Stone Soup

Interactive Prototype

Linden Essa | Design Coordinator
Leslie Ferguson | Group Manager
Peter Kamb | Documentation Coordinator
Kim Todd | User Testing Coordinator

Document Available Online: `http://www.cs.washington.edu/education/courses/cse440/CurrentQtr/projects/stonesoup/fileList_files/7_InteractivePrototype.pdf

Stone Soup

Introduction & Mission Statement

Potlucks are an efficient and economical way to plan a meal for a group function. By outsourcing the food dishes to each person or family that is attending, much less of a burden is placed on the event's host. However, because of the unique properties of a potluck, potential problems are introduced that do not factor in to the planning of any other type of event. There is always the danger that people will bring too many of a single dish, or that some type of food, such as salads or drinks, will be underrepresented. Potlucks are also often planned for groups outside of one's circle of close friends, which makes contacting the right people a difficult task. To help solve these difficulties, we have developed the Stone Soup application, an event planner tailored specifically for the planning of potlucks. By making it easy to populate a list of your contacts through a variety of networks, users of the application will be able to make sure all the right guests are invited every time! In addition, by having a centralized list of what people are planning to bring, you can be sure that your potluck will be a success and that no one will go home hungry.

Our Mission is to make it really easy to get together with friends and enjoy a great meal where everyone contributes.

Representative Tasks

Task 1: RSVP for an Event (easy)

You have been invited to a party for Computer Science/Engineering majors for tomorrow night (Friday, December 18). You have decided that you want to go, and bring something that doesn't require much cooking because it's finals week, and you are busy practicing your presentation. When you look at the suggested contribution page, you see that taco shells are needed, and so you decide to bring taco shells.

Task 2: Create a New Event (medium)

Your younger sister's figure-skating team, the Gliders, is having a meet next Saturday. You have drawn the short straw this time, so you get to organize the post-meet celebration. Use the Stone Soup application to organize the potluck. The "Glider's Gala" will be on Saturday, December 19, 2009 at 6:00 pm. It will be at the local skating rink, Icy Fields. You need to invite: Amber Corwin, Brandon Dunn, Derek Chan, Emily Pierce, and Eric Spishak. You want to invite people via email. If they don't have email, invite them via text message. You want for these items to be brought: chips, dip, soda, and cupcakes. Aside from those few things, you don't care what people bring.

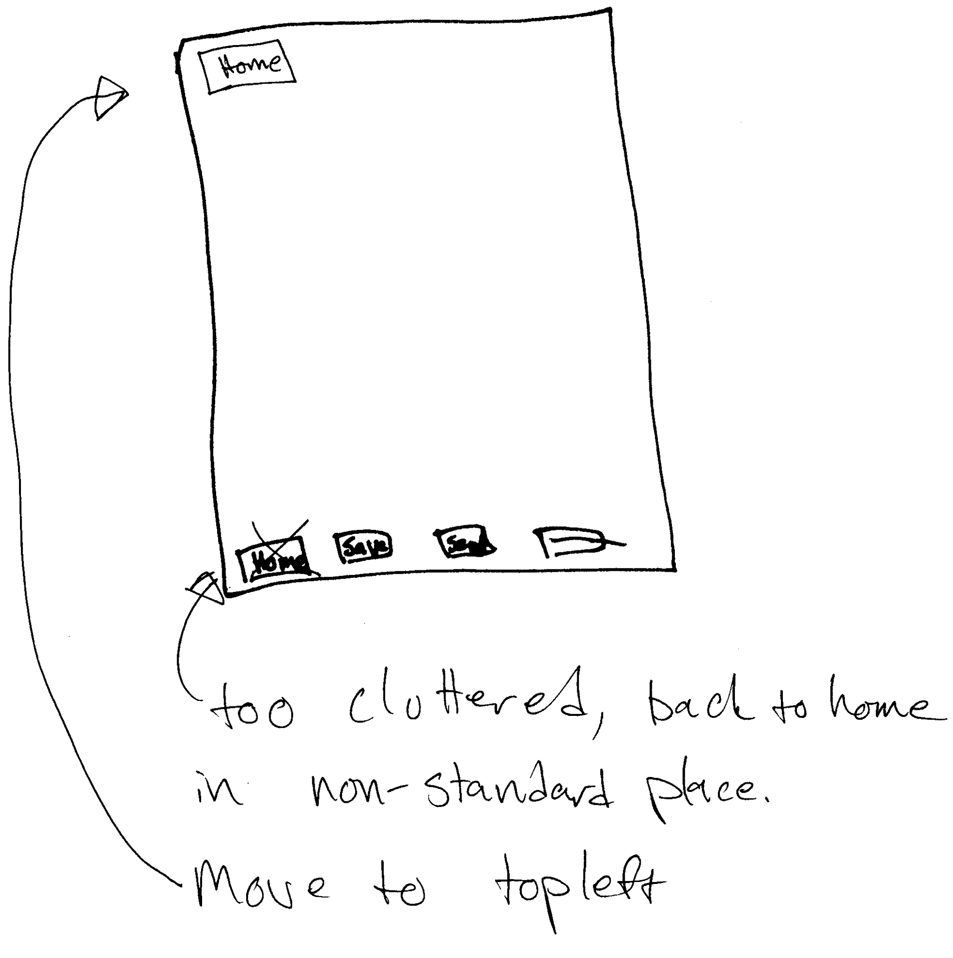
Task 3: Create a New Event & Inivte Guests from a revious Event (hard)

You went to a Turkey Day Tango on Friday, November 27th, and there were lots of people there that you didn't know, but all of them seemed to be really friendly and talented dancers. You have decided to host a dance party starting at 7:00 pm on New Year's Eve, and would like to invite those people to it. The plan is to have a potluck meal all together at the Watergate Hotel, and then start the music once the tables have been cleared out of the way. You want for the following items to be brought: champagne, petits fours, chips and dip.

Interface Revision Sketches

Misplaced Home Button

The “Home” button was moved from the bottom of the screen to the top because that is standard in iPhone applications.

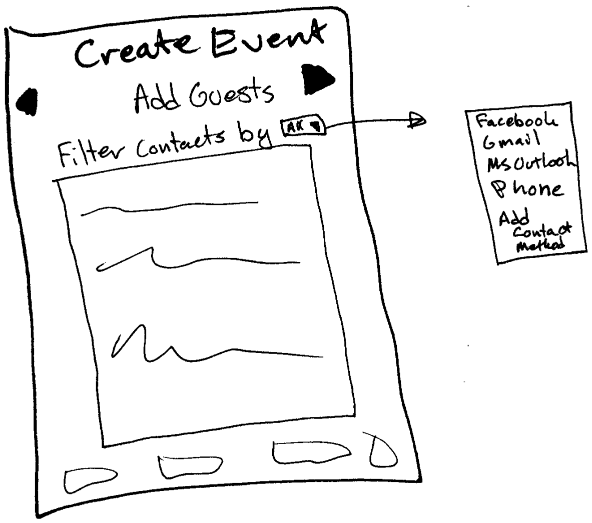


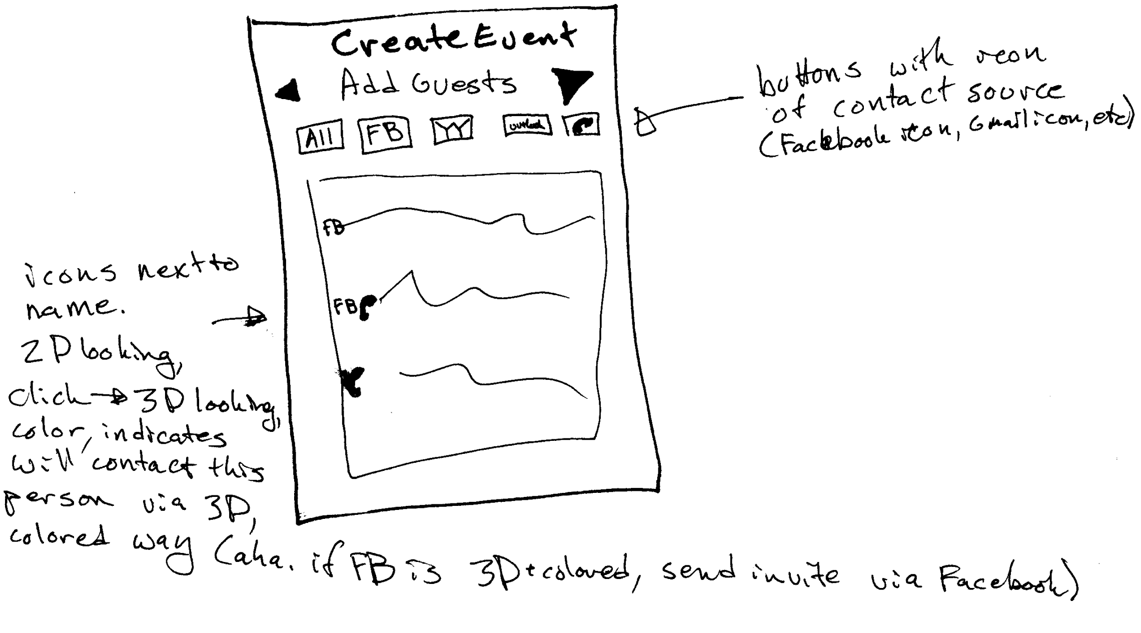
too cluttered, back to home in non-standard place.

Move to topleft

“Filter Contacts By” = Confusing

The user can filter contacts using a drop-down selection box. We also tried having a button above the list for each contact list, but this resulted in too much clutter when a user has several contacts lists.



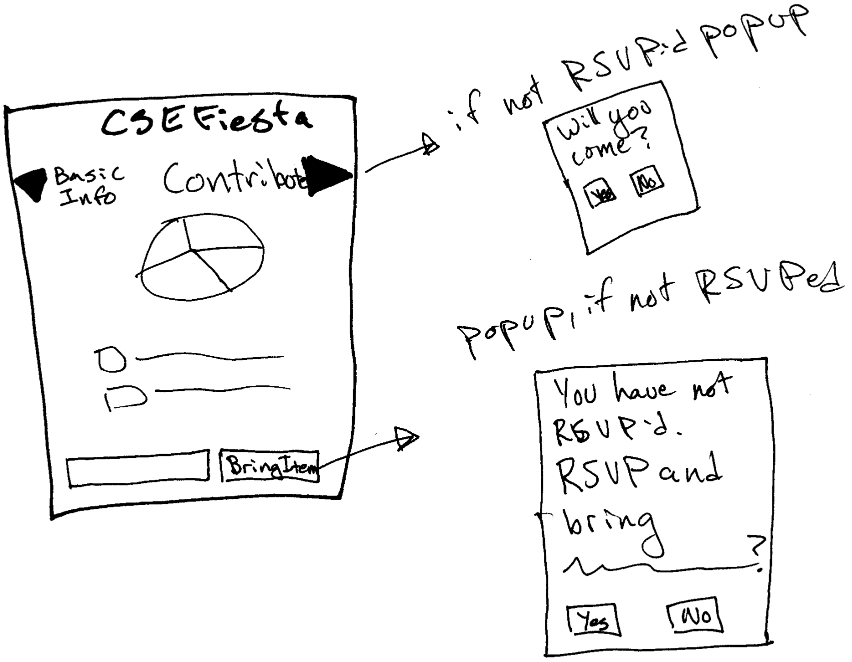


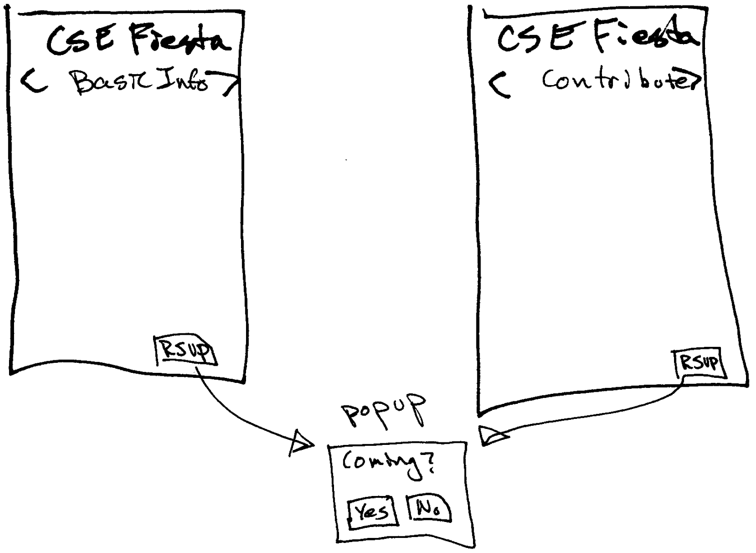
buttons with icon of contact source (Facebook icon, Gmail icon, etc)

icons next to name. 2D looking, click → 3D looking, color, indicates will contact this person via 3D, colored way (aha. if FB is 3D+colored, send invite via Facebook)

RSVP vs. Contribute Page Confusing

The RSVP page was removed from the interface because it confused several user testers. Instead, we gave the users 2 ways of RSVP-ing. First, they can click "RSVP" on any of the pages, which will result in a pop-up asking if they will be attending of not. Second, the user can click the next arrow on the "Contribute" page which will result in the same pop-up.





