Circle

Design Document

Team Think Different

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EXECUTIVE SUMMARY

Have you ever found yourself in a new city wanting to explore, but not had the slightest idea of what's going on around you? Hear about an event you would have loved to attend the day after it happened? Those "you just had to be there moments" that make the bonds of friendships? With Circle, you'll be there for all of it.

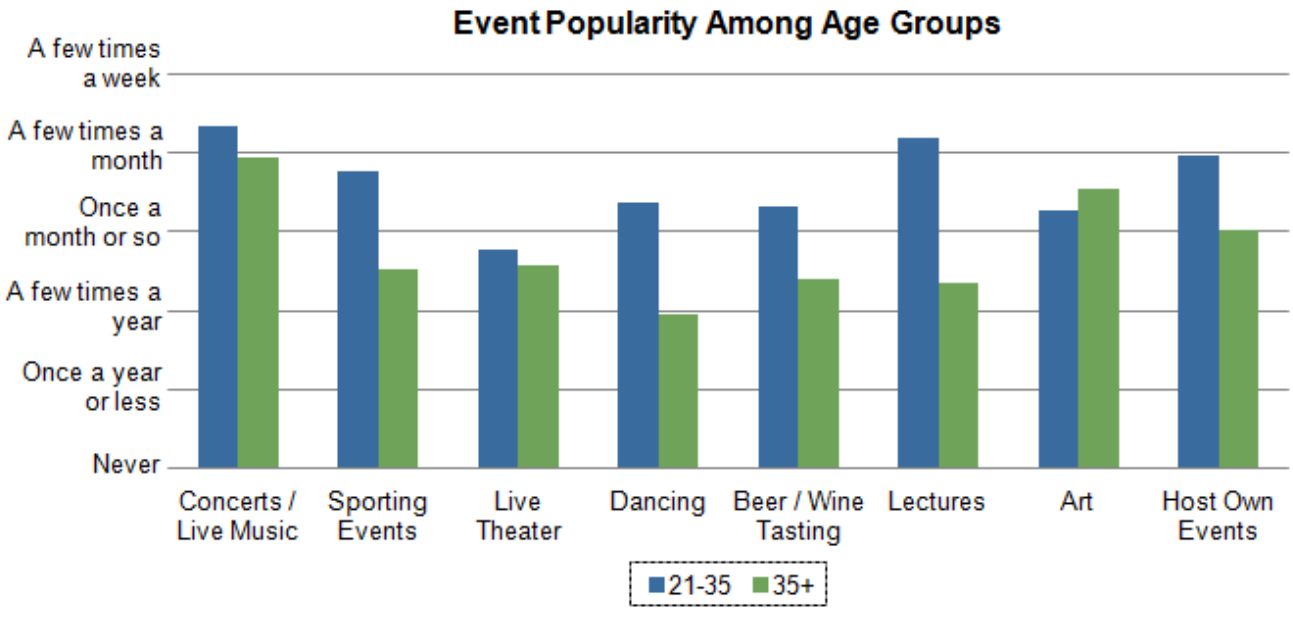
Additionally, you can create your own events and invite friends, RSVP to events, and find others that are going. Planning on going out of town? Use Circle to events in different cities right now or at any time in the future. Circle allows you to find the best stuff to do and mix into the local scene, wherever you are.

Features

- Get a list of events near your location in real-time
- Create events, invite your friends, and RSVP to others' events
- Browse events by date, location, age-level and category
- View details about events, including who is attending, information about the venue, and directions

