Task Analysis + Design Sketches

Linden Essa | Design

Leslie Ferguson | Group Manager

Peter Kamb | Writing

Kim Todd | Testing

STONE SOUP

OVERVIEW

Problem and Solution

Following our contextual inquiries we were left with many unanswered questions and no clear direction for our project. Our initial project plan called for a system to help low-income individuals make healthy eating choices on a budget. The locations used for our contextual inquiries, however, offered only middle-class people in a rush on their lunch break. We were not particularly unified or inspired in the development of an application for this large and varied population, so we instead reexamined the many ways in which people interact with their food and with each other.

We quickly identified the potluck as a common gathering of people and food. Potlucks, in which every attending person or family brings a dish to share with the wider group, are often held to expedite the planning of a banquet for a team or group. They are also a convenient way to eat a varied, multi-course meal while expending only the effort to cook or buy one dish. Through our mobile application, we hope to promote the potluck as a community building activity as well as source for a great meal.

Questions + Answers

1. Who is going to use the system?

Teams that already hold potlucks will use the system to better organize their gatherings. Members of neighborhoods or schools will use the system to connect and hold potlucks, even if they never have before. Individuals will use the system to find existing potlucks and groups to join, for either the food or social aspects.

2. What tasks do they now perform?

Potlucks are generally not very organized. They often rely on the last names of guests: "A-K brings main dish, L-T brings side dishes, U-Z brings desserts." It's hard to know what other guests will bring, and very easy to double up on one particular item. Potlucks are only held in inclusive groups and a date is set-aside well in advance; it is hard to find random potlucks, and even harder to be welcomed by the members.

3. What tasks are desired?

The potlucks created through our application should improve the guests' sense of community. Users should create potlucks and invite their friends. They should specify their menus according to dietary needs or the meal's theme, or leave the menu open to interpretation by the guests bringing the food. Guests should be able to see what others have already signed up to bring, and should RSVP by confirming which food item they will bring. At the store they should bring up our application to check the shopping list for the meal, and they should check it again to see the recipe when cooking. Users of our application should also turn to potlucks as a way to meet new friends with the same interests, and as a way to eat delicious food, by being able to find public potlucks quickly and easily.

TASK ANALYSIS

4. How are the tasks learned?

This application takes the task of creating or attending a potluck, which most of us are familiar with, and moves it into a handheld application. Thus, tasks are not so much learned as located in the new user interface. People will use their past experience with potlucks to guide their actions in the various steps of the process, so we have strived to make it as easy as possible to find the necessary command in our graphical user interface.

5. Where are the tasks performed?

In the field, Guests can check their personalized shopping list to see what they need to buy to bring to the potluck. They can also look up recipes on their mobile phone in the kitchen. Creating a potluck or picking a food item to bring can be done either from the mobile application or from a website on the user's PC.

6. What's the relationship between customer & data?

Users of the application create a profile for themselves containing dietary information to personalize their recommended potlucks. The creator of the event is granted administrator rights over the event and can edit or delete it at any tem. Guests who have signed up to bring a dish can remove themselves from the responsibility, but doing so would take them off the guest list until they select another dish.

7. What other tools does the customer have?

Potlucks are traditionally organized over the phone or during other meetings, so we will need to prove the value of the additional features that our application provides. Other solutions such as Facebook events or evites provide similar functionality as well. The list of menu items is a major tool of our customers, as it allows each user to see what food is being brought to the event.

8. How do customers communicate with each other?

We hope to encourage 'real world' communication between users, bringing people together through potlucks for discussion and friendship. Invitations will be sent through email or a messaging system built into the application, and discussion between users can be handled in the same manner.

9. How often are the tasks performed?

The number of potlucks an individual attends depends on their personality type and schedule. It is safe to assume that most people will not be planning or attending a potluck every day, however, this is not a restriction. Some communal dinners may be recurring and consequently, some tasks may be skipped after the initial event. Some tasks are performed before every potluck – such as determining how you will contribute as an attendee.

10. What are the time constraints on the tasks?

Event creators can spend as much time as they would like setting up their invitations, by specifying exact recipes to bring or combing through a large list of friends to find the ones to invite. They can also speed through the process very quickly. Guests who receive an invite will RSVP to the event and choose a dish quickly, but will likely refer back to the application several times before the event to check the shopping list for that dish or get directions to the event.

11. What happens when things go wrong?

The common place where something can go wrong with a potluck results when a guest does not bring the food they signed up to bring. If enough people do not bring their food, there will not be enough for everyone to eat. There is no digital way to solve this problem, although our application does provide notifications to help prevent it. As with a traditional potluck, shame helps people remember to bring their item in order to eat everyone else's food. In addition, someone who constantly forgets to bring their food will not be invited to many potlucks.

