Heuristic Evaluation of [ConverStation]

1. Problem/Prototype

ConverStation is an app that promotes non-awkward and healthy dialogue about a variety of topics with strangers. It tailors to the user's free time slots, facilitates offline meetups with maps, and encourages group gatherings.

2. Violations Found

1. H8: Aesthetic & Minimalist Design / Severity 1 / Found by: A

Apart from two screens (the home screen and the "Start a Conversation" screen), the buttons on every other screen are a light grey, which isn't the most noticeable or distinguishable from the white background. One quick fix for this is just to make the rest of the buttons in the same color palette as those other screens — blue or green.

2. H3: User Control & Freedom / Severity 4 / Found by: A, B, C

When you're in a conversation with someone, pressing "share contact info" also requires the user to end the conversation. If users should only share contact info after a conversation is over, then the button to end the conversation should come first, and "share contact info" can come after. Alternatively, maybe the app should let the user share contact info whenever, especially so that they can contact each other once they arrive at their meeting location. A third suggestion would be to put in the correct/more appropriate confirmation text when user clicks "SHARE CONTACT INFO".

3. H4: Consistency & Standards / Severity 3 / Found by: A

When ending a conversation, there is a button to ask if the user is sure that they want to end the conversation. However, when you cancel an item that you just scheduled, there is no "are you sure?" button. Including that button on all pages would make things consistent, and also help avoid accidentally cancelling a scheduled block of time.

4. H3: User Control & Freedom / Severity 4 / Found by: A

If you click "cancel" after already adding a block to your schedule, it removes what you already added, which doesn't make much sense. The "cancel" button should probably be removed after the user adds a block to the schedule, *or* there should be another separate "remove" button that would allow the user to remove something that is already on the schedule.

5. H5: Error Prevention / Severity 4 / Found by: A

On the map, there is no indicator of where the user is on the map. Thus, the user might have to click through all of the potential locations only to realize that they are "too far" from every location but one. One simple fix could be to include a pin to show where the user is, and to highlight the potential meet-ups that are within their range.

6. H6: Recognition not Recall / Severity 3 / Found by: A, B

On the map as the user is walking to a group conversation, there is nothing to remind the user about the conversation topics — it might be easy to forget why a user joined the group conversation in the first place. A simple fix would be to include a small box that reminds the user of the topics of discussion for the group conversation.

7. H4: Consistency & Standards / Severity 3 / Found by: A

If I'm cancelling walking to a single conversation, a button pops up that asks, "Are you sure you want to cancel the conversation?" However, if I'm cancelling walking to a group conversation, the button asks, "Are you sure you want to exit navigation?" The second question makes more sense (as the conversation has not yet actually begun), and should probably be the standard question when exiting out of the navigation. "Cancelling" a conversation should only show up once the user is actually in a conversation.

8. H8: Aesthetic & Minimalist Design / Severity 1 / Found by: A

The big green bar at the top when we're in the navigation section on the way to a group or a 1-1 conversation feels too big, and the parentheses that remind us where we're going feel unnecessary and clutter the screen. There's a simpler way to remember where we're going and how to get there, without the parentheses, which makes the bar feel cluttered and a bit unprofessional.

9. H5: Error Prevention / Severity 2 / Found by: A

As it stands now, a user can create another group conversation at a location that already has an existing group conversation. There should likely be some mechanism to stop a user from making another group conversation in the same area — and especially about the same thing. A simple "there's already a group conversation happening here!" might suffice.

10. H2: Match b/w System and Real World / Severity 1 / Found by: A, B

Whenever I want to leave a 1-1 conversation, the pop-up box asks if I want to "cancel" the conversation. "Cancel" as a word feels more like developer language; I think "leaving" a conversation or "ending" a conversation is easier to understand and thus more accessible to a wider array of users.

11. H8: Aesthetic & Minimalist Design / Severity 1 / Found by: A

The emoji arrow right before the direction on the navigation page doesn't quite fit with the rest of the app's aesthetic. The use of the emoji is cute, but using a green arrow that is more in line with the rest of the aesthetic and color palette of the app would make the app more aesthetically cohesive.

12. H1: Visibility of System Status / Severity 4 / Found by: A

There's nothing that updates or shows the user when they have reached their destination and are actually talking to their conversation partner. This might be useful so that the user knows that they have reached the meeting point, and so that the users

know when the conversation has actually or officially begun. It is also unclear where to click to start conversation, so adding a clickable button to "enter conversation" would be helpful.

