Instructor: James Landay

Heuristic Evaluation of local.ly

1. Problem/Prototype

Local.ly's members found that it was difficult for people to reliably find local businesses that resonate with their personal values, so they created Local.ly to help solve this problem. We evaluated Local.ly's medium-fi prototype, an app that allows users to search for local businesses that fit their own beliefs more easily and share them with their friends.

2. Violations Found

1. H1. Visibility of System Status / Severity 0 / Found by: B

- a. The prototype does not have a status bar at the top of the prototype indicating time, battery, reception, etc. Although a less important critique, this violates H1 because the user's status bar, which often displays time, battery, reception, etc., gives important and necessary information to the user to keep them informed of their phone usage.
- b. Fix: Add status bar at the top of the screen.

2. H1. Visibility of system status / Severity 2 / Found by: A, B, D

- a. Task 1
- b. When searching for a shop, there's no indication of what you're searching for; rather, there's just a text box at the very top of the screen saying "search local.ly"
- c. Fix: Add a header with the search bar under it

3. H1. Visibility of system status / Severity 3 / Found by: A

- a. Task 3
- b. There's no clear way to tell whether or not a card is "favorited," and no clear way to "favorite" a card. The only reason why I figured this should be something to clarify was because there appears to be a "favorites" button on the "cards" screen
- c. Fix: Add a clear "favorite" button to cards

4. H1. Visibility of system status / Severity 3 / Found by: D

- a. Task 2
- b. When the bronze reward reaches 100%, it isn't clear what users need to do in order to take advantage of this, and what the next steps are to proceed.
- c. Fix: Include a "Claim here" button.

5. H1. Visibility of system status / Severity 4 / Found by: D

- a. Task 2
- b. When you press the "100 % Bronze" button, and your prize does appear, once you click the green check on the pop up, your reward disappears and there is nowhere to retrieve it.
- c. Fix: Include a separate "Rewards" section, where users can see all the previous rewards they've earned and how to claim them.

6. H2. Match between system and the real world / Severity 2 / Found by: A, B, D

a. Task 1

Instructor: James Landay

- b. Honestly not sure if this is the right category for this violation, but when the shop's hours are listed in the card, what happens if the shop has different hours on different days? This seems like a "real world" problem, so that's why I decided to categorize it under H2. In addition, there is no labelling for the times, so you are relying on users inferring that these are the opening hours
- c. Fix: Either not show hours at all, given the small area of the card, or find a condensed way to display hours given different days of the week (i.e. "M-F: 8-5p / Sat: 9-4p / Sun: Closed" or "M,W,F: xyz / T,Th: abc," etc.). Also, label the section with 'opening hours' to make it clear that is what is being referred to.

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

- a. Task 3.5
- b. I was able to figure out the difference between the "friends" section and the "chat" section, but on first click, it may not be super obvious what the "friends" tab provides. Does it allow the user to just add friends? Can you not just chat with your friends?
- c. Fix: Maybe use more direct terminology like "Recommend" or "Share" or something similar

8. H2. Match between system and real world / Severity 2 / Found by: D

- a. General
- b. The app makes mentions of cards on several occasions in the UI. However I as a user, I'm not 100% sure what they are referring to, especially in Task 1, my first time going through the UI.
- c. Fix: Improve labelling of cards on screen don't assume users know what you're referring to. Alternatively, change wording to 'business card', 'stores' or other more commonly used term.

9. H2. Match between system and the real world / Severity 2 / Found by: D

- a. Task 1
- b. On the card, the system uses the word navigate, which isn't commonly used when users are in an application and trying to find the physical location of a place.
- c. Fix: Use the word 'Directions' instead of navigate this is what applications such as Google Maps and Apple Maps use, therefore it will be more familiar to users.

10. H2. Match between system and the real world / Severity 3 / Found by: D

- a. Task 2
- b. It's unclear what the "Scan receipts" relates to, and what the purpose of scanning my receipt is until the user clicks on that button.
- c. Fix: Use a more descriptive label, e.g. "Scan receipt to earn rewards".

11. H2. Match between system and the real world / Severity 3 / Found by: A

- a. