Sociall

Beta

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Task Analysis

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ROLES

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PROBLEM AND SOLUTION OVERVIEW

Talking to someone for the first time in a public setting can be very intimidating. There is often no indication of common ground or shared interests with which to break the ice. Because of this, many social opportunities are missed. What if the man sitting across from you on the bus shared your love of motorcycle maintenance? What if the girl at the next table in the coffee shop had just finished refinancing her home mortgage and could tell you the pitfalls to avoid? Sociall is a mobile app that solves this problem by allowing people to share information with other people in their vicinity. Privacy settings along with the option to chat before meeting generate the security and trust needed to make Sociall comfortable for its users.

TASK ANALYSIS QUESTIONS

WHO IS GOING TO USE THE SYSTEM?

Users of Sociall are going to a) have a desire to meet new people and create new connections b) have access to and be comfortable with smart phone technology and c) be comfortable with the privacy and safety implications of meeting relative strangers. From our research we believe that college students best fit these three criteria. The results of our interviews show that even traditionally "shy" students have a desire to meet new people if it is made convenient.

WHAT TASKS DO THEY NOW PERFORM?

People tend to socialize within their already existing groups of friends. Services like Facebook allow for limited viewing of information of "new" people (depending on privacy settings), but these people are still friends of friends and there is little opportunity to meet these people in person.

WHAT TASKS ARE DESIRED?

Users of this application can generally be broken up into two groups: those that are already fairly social and those that are not. For those who are social, their main concern is finding another person who is in a mood to talk. This same desire exists for those who are not as social, but there exists an additional want of some sort of identification of shared interest to ensure there is something to talk about. The social desire more access to people, the not as social desire more confidence in talking with new people.

HOW ARE THE TASKS LEARNED?

As everyone should have some experience both interacting with and meeting people, there is no additional training required for our tasks.

WHERE ARE THE TASKS PERFORMED?

Meeting new people can happen anywhere. For our target, college students, meeting a wide range of new people happens most at parties or other types of mixer events where meeting people is both socially acceptable and the purpose of the event. We hope to expand this meeting space to coffee shops, libraries, classes, and other places where college students come together.

WHAT'S THE RELATIONSHIP BETWEEN CUSTOMER & DATA?

User's data is split up between private information and public information. As our users are going to be socializing with strangers it is important that information is only shared with a user's consent. Information (like the location of the user) can only be shared when explicitly allowed.

WHAT OTHER TOOLS DOES THE CUSTOMER HAVE?

Connection to existing social networks / instant messaging / text messaging / phone calls, though these all tend to be directed at connections that already exist.

HOW DO CUSTOMERS COMMUNICATE WITH EACH OTHER?

The main method of communication is a chat feature between users. This can help users vet these otherwise strangers before choosing to meet up in person.

HOW OFTEN ARE THE TASKS PERFORMED?

How many new connections a person makes depends on how social a person is, but interacting with other people generally takes place daily.

WHAT ARE THE TIME CONSTRAINTS ON THE TASKS?

As the goal of our application is to direct people to a spontaneous, in person meeting, the location, verification, and meeting process of a potentially new contact has to take place within the time a person would be at a single location (such as in a class, or eating lunch, etc.).

WHAT HAPPENS WHEN THINGS GO WRONG?

In the worst case scenario, someone chooses to meet up with someone who has misrepresented himself. This could create safety and privacy concerns, but as users will have some notion of reputation (which takes into account how many people they've met with that can confirm they are who they say they are), it should be harder to claim to be someone you're not.

REVISED TASKS

During our contextual inquiry, we chose three different tasks that we felt covered the essential use cases for our application. After further analysis, we think that with a few minor tweaks the tasks still cover our essential cases. The following three tasks cover cases with different levels of social interaction, interaction with data, and specificity.

FIND SOMEONE INTERESTING TO YOU.

This is our easiest task. Our app is very data driven and initially attempts to link a person up with people in their vicinity that they'd be interested in meeting. Some people may just want to survey the people around them without actually initiating a conversation. This involves searching through the list of people around you and perhaps applying filters to find someone interesting to you (this may not be the same as the person the program picks for you).

ARRANGE A MEETING WITH SOMEONE

This is our medium-level task because it requires interaction with the people around you. There is no specification as to whether the person you pick is someone whose interests match with yours, although this can be done using knowledge from the previous task. You must talk with whomever you pick and arrange to meet them. The challenge lies in successfully navigating the UI and entering different levels of privacy in order to eventually arrange a meeting with a person.

ARRANGE A STUDY SESSION WITH SOMEONE FOR A SPECIFIC CLASS

This hard task requires that you first have a working profile so that the app can use your data to match your interests with those of nearby people. If you don't have a profile, you need to create one. Afterwards, the use of filters and the matching capabilities of our app are required to find someone who is in the same class as you. Once someone has been found, you must connect with them and arrange a meeting for your class. This builds off of skills used in the previous tasks and is harder because of the specificity of the task. After you have met up with the person, there will be an evaluation screen that allows you to comment on how truthful the person's profile was. This was only included in the final design, since it was added after our storyboards were finished.

STORYBOARDS

STORYBOARD 1

This is one of our three user interfaces of our project. The diagram at the left is the home page on which all the major features are displayed in each row. Each icon directs a user to the next page to complete their task. For example, clicking on "Lookup" directs the user to "Lookup" page that displays some people who share some common interests with him. Upon clicking on one of the arrows it will display another user's profile. Here it shows Robert's profile.
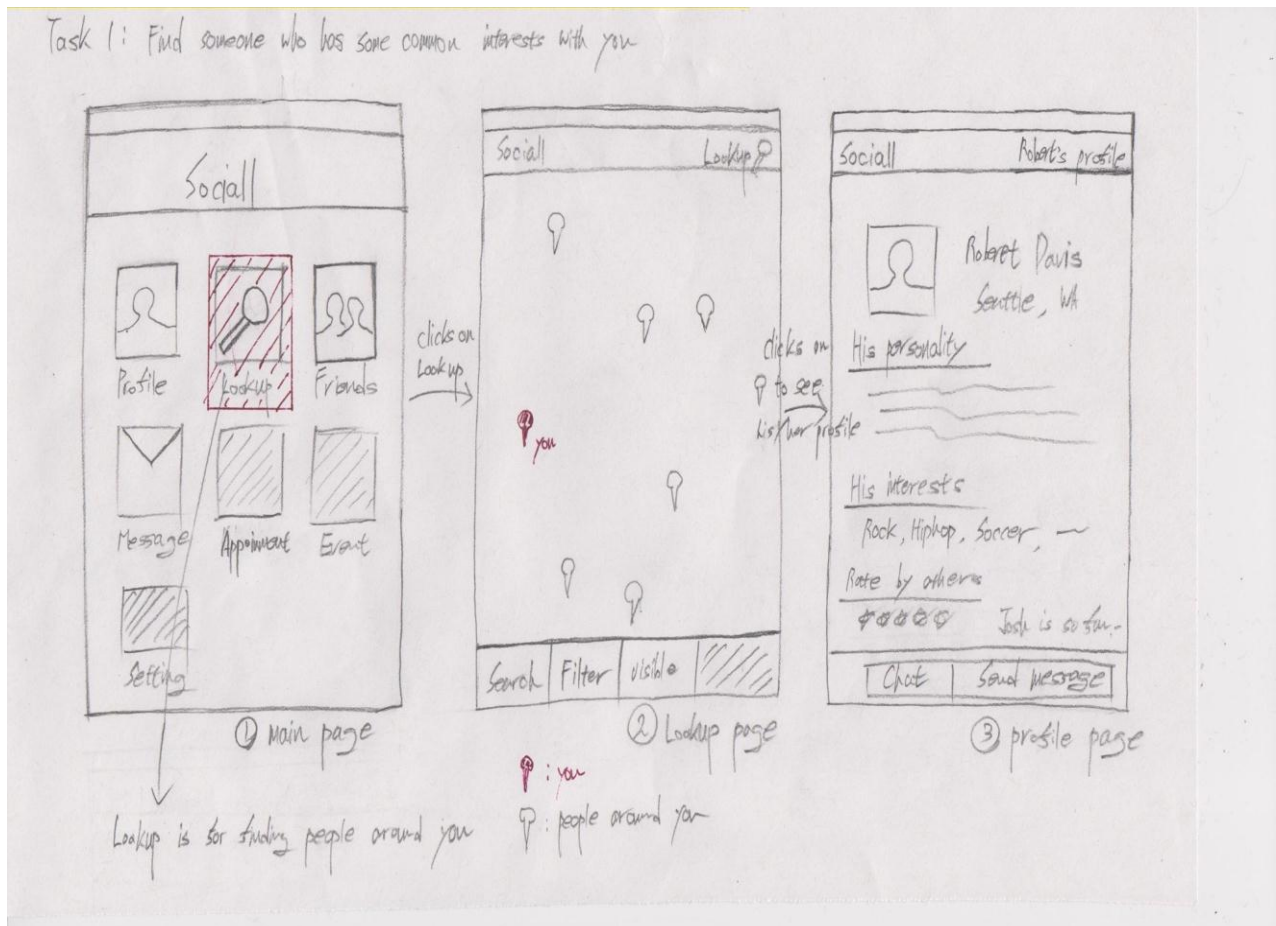

Figure 1. Looking at Robert's profile by using the "Lookup" feature

A user can start a new chat to arrange a meeting with another user. For example, the user, Hannah, clicks on "chat" button on Scott's profile and starts a chat. After chatting is done, she clicks on "Arrange meeting button" to decide a meeting place and time. She then sends it to Scott for confirmation.
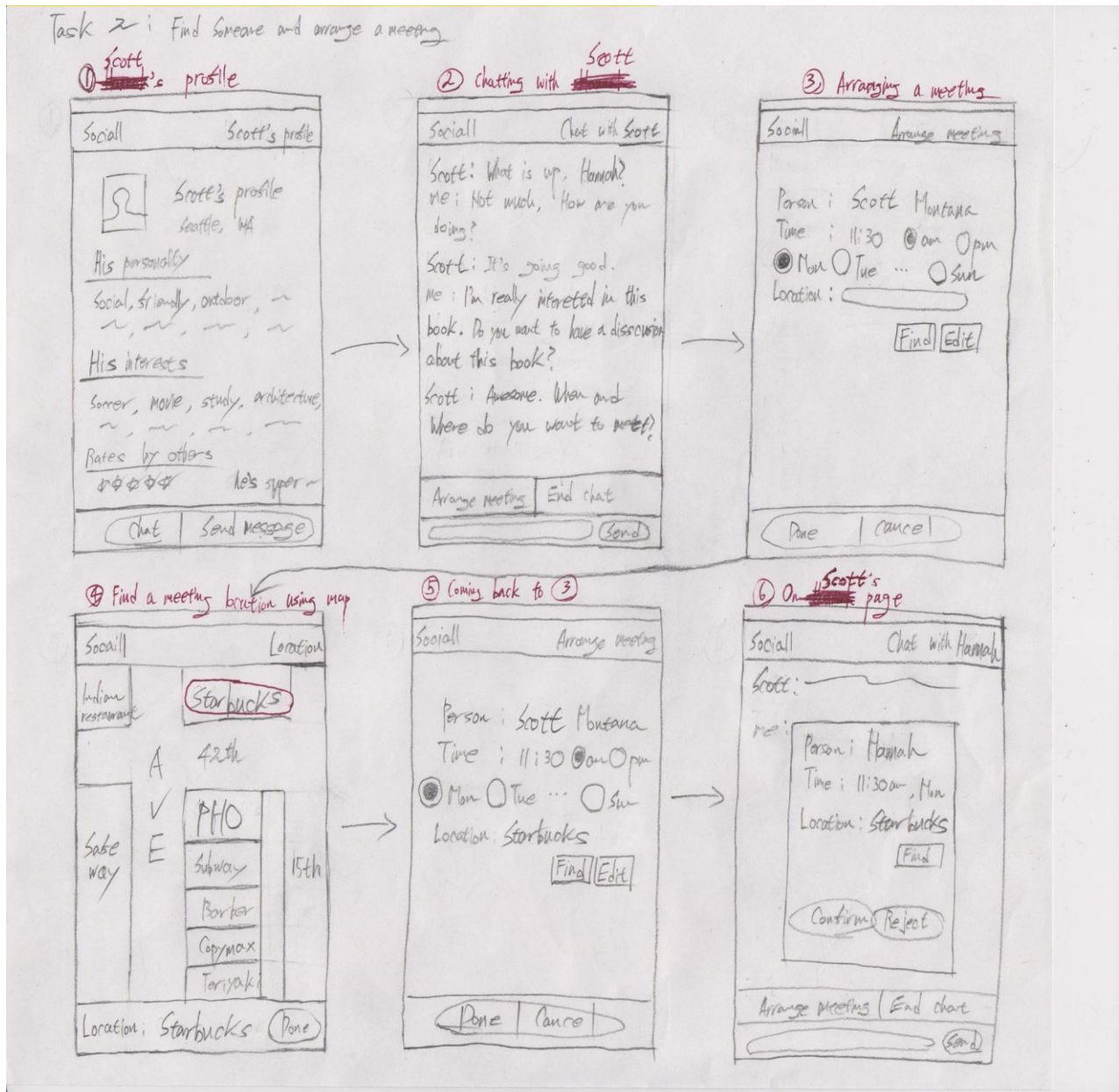

Figure 2. Hannah chats with Scott and arranges a meeting

This interface also responds to the user's request. Upon the user's wish it will start a new activity to perform his task. For example, the user wants to find some specific people for a CSE 440 assignment. When the user clicks on "Search" on the menu, it will prompt a mini window to take a key word to find people for the CSE 440 assignment so that the user can find them and arrange a meeting to do it together.
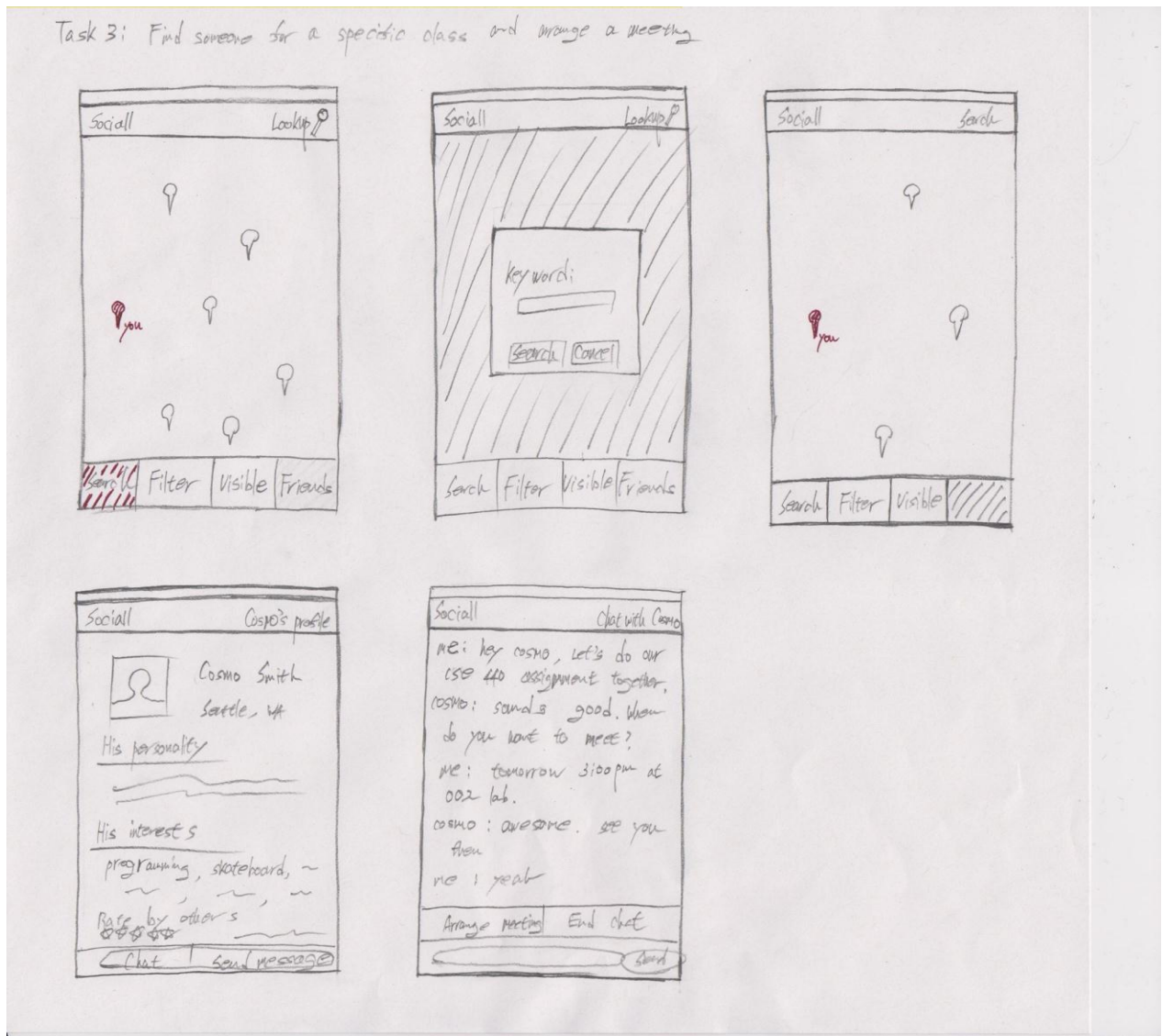

Figure 3. Search for a specific topic (e.g. CSE 142) to arrange a meeting for study

This is an extra diagram to show a major feature that keeps track of all the appointment for a user. From the main page, clicking "Appointment" icon directs the user to "Appointment" page so that he can check his next appointment.
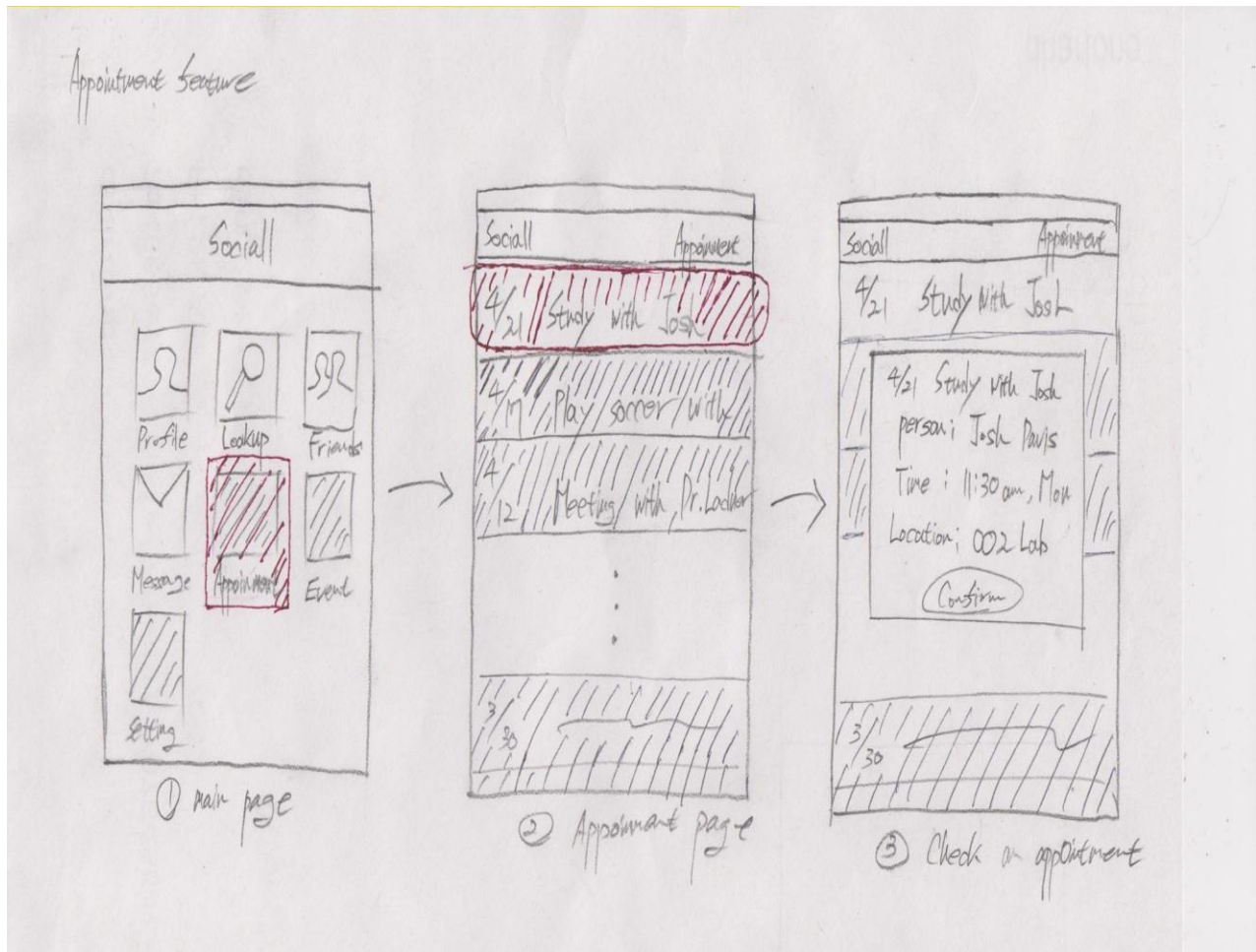

Figure 4. "Appointment" feature of the app to keep track of all the appointments

STORYBOARD 2

The main features of this interface are: 1) it assigns the users in a chat room based on their interests and proximity (e.g. in a distance less than 150 feet); 2) it uses a "Name Cloud" to show the names. The bigger the names are, the better it matches the user's interest. The user can click these names to see their profiles and may start a private chat. The users can accomplish different tasks based on their chat contents. The meet-up venue will be shown on a map.
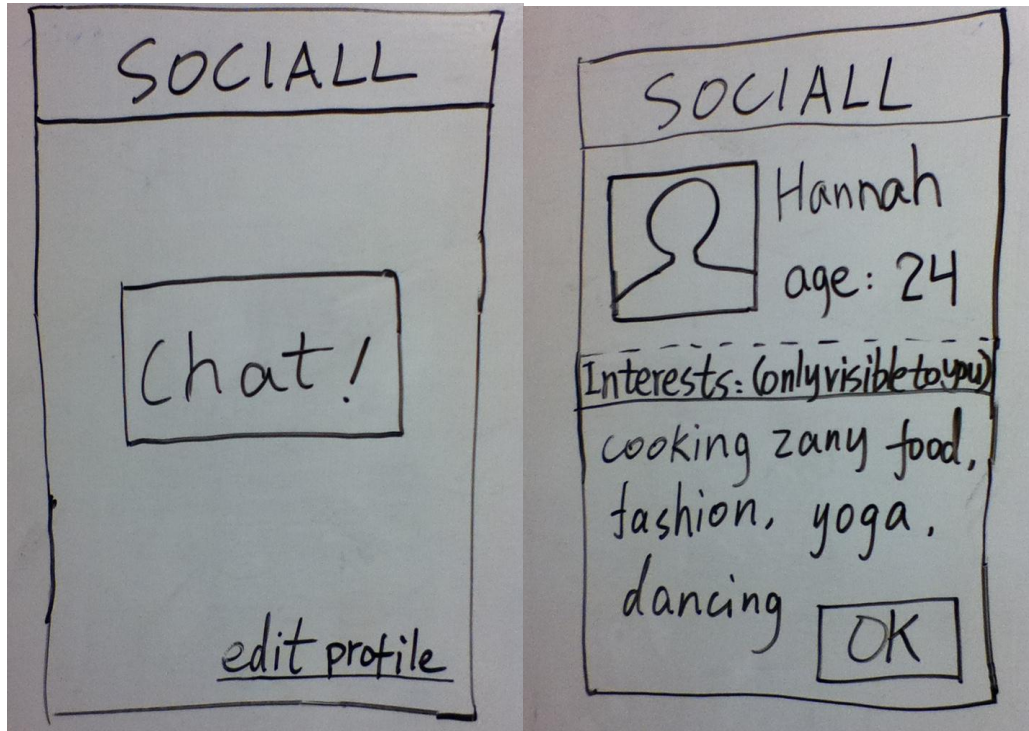