Prototype Overview

Overview of Implementation

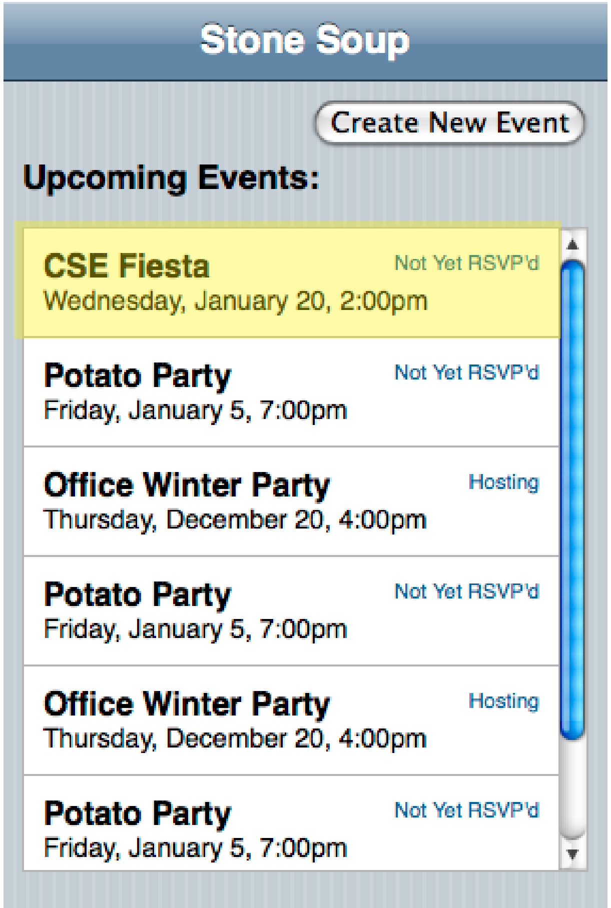
Our prototype is implemented in HTML, which turned out to be a great compromise between functionality and time spent implementing the prototype. Given our backgrounds in web programming, it was relatively simple to get the prototype up and running. The web pages we created are also quite interactive, with links between pages, check boxes, scroll bars, and other such features of a 'real' user interface. Although we considered using other prototyping tools such as Flash or Expression Web, they did not offer the same mixture of convenience, development speed, and power. We first created a homepage for Stone Soup, with the calendar-list of tasks and the "create new event" button serving as jumping off points toward our chosen tasks.

We laid out our tasks according to a fixed path prototyping method. From the homescreen, hitting the CSE Fiesta event link takes you to that event page and the beginning screen of our first task. Clicking any of the other event links, however, does not result in any new screen as we did not implement these screens for this prototype. Avoiding making these extra screens saved us time that we were able to spend on the most used and difficult parts of our interface. The extra screens are also completely unnecessary due to the nature of our tasks: our subjects are directed to accept an invitation to a specific potluck, or to invite certain listed people. Having detailed screens for the other events does no good as they will never be seen when going through our tasks. Likewise, for the third task, only the "Create New Event" button is active on the main page, as it is the link that leads down the third task's fixed path.

We set the directions for each task next to the interface itself. This affords for the participants to easily and quickly check the task directions for what to do next. Our task directions are generally written in paragraph format and read like a story or scenario. The directions list is meant to guide the subject towards the correct solution but should not directly state how to manipulate the interface. Our directions are therefore somewhat vague and do not state exactly how the participant should accomplish the task, or what buttons to push. Our interface should hopefully easily guide the task even without these explicit clues.

Each of our three tasks received its own Stone Soup home screen, linked from our project's home page. By going through these fixed path prototypes and completing our three tasks, we hope to see how our interface performs under actual use.

Scenario for First Task



Stone Soup

Upcoming Events:

CSE Fiesta — Not Yet RSVP'd
Wednesday, January 20, 2:00pm

Potato Party — Not Yet RSVP'd
Friday, January 5, 7:00pm

Office Winter Party — Hosting
Thursday, December 20, 4:00pm

Potato Party — Not Yet RSVP'd
Friday, January 5, 7:00pm

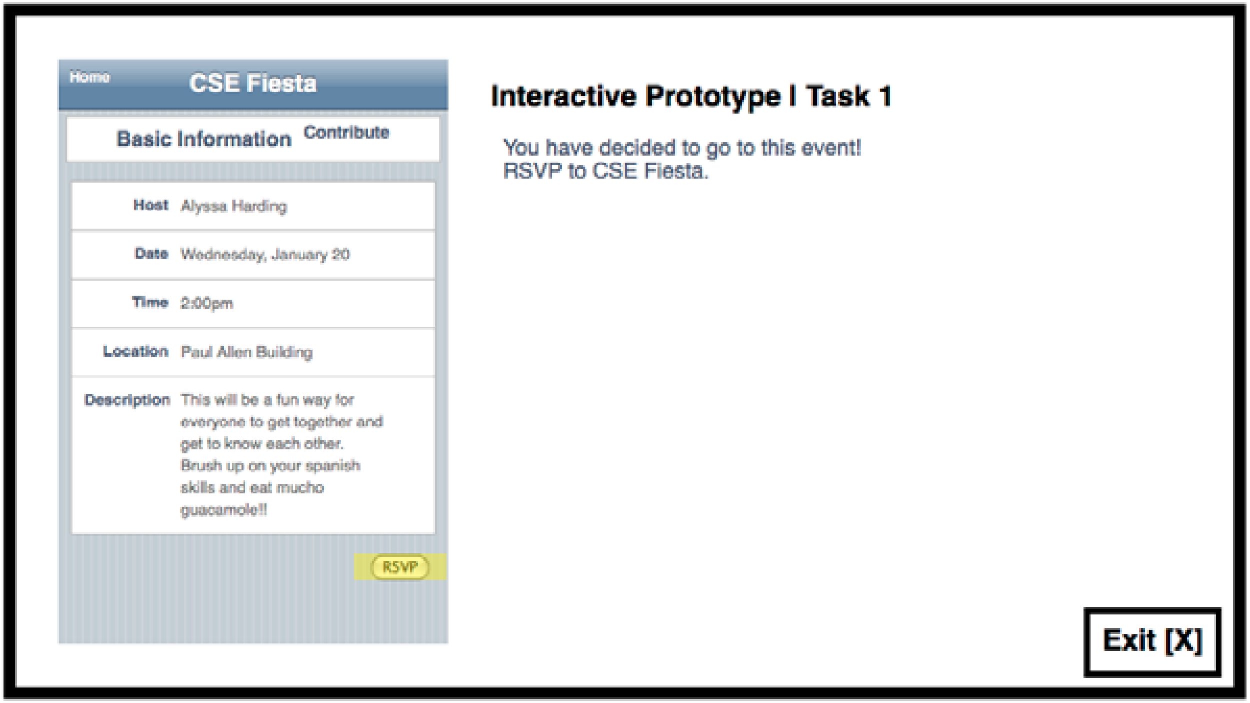
Office Winter Party — Hosting
Thursday, December 20, 4:00pm

Potato Party — Not Yet RSVP'd
Friday, January 5, 7:00pm

Interactive Prototype I Task 1

You have been invited to a party for Computer Science/Engineering majors for tomorrow night. You have decided that you want to go, and bring something that doesn't require much cooking because it's finals week, and you are busy practicing your presentation.

Fig.1 All of the events that are coming up that you are attending, haven't RSVP'd to yet, or are hosting.

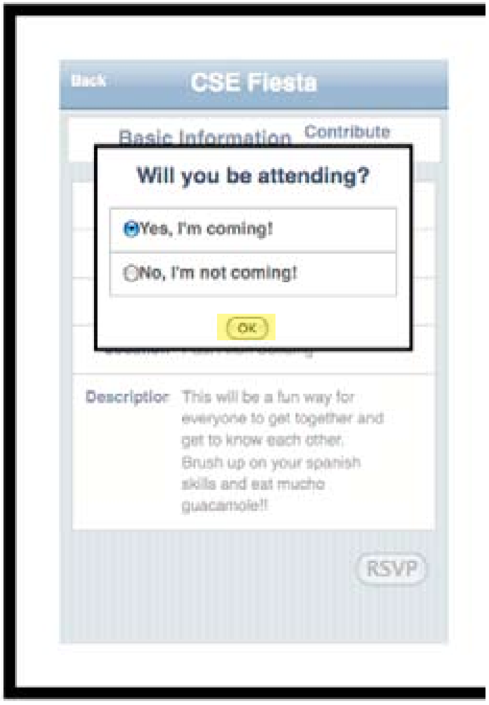


Host	Alyssa Harding
Date	Wednesday, January 20
Time	2:00pm
Location	Paul Allen Building
Description	This will be a fun way for everyone to get together and get to know each other. Brush up on your spanish skills and eat mucho guacamole!!

Interactive Prototype I Task 1

You have decided to go to this event!
RSVP to CSE Fiesta.

Fig.2 Information for the event which the user RSVP's for in task 1. Users can push RSVP here, or on the contribute screen.



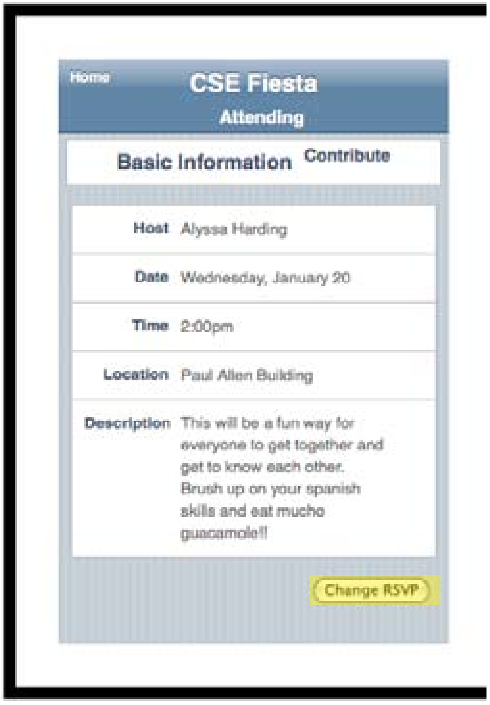
Will you be attending?

● Yes, I'm coming!

○ No, I'm not coming!

Description	This will be a fun way for everyone to get together and get to know each other. Brush up on your spanish skills and eat mucho guacamole!!