13. H1 Visibility of system status/ Severity 1/ Found: B

 For the very first page of making an account, the text are not sized correctly to fit into the boxes. This affects the visual and somewhat the readability of the text. For the Hi-Fi prototype, you should double check that the size of the text are enough to fit within the allotted boxes.

14. H10 Help and Documentation / Severity 2 / Found by: B, C

a. You have the text option for "Pronouns" but I am wondering if you would have an option that allows them to omit it or/and give them a sample of what pronouns are in case the user might not understand what pronouns are exactly. This feedback is just for a case of an extreme user who has never used pronouns before. As suggested, either consider making Pronouns an opt in or/and give sample Pronouns they can choose from.

15. H3 User control and freedom / Severity 2 / Found by: B, C

a. Just a very small nick-picky thing, but I was a bit confused on making a profile page of what things were required and what things weren't. Initially I had thought that everything was required since it seems like I would have to put in everything or just put in N/A but when David made his profile, I saw that he omitted the Minor instead of putting N/A. I would suggest adding an option to put in "none or N/A" just to make it more clear to the user about what to fill for things they don't have or know.

16. H10 Help and Documentation / Severity 4 / Found by B

a. I was confused with how to fill out the "Talk to me about" box. For example I had questions about what exactly could I put in there? Could I write sentences or just genres? Additionally, how specific is the genre, ex) games or a specific type of game (hack and slash) or a specific name of a game? I would suggest adding some made options for user to see so they can understand. Additionally, perhaps adding an explanation just for the "Talk to me about" section would help the user understand more about how that section is going to be used for the app.

17. H8 Aesthetic and minimalist design / Severity 3 / Found by: B

a. For your Calendar page, the Calendar just states Calendar and not the actually date in which you are viewing the Calendar. This would make it hard for the user to understand which day they have assigned the meeting for. Suggestion is to add in the date instead of the text Calendar since the user is already going their for a Calendar and it looks like a Calendar already, so it would be repetitive to just have the text Calendar.

18. H10 Help and Documentation / Severity 4 / Found by: B

a. For the Calendar page, I was a bit confused about the intention of the Calendar. Is this Calendar suppose to be for me setting meetings with people or for people to be able to view when I'm free? I would suggest an explanation of what the intended purpose and usage of the Calendar page is for the user.

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

a. For the Calendar page, I was confused on the clarity of what I put into my calendar. I had already made a task and put it on the Calendar but it just blocked off a chunk of time on my Calendar and didn't allow further text or labeling for me to understand what this blocked off time chunk is. Suggestion is to make the Calendar page more clear and/or to provide a small titling and labeling for the blocked off time chunks so the user doesn't have to try and remember what each time chunk is every time they look at it.

20. H10 Help and documentation / Severity 2 / Found by B

a. For the main home page of the app, START A CONVERSATION & GROUP CONVERSATION page, I was a bit confused on what is the difference and purpose of each of the two? I understand that I would come to understand the difference eventually once I get use to the app, but as a first time user, I would appreciate a small explanation text bubble of what they each do so I can understand and choose rather than just try it out and learn. Suggestion is to provide an explanation text for this page of the type of things you can click and what they do.

21. H8 Aesthetic and minimalist design / Severity 1 / Found by B, C

a. The design feature for the "Finding you someone to chat with!" page could be improved. I was confused if the circle was suppose to be a loading screen or not. Perhaps this would be more clear when it's an actual app but for now, I would suggest adding like a radar loading screen into the circle or other loading bar.

22. H10 Help and documentation / Severity 4 / Found by B

a. On the process of finding a person when clicking "START A CONVERSATION" I was confused about the process of how the app is matching me with a person: distance relative to me, similar interests?, etc? I would like there to be an option to allow for the user to choose who they can search for a person to start a conversation with since I might want to talk to someone close to me about anything or talk to someone about a specific topic, etc. Suggestion is to allow search method options for when starting a conversation.

23. H4 Consistency and Standards / Severity 1 / Found by B

a. The design feature of the image profile for the person you got matched with when you START A CONVERSATION can be confusing when compared to the screen of the same blue circle of the "Finding you someone to chat with!". Because of the two screen both using the same blue circle, as a user I would be confused with the difference between the blue circle as a loading circle vs a profile image circle. Suggestion is to remove or change the blue loading circle for the "Finding you some to chat with!"