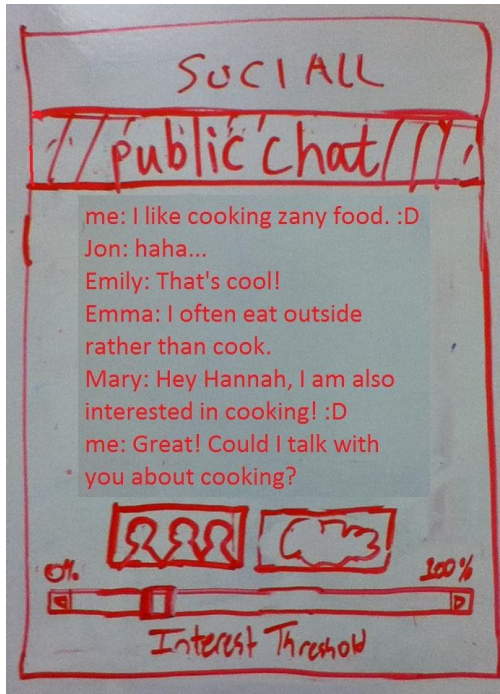Figure 1. Main page   Figure 2. User's profile page
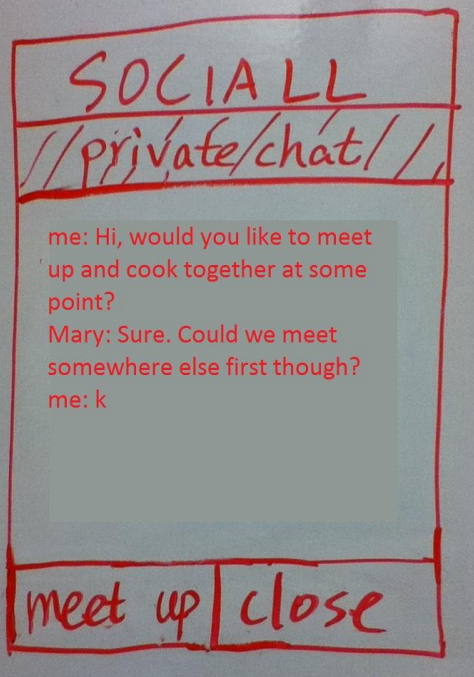
Figure 3. Public chat (task 2)
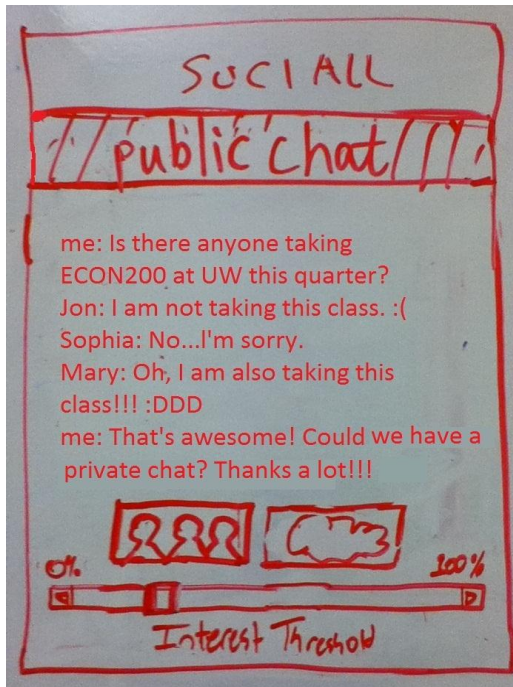

Figure 4. Private chat (task 2)

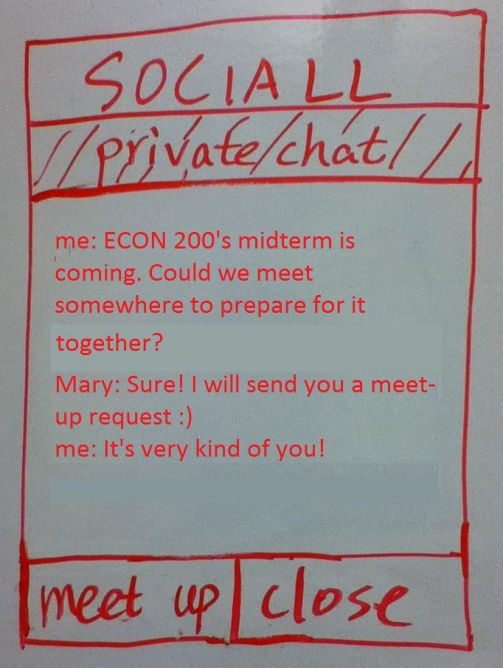*Figure 5. Public chat (task 3)*
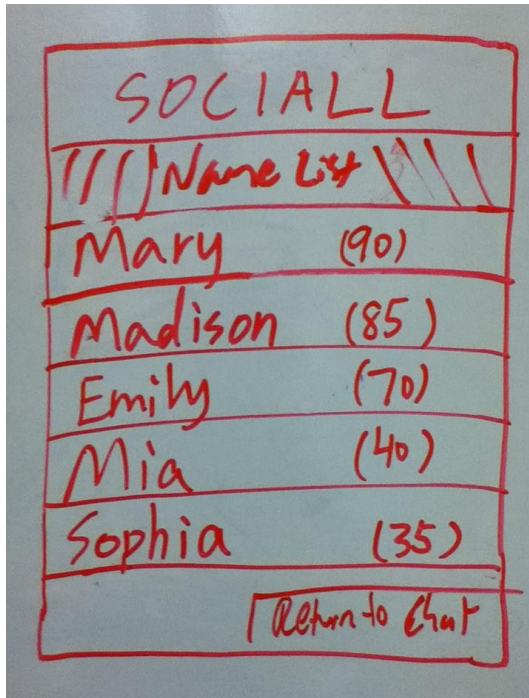

Figure 6. Private chat (task 3)
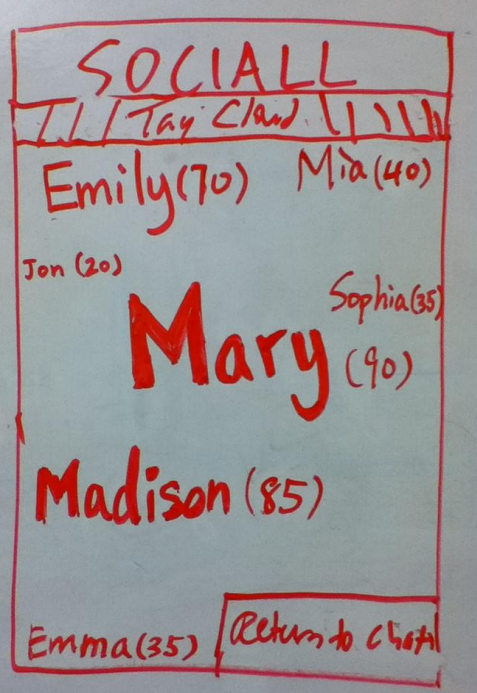
Figure 7. Name list
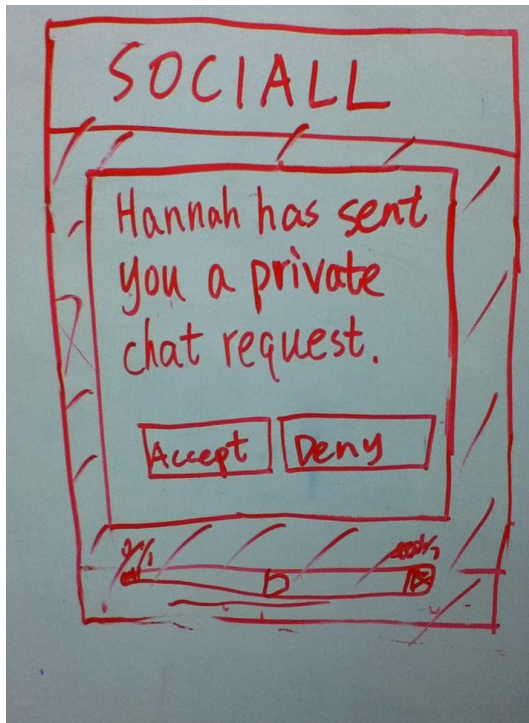