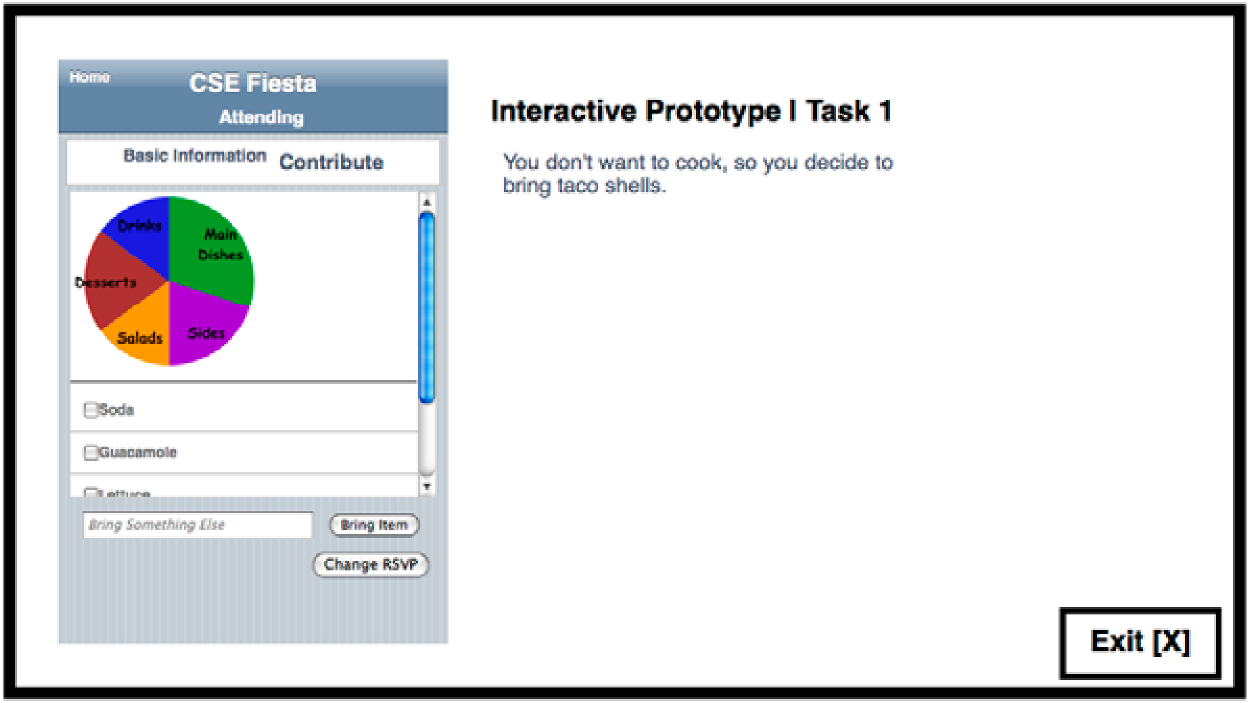
Fig.3 Pop-up where user can specify whether or not they will be attending the event. For task 1, the prototype assumes that the user says yes.



Host	Alyssa Harding
Date	Wednesday, January 20
Time	2:00pm
Location	Paul Allen Building
Description	This will be a fun way for everyone to get together and get to know each other. Brush up on your spanish skills and eat mucho guacamole!!

Fig.4 Screen from Figure 2 has changed to tell the user they have said they will be attending the event. If the user will not be attending, the heading would say "Not Attending". The RSVP button has also changed to say, "Change RSVP". If the button is pushed, the pop-up from Figure 3 will appear.

Prototype Overview: Scenario for First Task (Continued)



Interactive Prototype I Task 1

You don't want to cook, so you decide to bring taco shells.

Fig.5 User can specify what they will bring to the event. The pie chart shows the current distribution of items other guests have signed up to bring.

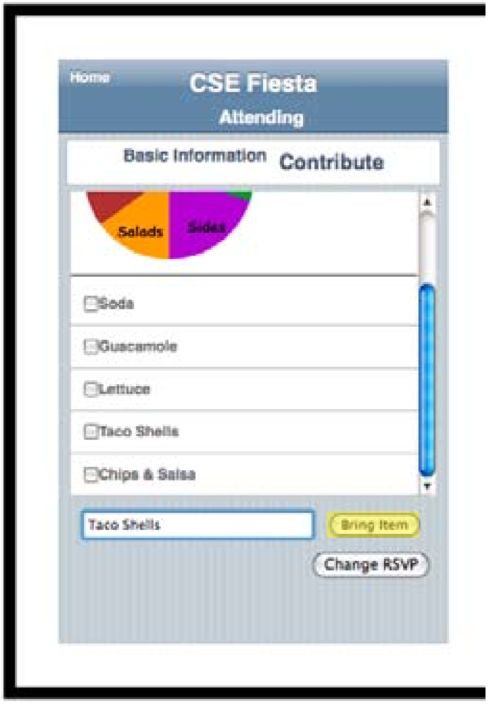


Fig.6 Users may choose to bring an item from the given list, or bring something else by typing it into the text box.

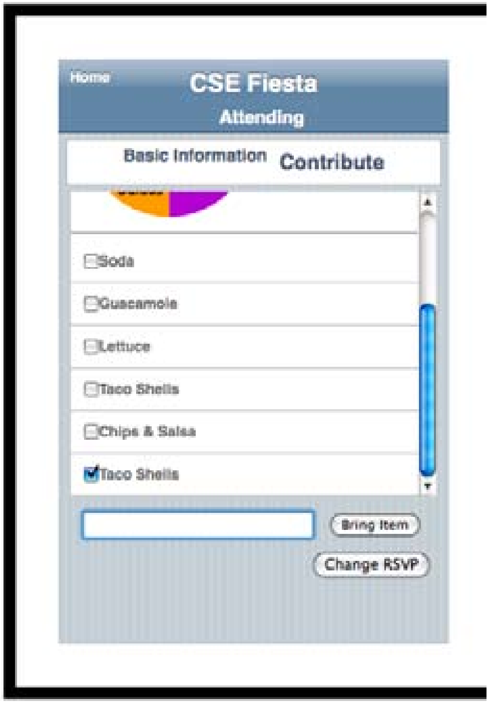
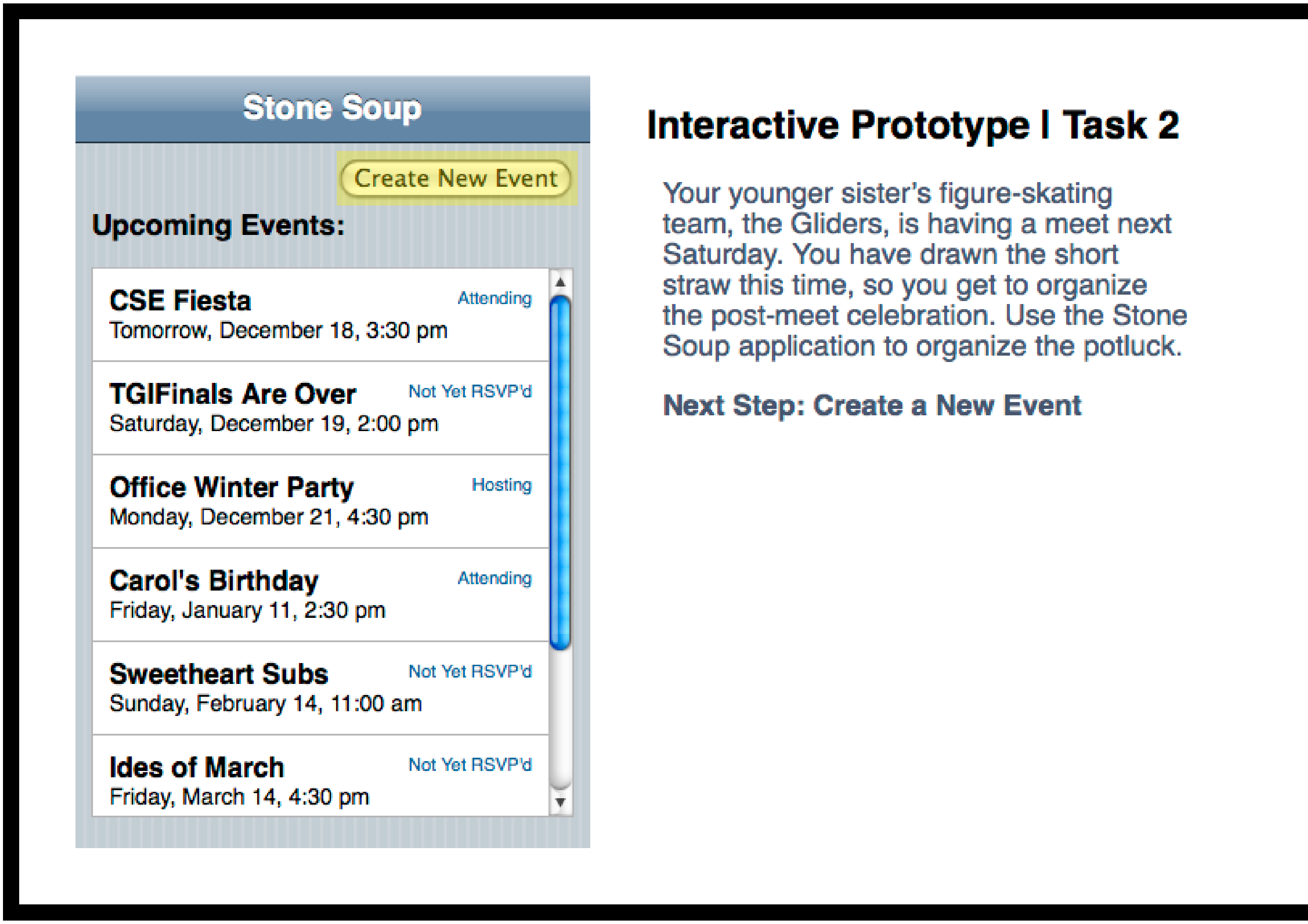


Fig.7 After an item is typed into the text box, it will appear on the list once “Bring Item” is pushed.

Scenario for Second Task



Upcoming Events:

CSE Fiesta — Attending
Tomorrow, December 18, 3:30 pm

TGIFinals Are Over — Not Yet RSVP'd
Saturday, December 19, 2:00 pm

Office Winter Party — Hosting
Monday, December 21, 4:30 pm

Carol's Birthday — Attending
Friday, January 11, 2:30 pm

Sweetheart Subs — Not Yet RSVP'd
Sunday, February 14, 11:00 am

Ides of March — Not Yet RSVP'd
Friday, March 14, 4:30 pm

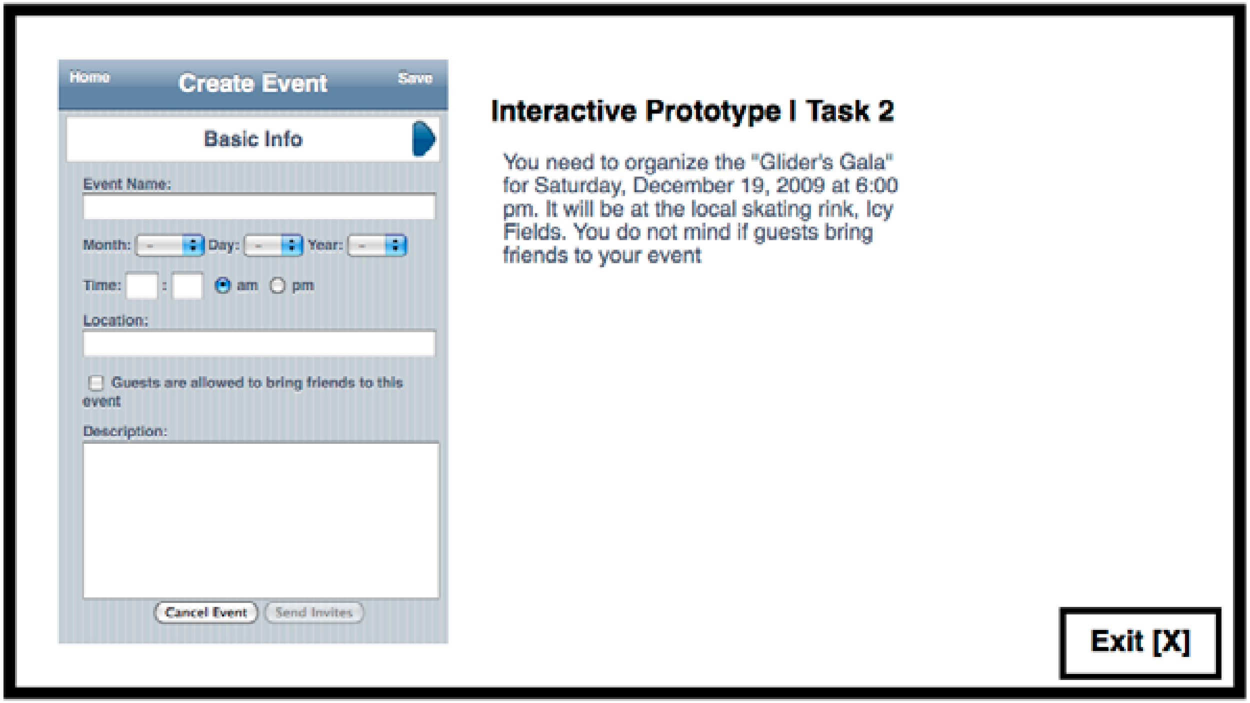
Interactive Prototype I Task 2

Your younger sister's figure-skating team, the Gliders, is having a meet next Saturday. You have drawn the short straw this time, so you get to organize the post-meet celebration. Use the Stone Soup application to organize the potluck.