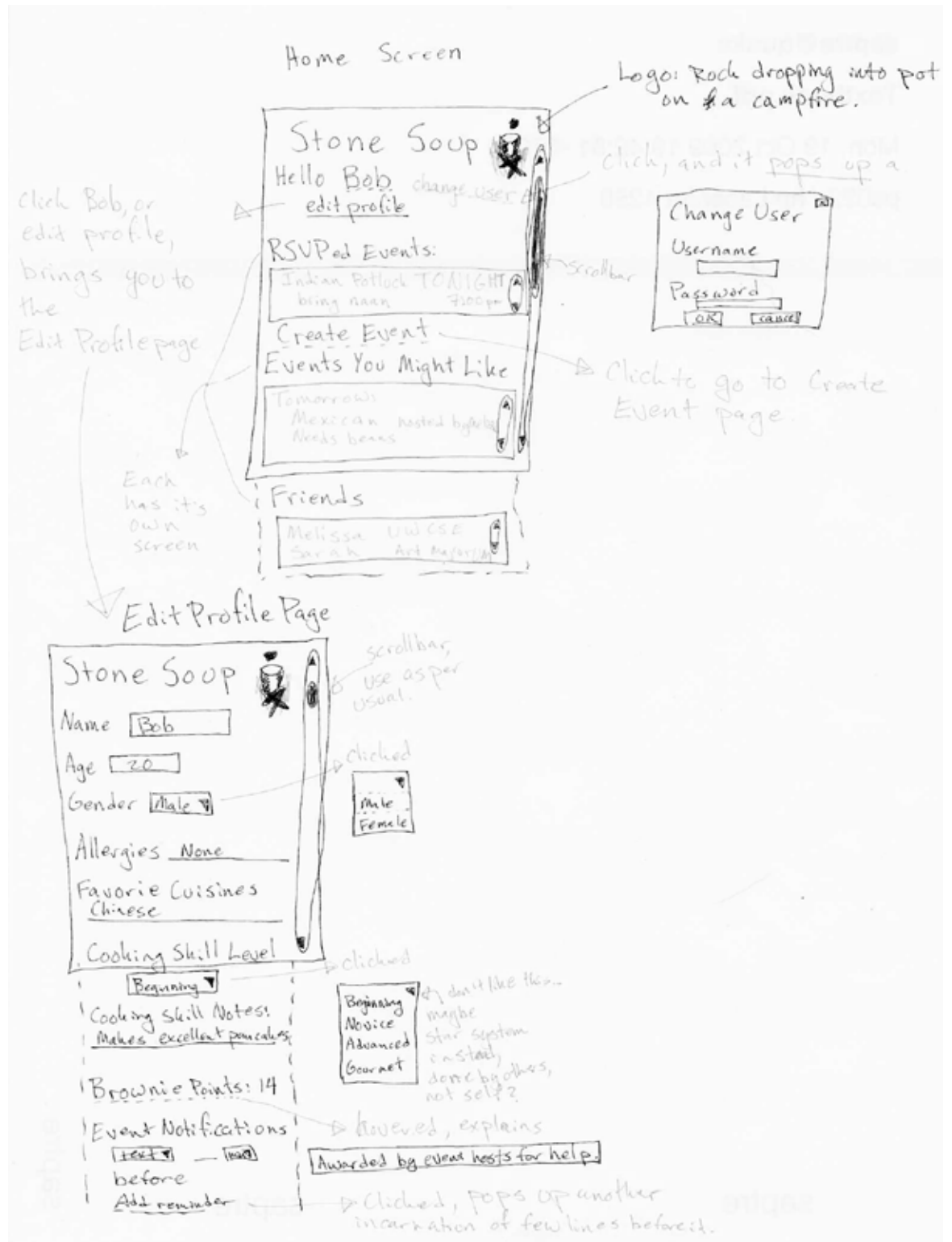# New Tasks

Create an event and invite people to it.
Find a potluck for tonight and sign up to bring a dish.
Create a profile and share it with a new friend at a potluck.

List and Nested Menus Sketches

Home Screen

Stone Soup

Hello Bob change user
edit profile

RSVPed Events:
Indian Potluck TONIGHT
bring naan   7:00 pm

Create Event

Events You Might Like
Tomorrows
Mexican   Nested big parties
Needs beans

Friends
Melissa   UW CSE
Sarah   Art Major

Logo: Rock dropping into pot
on a campfire.

Click, and it pops up a

Change User
Username
Password
[OK] [Cancel]

scrollbar

Click to go to Create
Event page.

click Bob, or
edit profile,
brings you to
the
Edit Profile page

Each
has it's
own
screen

Edit Profile Page

Stone Soup

Name [Bob]
Age [20]
Gender [Male ▼]

Allergies None

Favorie Cuisines
Chinese

Cooking Skill Level
[Beginning ▼]

Cooking Skill Notes:
Makes excellent pancakes.

Brownie Points: 14

Event Notifications
[text ▼] — [time]
before
Add reminder

scrollbar,
use as per
usual.

Clicked
Male
Female

clicked
Beginning
Novice
Advanced
Gourmet

I don't like this...
maybe
star system
instead,
done by others,
not self?

Hovered, explains
Awarded by event hosts for help.

Clicked, pops up another
incarnation of few lines before it.

INTERFACE SKETCHES

Create Event Page

Event Name: _____
Theme: _____
Menu Restrictions
specify menu
_____
_____

Invite People _____
guest list
☐ Let people invite
themselves
if they _____

▷ click→ popup asks for name,
popup gives query results, click
on person, click invite, added to list

← Scroll bar

Ban People _____

▷ type restrictions here
▷ as with invite, only button says
"ban"

○ I will host.
Where? _____
○ I need someone
to host.

Date: _____
Time: _____

[CREAT EVENT]

RSVPed Events Page

Stone Soup
RSVPed Events

Indian_Potluck_TONIGHT
Bring:
Where: _____ map;t
When: time date
Guests: Melissa painting
bears, etc.