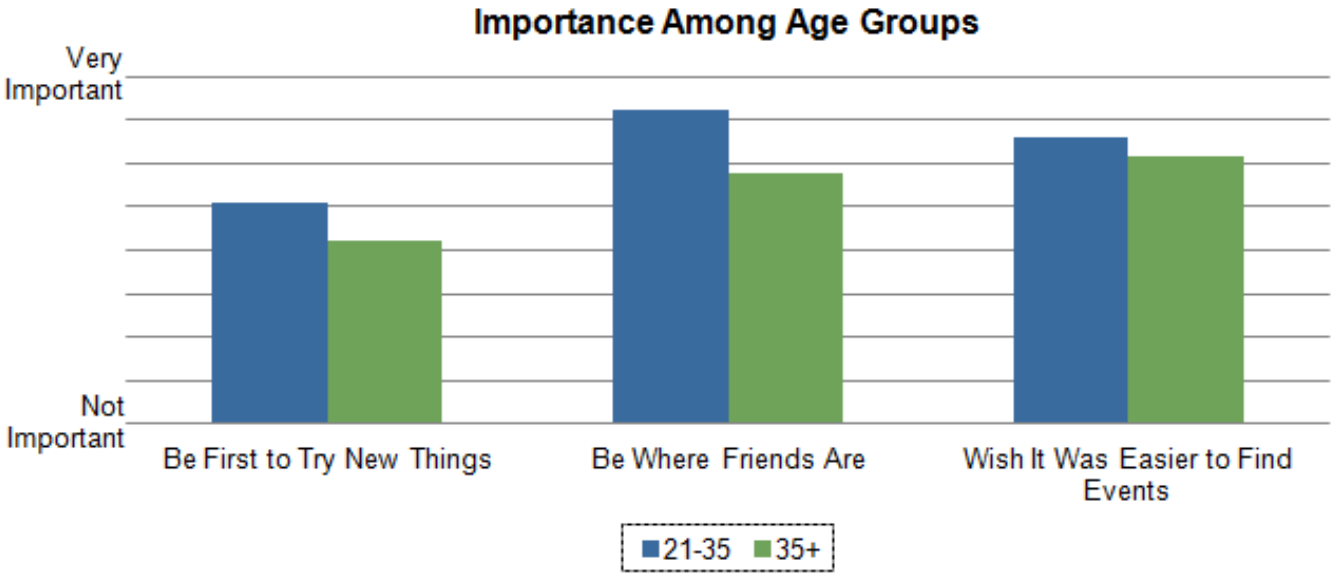
Market Analysis

Currently, there is no Craigslist for events — a centralized service to provide all events happening in a given area. Presently, event planners must register their events with many different publications and services, generally targeted at a local audience. One



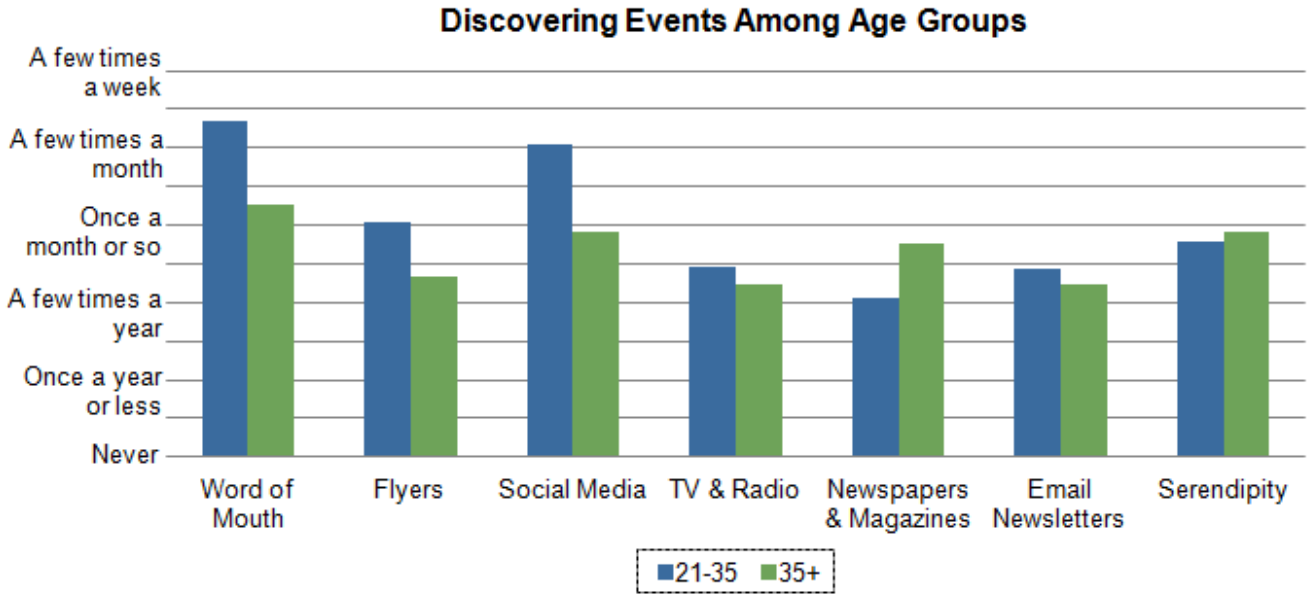
of our main challenges as a service, then, is to collect, parse and normalize all of this information for each locale.

