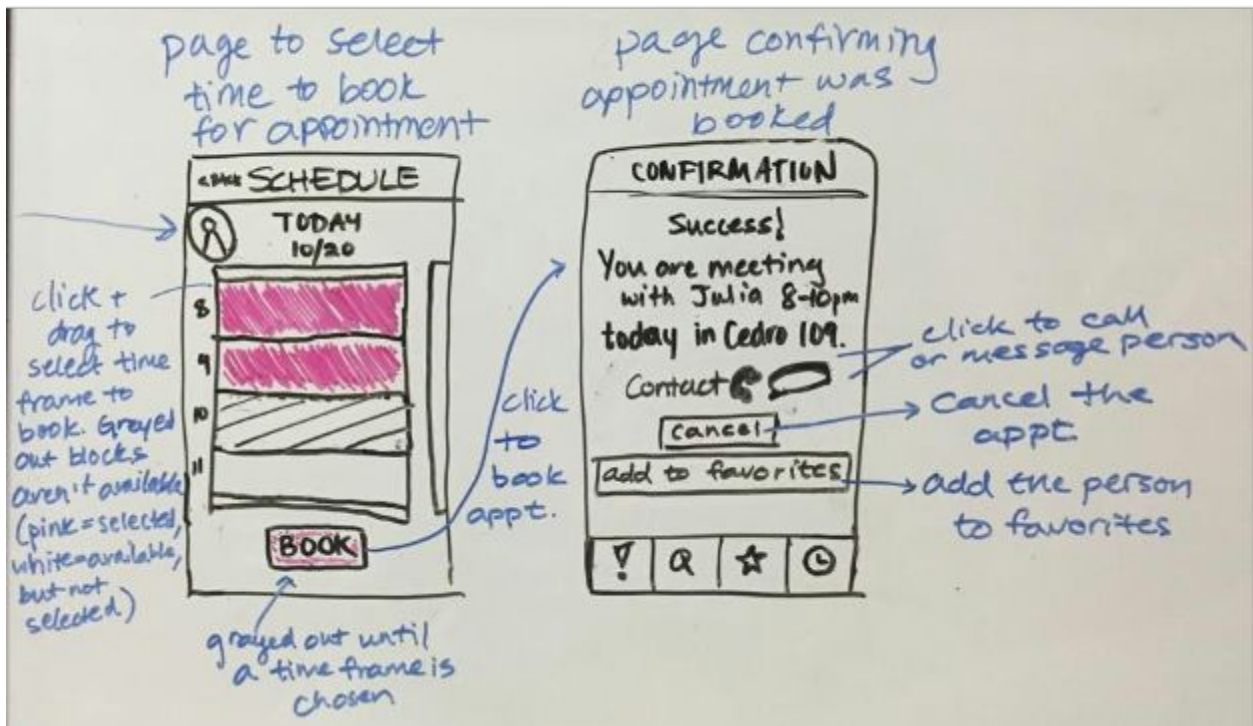
To find a specific person to talk to, the user can use the tabs along the bottom of the application to navigate to the search page. Once on the search page (2), the user can select suggested tags to search for.