▷ Click to go to specific Event page

▷ goes to Google maps, with address
pre-entered

▷ Click name to go to profile page
of that person

Friends Page

Stone Soup

Friends
You have 14 Friends.
Find More: _____
_____ [search]
Find in Friends _____ [GO]

Melissa is coming
to Indian Potluck
_____

ck to go to
profile

brings up page of list of
possible results

👥 Billy Bob
UCs

👤 William
Wa

6

INTERFACE SKETCHES

Suggested Events Page

Stone Soup (logo)

Events You Might Like

Find in Events
_____ [GO]

▷ enter info, click go, and it filters events in place

Click an event to go to Specific Event Page

▷ scroll bar

Specific Event Page

Stone Soup (logo)

Event:
Theme:
When:

Where: _____ [map it]

▷ to Google maps, pre-entered

Needs:

Guests:
#
Guests

[RSVP]

pops up

Will bring [X]
You must bring something to _____
to a potluck

▷ enter stuff

on _____
[RSVP] [cancel]

if nothing entered, goes back, makes you, by showing

Calendar Based Navigation Sketches

INTERFACE SKETCHES

Recap an event

Wednesday. Sept 9, 09

Fish Fiesta
[Participants]
[Menu]
[Photos]

[Back]

press date
← in past

[☺] Username   edit pk.

[←] October [→]

M T W Th F S S

1	2	3	4★	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23★	24	25	26	27	28

[I   ] [🔍]

search by
subject, ~~date~~
people, for past
current, future,
invited and open
events.

Press empty date
in future

Create an Event

Event Name
[   ]

Date
[October 16, 2009 ∨]
Location?
[∨]

Description
[   ]

[Create Menu]
~~Invite friends~~ [Guest List]

Tuesday
October 16, 2009

maybe →
show what
popular events
are happening

[Create Event]

[Search for events]
[I   ] [🔍]

[Back]

Press date in future

create event

Tuesday Oct 16, 2009

[Create Event] [I   ] [🔍]

Whats happening...
_____
_____
_____
_____ ↕

shows
open events
based on
proximity

[Send Invites]   [Save & Close]

[Back]

Search results:
[My Events]
[Friends events]
[Public events]

Sketches of the "Bare Minimum"