24. H8 Aesthetic and minimalist design / Severity 1 / Found by B, C

a. All CAPS text for SHARE CONTACT INFO is a bit jarring and commanding for the user. All CAPS makes the SHARE CONTACT INFO more of a demand than a choice. Suggestion moving forward is to consider changing the text to be not all CAPS.

25. H10 Help and Documentation / Severity 3 / Found by B

a. For the SHARE CONTACT INFO button, I was a bit confused with what info exactly am I sharing with the other person: name, profile, email, etc? I would like there to be a description of what is being shared.

26. H10 Help and Documentation / Severity 3 / Found by B

a. For the SHARE CONTACT INFO button, I was a bit confused with what the purpose of this button is meant to serve. Is this button suppose to 'connect' use to each other or for another purpose. Suggestion is to provide a short explanation of what this SHARE CONTACT INFO is supposed to do.

27. H5 Error prevention / Severity 3 / Found by B

a. For the SHARE CONTACT INFO button, when I do confirm 'yes', instead of my expectation that my info will be shared the app simply gives me Afonso's email instead. This is very confusing to me as to what the button just did. Additionally, what I am supposed to do with the given email: do I now contact him via email? I suggest adding a pop up screen that just confirms what the info you shared with the other person. For ex: "You just shared your profile information: name, email, interest, etc. with Afonso. Now you can contact him via ... "

28. H8 Aesthetic and minimalist design / Severity 2 / Found by B

a. For the Afonso P. profile page, the design feature in which you have two different clickable items with the same destination is confusing (User can click either the profile image or the profile name to reach profile page). Additionally, you already have a text that states "VIEW PROFILE" which should lead the user to the profile page already. I would just choose one item to lead to the profile page.

29. H2 Match between system and the real world / Severity 2/ Found by B, C

- a. When found someone to chat with, the option named "Start Direction" is a bit confusing and abrupt as it is not true to real, human interactions.
- b. Fix: To make it feel less stiff, the app should ask for user's interest in interacting the person, and guide the user to action, whether it be meetup on a specified spot on map or otherwise.

30. H3 User control and freedom / Severity 4 / Found by B

CS 147 Autumn 2019: Assignment 9 (Heuristic Evaluation Group Template) Instructor: James Landay

> a. For the Directional Map page, the design feature of when I either cancel or click the android go back arrow, I expected to go back to Afonso's profile page, but then it lead me all the way back to the home page. Suggestion is to change the navigation when canceling or going back from this page to go back to Afonso's profile page instead.

31. H8 Aesthetic and minimalist design / Severity 1 / Found by B

a. For the Roble Arts Gym profile page, the subtext address could be moved a bit lower and have it's size increased a bit more so the user can see it better. Suggestion: lower subtext position and increase size for better visibility.

32. H10 Help and Documentation / Severity 2 / Found by B

a. For the Roble Arts Gym profile page, I'm a bit confused on the ConverStation Features section. \hat is the point of this? Suggestion: provide an explanation of what this section is and how can it be used. Additionally, could people add to these features?

33. H4 Consistency and standards / Severity 3 / Found by B

a. For the Directional Map page, I didn't expect that by clicking the "(Meeting in the courtyard of the Roble Arts Gym) part would lead me to Afonso's profile page when the bottom of the screen, where Afonso's profile image is, states that is where I am supposed to click to go to Afonso's profile page. Suggestion: change the navigation to Afonso's profile page from this page to be clicking Afonso's profile rather than the (Meeting in the courtyard ...).

34. H8 Aesthetic and minimalist design / Severity 1 / Found by B

a. For the Afonso's profile page when you clicked (Meeting in the courtyard ...) section of the Directional Map page, all CAPS text is a bit intimidating. Many times through your app there are many sections in which you are using all CAPS, I would suggest limiting the use of all CAPS everywhere since it is a bit 'demanding' of the user.

35. H10 Help and Documentation / Severity 2 / Found by B

a. For the Afonso's profile page when you clicked (Meeting in the courtyard ...) section of the Directional Map page, I was shocked and confused with the changed profile page of Afonso. I am confused with the MAKE THIS A GROUP CONVERSATION button and the END CONVERSATION button. Is this the way you end a conversation? Can you only have one conversation at a time? What does make this a group conversation mean? Suggestion: add text bubble explanation of each of these buttons and what they do.