Additionally, there is what we like to call the "RSVP problem." People RSVP to events and then change their mind or forget about the event, and or forget to RSVP to an event they actually attend. Designing a helpful but unobtrusive reminders system will help users to do the things they want to do when they want to do them, and showing



which events their friends are attending will help to encourage engagement.

Facebook is the 800-pound gorilla of anything social, and they do offer support for creating events, inviting your friends, and seeing what public events your friends are



attending. Forget about location-dependent information, though; there's no way - even through their developer API - to, for example, even get a list of all public events within 5 miles of a location.

Eventful provides a similar "local events" service, but at a sub-par level. Their iPhone app currently has two stars (out of five) on the App Store; 5 out of 9 reviews complain that the app constantly crashes, and another review mentioned that while the app ostensibly allows you to sort events, the sorting doesn't actually work.

Additionally, neither of these events provide any more than basic functionality in reminding users of events they had previously expressed interest in.

USER PROFILES

We surveyed 84 people — 42 men and 42 women — between the ages of 18 and 59 years old to attempt to establish who initial users of our service would be and to attempt to understand priorities and important tasks for those users. Our median respondent was age 34, and median income between $40-60,000/year. About 2/3 of our users do not live in a household with children.

Of all of the respondents, two groups in particular stuck out as being invested in finding great events and engaging with new forms of social media.

Young Professionals, age 21-35

This group rated highly in three key categories: event attendance, enthusiasm, and social connectivity. As a group, respondents age 21-35 were more social than their 35+ counterparts for every event category except art. Sporting events, dancing and lectures showing the greatest disparity - when considering the quasi-logarithmic scale of the graph, these differences are quite significant. Users in this age group will in particular realize benefit from Circle.

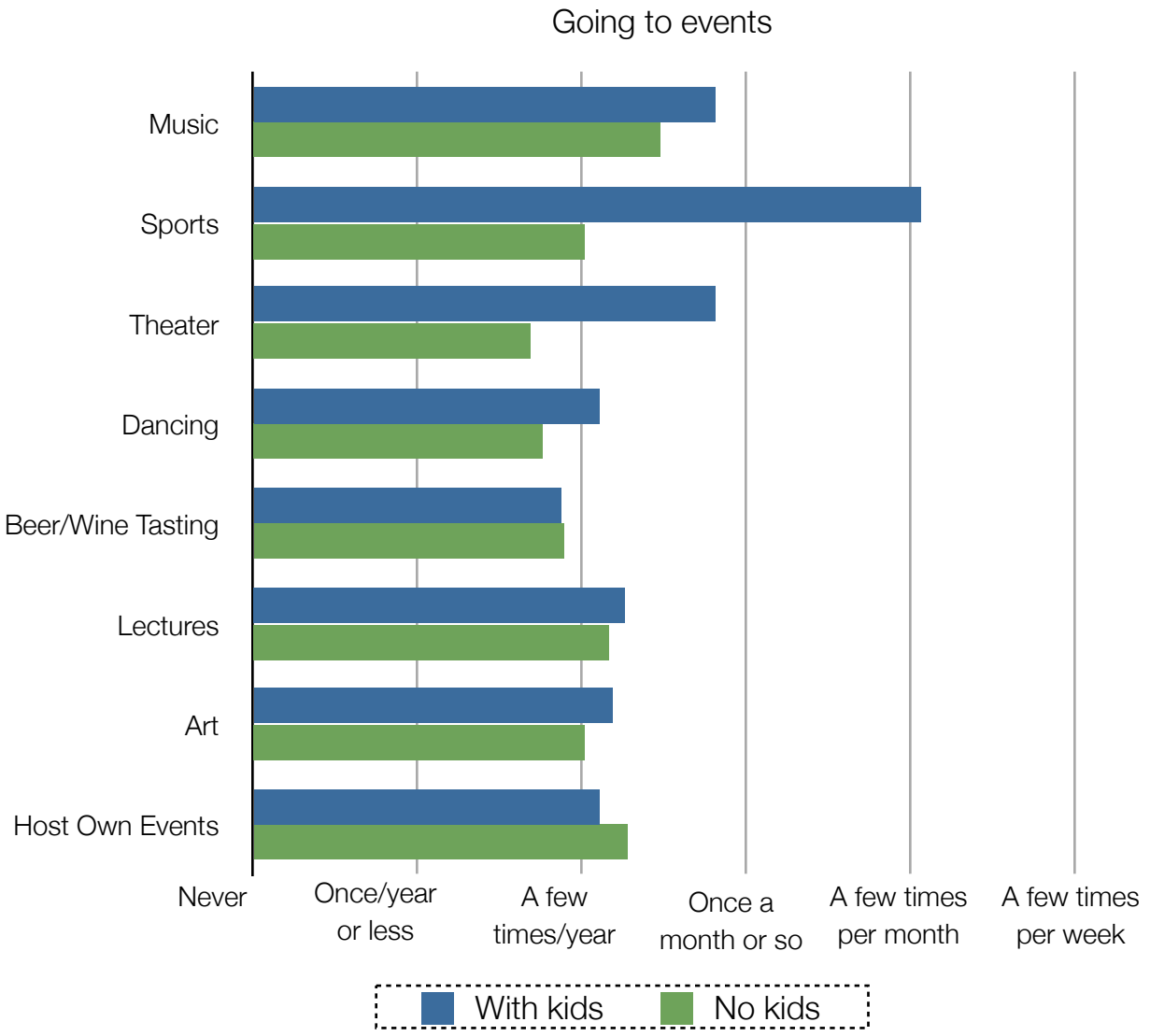
Additionally, users in this age group reported stronger engagement in three metrics we think will be key to Circle users; the desire to be an early adopter and be the first to try a new thing, the desire to go to events where their friends are and a strong desire to find better ways to engage in their community and find things to do around them:

Finally, we found a significant difference in how users in this group find out about events currently. While word of mouth was the most used vector for event discovery across demographics, with word of mouth not far behind - as one respondent noted,

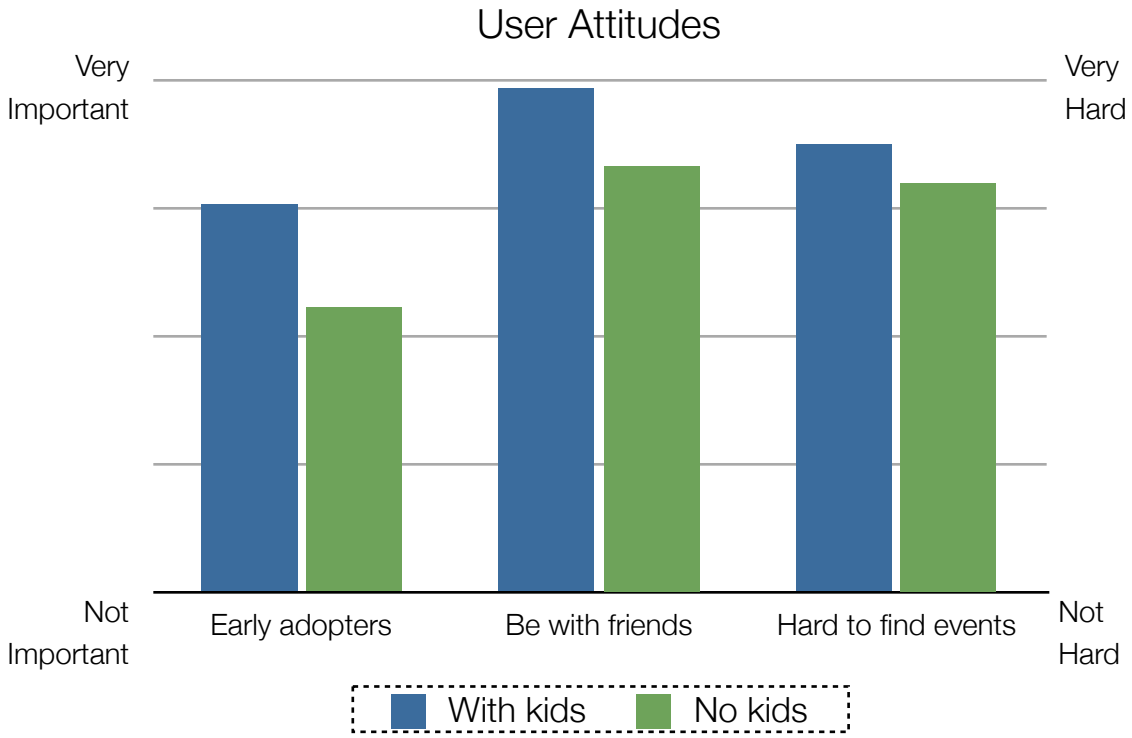
social media is just digital word of mouth, n'est-ce pas? - users 21-35 in particular relied on these channels to discover events.