Next Step: Create a New Event

Fig. 8 Main screen for task 2, which shows all upcoming events that the user will be attending, hosting, or hasn't RSVP'd to yet. The user clicks "Create New Event" to start planning the part for task 2.

Prototype Overview: Scenario for Second Task (Continued)



Home Create Event Save

Basic Info

Event Name:

Month: - Day: - Year: -

Time: : ● am ○ pm

Location:

□ Guests are allowed to bring friends to this event

Description:

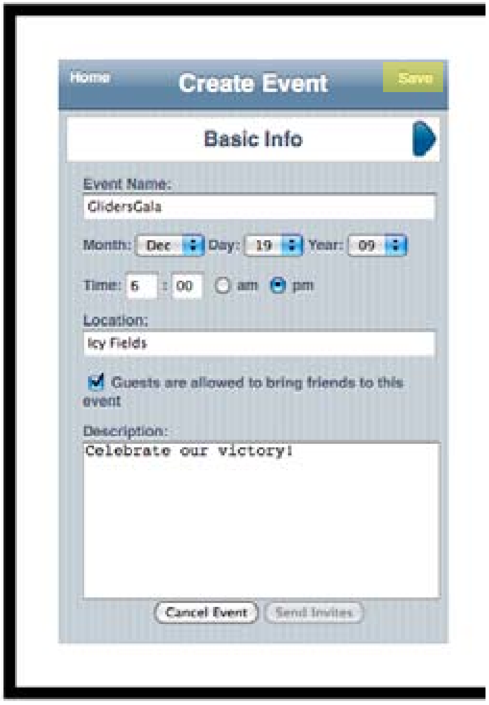
Cancel Event Send Invites

Interactive Prototype I Task 2

You need to organize the "Glider's Gala" for Saturday, December 19, 2009 at 6:00 pm. It will be at the local skating rink, Icy Fields. You do not mind if guests bring friends to your event

Exit [X]

Fig.9 The user fills out the form with the event's information, which is seen by the user on a page like the screen in Fig 2



Home Create Event Save

Basic Info

Event Name: GlidersGala

Month: Dec Day: 19 Year: 09

Time: 6 : 00 ○ am ● pm

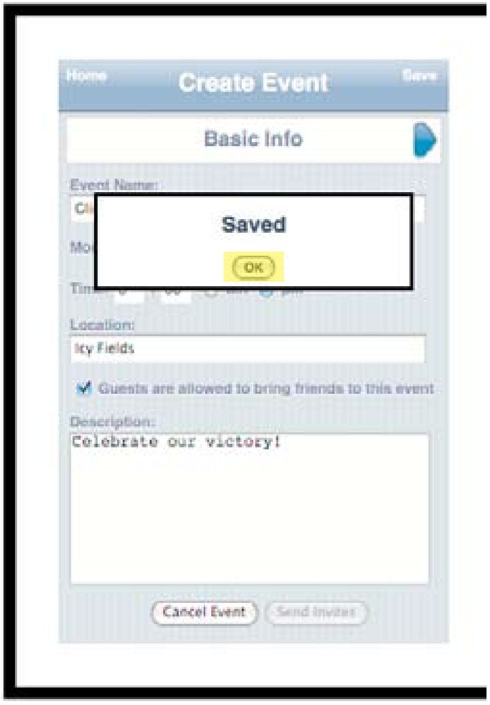
Location: Icy Fields

☑ Guests are allowed to bring friends to this event

Description: Celebrate our victory!

Cancel Event Send Invites

Fig.10 The user can save at any point during the event creation process. If they do not save, the application automatically saves when they click a button to leave the page.



Home Create Event Save

Basic Info

Event Name:

Saved

OK

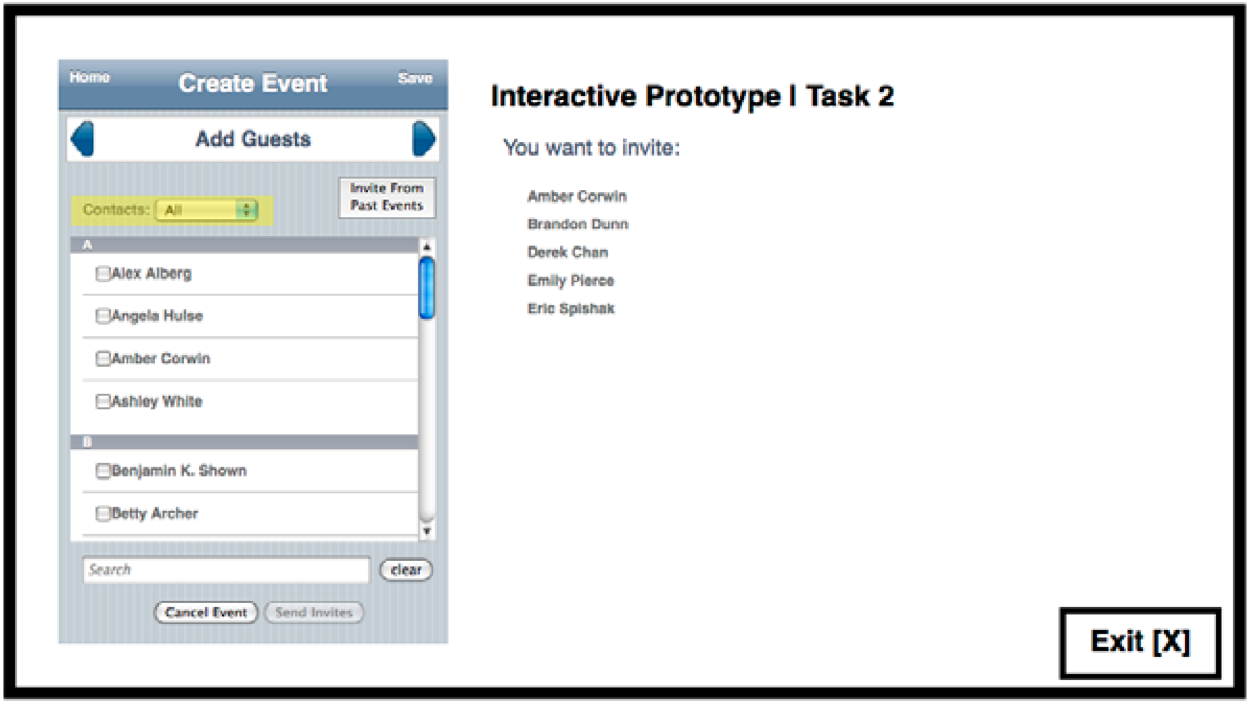
Location: Icy Fields

☑ Guests are allowed to bring friends to this event

Description: Celebrate our victory!

Cancel Event Send Invites

Fig. 11 Pop-up that appears when the user pushes "Save."



Interactive Prototype I Task 2

You want to invite:

Amber Corwin
Brandon Dunn
Derek Chan
Emily Pierce
Eric Spishak

Fig.12 User can add guests from any contact list the user has added to the application. Search bar at the bottom can be used to search for a specific person in the list. As the user types, the list is refined. A filter (highlighted in yellow) can be used to view just one of the contact lists the user has added.

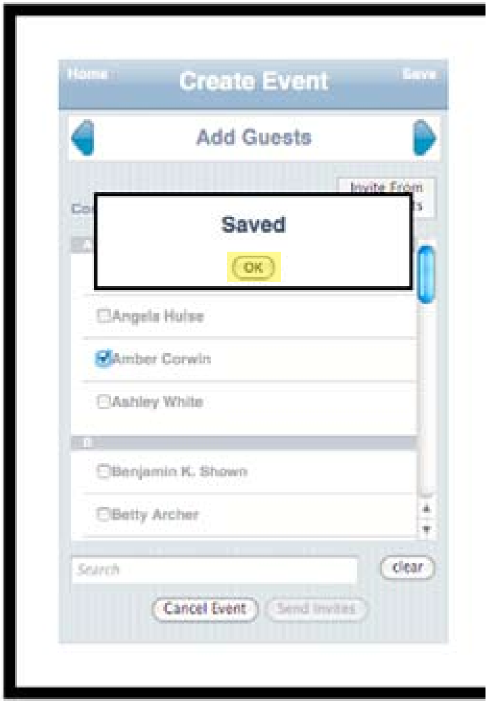


Fig.13 Pop-up that appears when the user pushes "Save."

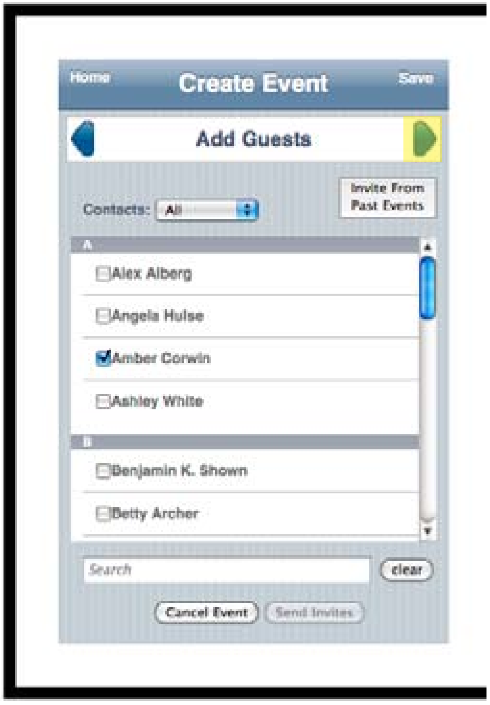
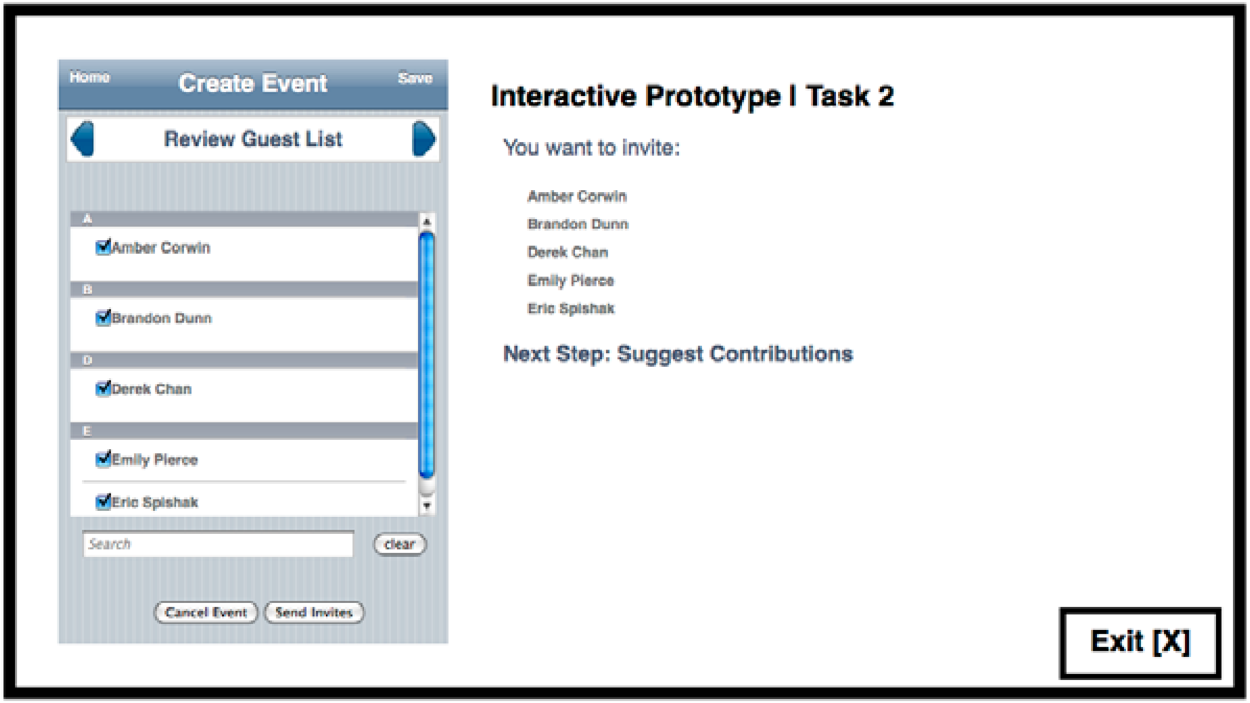


Fig.14 The user pushes the Next arrow to move to the Review Guest List screen.