Figure 8. Nametag cloud

Figure 9. Private chat request
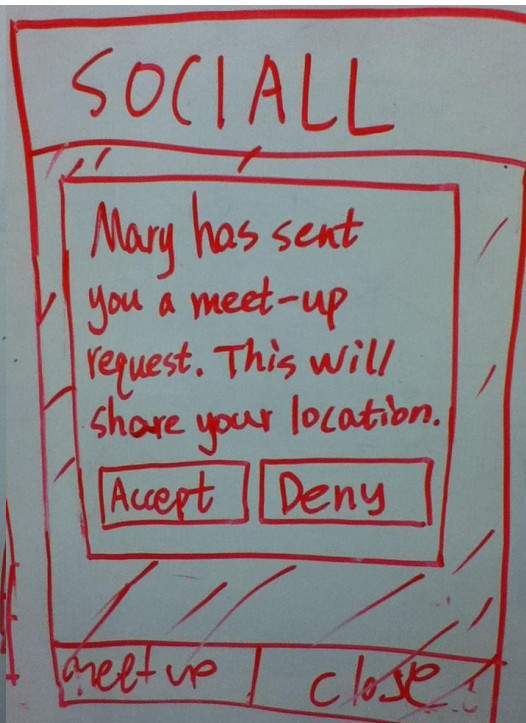
Figure 10. Meet up request
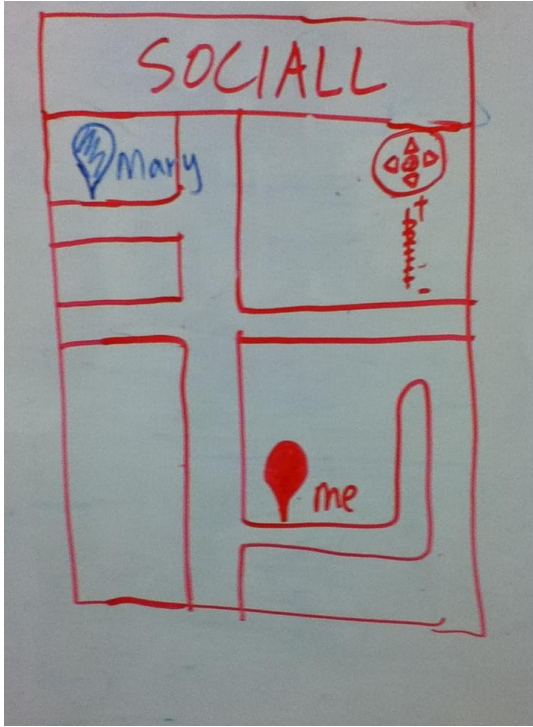
Figure 11. Map for arranging a meeting place

STORYBOARD 3
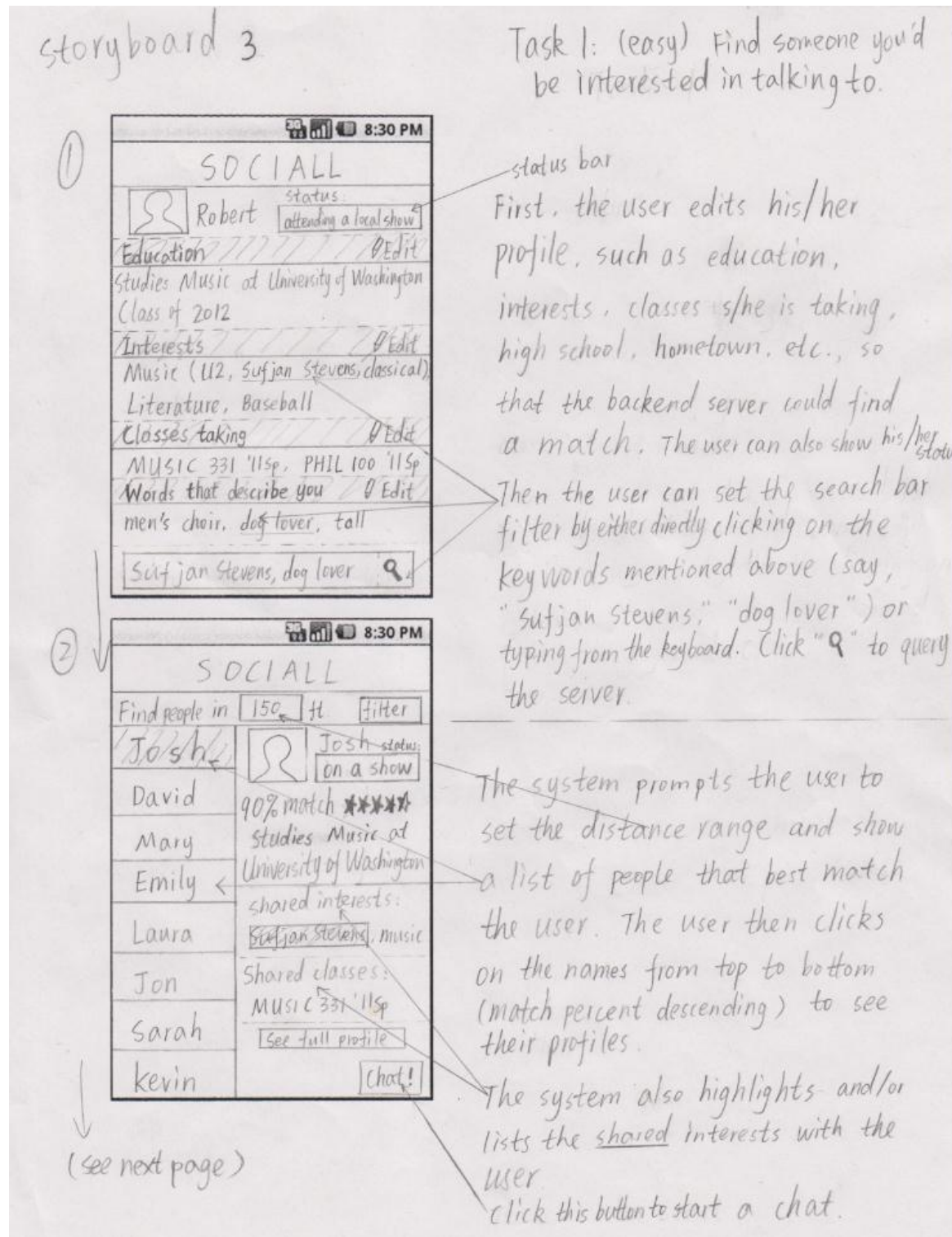
Figure 1: 1) User's profile

2) Search results (click on a name for their profile)

Storyboard 3.
cont'd

Task 2: (moderate) start a chat with someone interesting and arrange to meet them.

(3)

8:30 PM
SOCIALL
arrange a meetup
me: Hey Josh! Are you also on the local band show in Beacon Hill?
Josh: Yeah, and I am a Music major at UW as you are :D
me: Cool, could we meet up somewhere?
Josh: No problem!
[   ] [send]
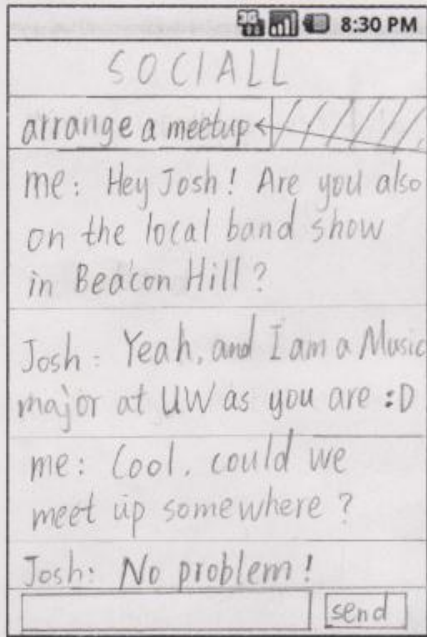
The user clicks this button to arrange a meetup with the one s/he is chatting with.

Chat page

meetup invitation page

(4)

8:30 PM
SOCIALL
Josh sends you a meetup invitation.
People: me, Josh
Location: Dearborn Park, Beacon Hill, Seattle   show map
Time: 4:00pm, Sat., 4/23/11
[Confirm] [Cancel]
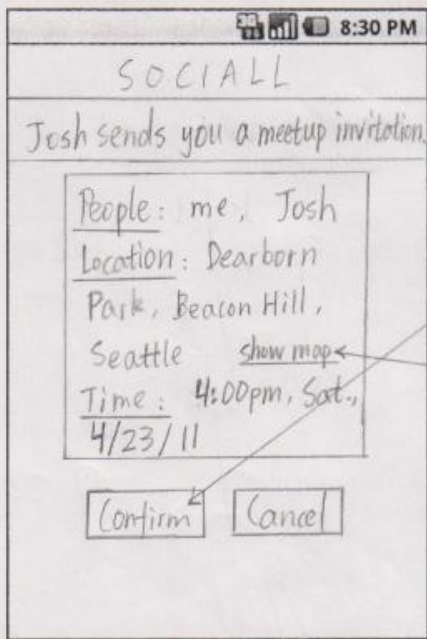
Josh sends the user a meetup invitation; the user can click "Confirm" to accept this invitation.