Image 10: Storyboard of Task 2, part 2, on Native Mobile App



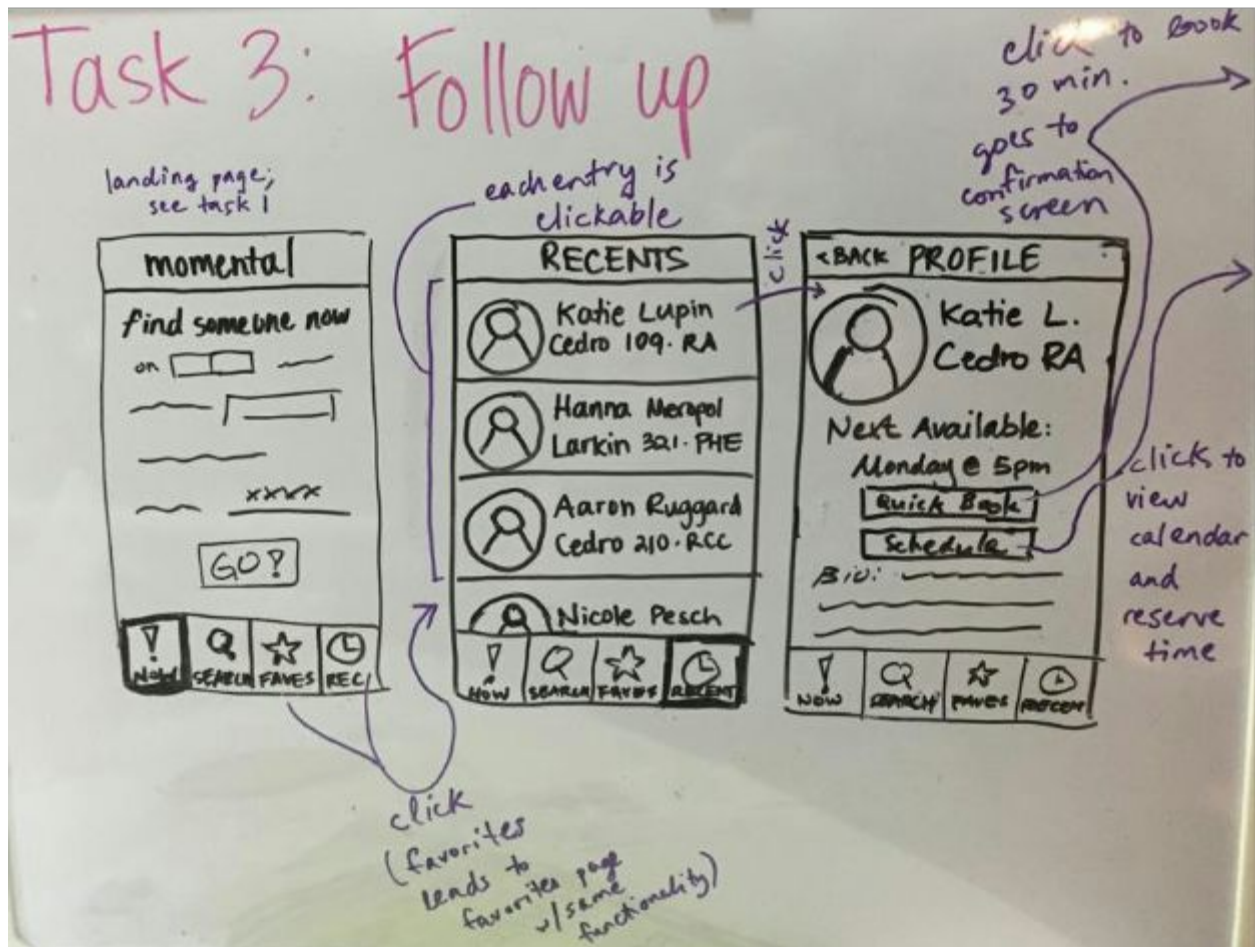
They can also type their search terms directly into the search bar (4). Hitting “search” leads them to a list of results (5). Each entry leads to the appropriate profile (6), which displays the person’s next availability and ways to schedule time with them, either immediately or later.

Image 11: Storyboard of Task 2, part 3, on Native Mobile App



If the user clicks “schedule” they end up on the scheduling screen (left). From here, the user can select and drag to request a time slot. When they click “book”, they are directed to the confirmation screen (right) and shown the relevant information for the meeting, as well as options to cancel the meeting and add the person to favorites.