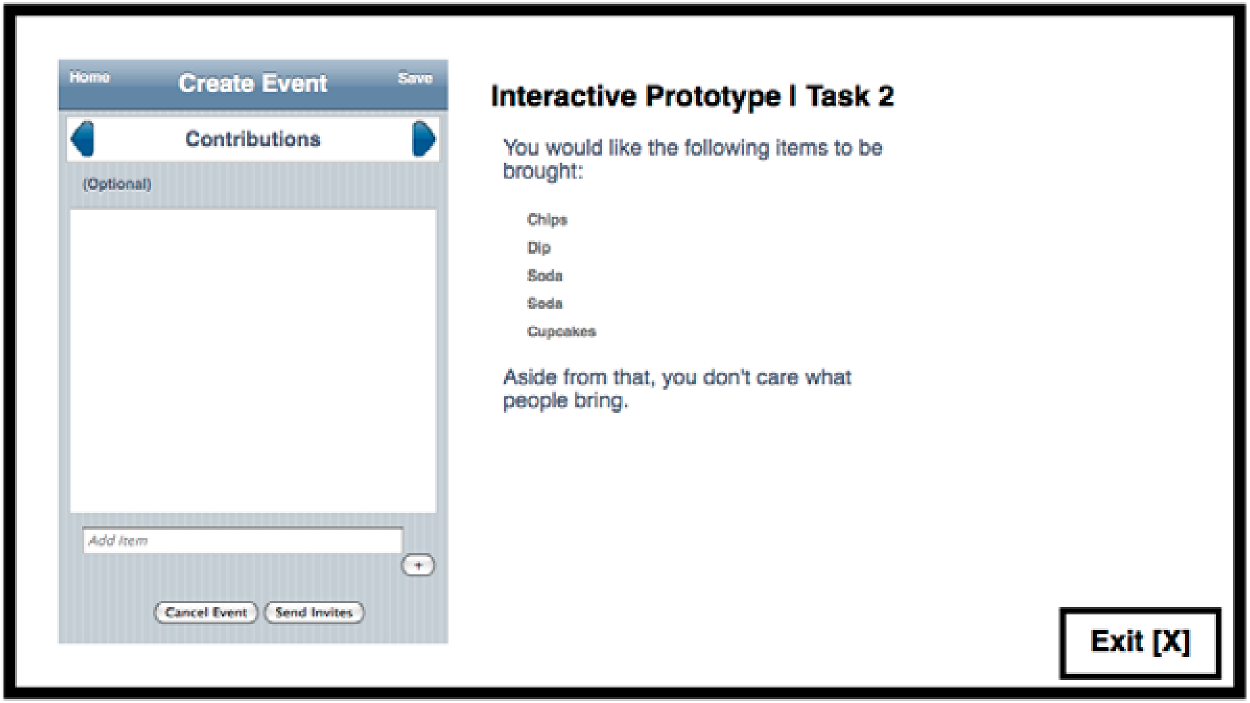
Interactive Prototype | Task 2

You want to invite:

Amber Corwin
Brandon Dunn
Derek Chan
Emily Pierce
Eric Spishak

Next Step: Suggest Contributions

Fig.15 Talked about it in Fig 10) User can view just contacts that they added to the guest list on the previous page. The search bar at the bottom behaves just like the search in Fig 12. If a contact's box is unchecked, an invitation will not be sent to them.



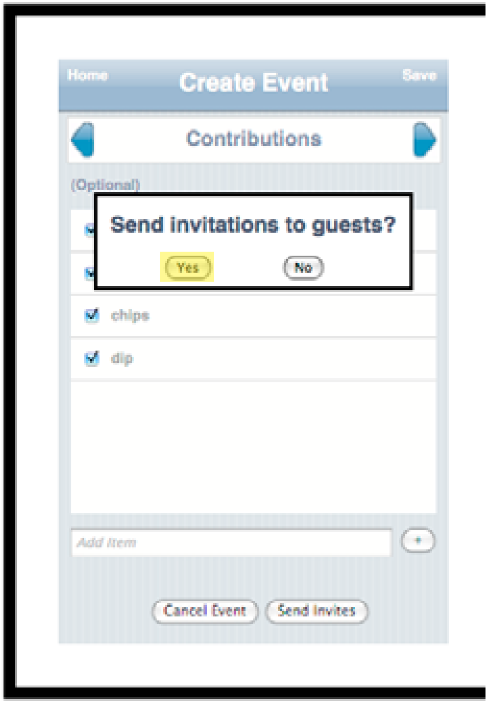
Interactive Prototype | Task 2

You would like the following items to be brought:

Chips
Dip
Soda
Soda
Cupcakes

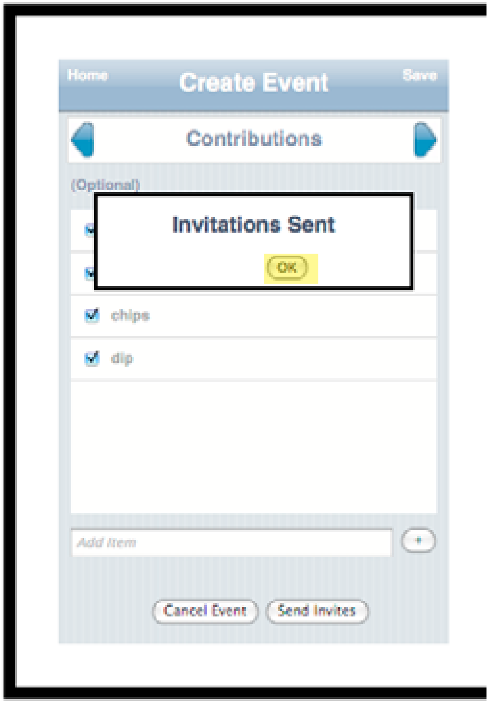
Aside from that, you don't care what people bring.

Fig.16 User can suggest items for guests to bring. An item is added by typing it into the text box and pushing the "+" button.



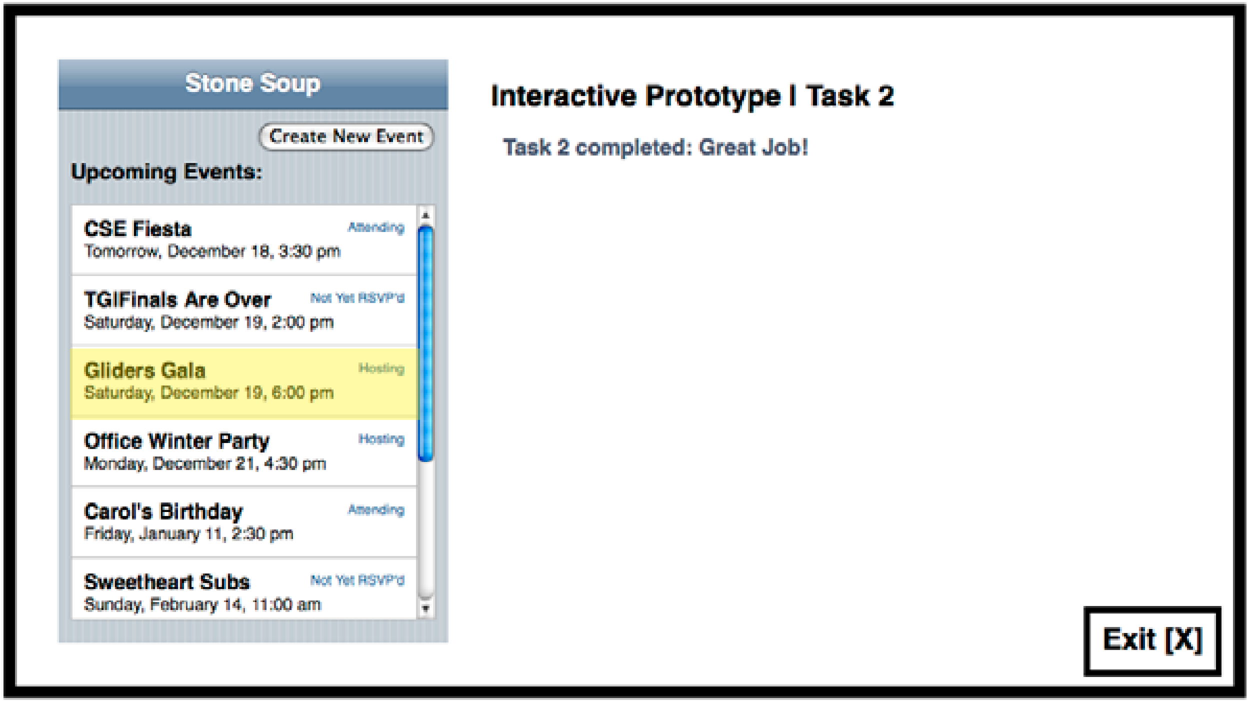
Send invitations to guests?

Fig.17 Pop-up which appears when the user pushes the "Send Invites" button If the user pushes "No," they are taken to the previous screen. If the user pushes "Yes," they are taken to Fig. 18.



Invitations Sent

Fig.18 Pop-up which appears when the user says "Yes" in Fig 17. When the user pushes "OK," they are taken to the screen they were on before pushing "Send Invites."



CSE Fiesta — Attending
Tomorrow, December 18, 3:30 pm

TGIFinals Are Over — Not Yet RSVP'd
Saturday, December 19, 2:00 pm

Gliders Gala — Hosting
Saturday, December 19, 6:00 pm

Office Winter Party — Hosting
Monday, December 21, 4:30 pm

Carol's Birthday — Attending
Friday, January 11, 2:30 pm

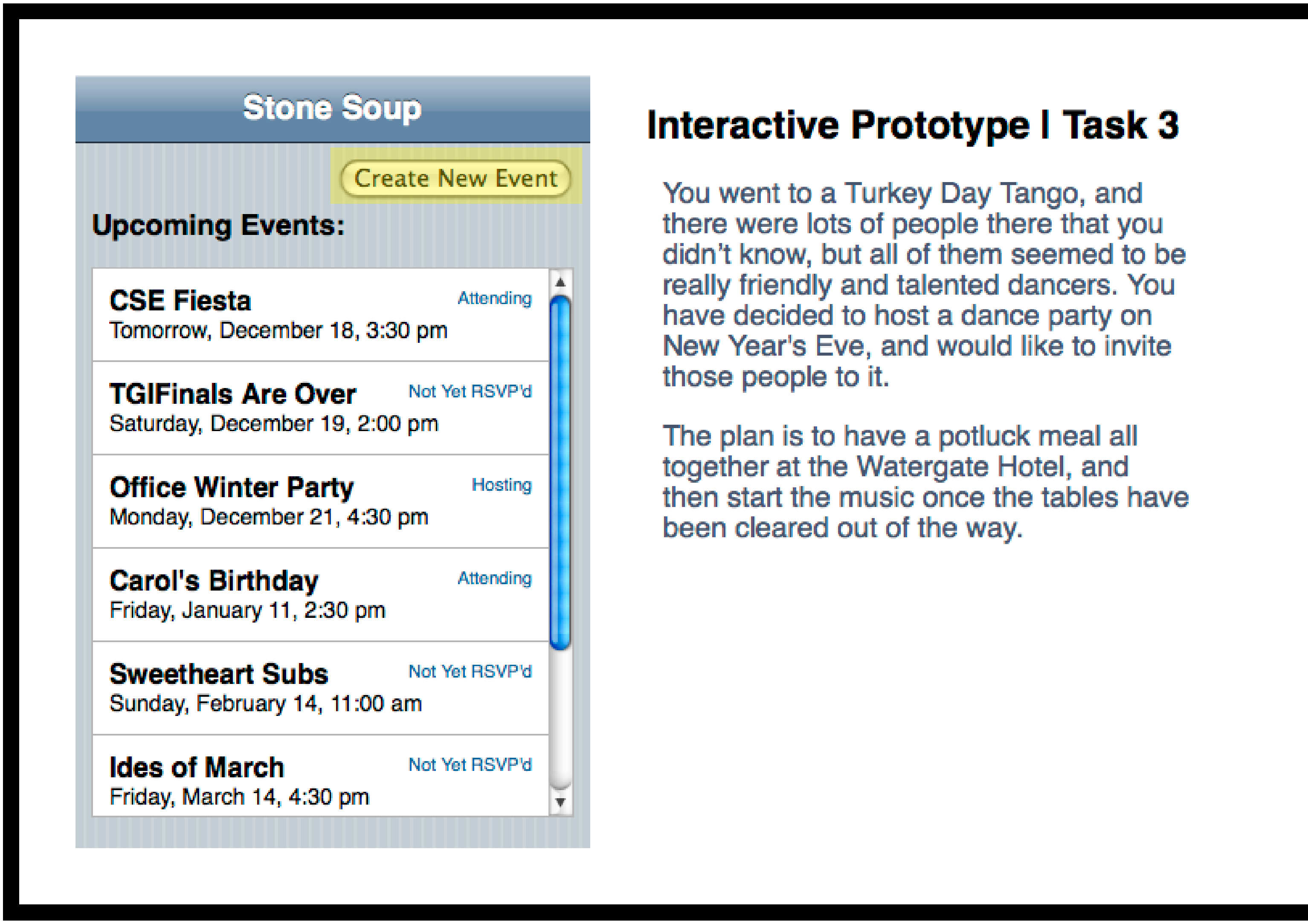
Sweetheart Subs — Not Yet RSVP'd
Sunday, February 14, 11:00 am