Click this to show a local map which also displays the two people's locations.

Figure 2: 1) A chat page with an "arrange a meet-up" button

2) A pop-up for meeting confirmation

Storyboard 3

Task 3: (difficult) Find someone to study with for a specific class and meet them.

Screen ①

8:30 PM

SOCIALL

[CSE 142, Computer Science 🔍]

Ben | preparing for my CSE 142 midterm.

Education | ✎ Edit
Pre-major at University of Washington. Class of 2014

Classes taking | ✎ Edit
MATH 126 '11sp, CSE 142 '11sp

Interests | ✎ Edit
programming, soccer, food

Words that describe you | ✎ Edit
nerd, Chinese, Apple fan

Click to search

Click to show the profile

Screen ②

8:30 PM

SOCIALL

filter people in [150] ft. [Go]

David
Jon
Edward
Aaron
Brian
Laura
Emily
Steven

[avatar] becomes a CSE TA!
77% match ★★★☆☆
studies [Computer] [Science] at Univ. of Washington, Class of 2012
Shared classes:
[CSE 142] '09 Au
MATH 126 '09 Au
Shared interests:
programming
Completed keywords:
nerd, Chinese
[see full profile] [Chat!]

Click to filter people within a distance

Highlighted keywords

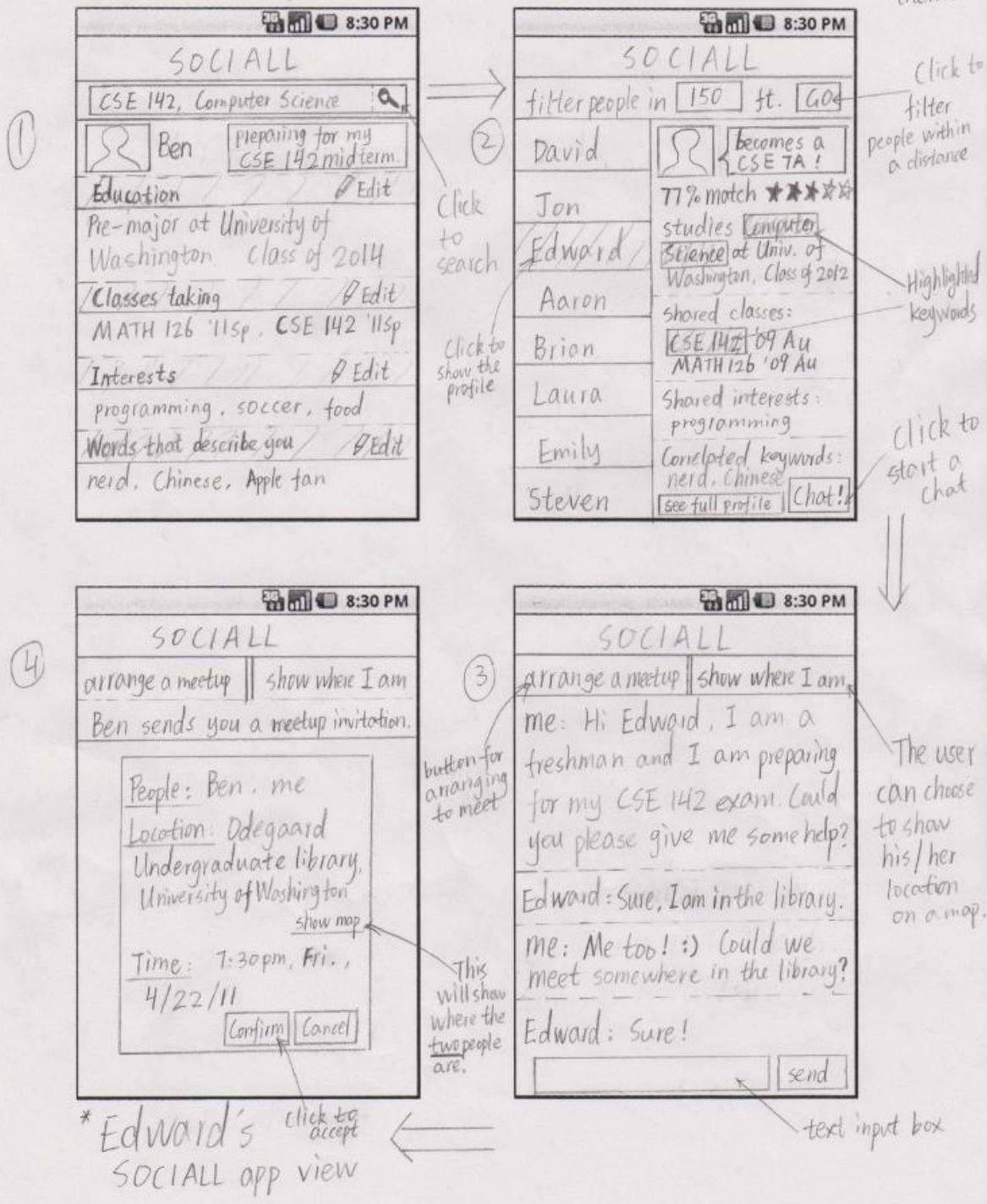Click to start a chat

Screen ④

8:30 PM

SOCIALL

[arrange a meetup] || [show where I am]

Ben sends you a meetup invitation.

People: Ben, me
Location: Odegaard Undergraduate library, University of Washington
show map

Time: 7:30pm, Fri., 4/22/11

[Confirm] [Cancel]

* Edward's click to accept
SOCIALL app view

button for arranging to meet

This will show where the two people are.

Screen ③

8:30 PM

SOCIALL

[arrange a meetup] || [show where I am]

me: Hi Edward, I am a freshman and I am preparing for my CSE 142 exam. Could you please give me some help?

Edward: Sure, I am in the library.

me: Me too! :) Could we meet somewhere in the library?

Edward: Sure!

[   ] [send]

text input box

The user can choose to show his/her location on a map.

Figure 3: Search for a specific class; arrange to meet someone and study together. The venue is shown on a map.

SELECTED INTERFACE DESIGN

OVERVIEW

Our initial designs explored a number of interfaces and mechanisms all in search of an answer to the question "who is the person you will have the 'best' conversation with". The difficultly came with defining what "best" meant in this context. Is it the person you have the most in common with? The one who is closest? The one who has insight in some area you want to learn about? Our final design attempts to find an answer to these questions by revisiting our original contextual inquiry notes and pulling aspects from our three sketches that meet the desires of our potential users.

Our initial sketches fell into 3 broad use cases: I just want to talk to someone near me right now (storyboard 1), I want to talk with someone reasonably close who shares the most interests with me (storyboard 2), I want to talk with someone meeting a specific criteria (storyboard 3). Our final design features a system that ranks other people in the area around the using a number of criteria including a user's interests, their feedback from other users, proximity, as well as additional refinements.

HOME PAGE

Our home screen provides access to all the features of Sociall. From here a user can edit his profile (see "Your profile page" section), check on scheduled meet ups, or view a list of friends established using the service. The main point of this screen and common use case though is to begin to chat with those around you (see "Group chat" section). For this reason, the chat button has been made most prominent button on the screen.

The profile displays name and picture information as well as public and private tags for this user. This view is only viewable by the owner of the profile. These tags are used by our ranking algorithm to determine how much one user has in common with another. As tags are entered they auto-complete to help the user choose from already existing tags.

