Instructor: James Landay

Heuristic Evaluation of Rally

Evaluator #A: Anonymous Amazon River Dolphin Evaluator #B: Anonymous Bearded Dragon

Evaluator #C: Anonymous Crane

1. Problem/Prototype

Rally makes nearby political events accessible by providing information about the event, mapping routes/ methods of transportation to the event, and connecting users with friends who will also be in attendance.

2. Violations Found

1. H4. Consistency and standards / Severity 3 / Found by: A

When you first click on Sophie's profile it says that she has 3 upcoming rallies, but on her profile it only has 1 event (Mana'o Mauna Kea) marked as going. The switch of language from "rally" to "event" could be confusing for users, as is the discrepancy from 3 to 1. I was wondering if there was an error with the numbers or if the 3 upcoming rallies was meant to indicate how many events she was interested in, not just the events she had "rallies" for. I would pick one number to represent Sophie's upcoming rallies and on her profile would rename "Upcoming Events" to "Upcoming Rallies".

2. H2. Error Prevention / Severity 4 / Found by: A

When a user first starts a rally, they can add a friend who is interested in the event. That friend is then automatically added to a group chat with the user. This does not follow typical conventions on other social media platforms. On Facebook, for instance, saying you are interested in an event does not necessarily mean you intend on going to the event. To solve this issue, I would replace the "Let's Rally" button with an "Invite to Rally" button. Then, the friend can be notified of an invite to the rally and can accept it if they truly want to go to the event.

3. H3. User control and freedom / Severity 3 / Found by: A, B, C

User is unable to leave a rally once they join. There seems to be no exit strategy, thus if a user accidentally joined a rally or was invited to a rally but does not wish to attend, they are unable to leave. This violates user control and freedom because it does not support 'undo and redo' functionality. To solve this, once in the groupchat, give users the option to leave the chat or leave the rally.

4. H6: Recognition Rather than Recall / Severity 2 / Found by: B, C

The icon to find friends is unclear. When I first look at it, I associate that icon with my user profile (like a system preferences). Thus this violates this heuristic because the

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user must remember that this icon is not for their profile, but instead to find friends. We recommend changing the icon to something that is more associated with friends and is different from just a user icon, such as the one facebook uses:



5. H7. Flexibility and efficiency of use / Severity 2 / Found by: A, B

I understand that due to the constraints of a medium-fi prototype this may not have been feasible, but in order to best accomplish Task 1 (finding events), users should be able to explore events beyond the immediate area. I would have liked to be able to "pinch out" to explore events all across the Bay Area and San Francisco. If the "pinching" is not feasible, users should at least be able to filter events by location on the "Find Events" page.

6. H3. User control and freedom / Severity 3 / Found by: B

Because the user enters their interests, is there an option to sort by event topic or time, or is it always by distance? It it list function, it is obvious that the events are numbered, but the order in which they appear can be confusing. The user should be allowed to order these events either by time or topic. For example, if they wish to do to an event on Saturday, they should be able to search for events on Saturday. A lack of this reduces user freedom as it does not allow them to customize how they would like to view events. This can be remedied by adding an option to sort by topic or by date. Alternatively, it can be remedied by clearly stating that these events are only ordered by distance.

7. H6. Recognition rather than recall / Severity 2 / Found by: C

When creating a new rally, the message should not be that I (as the user has created the rally) joined the rally, it should be that the rally was created.

8. H1. Visibility of system status / Severity 2 / Found by: A

On event pages (i.e. the "Cardinal for Warren Trivia Night" event), the user is given the option to say they are interested in that event. If they are, the "Interested" button is greyed out. That does not feel sufficient to notify the user of their choice. I would recommend either making the background green instead of grey, or adding a checkmark next to "Interested" to make the system status absolutely clear.

9. H10. Help and Documentation / Severity 2 / Found by: B

When you click on the event, you receive some information about the event, but there is little information about who is organizing the event. The organizer should be more prominent because people will want to be informed about what kind of group is organizing it (especially for more ambiguous events). For example, there may be an event on climate change, but without more information from the event

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planner, it may be unclear what side of the issue this rally is supporting. This can be solved by increasing the font of the organizer and supplying a link to more information about this group (either through a profile in the app or to an outside website)

10. H3. User control and freedom / Severity 3 / Found by: C

If a friend of the user has created a rally at an event, there is no way for the user to create a separate one at the same event. This diminishes user freedom, as they cannot choose that they want to create a new rally. Allow users to create new rallies at events that already have rallies.

11. H5. Error Prevention / Severity 1 / Found by: B

Problem: There is no error prevention when joining events. Your profile displays the events you will be attending, but there is no error message if you try to join events at conflicting times. It is not to say the app should not allow users to join two events, but it should inform the user that they have a conflicting event. To solve, create an error notification when the user tries to sign up for events at the same time. Alternatively, events that are scheduled at the same time can include a little note in their description about conflicting events or perhaps a calendar feature.