36. H6 Recognition rather than recall / Severity 4 / Found by B, C

a. On the screen of "You are in a group conversation" page, there wasn't any information about who was in this group. Suggestion: create a 'users in this group' viewing option.

37. H10 Help and Documentation / Severity 3 / Found by B

a. On the screen of "You are in a group conversation" page, I was confused about what the leave conversation entails. Additionally, does the leave conversation means you leave the group conversation. Suggestion: explanation of what leave group conversation means.

38. H10 Help and Documentation / Severity 3 / Found by B

a. On the screen of Roble Arts Gym, Current Group Conversations, there is an option of JOIN CONVERSATION but I'm confused if this is a group conversation that I'm already in, or if this is one that I'm joining? Additionally, I'm confused as to what the point of clicking join the conversation for this page is supposed to do? If I wanted to just join the conversation, could I just search and go in person without clicking that I joined the conversation? Suggestion: explain more about what does joining the conversation entails and why you might want to join rather than just show up without joining.

39. H3. User control and freedom/ Severity 2 / Found by C

On the fourth page of entering new user information, the required questions seem very limited, and "major/minor" blanks limit the target audience to college students, which is or is not intended.

Fix: Use more high-level prompt words like "interest", "fun facts" so as to give users more freedom

40. H10. Help and documentation/ Severity 2 / Found by C

It is not clear why email address is needed to set up a new profile, and similarly, other more private and niche questions should be set to optional accordingly, giving user enough information on why providing such information is necessary to use the app Fix: Add short one liners in between the blanks to give example scenarios where the info might be necessary

41. H8. Aesthetic and minimalist design/ Severity 1 / Found by C

On the main homepage, because the two main buttons mean to emphasize the main functionalities, the other smaller buttons on the bottom should be de-emphasized. Fix: Adjust the size of icons underneath

42. H4. Consistency and standards/ Severity 1 / Found by C

On page ten, it's unclear where to click while the app is finding someone to chat with. It is not intuitive to the users to click on the plain text. Fix: Add a clearly clickable button

43. H1. Visibility of system status/ Severity 3 / Found by C

CS 147 Autumn 2019: Assignment 9 (Heuristic Evaluation Group Template) Instructor: James Landay

While finding people to talk to, the page provides little information on the progress of such search, leaving the user in a slightly pointless wait. Fix: Add progress bar or animation to keep user informed

44. H7. Flexibility and efficiency of use/ Severity 3 / Found by C

It is not clear and confusing the use of "Cancel" on multiple pages lead to the same page as the Android back button. Considering the implicit design features of Android, it is still problematic to have two buttons doing the exact same thing on the same page.

Fix: Make sure every "Cancel" button has a clear purpose and differentiates from Android back button

45. H3. User control and freedom/ Severity 2 / Found by C

User should have the freedom to skip setting a group topic, as inputting a group topic message seems mandatory.

Fix: Add optional and lower-effort ways to enter group conversations.

46. H2. Match between system and the real world/ Severity 2/ Found by C

On page 21, "Comma separated" in the prompt is not user-friendly language. Fix: Kindly ask for a certain format of text input, or use backend algorithm to parse user input so it feels more natural for the users

47. H1. Visibility of system status/ Severity 3/ Found by C

It is unclear on in group conversations who the other participants are and how they are matched to the user.

Fix: Add intermediate pages to keep users informed of the formation process of group conversations

48. H2. Match between system and the real world/ Severity 1/Found by C

On a location with no group conversation going on, such as on page 24, the "None." message seems cold and impersonal.

Fix: Substitute with a sofer message such as "No conversation is going on here right now. Check back later?"

49. H3. User control and freedom/ Severity 4/ Found by C

On page 41, where there is a group conversation going on in roble gym, the user discovering this ConverStation has full control over joining the conversation, but it is unclear if the current participants in the conversation has, or how much of control they have over having this user join.

Fix: Change join the conversation to "Ask to join the conversation" and design separate frames for both sides.

50. H2. Match between system and the real world/ Severity 2/Found by C

On page 7, the planning page, "regular openings" is a stiff way of wording "when are you free". Fix: Change to more user-friendly wording.