Upcoming ~~Potlucks~~ Potlucks

Find a Potluck

Create a Potluck

INTERFACE SKETCHES

Main Dish Suggestions

Pasta

Meat

Fish

My Potlucks

-Today-
Block Party BBQ

-Tomorrow-
Soccer Team Dinner

-11/14/09-
Office Thanksgiving

-12/25/09-
Family Christmas Brunch
Christmas Dinner

My Events

11

INTERFACE SKETCHES
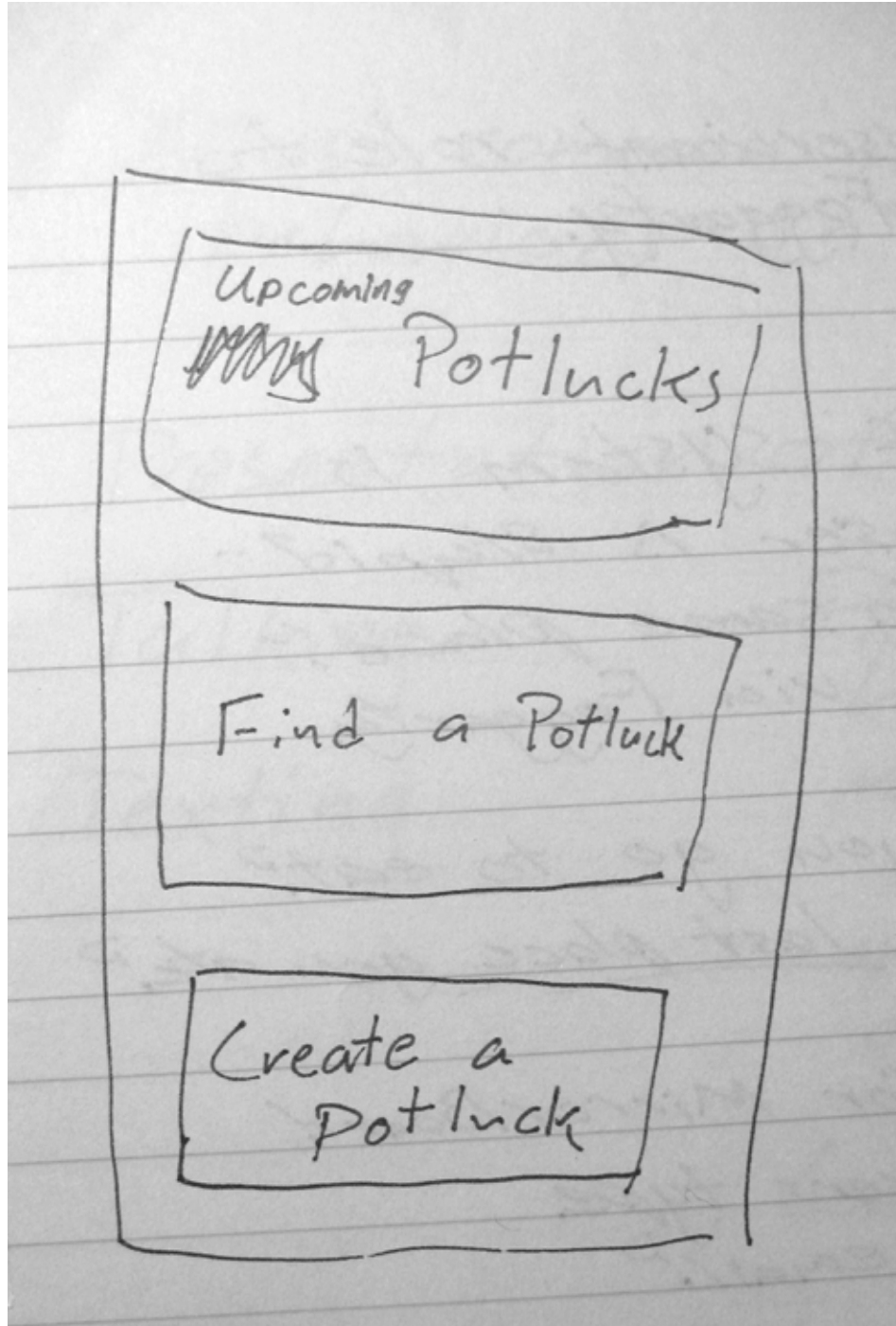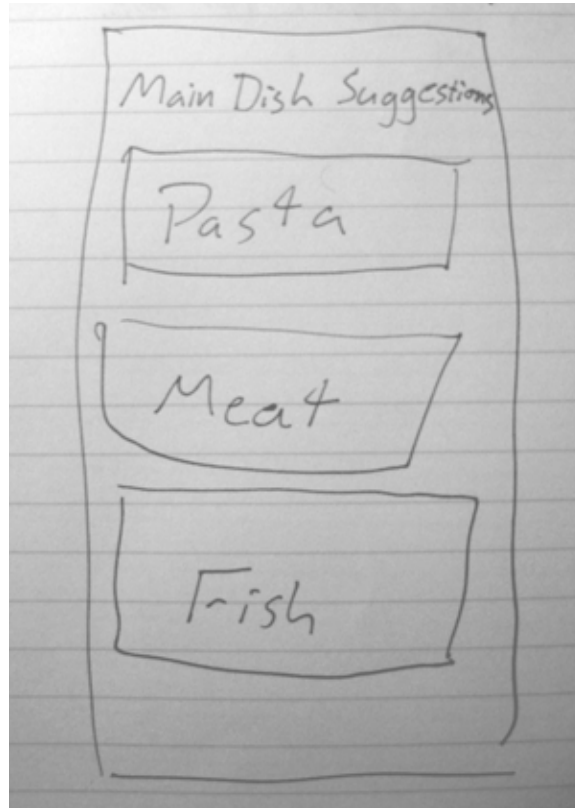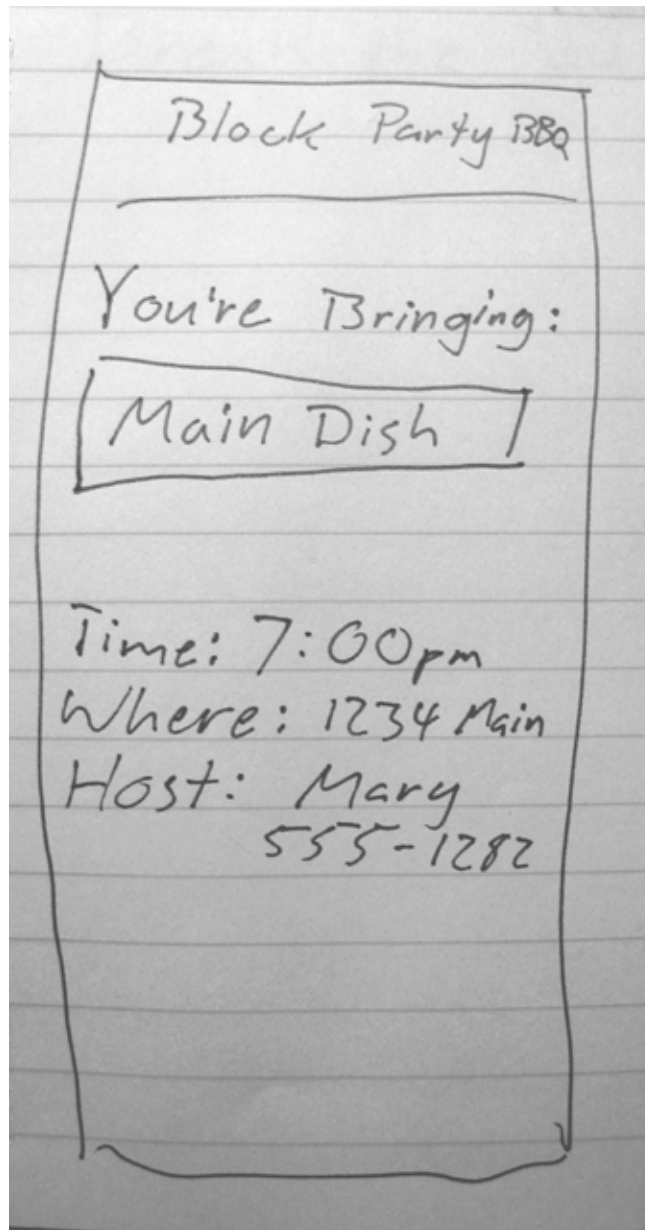
Reasons for Selected Design

After much discussion the final design of the interface was based primarily upon a listed agenda view of upcoming potlucks. We decided that this was the most natural way to display the information in a quick and easy to read way. Upcoming Potlucks you will be attending are visible on the main page, along with the food item you will be bringing with you to the event. This home screen serves as a constant reminder for your potlucks and of your obligations to the group.