Parents of children 18 years and under

We had originally anticipated that parents would be active users of Circle, but for different reasons. Though we had guessed — in today's hyper-competitive child-rearing environment — that parents would use Circle to find unique experiences for their family, survey respondents who had at least one child 18 years or younger in their household reported that their own social lives and social media engagement matched and often exceeded many other groups'.



As compared to the rest of survey population, parents are more socially active by most metrics, particularly when it comes to music, sports, and live theater. Additionally, as with users 21-35, we find key User Attitude differences that make us suspect they will be key initial users of Circle:



As compared to responders without kids, parents were much more enthusiastic early adopters, placed extremely high importance on being with friends at events, and really seem to struggle as a group with finding worthwhile events for their precious time. Providing functionality to coordinate event attendance with friends and making it easy to find really great things to do will ensure these users will be enthusiastic evangelists for our service.

TASK PROFILES

1. A user wishes to find a nearby event happening now

The user may be out on the town or planning on going out. The user will be able to request to see nearby events happening now or later on in the day. Upon requesting to see the nearby events the app will load the events and present them to the user. The user will then move on to Task Profile 4.

2. A user wishes to find an upcoming event nearby

The user will be able to request to see upcoming events. They will then be prompted to give a time frame. The events will then load and be presented to the user. The user will then move on to Task Profile 4.

3. A user wishes to find an upcoming event for a particular location

The user will be able to request to see upcoming events in a particular location. They will then be prompted to give a location and an optionally time frame. The events will then load and be presented to the user. The user will then move on to Task Profile 4.

4. A user is browsing events

The user will be able to look through the events and view descriptions. The user will be able to sort/filter events by tags. Event descriptions will include location information, category information and an attendees list. When the user finds an event he/she wishes to attend they may request to see where the event is on a map or get directions to the event. Additionally the user may RSVP to the event, add it to their calendar, save the event, or tag the event.

5. A user wishes to find their friends

The user will be able to request to see what events their friends are currently attending. These events will then be presented to the users and they may move to Task Profile 4.

6. A user wishes to invite friends to an event

When viewing an event the user may request to invite friends to the event. Their friends will be presented and the user may select friends to invite.

7. A user wishes to create/modify/delete an event

The user will be able to request to create an event. They will be taken step by step through forms that capture the details of the event. Finally they will be able to publish the event.

When the user is viewing an event they own they may request to modify the event. They will be taken to the event editor to make their changes. They will be able to publish their changes.

Likewise when viewing an event they own they may request to delete the event. A confirmation dialog will get confirmation before the action is carried out.

8. A user wishes to message the attendees of an event they created

When the user is viewing an event they created they may request to send a message to attendees. A message editor will be displayed to the user. The user will enter their message into the editor and then they may request to have the message sent.

FUNCTIONAL SPECIFICATIONS

The following describes each piece of functionality that will be implemented in Circle. Each function has a specification section where the action is described in more detail. There is also a rationale and importance section. These describe the connection between the function and our survey results along with how critical it is to our finished product.

1. Finding events

No.	*Function*	*Specification*	*Rationale/Importance*
1.1	Find an event now	The user will be able to request to see nearby events happening now or soon.	Part of the core functionality. Required.
1.2	Find upcoming events nearby	The user will be able to view upcoming events nearby.	On a scale from 0-10, 57% of respondents rated 7 or higher for “I wish it was easier to find events where I live” Very Important.
1.3	Find upcoming events for a location	The user will be able to view upcoming events given a specific location.	Part of core functionality. Required.
1.4	Save an interesting event	The user will be able to save an event they find interesting to a list of saved events.	Part of core functionality. Required.
1.5	Delete an event from their saved events	The user will be able to delete an event from their list of saved events.	Part of core functionality. Required.