Image 12: Storyboard of Task 3, part 1, on Native Mobile App

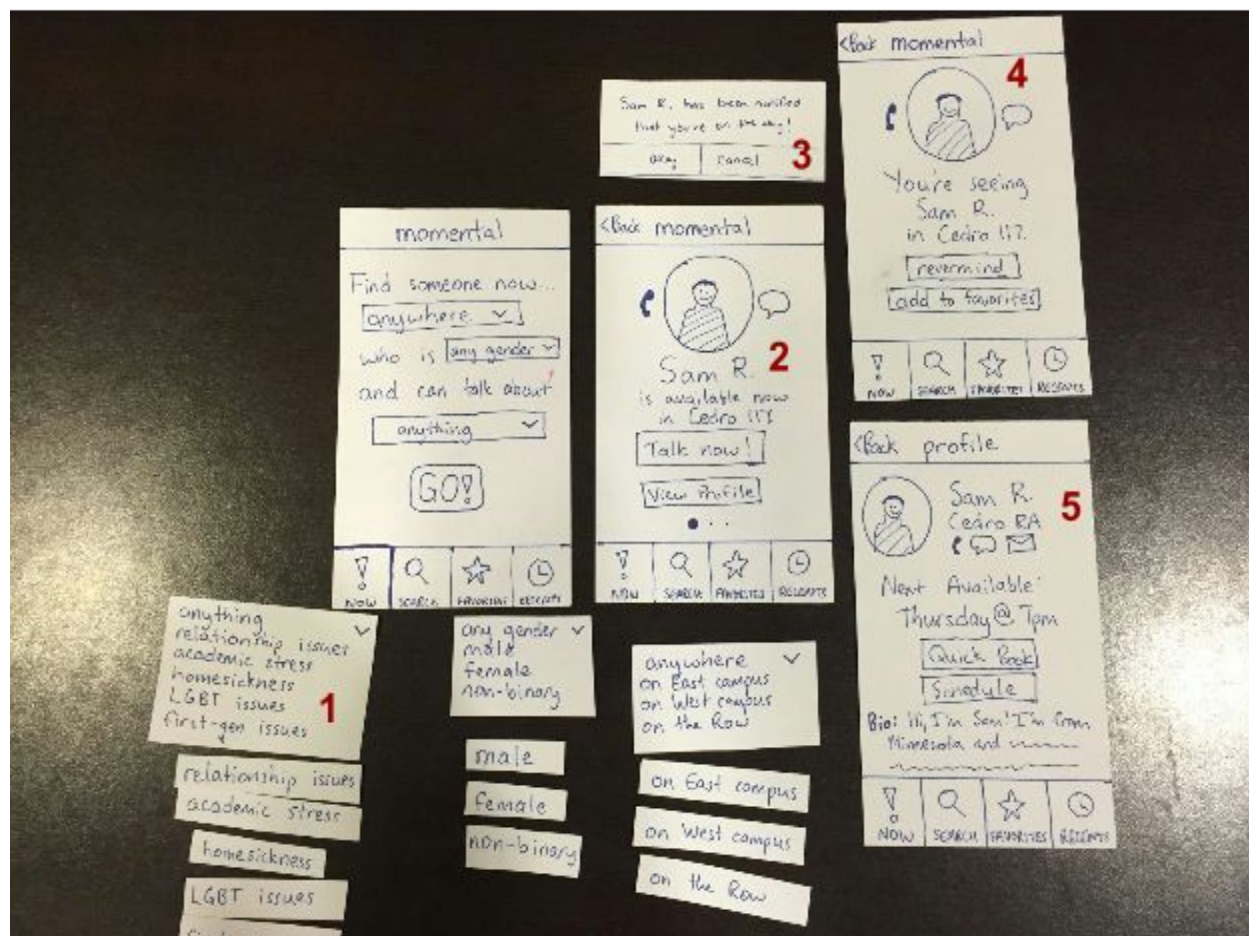


To follow up with someone, the user can click the “recents” tab to view recent contacts. From there, they can view user profiles, and the task flow continues as in image 10.6.

Prototype

Our prototype consisted of whole or partial index cards with a UI for the user. The user could interact with the prototype by touching icons to provide input or navigate screens. Following is our prototype as used in the three task flows.