Functionality Summary + Interface Description

Stone Soup is divided into five main categories of functionality to enable people to easily plan communal dinners. First, Stone Soup employs the notion of a user profile. This user profile is much less like a personal ad and more like a survey of dietary preferences and constraints that will help the application better match you to events that fit your wants and needs. These preferences may be dictated by a particular diet you are currently on or a more lasting lifestyle choice. For example, by indicating that you are a vegetarian, the application can help connect you with other vegetarians. Dietary profile information allows for the recommendation of local potlucks that you have never attended before.

The profile is not used as an expression of you as an individual, like a Facebook profile, but is instead a listing of qualities used to measure compatibility. Therefore, a profile isn't something that would need to be referenced and changed regularly. Instead it is something that is done once and updated occasionally depending on changes in dietary restriction or preferences.

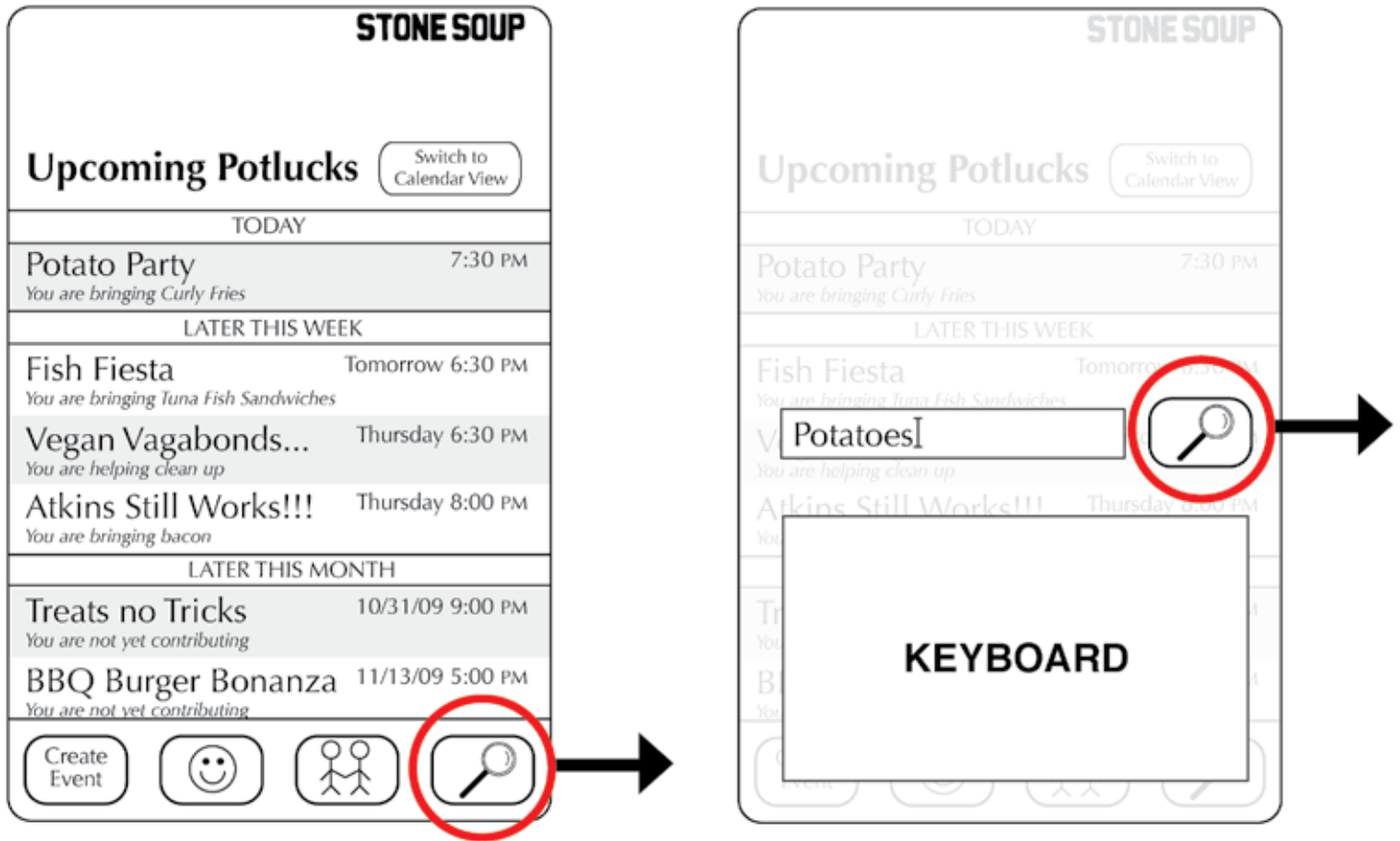SELECTED INTERFACE

HOME SCREEN

14

The second main piece of functionality that this application provides is the notion of searching for a potluck that may fit your interests. Events can be suggested based on preferences indicated in your profile, what type of food is being served, who will be there, who is hosting, where it is being held, when it is being held, or any combination of these attributes. By matching people on multiple dimensions, individuals can find events that fit their specific needs and increase the chance of compatibility.