Interactive Prototype I Task 2

Task 2 completed: Great Job!

Fig.19 After creating an event, it will appear on the home screen with a subtitle of "Hosting."

Scenario for Third Task



Upcoming Events:

CSE Fiesta Attending
Tomorrow, December 18, 3:30 pm

TGIFinals Are Over Not Yet RSVP'd
Saturday, December 19, 2:00 pm

Office Winter Party Hosting
Monday, December 21, 4:30 pm

Carol's Birthday Attending
Friday, January 11, 2:30 pm

Sweetheart Subs Not Yet RSVP'd
Sunday, February 14, 11:00 am

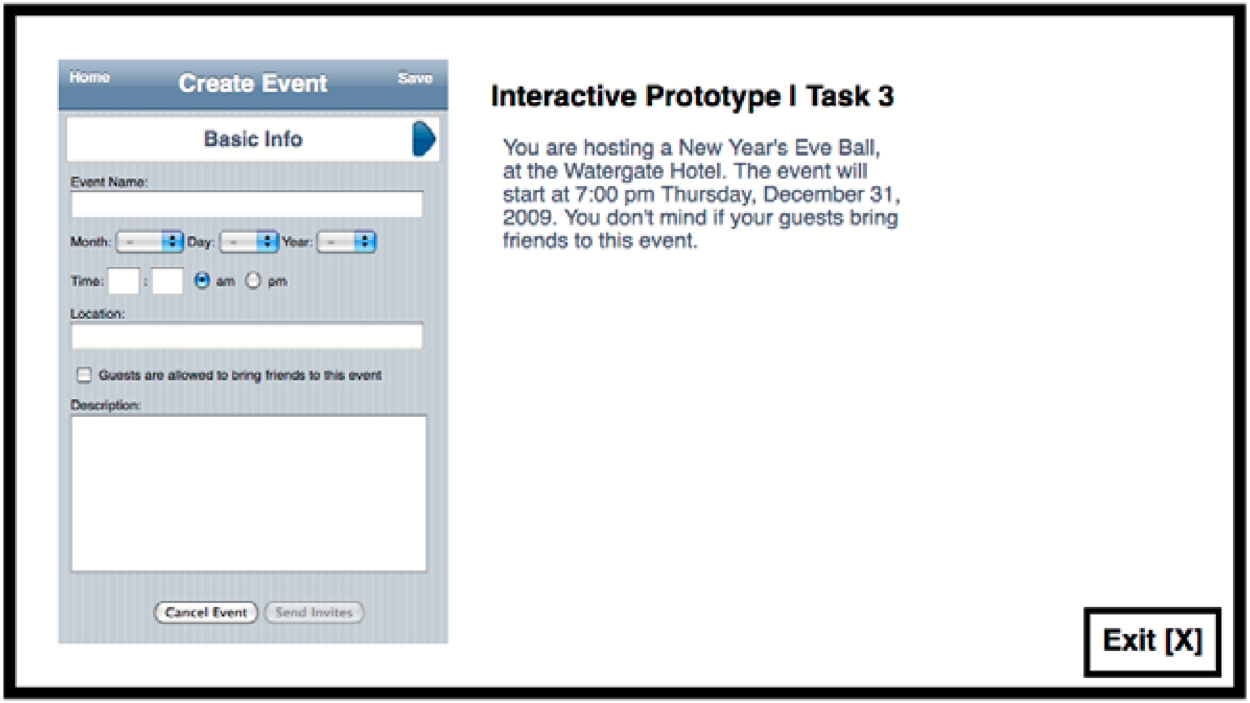
Ides of March Not Yet RSVP'd
Friday, March 14, 4:30 pm

Interactive Prototype I Task 3

You went to a Turkey Day Tango, and there were lots of people there that you didn't know, but all of them seemed to be really friendly and talented dancers. You have decided to host a dance party on New Year's Eve, and would like to invite those people to it.

The plan is to have a potluck meal all together at the Watergate Hotel, and then start the music once the tables have been cleared out of the way.

Fig. 20 Main screen for task 2, which shows all upcoming events that the user will be attending, hosting, or hasn't RSVP'd to yet. The user clicks "Create New Event" to start planning the part for task 2.



Event Name:

Month: - Day: - Year: -

Time: : ● am ○ pm

Location:

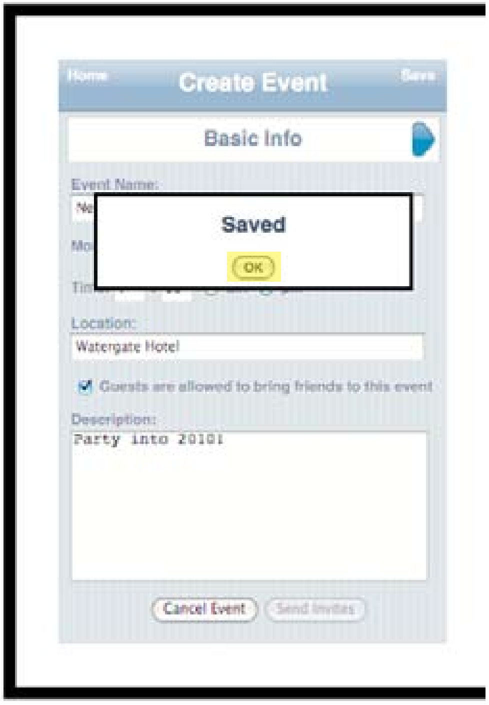
□ Guests are allowed to bring friends to this event

Description:

Interactive Prototype | Task 3

You are hosting a New Year's Eve Ball, at the Watergate Hotel. The event will start at 7:00 pm Thursday, December 31, 2009. You don't mind if your guests bring friends to this event.

Fig.21 The user fills out the form with the event's information, which is seen by the user on a page like the screen in Fig 23



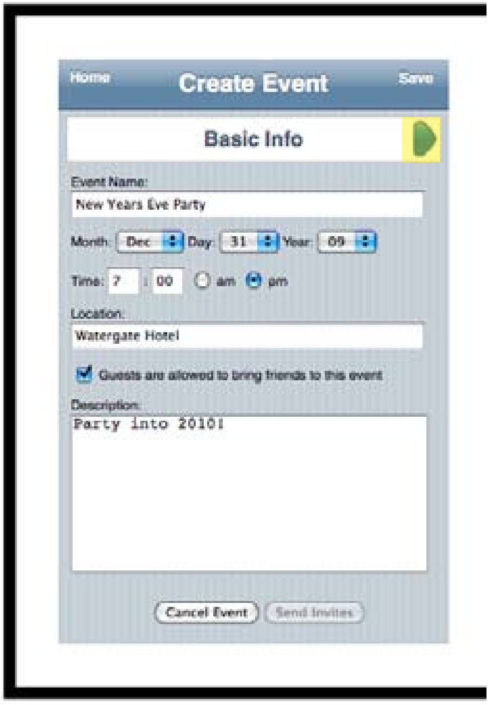
Event Name: Ne

Location: Watergate Hotel

☑ Guests are allowed to bring friends to this event

Description: Party into 2010!

Fig.22



Event Name: New Years Eve Party

Month: Dec Day: 31 Year: 09

Time: 7 : 00 ○ am ● pm

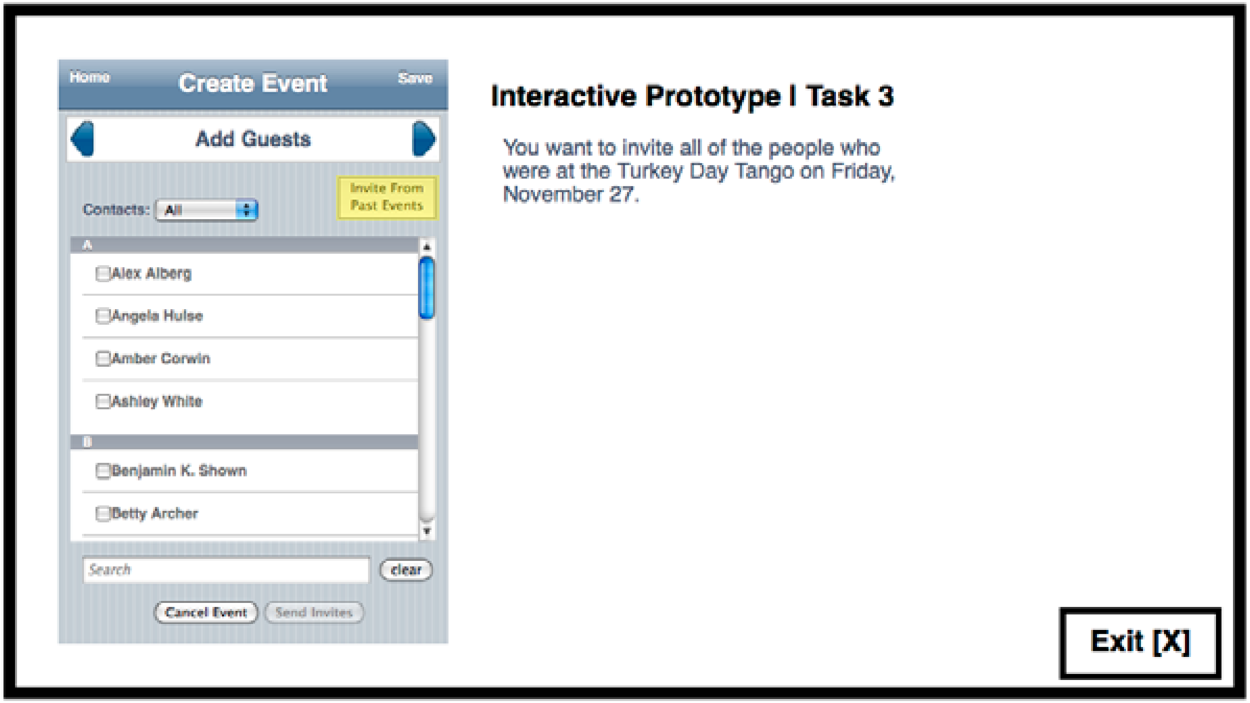
Location: Watergate Hotel

☑ Guests are allowed to bring friends to this event

Description: Party into 2010!