12. H2. Match between system and the real world / Severity 2 / Found by: A

Users are given the option to "Explore Events" under each of their friend's profiles. However, this does not list the events that friend is Interested in but rather all the event options. That user flow does not really make sense to me, because users could simply click back and see all the event options. It would make more sense if you changed "Explore Events" to "Explore <Friend Name>'s Events" and then went to a page with all the events that friend was interested in or had rallies for.

13. H1. Visibility of System Status / Severity 4 / Found by: A, B

For some events, like Mana'o Mauna Kea for instance, it seems that Patrick who is interested (and in the corresponding group chat) should have visibility to everyone in the Rally chat, not just the creator. Additionally, It is not clear who is actually in the chat when you are added to a group. Are you added to a message group with everyone going to that rally, or just your friends? If a friend added other people who are not your friends, Do you become friends? The relationship between friends and who is actually added to the messaging group is not intuitive or clear. I would recommend allowing Patrick to click to see who is in the chat before joining, just to make sure users feel comfortable joining certain rallies. Additionally, give users the option to see everyone in their chat and indicate whether or not they are friends already. If not friends, give them to option to become friends.

14. H1. Visibility of system status. Severity 0 / Found by: C

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On the screen of the message in the Mana'o Mauna Kea group chat, there is a blue message sent from the user, and a few lines down there is "You have joined the rally". This makes it seem as though the user just joined the rally, even though they have previously sent messages, making the system state unclear. This message should move along with the chat.

15. H4. Consistency and standards. Severity 2 / Found by: C

The icon for the user's profile looks like the Face ID logo from Apple. This could confuse users to make them believe that that is somehow unlocking or locking the app. Fix this by choosing another icon.

16. H1. Visibility of System Status/ Severity 2 / Found by: B

It is not clear what happens to a group chat after the event has occurred. Do these chats stay forever, can a user remove themselves, are they archived, or does it automatically get deleted after the event. To fix this, the app should give the user warnings like '3 days until chat is deleted' if this is the case. However, I would recommend giving users the option to delete chats in case they want to follow up with this group of people after the event has happened.

17. H7. Flexibility and efficiency of use. Severity 1 / Found by: C

When I join a rally, I am taken to the messaging portion of the app immediately. However, if I press back, I would expect to be taken back to the map, since that is where I came from, and not to the all messages portion. To fix this, make the back button say go to all messages, or make the button take the user to the last visited screen.

18. H7. Flexibility and efficiency of use / Severity 3 / Found by: A, B, C

One of the key tasks outlined in the slide deck was Task 2 (finding friends). I understand that not choosing to add pages to add friends may have been an intentional choice to streamline the medium-fi prototype. However, I believe adding friends is a crucial aspect of finding friends to rally with and could have been integrated into Task 2. This could be fixed by adding a "Find Friends" tab or icon on the Friends pop-up page. Perhaps users could connect with Facebook or their contacts list to see which of their friends were already on the platform.

19. H6. Recognition rather than recall / Severity 3/ Found by: A

Right now, there is a way for users to easily see all the rallies they are in by simply clicking on the chat icon. However, I think it would be equally as beneficial to have a centralized page where they can see all the events they are interested in. This could be easily solved by having a button next to the chat button that users can click to see a list of all the events they have marked as being interested in. That way they don't have to remember each event they were interested in and can easily decide which ones to join rallies for.

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20. H7. Flexibility and efficiency of use. Severity 3 / Found by: B, C

The app is constrained exclusively to Facebook events which can be helpful to novice users, but to an expert user of the app they might want to create rallies for events that are not on Facebook. There should be an option to create a rally at a specific spot that does not need to be backed by a Facebook event. There should just be an add rally button.

21. H3. User control and freedom / Severity 1 / Found by: A

One of the key features of this app, especially as outlined on your problem/solution statement on the slide deck, is the integration of transit options into the app. However, currently only public transportation options are offered. A simple fix would be to offer multiple options for transportation to events, maybe including walking, public transit, car, and rideshare. Users can click on the option that appeals most to them and then get the appropriate directions.

22. H6. Recognition rather than recall / Severity 3 / Found by: A

Currently, once a user is in the rally chat for a given event they have to either remember the details of the event or click back to the homepage and re-navigate to that event to obtain more information about the event. A lot of those details (location, time, etc.) are critical to planning a "rally". From a user-flow point of view, then, it would be best to allow users to click the banner at the top of a rally chat to be directed to a page with event information. That way they would not have to memorize the event details and can access them simply.

23. H4. Consistency and Standards / Severity 4 / Found by: A, B, C

There is one user picture who is by a rally, but then another user picture that is not near anything. This makes it seem like the app tracks your friends (kind of like the snapchat app). Was this intendended? Or are user images only supposed to appear next to an event if they plan on attending it? It is not clear what the purpose of the user images on the map are supposed to serve, especially in relation to using the map filter. Does the user image signify that they plan on attending an event or their current location? This can be solved by only showing a user image on the map when they plan on attending an event. Or not including images at all. This will create consistency and reduce confusion.