Users search for potlucks on these multiple dimensions through a single search bar. This search bar is accessed by clicking on the magnifying glass icon on the bottom of the home screen. By entering in key words, dates, or any other information to narrow the results, users will be returned a list of events that were created as "open" to new attendees. These events are listed by date and also show their given name and a short reason for why they were matched to the user. Users can then see their options of what is currently available.

SELECTED INTERFACE

STONE SOUP

Search Results:
Potatoes

Switch to
Calendar View

TODAY

Potato Party   7:30 PM
Your friend Sally is hosting this event

LATER THIS WEEK

Farmers Breakfast   Tomorrow 8:00 AM
In your neighborhood

Irish Food Party   Thursday 6:30 PM
Matches your food preferences

Waffles are Good   Friday 8:00 PM
Your friend John is bringing Orange Juice

LATER THIS MONTH

Long Live Idaho!   11/01/09 7:00 AM
Lots of potatoes are promised

BBQ Burger Bonanza   11/13/09 5:00 PM

Create
Event   ☺   👥   🔍

STONE SOUP

←

Potato Party   RSVP

Today 7:30 PM

5034 16th Ave NE
Seattle, WA 98105

Who doesn't love potatoes and potato derived products? That's right - nobody. This potluck was created to celebrate the mighty potato that helped the irish endure and keeps the great state of Idaho on the tip of all our tongues.

Description   Menu   Your Grocery List/Recipe   Map

SELECTED INTERFACE

STONE SOUP

Potato Party — RSVP

Today 7:30 PM

5034 16th Ave NE
Seattle, WA 98105

Who doesn't love potatoes and potato derived products? That's right - nobody. This potluck was created to celebrate the mighty potato that helped the irish endure and keeps the great state of Idaho on the tip of all our tongues.

Description | Menu | Your Grocery List/Recipe | Map

STONE SOUP

Potato Party

Today 7:30 PM

Attending

Not Attending

Back

Description | Menu | Your Grocery List/Recipe | Map
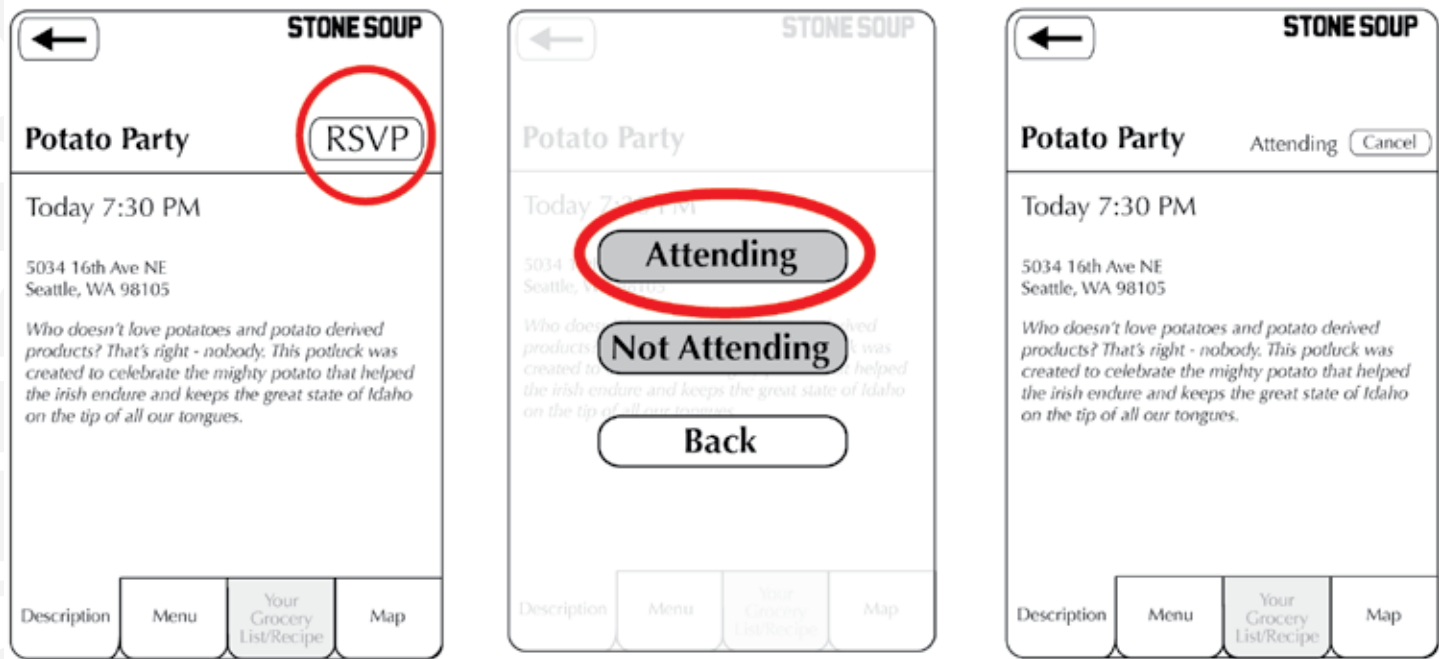
STONE SOUP

Potato Party — Attending (Cancel)

Today 7:30 PM

5034 16th Ave NE
Seattle, WA 98105

Who doesn't love potatoes and potato derived products? That's right - nobody. This potluck was created to celebrate the mighty potato that helped the irish endure and keeps the great state of Idaho on the tip of all our tongues.