The profile information here is left intentionally sparse. Some of our sketches had more expansive profile sections, but from our research people were hesitant to share too much information with strangers, fearing both for their privacy and that they might be pre-judged by others for their interests. This concern led us to the distinction between public and private tags. There may be some things, such as religion or sexual or sexual orientation, that users wish to play into the matching algorithm but don't want to make available to everyone around them.
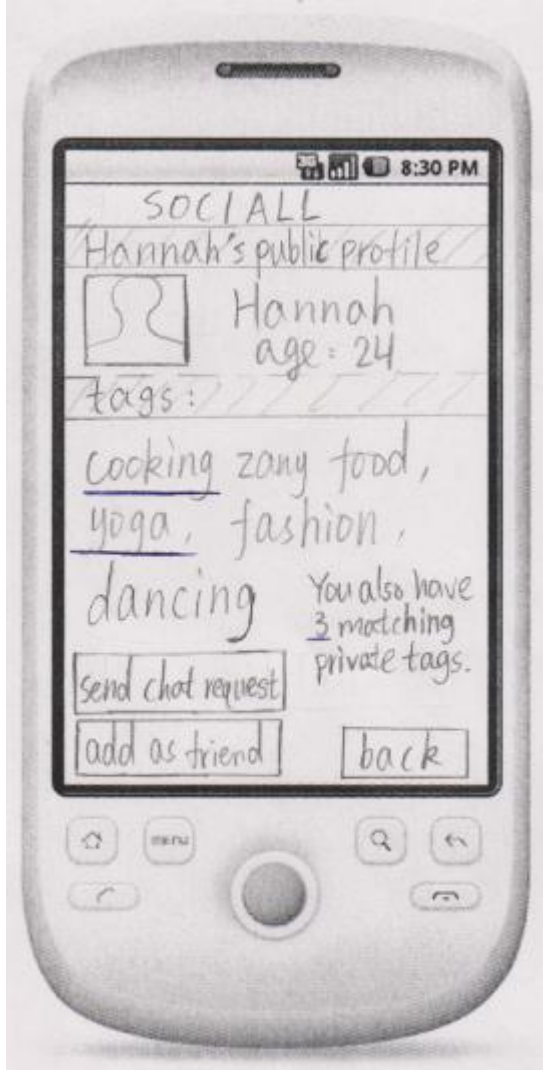
GROUP CHAT
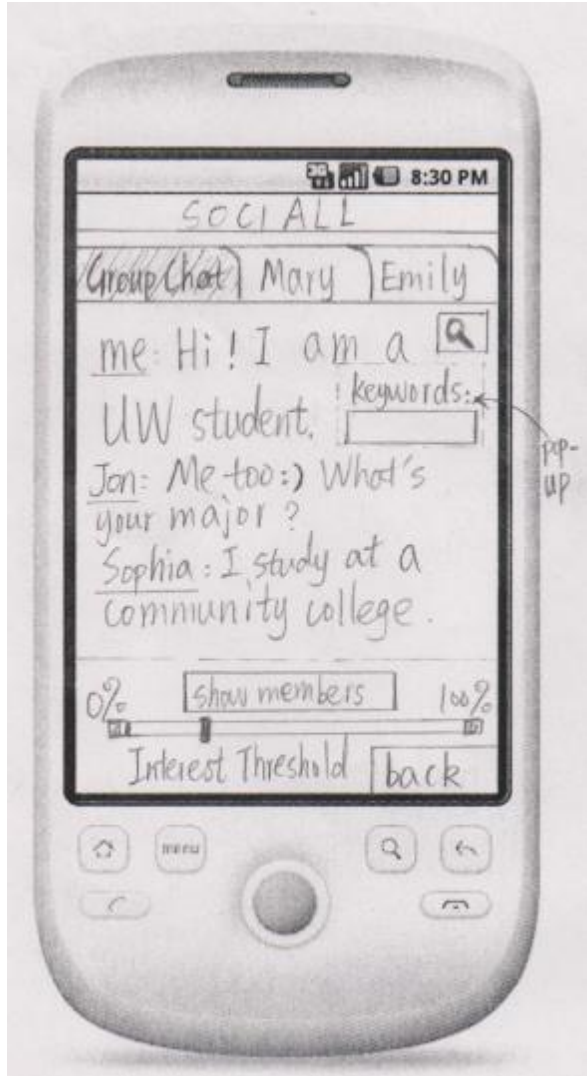
We found that one of the biggest impediments to social interaction with new people for our demographic is simply not knowing what to talk about. Though our application is supposed to ease the tension of meeting new people, a number of our sketches (1 and 3) still require a focused effort on reaching out to a new person to request and in-person meet up. In many ways this just transfers the fear of embarrassment or social awkwardness to the digital front. For our final design we leveraged a social technique noted in both extroverted and less social (Naomi and John respectively) participants in our contextual inquiry. We observed our participants hanging on the periphery of a group conversation until they felt comfortable with the people in the conversation and the topics being discussed. Mimicking this dynamic, we have created a group chat room composed of people that are close in proximity to the user. Here the user can participate in the conversation, view a list of users in the chat room, or refine the "interest threshold" of who he can see in the discussion. This slider can be used to filter people out of the discussion who don't meet a certain minimum of similarity with the user. Users can also search the chat / public profiles of current users using the keyword search pop-up to try to locate specific interests. When a user feels comfortable with the group conversation he can initiate a private conversation with another user as described more in the "private chat" section.

MEMBER LIST (LIST, NAMETAG CLOUD)
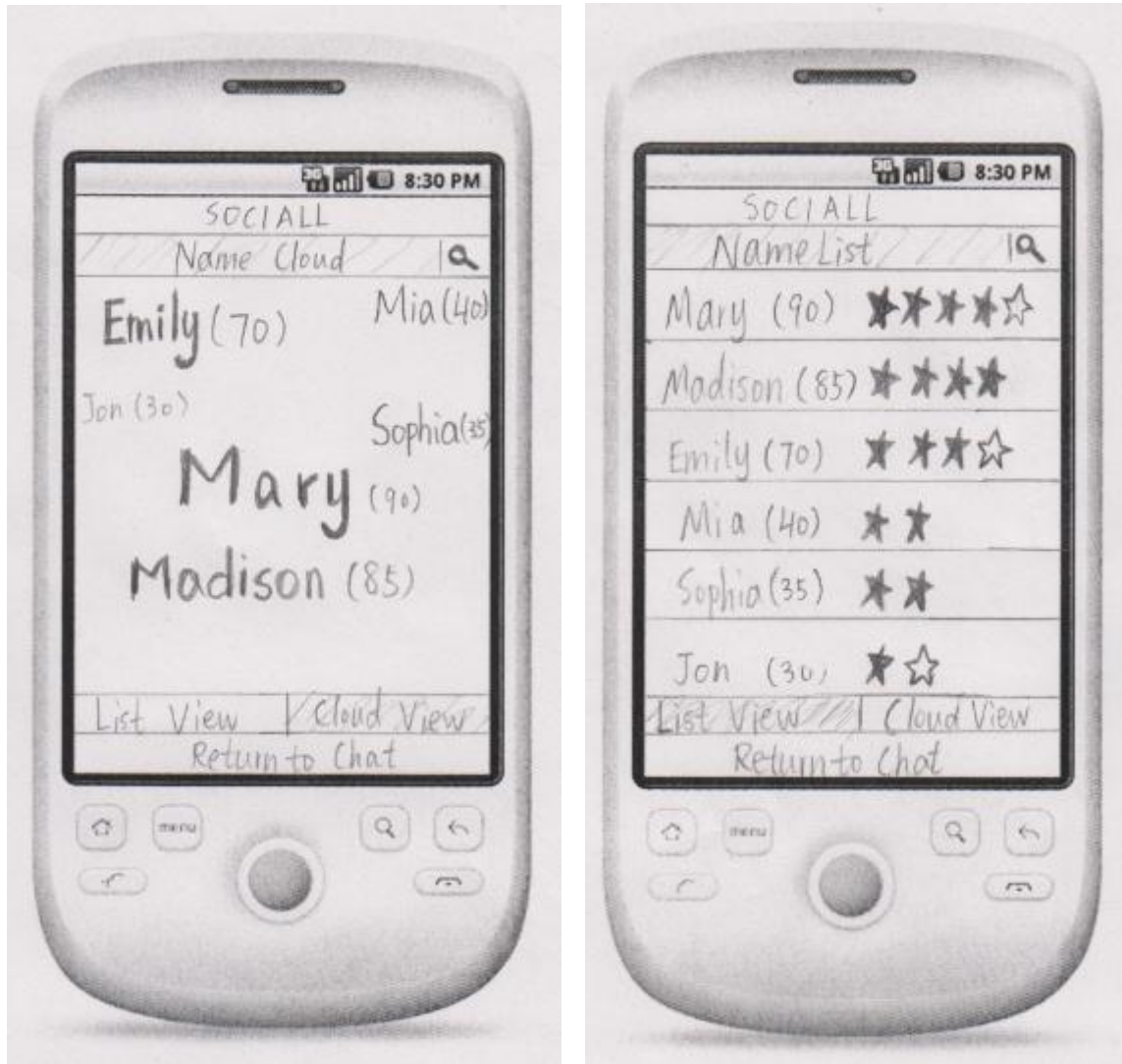
The member list lists all the users that are currently available in the chat room (the ones that match the current refinements). There are two options for this visualization of users. One is a "tag cloud" like structure where the size of the other users' names (along with their corresponding match scores) is scaled according to their match score. The other view is a list of user name and match score sorted by match score. The tag cloud feature provides a mechanism for the use case where a user just wants to talk with someone who is in theory most compatible with them, and the list view provides and important alternative that is more accessible for those who would have trouble clicking on very small tags.