51. H4. Consistency and standards/ Severity 3 / Found by C

Starting 1-on-1 conversation is a person-based process: match first, choose location next Starting group conversation is a location-based process: choose location first, match next

It's unclear why the two main functionalities of the app operate on opposite logics, and this discrepancy adds to confusion.

Fix: Maybe unify the logic of flow and think about all the potential, even awkward situations users might find themselves in to take of corner cases: eg. entering a group conversation a user wants to retreat back to 1-on-1 conversation, or a certain user wants to avoid a known user but still wants to use the app for conversations with other people.

3. Summary of Violations

| Category | # Viol. | # Viol. | # Viol. | # Viol. | # Viol. | # Viol. |
|---|------------|------------|---------|---------|------------|---------|
| | (sev 0) | (sev 1) | (sev 2) | (sev 3) | (sev 4) | (total) |
| H1: Visibility of Status | 0 | 1 | 0 | 2 | 1 | 4 |
| H2: Match Sys & World | 0 | 2 | 3 | 0 | 0 | 5 |
| H3: User Control | 0 | 0 | 3 | 0 | 4 | 7 |
| H4: Consistency | 0 | 2 | 0 | 3 | 0 | 5 |
| H5: Error Prevention | 0 | 0 | 1 | 1 | 1 | 3 |
| H6: Recognition not Recall | 0 | 0 | 0 | 2 | 1 | 3 |
| H7: Efficiency of Use | 0 | 0 | 0 | 1 | 0 | 1 |
| H8: Minimalist Design | 0 | 8 | 1 | 1 | 0 | 10 |
| H9: Help Users with Errors | 0 | 0 | 0 | 0 | 0 | 0 |
| H10: Documentation | 0 | 0 | 6 | 4 | 3 | 13 |
| Total Violations by Severity | 0 | 13 | 14 | 14 | 10 | 51 |
| Note: check your answer for the green box by making sure the sum of the last column is equal to the sum of the last row (not including the green box) | | | | | | |

4. Evaluation Statistics

| Severity / | Evaluator | Evaluator B | Evaluator C | Evaluator D | Evaluator E |
|--------------------------------|-----------|-------------|-------------|-------------|-------------|
| Evaluator | Α | | | | |
| sev. 0 | 0 | 0 | 0 | | |
| sev. 1 | 4 | 7 | 5 | | |
| sev. 2 | 1 | 7 | 8 | | |
| sev. 3 | 3 | 9 | 4 | | |
| sev. 4 | 4 | 6 | 3 | | |
| total (sev. 3 & 4) | 7 | 15 | 5 | | |
| total (all severity levels) | 12 | 29 | 20 | | |

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

5. Summary Recommendations

• The prompt of major, pronouns and interest pinpoints a very specific slice of demographics, and that might or might not be intentional. Maybe put a little more

thought into the impression of such wordings and the information the app asks from the user should be well designed and thought of

- On a couple pages, there are no obviously clickable buttons to help users move on to the next page. Maybe add clear visual clues and run through the flow after not looking at for a while, and see if it is intuitive to find out where to click
- The **typography** is not consistent. Some buttons have all-cap text which is confusing and they should only be used when absolutely necessary for emphasis
- The app in general should track for the user his or her use of the app. For example, there should be **an option for the user to browse through and reflect** on all the past conversations had through this app
- Another important issue to tackle is to make sure users don't do things that they're not supposed to, like making a group conversation where one already exists, or having to click through a number of locations that are ultimately be out of a user's distance range/radius
- Other small things include having some indication of when the user has arrived at their meeting point, a way to know that they have started a conversation, and including a way to remove blocks from their schedule (particularly because college students' schedules are ever-changing!)
- Overall, we realize that your app has a problem with the go back arrow/canceling feature. As such, implementing the go back and cancel feature is very important so the user doesn't have to restart everytime.
- Lastly, there were many instances in the app in which we **felt a lack of clarity and understanding when using it as a first time user**. As first timer users, we think it will still be **beneficial for there to be an explanation of what each button in your app does** at least for the first time users.

Severity Ratings

- 0 don't agree that this is a usability problem
- 1 cosmetic problem
- 2 minor usability problem
- 3 major usability problem; important to fix
- 4 usability catastrophe; imperative to fix

CS 147 Autumn 2019: Assignment 9 (Heuristic Evaluation Group Template) Instructor: James Landay

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