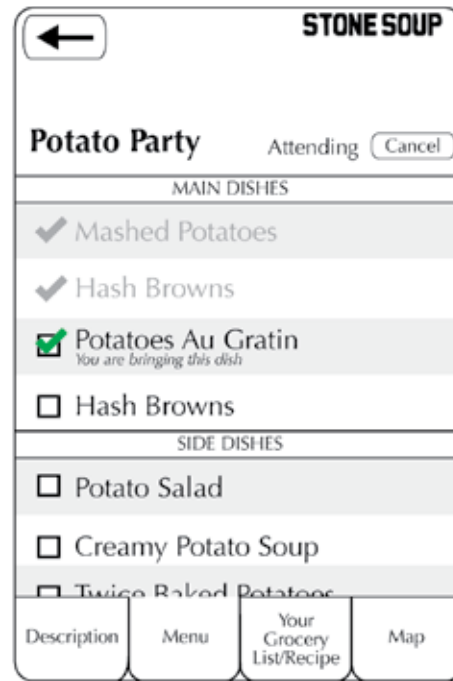Description | Menu | Your Grocery List/Recipe | Map

The application also allows individuals to view a summary of current and upcoming events that they are attending – as well as the details for each. By providing an overall snapshot of the upcoming events, the agenda list or calendar screen on the main page serves as a way for people to keep track of their commitments. Ideally, these confirmed events could be automatically synced with your phones system calendar to help with concurrent planning.

This snapshot easily allows individuals to dive deeper into the details of a specific event. By selecting an event you are then taken to a screen containing a summary of what the event is about. You can then easily see what is on the menu by selecting the "menu" tab. This will show a list of items that the host has asked guests to bring to the potluck and what other attendees of the event have already signed up to bring. These items are as specific or as general as the event creator desires. For example, a specific recipe such as "butternut squash soup," a more general dish such as "salad" or "meat," or simply a "main course" or "appetizer" that in the spirit of potluck leaves the decision up to the guest. In addition, services such as "Help with Dishes" can be listed along with food. By clicking on one of the items, you commit to bringing that item to the potluck or carrying out that service. Information about the food item, such as a recommended recipe or local sale prices, then becomes available to help you complete your commitment in the "Grocery List/Recipe" tab. Finally, the "map" tab of the event page provides guests with a map and directions to the potluck.

SELECTED INTERFACE

EVENT MENU

CHOOSE TO CONTRIBUTE
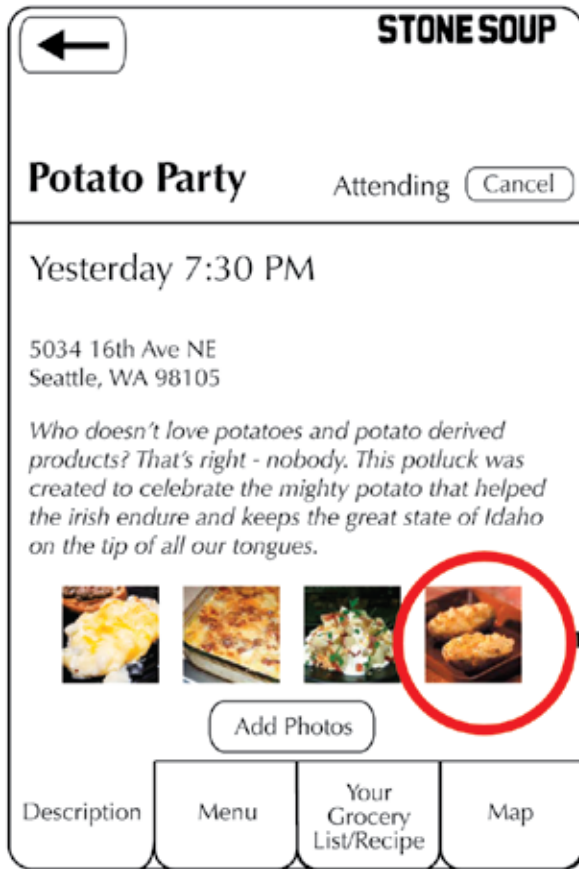

YOUR GROCERY LIST
AND RECIPE

MAP AND DIRECTIONS
TO EVENT

18

SELECTED INTERFACE

STONE SOUP

←

Create New Event

Name:
Date:
Time:
Location:
Description:
_____
_____
_____
_____
_____
_____

| Description | Add Guests | Menu | Publish/ Send Invites |

Stone Soup also provides the ability to create your own events around a specific interest or theme. These events can be private and only viewed by invited guests, or they can be open to the public in order to bring together neighbors or those with similar tastes. To create an event an individual must select the create event button on the main screen. Certain fields are required, such as the name of the event, the description and the date. However, in the spirit of potluck, much can be left open to those that decide to attend, such as the location and menu.

SELECTED INTERFACE

Potato Party Attending [Cancel]

Yesterday 7:30 PM

5034 16th Ave NE
Seattle, WA 98105

Who doesn't love potatoes and potato derived products? That's right - nobody. This potluck was created to celebrate the mighty potato that helped the irish endure and keeps the great state of Idaho on the tip of all our tongues.