Fig.23

Prototype Overview: Scenario for Third Task (Continued)

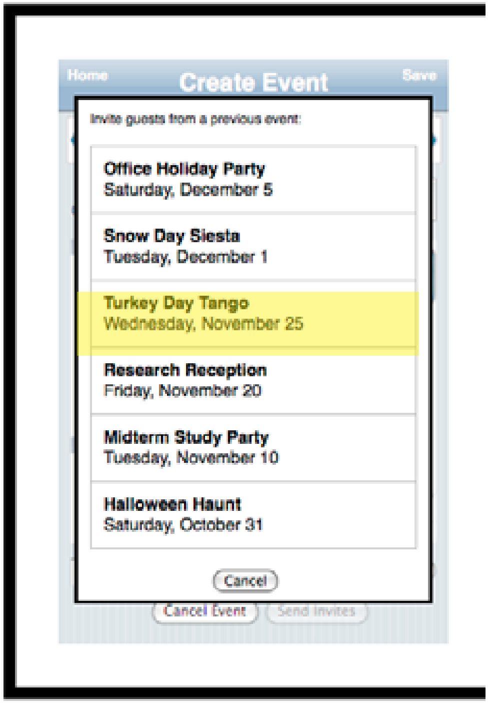


Interactive Prototype I Task 3

You want to invite all of the people who were at the Turkey Day Tango on Friday, November 27.

Exit [X]

Fig.24 From the "Add Guests" screen, the user can push "Invite From Past Events" to view guest lists of events they have attended or hosted.



Invite guests from a previous event:

Office Holiday Party
Saturday, December 5

Snow Day Siesta
Tuesday, December 1

Turkey Day Tango
Wednesday, November 25

Research Reception
Friday, November 20

Midterm Study Party
Tuesday, November 10

Halloween Haunt
Saturday, October 31

Fig.25 Pop-up which appears after "Invite From Past Events" is pushed in Fig 24. The list shows all events the user has attended or hosted in the past.

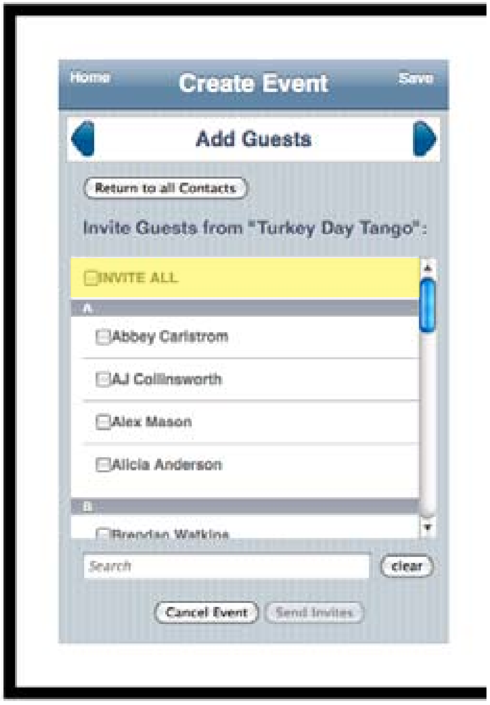


Fig.26 After a previous event is chosen in Fig 25, the user is shown a list of all guests of that event. If the user would like to go back to Fig 24, they can click "Return to all Contacts".

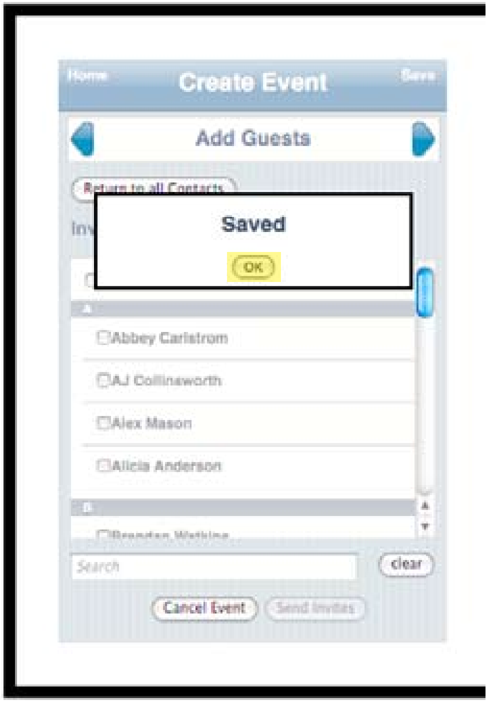


Fig.27

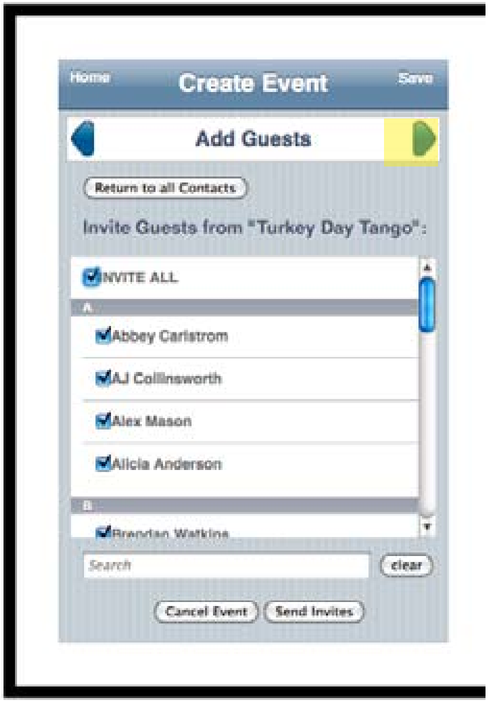


Fig.28 The user can click "INVITE ALL" to check all boxes in the list. If the user unchecks "INVITE ALL," all boxes on the list will be unchecked.

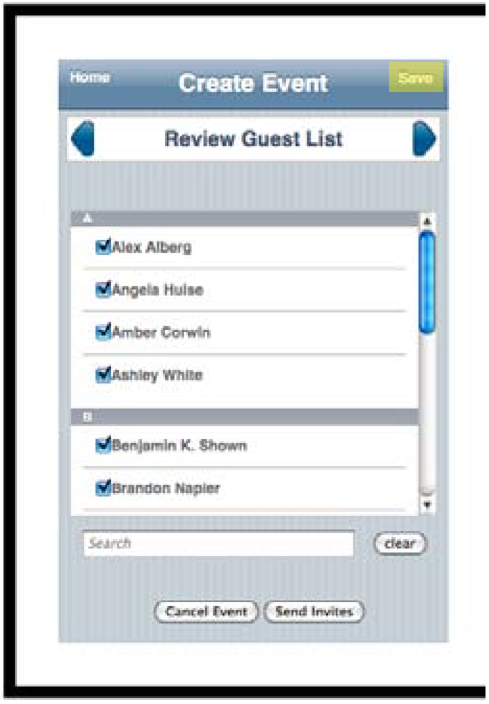


Fig.29

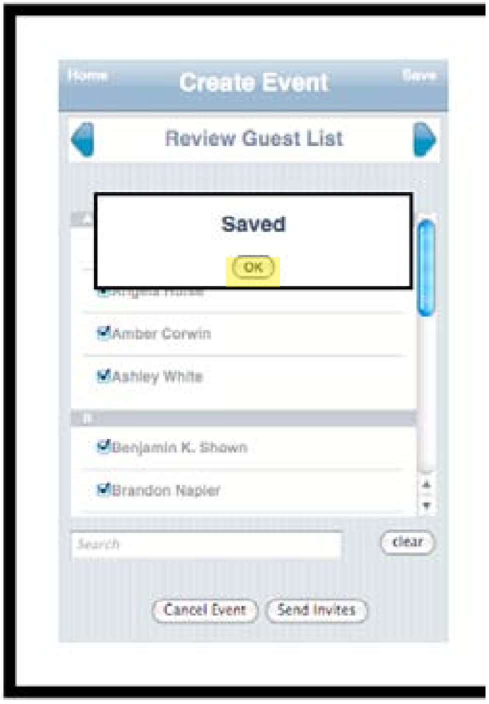
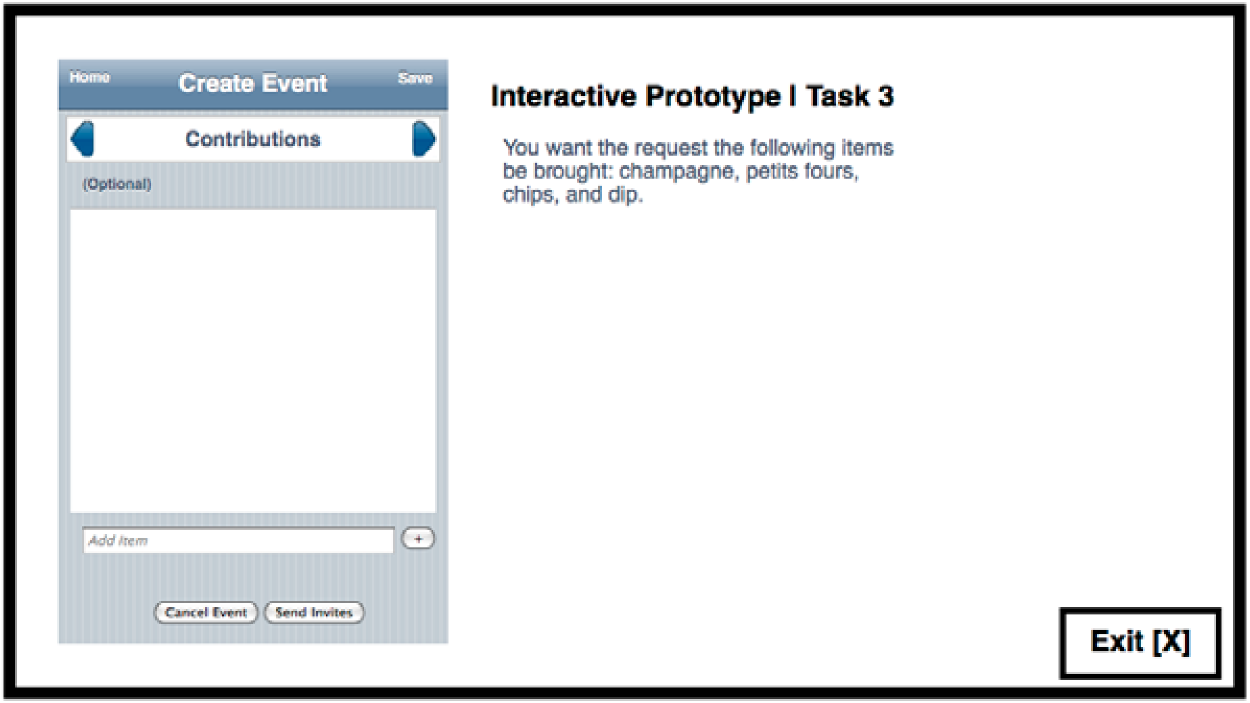


Fig.30



Interactive Prototype I Task 3

You want the request the following items be brought: champagne, petits fours, chips, and dip.

Fig.31 User can suggest items for guests to bring. An item is added by typing it into the text box and pushing the "+" button.