1.6	Add an event to the calendar	The user will be able to add an event to their calendar (only on supported devices).	Users will want to follow through with their plans. Especially when they've RSVP'd to an event and their friends are expecting them to go. Moderately Important.

2. Finding Friends

No.	*Function*	*Specification*	*Rationale/Importance*
2.1	Find your friends	View where your friends are and see what they are doing.	On a scale from 0-10, 58% of users rated 7 or above for "When I go out, I want to be where my friends are." Very Important.
2.2	Invite your friends	Invite your friends to events that you are attending or hosting.	57% of respondents host their own events at least a few times per year. Moderately Important.
2.3	RSVP to events	Tell the system you are either going to an event, thinking about going, or that you'd rather not go.	Users want to go where their friends are, so it's crucial that they know where their friends are. Moderately Important.

3. Create Events

No.	*Function*	*Specification*	*Rationale/Importance*
3.1	Create an event	The user will be able to create an event.	Part of the core functionality - we can't add all events. Required.
3.2	Update/modify and event	The user will be able to update an event.	Part of core functionality. Required.
3.3	Delete an event	The user will be able to delete an event.	Part of core functionality. Required.

3.4	Mark an event as private	Block users from seeing your event either using a blacklist or whitelist.	59% of users “check in” somewhere once per month or less; seem careful about privacy still. Very Important.
3.5	Message attendees	Send messages to people that have RSVP’d to your event or send out reminders/ updates/special instructions.	70% of respondents use social media to find out about events a few times per month or more. Moderately Important.

4. Categories

No.	*Function*	*Specification*	*Rationale/Importance*
4.1	Sort/filter events by tag	Allow the user to see events of a certain type or to sort the events by a such as “Live Music,” “Sports” or “Art.”	There was some evidence of clustering in our data; for example, respondents who went to concerts often were also many of the respondents who went to art events the most often. Very Important.
4.2	Tag events	Add a category to an event	Events must be tagged to be sorted by category. Moderately Important.
4.3	Tag events by age.	Events will be able to be tagged as “kid-friendly” or “21+”.	Parents are one of the most active groups we surveyed, both on social media and going to events. Somewhat Important.

5. Location information

No.	*Function*	*Specification*	*Rationale/Importance*
5.1	Show the venue an event is being held at	Link to a venue description that is attached to an event	Part of core functionality. Required.
5.2	Map/get directions to venue	Allow the user to request a map showing the events venue or to get directions to the event.	Location-awareness is what will differentiate our app from a newspaper. Very Important.

6. Synchronization

No.	*Function*	*Specification*	*Rationale/Importance*
6.1	Save event to save list and sync	When an event is saved to the save list it synchronizes with the server and across the users devices.	Part of core functionality. Required.
6.2	Delete event from save list and sync	When an event is deleted from the save list it synchronizes with the server and across the users devices.	Part of core functionality. Required.
6.3	Invite friends and sync	When friends are invited to an event it synchronizes with the server and across the users devices. Additionally the invitees are notified.	Part of core functionality. Required.
6.4	RSVP and sync	When a user RSVPs it synchronizes with the server and across the users devices.	Part of core functionality. Required.
6.5	create event and sync	When an event is created it synchronizes with the server and across the users devices.	Part of core functionality. Required.
6.6	modify event and sync	When an event is modified it synchronizes with the server and across the users devices.	Part of core functionality. Required.
6.7	delete event and sync	When an event is deleted it synchronizes with the server and across the users devices.	Part of core functionality. Required.
6.8	message attendees and sync	When a message is sent it synchronizes with the server and notifies the attendees or forwards the message (this behavior is to be determined).	Part of core functionality. Required.
6.9	tag event and sync	When an event is tagged it synchronizes with the server.	Part of core functionality. Required.

PERFORMANCE SPECIFICATION

The time a task takes to complete that requires network connectivity on a mobile device is highly dependent on the network connection. The time to complete these tasks is therefore outside of our control. As such, we will not specify time to complete for network dependent tasks and we make no guarantees whatsoever about the time to complete such tasks. We will assume an ideal network connection for all network dependent tasks and provide only a click-path analysis time to complete guarantee.