Image 13: Full Prototype, "Talk to someone now" Task Flow



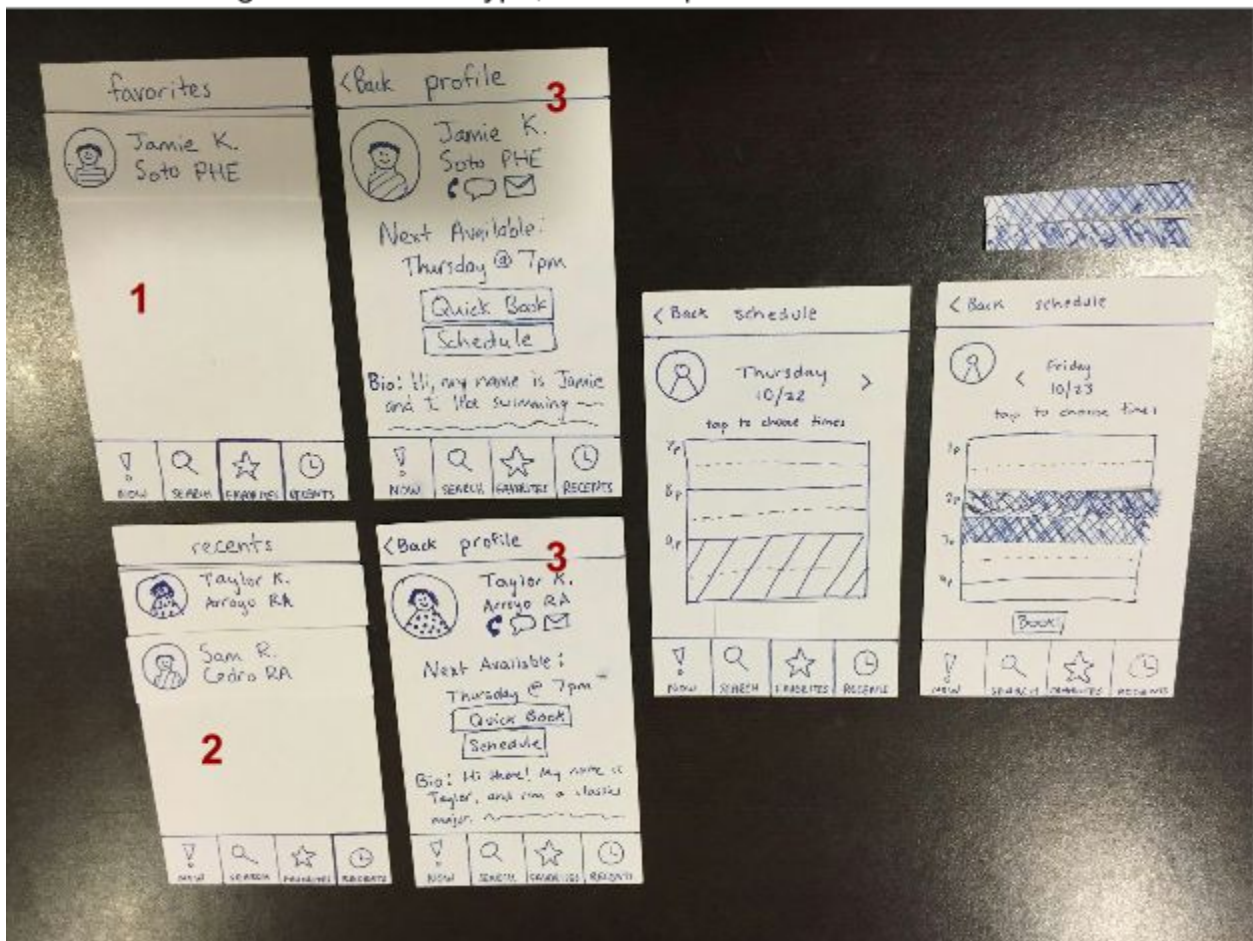
In this task flow (talk to someone now), the user starts on a screen with several categories (location, gender, topic) of dropdowns (1). The user can tap to select, then tap "GO!" to move to a booking screen (2). Clicking "Talk now!" leads to a popup (3) to indicate that the R/PHE has been notified and a confirmation page (4). Clicking "View Profile" leads to the R/PHE's profile (5).