24. H10. Help and documentation / Severity 1 / Found by: B, C

The numbers on each rally / event are confusing as to what they are. Can either be eliminated entirely or some sort of clarifying dialog as to what the numbers mean.

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25. H4. Consistency and Standards / Severity 3 / Found by: A, B, C

When you click on any event, it immediately shows you the route to get there. It does this before you turn the event into a rally. Does this mean you can just go to an event without starting a rally and if so, what is the actual difference between an event and a rally? It the biggest difference that a rally give you the option to talk to people? The distinction between an event and a rally is not the most intuitive. This can either be fixed by not showing the route until you make the event a rally or clearly stating in the app intro what the difference between an event and a rally is (if there is one).

26. H6. Recognition rather than recall / Severity 1 / Found by C

When I visit Sophie's profile, there is no documentation of rallies that the user and Sophie have participated in together. This forces the user to recall this. It would be nice to add rallies that the user participated in with their friend.

27. H5. Error prevention / Severity 2 / Found by: C, A

When viewing Sophie's rally, the difference between Interested and Joining the rally is not immediately clear, and the user might just click interested and think that that is what is going to join the rally. A fix is to remind the user with a push notification that they are interested in x rally and ask them if they want to join it now. We also don't know if it is interested in the event or the rally.

3. Summary of Violations

Category	# Viol. (sev 0)	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (total)
H1: Visibility of Status	1	0	2	0	1	4
H2: Match Sys & World	0	0	1	0	1	2
H3: User Control	0	1	0	3	0	4
H4: Consistency	0	0	1	2	1	4
H5: Error Prevention	0	1	1	0	0	2
H6: Recognition not Recall	0	2	1	2	0	5
H7: Efficiency of Use	0	1	1	2	0	4
H8: Minimalist Design	0	0	0	0	0	0
H9: Help Users with Errors	0	0	0	0	0	0
H10: Documentation	0	1	1	0	0	2
Total Violations by Severity	1	6	8	9	3	27

4. Evaluation Statistics

Severity /	Evaluator A	Evaluator B	Evaluator C
Evaluator			

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sev. 0	Λ	n	1
	U	U	ı
sev. 1	1	2	3
sev. 2	4	4	4
sev. 3	6	5	5
sev. 4	3	2	1
total (sev. 3 & 4)	9	7	6
total (all severity levels)	14	14	14

^{*}Note that the bottom rows are *not* calculated by adding the numbers above it.

5. Summary Recommendations

Most of the issues of this application came from information not being stored or easily accessible. Users have to remember a lot of information throughout the event organization (rallying) process, which can slow them down and interfere with the successful completion of the team's outlined tasks. Additionally, we believe that many of these issues could come from the distinction between being interested in an event and starting a rally. I became confused at the difference between the two, and think that the user flow for events versus rallies needs to be more thoroughly built out.

We also found a few issues with error prevention/ logistical features. Within the actual event, it is quite hard to find the time and date of an event and see if it conflicts with any other upcoming events. It might be beneficial to add this information to a filter option or allow the user to see what other events they might have that conflict with other rallies. Additionally, it would be beneficial to have access to more information about who is organizing the event. This ties into the larger problem of general usability. It took us a little while to understand the benefit of this app and why I should use this instead of just looking for events on other social media platforms such as facebook. We think the main benefit is that it provides all the information you need in one place, however in order for this to be effective, the way the information is presented to the user must be refined.

The final main issue is that the user probably should not be able to see their friends' locations in the app. This could open up potential risks for abuse of the application. This also seems to not be relevant to the purpose of the app.

Rally is at a great starting point. The app is interesting, but the ideas need to be fleshed out a little more and thought through more thoroughly. This can possibly be achieved with more user testing to make sure everything is clear, in addition to adding certain features described in my evaluation. We think this app has a lot of potential and we are excited to see where it goes!

Severity Ratings

- 0 don't agree that this is a usability problem
- 1 cosmetic problem
- 2 minor usability problem

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3 - major usability problem; important to fix4 - usability catastrophe; imperative to fix

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Heuristics

H1: Visibility of System Status

• Keep users informed about what is going on

H2: Match Between System & Real World

- Speak the users' language
- Follow real world conventions

H3: User Control & Freedom

- "Exits" for mistaken choices, undo, redo
- Don't force down fixed paths

H4: Consistency & Standards

H5: Error Prevention

H6: Recognition Rather Than Recall

• Make objects, actions, options, & directions visible or easily retrievable

H7: Flexibility & Efficiency of Use

- Accelerators for experts (e.g., gestures, kb shortcuts)
- Allow users to tailor frequent actions (e.g., macros)

H8: Aesthetic & Minimalist Design

• No irrelevant information in dialogues

H9: Help Users Recognize, Diagnose, & Recover from Errors

- Error messages in plain language
- Precisely indicate the problem
- Constructively suggest a solution

H10: Help & Documentation

- Easy to search
- Focused on the user's task
- List concrete steps to carry out
- Not too large