1. Finding events

No.	Task	Specification
1.1	Find an event now	After having done it once, users should be able to accomplish this task in an average of 2 seconds with zero errors for 90% of the users across all subsequent tries.
1.2	Find upcoming events nearby	After having done it once, users should be able to accomplish this task in an average of 4 seconds with zero errors for 90% of the users across all subsequent tries. The time increases from the time specified in Task 1.1 because the user must select an upcoming timeframe.
1.3	Find upcoming events for a location	After having done it once, users should be able to accomplish this task in an average of 4 seconds with zero errors for 90% of the users across all subsequent tries. The time increases from the time specified in Task 1.1 because the user must select a location.

2. Finding Friends

No.	Task	Specification
2.1	Find your friends	After having done it once, users should be able to accomplish this task in an average of 2 seconds with zero errors for 90% of the users across all subsequent tries.
2.2	Invite your friends	After having done it once, users should be able to accomplish this task in an average of 10-60 seconds with zero errors for 90% of the users across all subsequent tries. The user will have to select invitees from some display of their friends which could be arbitrarily large/ lengthy. The user will undoubtedly require a brief moment to consider each of their friends before choosing to select the friend or choosing to move on.
2.3	RSVP to events	After having done it once, users should be able to accomplish this task in an average of 10 seconds with zero errors for 90% of the users across all subsequent tries. Simply RSVPing to an event will on average take 2 seconds, but the user will undoubtedly scan the event's description and list of attendees before deciding whether to attend, thus increasing the time to complete.

3. Create Events

No.	Function	Specification

3.1	Create an event	This is highly dependent on the user. Does the user know all the details when they begin creating the event? How fast can they type/ enter data? The task is inherently error prone as well. However, the app will prevent certain errors (e.g. Disallowing the creation of an event in the past). After having entered two practice events, 90% of users should be able to create an event with supplied content in an average time of 2 minutes, with up to 2 minutes of variance and minimal errors.
3.2	Update/modify and event	This is highly dependent on the user. Does the user know all the details when they begin modifying the event? Like Task 3.1 this is inherently error prone, but we expect the user to become proficient after modifying few events. After having modified two practice events, 90% of users should be able to modify an event with predefined modification in an average time of 2 minutes, with up to 2 minutes of variance and minimal errors.
3.3	Delete an event	After having done it once, users should be able to accomplish this task in an average of 3 seconds with zero errors for 90% of the users across all subsequent tries. A slight increase over other elementary tasks because a confirmation will be required.
3.4	Mark an event as private	After having done it once, users should be able to accomplish this task in an average of 10-60 seconds with zero errors for 90% of the users across all subsequent tries. The user will have to select invitees from some display of their friends which could be arbitrarily large/lengthy. The user will undoubtedly require a brief moment to consider each of their friends before choosing to select the friend or choosing to move on.
3.5	Message attendees	This is highly dependent on the user. Does the user know what they'll say? How fast can they type? After having sent two practice messages, 90% of users should be able to send messages with supplied content in an average time of 2 minutes, with up to 2 minutes of variance and minimal errors.

4. Categories

No.	*Function*	*Specification*
4.1	Sort/filter events by category	After having done it once, users should be able to accomplish this task in an average of 4 seconds with zero errors for 90% of the users across all subsequent tries.
4.2	Tag events	After having done it once, users should be able to accomplish this task in an average of 6 seconds with minimal errors across all subsequent tries. The task is not an elementary task, it requires data entry and is therefore slightly error prone.

4.3	Tag events by age	After having done it once, users should be able to accomplish this task in an average of 6 seconds with zero errors for 90% of the users across all subsequent tries. The task is not an elementary task, it requires data entry and is therefore slightly error prone.

5. Location information

No.	*Function*	*Specification*
5.1	Show the venue an event is being held at	After having done it once, users should be able to accomplish this task in an average of 2 seconds with zero errors for 90% of the users across all subsequent tries.
5.2	Map/get directions to venue	After having done it once, users should be able to accomplish this task in an average of 2 seconds with zero errors for 90% of the users across all subsequent tries.