Image 14: Full Prototype, "Talk to someone specific" Task Flow



In this task flow (talk to someone specific), the user can search people by tapping tags (1) or by using the keyboard to type directly into the search bar (2). When they hit "SEARCH", they get to the search results page (3). Selecting on one of the entries leads to a profile (4). From there, clicking "Quick Book" results in a booking for the next available time, and the alert confirmation (7) and confirmation screen (8) displays. Clicking "Schedule" leads to the scheduling screen (5). Selecting slots colors them (6), and clicking "Book" leads to the alert confirmation (7) and confirmation screen (8).

Image 15: Full Prototype, "Follow up with someone" Task Flow



In this task flow (follow up with someone), the user can find people to follow up with using either the favorites screen (1) or the recents screen (2). Clicking on an entry in either of those lists leads to a profile (3), from which scheduling can occur as described in the previous task.

Method

Subject 1 was a male undergraduate student. He was recruited through a message sent to a mailing list. Subject 1 was not compensated.

The interview was conducted at a table in Subject 1's dorm by Adrienne (Observer), Meredith (Facilitator), and Juliana (Computer).

The tasks (in order) were to find someone now, find someone specifically equipped for homesickness, find a specific Taylor the RA, and follow up with the person from task 1.

Subject 2 was a female undergraduate student. She was recruited by a team member. Subject 2 was not compensated.

The interview was conducted at a table in Subject 2's dorm by Adrienne (Observer), Meredith (Facilitator), and Juliana (Computer).

The tasks were presented to Subject 2 in the same order as to Subject 1.

Subject 3 was a male graduate student. He was recruited by a team member. Subject 3 was not compensated.

The interview was conducted at the kitchen table in the subject's home by Nhien (Observer), Meredith (Facilitator), and Juliana (Computer).

The tasks (in order) were to find someone now, find a specific Taylor the RA, follow up with the person from task 1, and find someone specifically equipped for homesickness.

During all of the user tests, the observer took notes about what the user noticed and remarked on, as well as when the user took alternative methods to complete a task, or didn't make use of a feature. They took general notes about the apparent mood of the user and the user's happiness with the application. They also noted the total amount of time taken for the tasks.

Results

Our subjects were able to accomplish all of the tasks successfully without major difficulties.

Some of them chose to accomplish the tasks using a different task flow than we had envisioned. For example, for finding someone now, some subjects navigated to the person's profile before clicking "Talk Now", then using the "Quick Book" button from there. For finding a specific person, some people continued to use the "Now" feature instead of the "Search" feature, and used the dropdown options to specify what they were looking for. Some subjects chose to text or call their recent contacts when following up with them, instead of booking a separate appointment.

Our subjects each missed or didn't understand some feature(s) of our app that we hoped they would use. Two (1, 2) of them didn't realize they could type into the search bar, instead only using suggested tags to search. One subject (3) was very confused (to the point of swearing) by the "Talk Now" button; he didn't understand the medium in which the communication would take place. Subject 3 was also confused about the "booking" screen and the profile and why they were different.

Our subjects had a few suggestions and requests for us. Subject 1 noted that the schedule screen made him feel obligated to book an appointment over just stopping by. Subject 2 asked about support for other on-campus resources, such as The Bridge, or suicide hotlines. Subject 3 liked being able to book an appointment for serious issues, but he has also dropped by staff members' rooms before for support. He requested a "My Staff" feature and the ability to link contacts with the app, since he strongly prefers to talk to people he already knows.