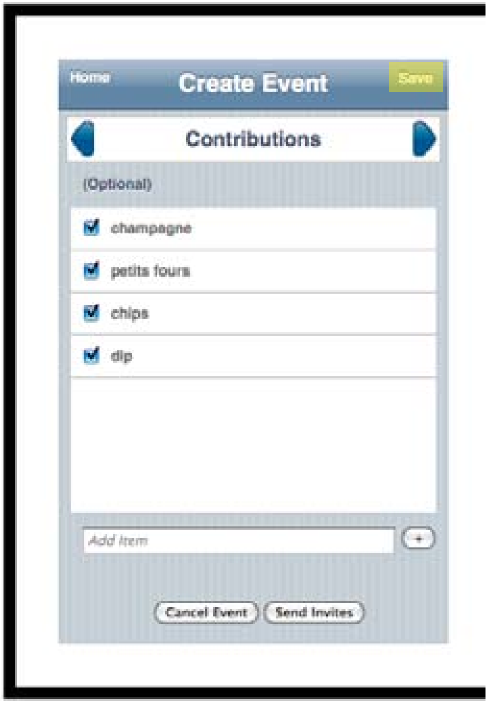


Fig.32

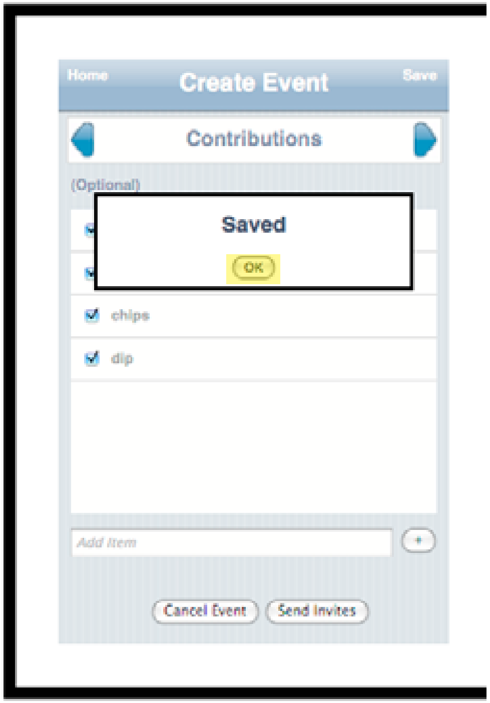
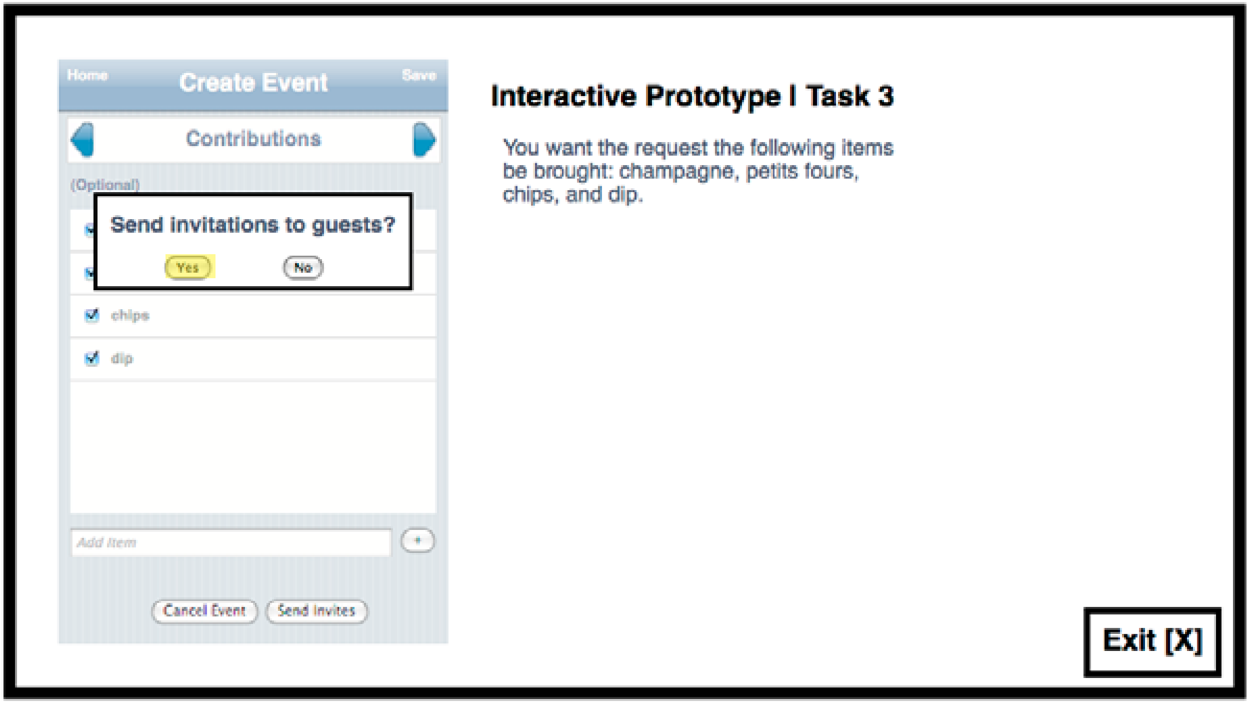


Fig.33



Home Create Event Save

Contributions

(Optional)

Send invitations to guests?

Yes No

☑ chips

☑ dip

Add Item +

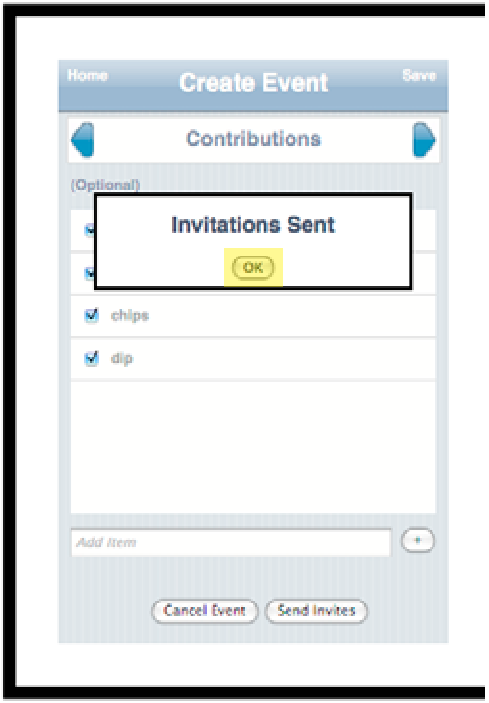
Cancel Event Send Invites

Interactive Prototype I Task 3

You want the request the following items be brought: champagne, petits fours, chips, and dip.

Exit [X]

Fig.34 Pop-up which appears when the user pushes the "Send Invites" button. If the user pushes "No," they are taken to the previous screen. If the user pushes "Yes," they are taken to Fig. 35.



Home Create Event Save

Contributions

(Optional)

Invitations Sent

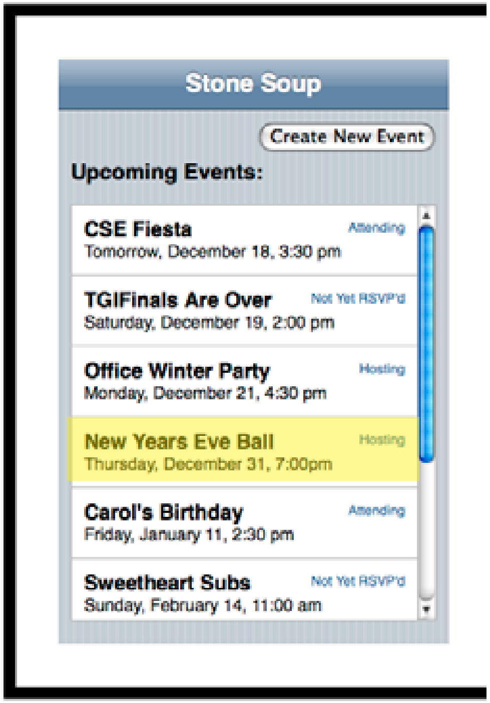
OK

☑ chips

☑ dip

Add Item +

Cancel Event Send Invites



Stone Soup

Create New Event

Upcoming Events:

CSE Fiesta — Attending
Tomorrow, December 18, 3:30 pm

TGIFinals Are Over — Not Yet RSVP'd
Saturday, December 19, 2:00 pm

Office Winter Party — Hosting
Monday, December 21, 4:30 pm

New Years Eve Ball — Hosting
Thursday, December 31, 7:00pm

Carol's Birthday — Attending
Friday, January 11, 2:30 pm

Sweetheart Subs — Not Yet RSVP'd
Sunday, February 14, 11:00 am

Fig.36 Pop-up which appears when the user says "Yes" in Fig 34. When the user pushes "OK," they are taken to the screen they were on before pushing "Send Invites."

Fig.37 After creating an event, it will appear on the home screen with a subtitle of "Hosting."

Tools Used & How They Helped

We implemented our prototype using an iPhone web development kit. This kit enables web designers to easily theme their webpages to look like native iPhone applications by including the same images and widgets as the iPhone SDK. By referencing these images and style guidelines in our own Cascading Style Sheets, our basic prototype was transformed into what looked like a native iPhone application.

Using the standard iPhone theme helps lend believability to our design. We want the application to feel as if it's being used on a standard iPhone, which helps explain the scope of the prototype. Given a fully featured website, our users might expect more functionality than our current prototype provides. However, just as a hand-drawn sketch leads to less nit-picking than one done in Photoshop, we hope that our testers will be more forgiving with our prototype because it mimics a mobile app.

Using the predefined iPhone styles also makes it possible to easily run the website off the iPhone's browser. With a few quick changes to the code, our pages are able to map directly to the iPhone screen, which allows us to test using our prototype on a mobile device without getting into the details of writing objective-C native iPhone code. Designing a web app to run in the iPhone's browser is much simpler than writing a native iPhone application (and getting it through the app-store approval process).

Tools Used & How They Did Not Help

By using this tool we may have become too reliant on the iPhone. Our original design calls for Stone Soup being a decentralized location to plan potlucks. A link would be created for each potluck, which could then be shared via email, IM, Facebook, fliers, etc. The website would then be forced to be multiplatform and not tied to any particular technology. By using the iPhone web development kit for our primary prototype, we are at risk of prematurely defining the iPhone as the one supported device. While the Stone Soup app for the iPhone would ideally look like an iPhone app, the app on a desktop computer would not. We don't want our testers being influenced by the iPhone-style interface when going through our tasks on other devices.

What Was Left Out

Several features were unfortunately left out of our prototype due to the limitations of our interface.

For one, the "horizontal scrollbar" approach we took to laying out our screens did not work well at all when implementing the iPhone style sheets. There is simply not enough room in the top bar to fit the labels of the previous screen, current screen, and next screen (See Figure A). As a compromise, we retained the current screen's label and used arrow icons to represent the previous and next screens (See Fig. B). This is not an ideal solution, as it makes it much harder for the user to realize that other screens exist. And, upon this realization, there is still no way to see what screen will come next. Unfortunately, fitting all three labels on this top scroll bar was simply impossible due to the iPhone's small screen size. After seeing the constraints of one of our target devices, we will have to rethink our interface. A standard "next" button at the bottom of the screen is likely easier for users to understand than our original proposal.

Another more minor feature was left out of the interface, this time for being more complex than our prototype allowed. We plan to have our application autosave any events that are being created regularly, in order to avoid losing any work. Autosaving would be linked to both a timer and important events, and a small "saving…" text would often appear in the corner of the screen to notify the user of this fact (See Fig. C). This autosave functionality is too complex for this prototype, as it would involve timers, background processes, and, most importantly, recreating every screen with the addition of the "saving…" text. Our time was better spent on other features. As a compromise, though, we included a save button on the screens where autosaving would normally occur. This button serves mainly as a comfort to users.

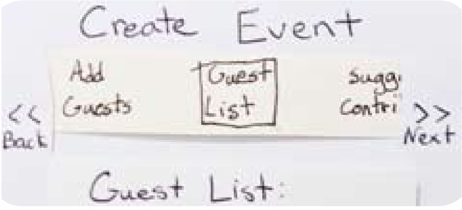


Fig.A Horizontal Scroll Bar

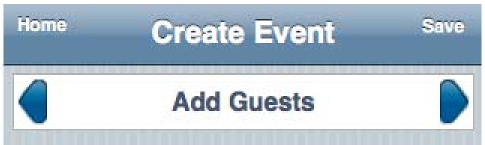


Fig.B Horizontal Scroll Bar

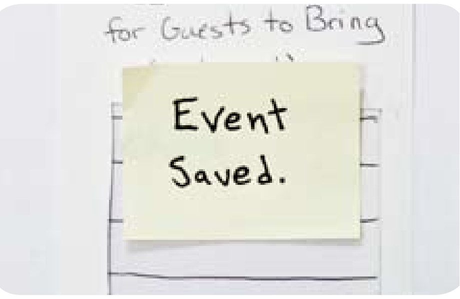


Fig.C Ambient Pop-ups

Wizard of Oz Techniques Used

For our prototype we used Wizard of Oz techniques to fake user input. Instead of saving the user’s text input and selections, the ‘next screen’ always shows the perfect entry that is required by the task. By faking this user input we were able to concentrate on coding other, more important pieces of the interface. Getting the exact text correct is really unimportant in this prototype, so faking the input was an easy way to save time and effort with very little drawback.