6. Synchronization

No.	*Function*	*Specification*
6.1	Save event to save list and sync	Time to complete is dependent on the network connection and outside of our control. Executed by system, so no chance of user error.
6.2	Delete event from save list and sync	Time to complete is dependent on the network connection and outside of our control. Executed by system, so no chance of user error.
6.3	Invite friends and sync	Time to complete is dependent on the network connection and outside of our control. Executed by system, so no chance of user error.
6.4	RSVP and sync	Time to complete is dependent on the network connection and outside of our control. Executed by system, so no chance of user error.
6.5	Create event and sync	Time to complete is dependent on the network connection and outside of our control. Executed by system, so no chance of user error.
6.6	Modify event and sync	Time to complete is dependent on the network connection and outside of our control. Executed by system, so no chance of user error.
6.7	Delete event and sync	Time to complete is dependent on the network connection and outside of our control. Executed by system, so no chance of user error.
6.8	Message attendees and sync	Time to complete is dependent on the network connection and outside of our control. Executed by system, so no chance of user error.

6.9	Tag event and sync	Time to complete is dependent on the network connection and outside of our control. Executed by system, so no chance of user error.

APPENDIX A: PAPER SURVEY

ABOUT YOU

Your responses will be kept 100% private, and will be destroyed at the end of the semester.

Age: _____ Gender: _____ Occupation: _____

1. How many adults (18+) currently live in your household?

   ☐ 1 ☐ 2 ☐ 3-4 ☐ 5-7 ☐ 8 or more

2. How many 18 years old and younger?

   ☐ 0 ☐ 1-2 ☐ 3-4 ☐ 5-7 ☐ 8 or more

3. What is your approximate household income?

   ☐ < $14,999 ☐ $15-24,999 ☐ $25-39,999 ☐ $40-59,999
   ☐ $60-84,999 ☐ $85-119,999 ☐ $120,000+

4. Please circle the degree to which the following statements apply to you:

It is important for me to be one of the first to try out a new thing.	Not important										Very important
	0	1	2	3	4	5	6	7	8	9	10
When I go out, I want to go where my friends are.	Not important										Very important
	0	1	2	3	4	5	6	7	8	9	10
I wish it were easier to find things to do where I live.	Don't care										Oh man, totally!
	0	1	2	3	4	5	6	7	8	9	10

SMARTPHONES, TABLETS & APPS

5. Which of the following, if any, do you own?

   ☐ Smartphone ☐ Regular cell phone ☐ Computer ☐ iPad or Tablet

6. If you own a smartphone or tablet, how often do you use it to do the following?

	10+ times per day	3-9 times per day	1 or 2 times per day	A few times per week	A few times per month	Once per month or less	Never	I don't know what this is
Make a phone call								
Check email								
Send a text message								
Check Facebook / Twitter news feed								
Post to Facebook or Twitter								
"Check in" using an app								

DISCOVERING & ATTENDING EVENTS

7. How often do you use the following to find out about events in your area?

	A few times per week	A few times per month	Once a month or so	A few times per year	Once per year or less	Never	I don't know what this is
Word of mouth							
Saw a flyer							
Facebook, Twitter, other social media							
TV & Radio							
Newspapers & magazines							
Email newsletters							
Serendipity / accidental encounter							
Other: _____							

8. How often do you attend the following types of events?

	A few times a week	A few times a month	Once a month or so	A few times a year	Once a year or less	Never
Concerts						
Sporting Events						
Movies						
Live Theater						
Dancing						
Beer/Wine Tasting						
Lectures						
Art						
Host my own events						
Other: _____						

May we contact you for a brief follow-up interview? We would love you forever.
If so, please leave your email here*:

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*We HATE spam. We promise to ONLY ever use your email address to contact you for this follow-up interview.

APPENDIX B: INTERVIEW OUTLINE

How do you find events now? For each method,

1. How often do you use it?
2. How satisfied are you with it?

How do you find events when you're not in your hometown?

1. Are you satisfied with this method?

Can you think of an event that you would have gone to, but missed because you didn't find out about?

1. What was it?
2. Why do you think you didn't hear about it?

RE: an event you recently went to.

1. What factors influenced your decision to go?
2. From 1-10, how much fun did you have?
3. What about it made it fun/not fun?

If this event was fun, ask following questions about a recent disappointing event they attended. If this event was not fun, ask following questions about a recent fun event they attended.

1. What factors influenced your decision to go?
2. From 1-10, how much fun did you have?
3. What about it made it fun/not fun?

RE: an event you recently thought about going to, but didn't.

1. What factors influenced your decision to NOT go?
2. From 1-10, how satisfied are you with the decision to not go?

We're building an event finding smartphone app. Any general thoughts on finding events? Suggestions? Other feedback you'd like to give?