Discussion

Overall, it seems like our users really liked the concept behind our app. 2 of 3 subjects seemed to like interacting with our app, with the third remarking that if he'd paid more attention to the writing on the prototype, he wouldn't have been as confused. It seems like the general flow of our app is intuitive enough that the subjects can accomplish what they need to accomplish. We had some features that the subjects seemed to really like, such as having more than one possible match when searching for someone within specific criteria.

From our results, we have several changes we'd like to look into for our app interface: One of our subjects noted that the book button on the schedule was very prominent, making them feel pressured to book an appointment when they only wanted to view the schedule. In the future, we might reduce the emphasis on that, possibly by not displaying the book button until the user has selected times to book.

One of our subjects was confused by match screen vs a profile screen. In the future, we'd like to either make them more consistent with each other or make them more distinguishable.

Our subjects seemed very interested in profile screens, to the point of navigating to them before pressing "Talk Now" in a "find someone to talk to now" situation. We'd like to provide subjects with more information about their matches without them having to navigate away from the matches screen.

Some of our signaling wasn't strong enough; some of our subjects didn't realize that they could type into the search bar or search for people by name. Some were also confused by the tag component of the prototype, and about how many they should select. We would like this signaling to be better.

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. It would be interesting to explore the "My Staff" list feature.

Word Count: 2215

Appendix

Momental Consent Form:

Consent Form

The Momental application is being produced as part of the coursework for Computer Science course CS 147 at Stanford University. Participants in experimental evaluation of the application provide data that is used to evaluate and modify the interface of Momental. Data will 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 (Juliana Cook, Adrienne Ivey, Meredith Marks, and Nhien Tran) 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 provided 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 experiment and my participation in it. I give my consent to have data collected on my behavior and opinions in relation to the Momental experiment. I also give permission for images/video of me using the application to be used in presentations or publications as long as I am not personally identifiable in the images/video. I understand I may withdraw my permission at any time.

Name _____

Participant Number _____

Date _____

Signature _____

Witness name _____

Witness signature _____

User Testing Script:

Introduction

(say names)

We are conducting an experiment to evaluate the interface of an mobile application designed to connect students to the supportive community around them. It's very low-fi at this point and just a series of paper prototypes, but pretend that it's a phone, and interact with it as you would if it were a screen. Try and talk out your thoughts and read what you're seeing so we can get a sense of how you're using the app.

Task 1: Find someone now

- You're a freshman living in Wilbur who is having trouble adjusting to the academic stress at Stanford. You're feeling upset and you'd really like to talk to someone now. How would you use Momental to do this?
- Great! You went and talked to (Sam|Jamie) and they were super helpful.

Task 2.5: Find someone specific

- You want to know when your RA Taylor is free. How would you use Momental to do this?

Task 3: Follow up with someone

- You did really well on an assignment in a class you'd been struggling with. You wanted to follow up or let (Sam|Jamie) know that you did well, and thank them for their advice. What would you do?

Task 2: Find someone specific

- You're starting to feel homesick, and you want to know who in Wilbur you might be able to talk to about that. How would you use Momental to do this?

Afterwards

- Tell me about the experience! What did/didn't you like? Could you see yourself using this?
- Why did/didn't you click "Schedule" each time you were on the profile page for different reasons? Are there situations when you'd prefer a formal appointment vs. a quick check-in vs. a text message?
- What do you wish was included in the app?
- Have you ever gone to a residential staff member for support? How did that experience compare to the experience with Momental?

Raw User Testing Notes:

Subject 1, Male Undergraduate Student

Subject was recruited by sending out a message to a mailing list. Interview took place at table in subject's dorm.

Task 1: Find Someone Now

- Clicked dropdown to select a dorm, selected option on East Campus.
- Didn't tap dropdown for gender.
- Clicked dropdown to select what to talk about, selected academic stressors.
- Tapped "Go!"
- From match page, wants to view profile to see what he is getting into.
- Reads first profile, navigates back and swipes to next match to see who else is available.
- Navigates to profile, clicks Quick Book to book an appointment.
- Added to favorites before meeting with them.