[Add Photos]

| Description | Menu | Your Grocery List/Recipe | Map |

Twice-Baked Potatoes

Contributed By: Sally [Add as Friend]

[Get Recipe]

[Contact Sally]

[Back]

Finally, to facilitate the sense of community, this application provides the ability to follow up on an event. By adding photographs taken at the event, uploading personal recipes, and adding new friends to your contacts links are made between the people you met at the potluck or the food you ate. Images from the potluck are linked to the person who took them and also the person who is in them. Images of food are linked to recipes and the person who contributed the dish. All references to a person will then give you the ability to contact them or add them as a friend. We hope that these social networking features will promote further potlucks with the new friends in the future.

SCENARIOS

Create an event +
Invite friends to attend

Sarah wants to have a party to celebrate getting into the Computer Science and Engineering Department at the UW. She normally doesn't like parties, though, because she is lactose intolerant and often cannot eat any of the main dishes. Her friend, Rachel, listens to her concerns and tells her about the Stone Soup application that will help her plan a potluck with dietary restrictions in mind. Sarah decides that having a potluck is a great idea because it's cheaper than trying to feed everyone herself. She opens the application and goes to the "Create Event" section. In the form, she specifies the date and location for the party. Sarah names the event and in the description states that the potluck will contain many lactose-free dishes, although guests may bring other dishes as well. After the details have been filled in, she goes to the menu selection screen and provides a list of lactose free items that she'd like the attendees to bring. She also leaves a number of spaces open in which guests can sign up for unspecified dishes that may not be lactose-free. Next, Sarah uses the guest list to invite all of her friends that she thinks would want to come to the potluck. Since she doesn't want strangers coming to her house, Sarah specifies that the event is not open to the public so that it will not appear in searches made by people other than Sarah's friends. After sending the invitations, Sarah eagerly counts down the days until her potluck.

Find an appealing potluck +
Sign up to bring a dish

John is an 18-year-old freshman at UW. While he is eating lunch alone in the HUB, he decides that he wants to meet new people in the U-District tonight instead. He doesn't have any plans for the night so he logs into his Stone Soup application. John searches for Mexican themed potlucks because he loves tacos. Using the phone's GPS location, Stone Soup finds 5 events nearby that fit John's criteria. Although none are purely Mexican themed, they do have some compatibility with the search query. John picks a potluck and goes to the event's page. He looks at the list of items the host requested the guests bring and sees that no one has signed up to bring guacamole, salsa, or soda. People have signed up to bring tacos and burritos, along with hamburgers, pasta, and other food, which explains the compatibility with John's Mexican theme. Since he has all of the ingredients at his apartment, John decides to bring guacamole to the event. He goes home to make the dish before heading off for the dinner. He has a great time that night, and joins the local Spanish language club that hosted the event because of all the great people he met.

Set up a user profile +
Share it with a new friend

Jennifer has just downloaded the Stone Soup application. She opens it up and creates a profile for herself. In the profile, she specifies that she is a vegetarian and loves Thai cuisine. Next, Jennifer receives an invitation to a Potato themed dinner at her friend Brian's apartment. She opens the invitation and says she will attend the event. Then she looks at the menu for the event, which lists any dishes the host would like people to bring along with who has committed to bringing that dish. Jennifer scrolls down the list and finds that no one has registered to bring mashed potatoes, so she signs up to bring them.

That evening, Jennifer attends the dinner at Brian's house and brings the mashed potatoes. At the potluck, Jennifer meets a cute guy who brought some amazing pudding, and learns that his name is Evan. They decide to share their information with each other. and put their phones next to each other. The application then asks if they would like to share their information with each other. They both agree and the application uploads the other person's information to each phone. Later, Jennifer uses the information to contact Evan, and ask him for his pudding recipe. She also sees that another guest who attended the potluck has tagged a picture of his pudding.
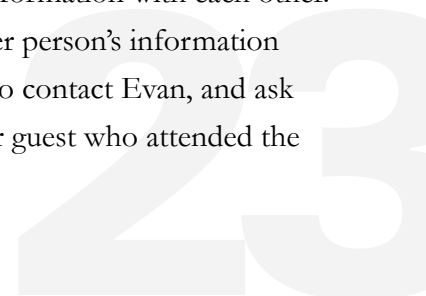
Scenario Development Process

We developed these tasks by isolating the three main uses of the application: creating a potluck, going to a potluck as a guest, and building community and friendship at a potluck. By presenting a scenario for each, we have covered our bases.

We came up with the idea of filtering based on a range of qualities thanks to the "Mexican themed potluck." We realized that it would be very unlikely to find a fully themed potluck right when you were looking for it. If the potluck wasn't fully themed, though, the next best thing would be for it to contain some of the food items you were searching for. Making a search for a Mexican potluck turn up results for a general potluck where someone is bringing burritos is clearly in the user's best interest.

The scenarios were difficult due to being at times functionally similar to other existing event applications. We need to capitalize on the things that make potlucks different from other events, mainly the list of food options. The search for Mexican food also worked well, as it highlighted the fact that many factors combine to recommend a particular potluck. It also showed that guests can effectively "trade" one type of food for another by attending a potluck, as he traded his chips for the tacos. This is a valuable observation that we should take into consideration to reevaluate our project.