PUBLIC PROFILE PAGE

The public profile page shows a quick summary of any user's relation to another user. There are three ways to get to this page including clicking on another user's name in the group chat, clicking on another user's name from the member tag cloud view, and clicking on another user's name from the member list view. This page shows the public tags the user has selected. Tags in common with the viewing user are highlighted. There is also a note of how many private tags match. This allows an inquiring user to see why they were matched with a given user without providing too much sensitive information. From this screen a user can add the other user as a friend or request a private chat with this user.

PRIVATE CHAT
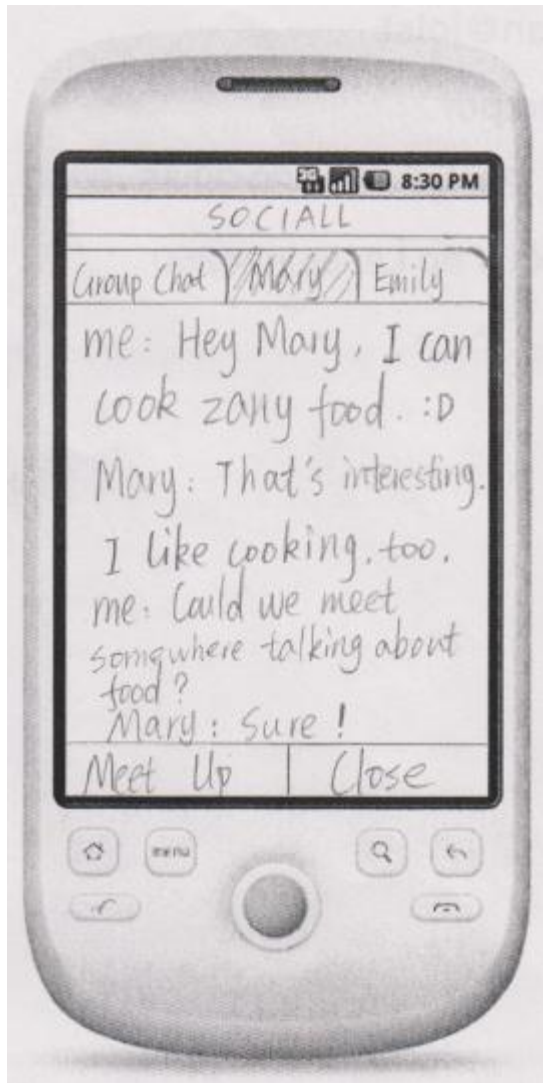
A private chat request can be sent from a user's public profile page and requires the confirmation of the other user. The idea is that a user would determine who they are interested in talking to primarily through the group chat, supplementing with info from the other user's profile. Within the private chat these users could ask more specific questions about interests or request a meet up with the other user by clicking the meet up button. This design, of sharing information primarily over an in person chat instead of through the profile, reflects the feelings of our interviewees that in general they don't want to share random information with strangers, but are generally comfortable sharing information with others in a conversational setting if asked directly.

A meet up request is sent from the private chat screen. Therefore, a private chat has to already have been requested and accepted before a meet up can be suggested. This provides essentially two levels of authorization before location information is shared. This is in response to concerns over meeting up with people you don't absolutely trust. Even the thought of being spammed with meet up requests was jarring to some interviewees, so this allows for requests to only be sent by users that one has already engaged in conversation.

When a meet up is accepted both users' location information is shared on a map. Either user can touch the map to select a new point on the map to set as the meet up location. This represents a compromise between the use case of "just give me someone near me to talk to" and "help me find a person I share interests with". A user might not be in the same building as you, but he would be close enough that you could set a meet up spot in between the two.

FEEDBACK SCREEN
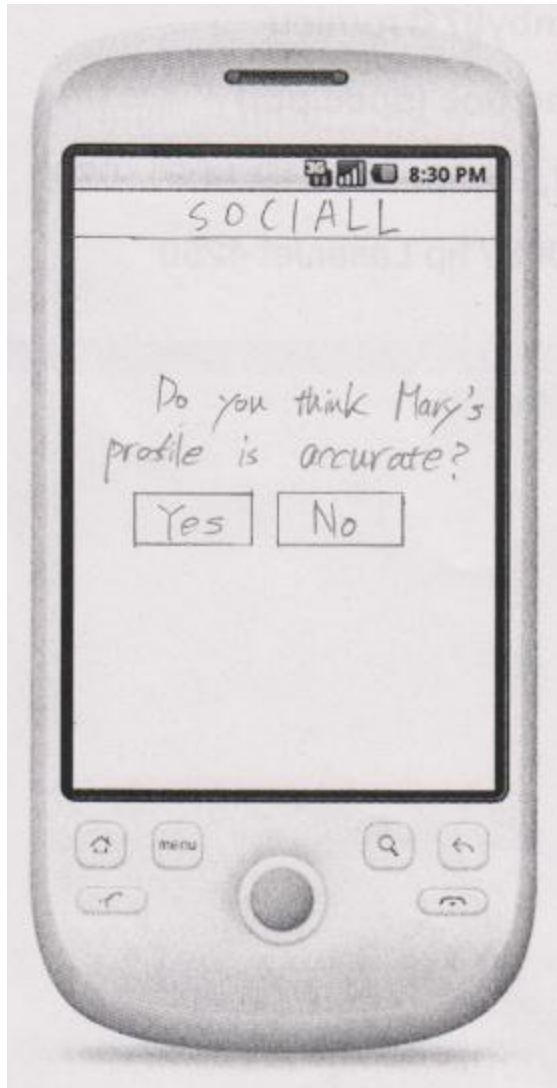
The feedback screen is presented after a meet up between two users has concluded. The question is asked "was this user's profile accurate?" whereupon if the user selects "yes", they are able to add whatever tags to the other user they desire, which are then used in the ranking algorithm. The thought is that other people might be able to pick up on other interests that users might not think to classify themselves as. If the user selects that the profile is not accurate, they are given an option to report the user as completely invalid, or they are asked which tags of the user were inaccurate. This review system provides a sense of "reputation" among users. This, in theory, makes it difficult to pose as someone you're not (which was a concern of potential users). We also decided that the feedback question should be "was this profile accurate" as opposed to "rate your conversation with this person". How "good" a conversation was is completely subjective. Even if it wasn't subjective we wouldn't want to essentially deem some users as boring; one target audience for this application is those who already lack confidence about their socialization skills and want to build them.

SCENARIOS

EASY TASK - FIND SOMEONE WHO YOU WOULD BE INTERESTED IN TALKING TO

Robert is a social college student working towards a major in music. He has several friend groups around campus, but often finds that his musical tastes differ a lot from those of his friends. Tonight, he is attending a local show by one of his favorite bands. He knows that other students from the university are attending as well, but doesn't recognize anyone in the crowd. Robert wants to know whether anyone else in the crowd is someone that he'd enjoy talking to. Robert represents a user who's interested in the people in his vicinity, but doesn't want to start a conversation right now. He knows that people around him share similar interests (music) and that if anyone else shares other common interests, he might strike up a conversation with them after the concert.

MODERATE TASK - ARRANGE TO MEET WITH SOMEONE

Hannah is a 20 year old college student who stops by Starbucks every morning to get coffee. She is interested in biology, running, and tennis. She is open to meeting new people, but is pretty shy and usually ends up reading the news by herself at one of the tables. Today, she decides she wants to talk with someone new, and not necessarily someone who shares the same interests with her since she likes learning about new topics. Hannah represents a user who wants to meet a random person casually to talk with for a short while. She is interested in starting a longer friendship if the conversation goes well.

DIFFICULT TASK - FIND SOMEONE TO STUDY WITH FOR A SPECIFIC CLASS AND ARRANGE A STUDY SESSION

Ben is a freshman at the UW and is therefore enrolled in many large classes. Ben is outgoing and has friends at the dorms, but has not had time to form a study group with people in his classes. He has been pretty intimidated by the class sizes and the college workload and consequently often studies alone at the library. As a major midterm nears, Ben decides that he wants to find other people to collaborate with. Ben is interested in networking with other people who share classes. He is looking for social networking and people who have specific backgrounds.