Task 2a: Find Someone Specific (homesickness scenario)

- To find someone to talk to, initially navigates to favorites
- States he doesn't know if the person he saw before can deal with homesickness
- Navigates to Find Now
- Searches for someone on East campus who can help with homesickness
- Clicks "Go!" to get to match page
- Looks at profile for the given match
- Clicks "Schedule", just wants to see when he is available
- Wants to scroll through times (not available)
- Ends up booking an appointment from schedule screen
- Clicks "Okay" to the alert that an appointment was scheduled
- On confirmation screen, still looking for things to do when done. Unsure if the task is finished or not.

Task 2b: Find Someone Specific (Taylor the RA scenario)

- Clicks the "Search" button to get to the search screen
- Taps the Wilbur and RA tags
- Does *not* try to type anything into search bar
- Finds RA in the search results, taps to go to profile
- Sees time she is next available, wants to see what other times she is free
- Clicks on schedule, picks a time and books an appointment

Task 3: Follow Up (connect with person from Task 1, Jaime)

- Taps "Recents" to look at recent people he's visited
 - Says he remembers he added Jaime to favorites, but just in case he had forgotten that he had done that, he goes to recents

- Clicks Jaime to go to Jaime's profile
- Clicks the phone button to call Jaime and let him know

General Feedback and Results

- Liked all of it! Found the interface very simple and straightforward
- Not difficult to use or navigate
- When asked why he chose to go to find now for scenario 2a, he said that having the Now button on the far left made it feel like the default/like the home screen
- When asked about what he thought of the search bar, said he didn't know he couldn't type into the search bar.
- When asked about scheduling appointments, said he worried about reserving/taking other people's times when he was booking; really just wanted to see schedule, but felt obligated to book
- Has gone to see a residential staff member for concerns before, thinks this interface would improve the process
- Thought it would be strange to see someone else's RA; his most common use case would be to see his own staff. Said he likely would have favorited his staff members.

Total time: 25 minutes

Subject 2, Female Undergraduate Student

Subject was recruited by a team member. Interview took place at table in subject's dorm.

Task 1: Find Someone Now

- Clicked on dropdown to select a dorm, selected option on East Campus.
- Clicked on dropdown to select a gender, selected female.
 - stated her choice "depends on problem"
- Clicked on dropdown to select an issue, selected academic stressors
- Clicked "Go!" to get results.
- Says she wants to view the profile to get more information about this person.
 - Spend a while looking at all of the information on the profile.
 - Notes that they're from Minnesota; "Minnesota is okay I guess"
- Quick booked from the profile after deciding that this person seems okay.
- Tapped okay on confirmation alert

Task 2a: Find Someone Specific (homesickness scenario)

- Said she had really liked seeing Sam, but didn't know if he understands homesickness
- Said she was feeling very homesick now, so wanted to find someone now.
- Navigates to "Now" screen.
- Clicks dropdown to select a location, sets location to east campus
- Clicks dropdown to select a gender, looks at options but decides to stick with any.
- Clicks dropdown to select a topic, changes to homesickness
- Sees match, decides to view profile to get more information about them.

- notes that they are a PHE
- reads all of their information
- decides that they seem fine
- Clicks quick book to book
- Clicks “Okay” to the alert

Task 2b: Find Someone Specific (Taylor the RA scenario)

- Said she is assuming that she hasn’t already added to favorites
- Clicks “Search” to get to search page
- Taps Wilbur tag and RA tag
 - asks if she needs to select something for the “Tags” section, since she is selecting something for other categories
- Presses “Search” to find results
- Finds RA in list of results, clicks on her
- “Okay, I want to schedule her”, clicks on schedule button
- Says she isn’t available Thursday, clicks arrow to navigate to Friday
- Taps times she wants
- Clicks book to reserve
- Taps Okay on the alert

Task 3: Follow Up (connect with person from task 1, Sam)

- Clicks on “Recents” tab to find recent people she has worked with
- Clicks on Sam’s entry to see more details
- Clicks “Schedule” to book a time
- Picks time to meet and clicks “Book”
- Taps Okay on the alert

General Feedback and Results

- Very user friendly, always knew what to pick.
- Liked the tags on the search page! Simple to use.
- Didn’t realize could type into the search bar initially, but looking again thought that she probably would try to type on a real phone, since the visual was similar to other typing fields
 - asked if there would be predictive searching when typing, to autocomplete names or tags
- When asked about choice to book appointments, said that desire to book appointments would likely be dependent on how urgent the issue was. If it was urgent, she would try to find someone now, not schedule for later.
- Asked if there would be additional tag roles for people like The Bridge counselors
- Asked if there would be any directing to hotlines, ex. abuse hotline, suicide hotline

Total time: 20 minutes

Subject 3, Male Graduate Student

Subject was recruited by a team member. Interview took place in subject's living room.

Note: For this user test, we decided to switch the order of the tasks so that we could get a more unbiased indication of how the user would perform Task 2a (where the subject is asked how they would find people they could talk to in Wilbur about homesickness). At the end, they will have seen both the Now screen and the Search screen and thus are familiar with both, giving them more of an opportunity to choose which interface would be more valuable for them.

Task 1: Find Someone Now

- see three dropdowns
- wants to see different options for location -- "talking in person or through messaging?"
- picked east campus
- clicked gender because curious -- "any gender"
- selected dropdown and academic stress
- "go"
- "that's weird" to meeting Sam in person, "unless you're expected to do that without letting them know"
- so are they just assumed to be in their room now?
- swiped because curious
- clicked talk now "not sure if this means phone call or message"
- "oh fuck -- so it wasn't either of those two options"
- clicked cancel because couldn't remember the room number
- clicked talk now again
- had no idea Jamie was a PHE in Soto

Task 2b: Find Someone Specific (Taylor the RA scenario)

- clicked search
- "wilbur RA", search/go
- clicked Taylor on results page
- reading next availability...
- guessed that quick book takes the next available time
- clicked schedule, scheduled non-contiguous block of time
- understood that some times weren't bookable

Task 3: Follow Up (connect with person from task 1, Jamie)

- clicked recents
- clicked Jamie's profile
- "what the fuck, why is this different from the other one??"
- "oh, the other one is people available right now, this is the profile regardless"
- clicked message, texted Jamie

Task 2a: Find Someone Specific (homesickness scenario)

- used the NOW feature, wilbur + homesickness

- clicked talk now -- “this is too many choices!”

General Feedback and Results

- It would be nice to have one’s own staff listed (a “my staff” feature)
- He would also like to see friends
- -- didn’t realize that “view profile” linked to a profile
- Would be more likely to “book a time” to talk about something serious, a follow up would be a text (even in real life, without the app)
- would search names to find a specific person, but didn’t think that the ability to search for names was obvious enough
- has asked RAs for help before. felt comfortable enough to go get help, but still had to go up and ask and make sure they were free and willing to talk

Total time: 40 minutes

General Thoughts/Ideas

- schedule as verb versus schedule as noun
 - some people want to book, but some people just want to see schedule
 - right now the schedule page has a large book button at the bottom, emphasis seems to be on making an appointment
 - in the future, possibly reduce emphasis on booking appointment (maybe remove book button unless times selected?)
- confusion about multiple screens, different layouts for screens
 - profile versus match screens
- first two people wanted to see profile information for their matches, ended up using “Quick Book” instead of “Talk now”
 - in general, make people more comfortable with seeing people they are matched with, without having to leave that page
- everybody tried to scroll through multiple people
 - people seemed to like having options!
- search bar people didn’t know you could type/search by name
- do I have to make a selection for every tag type?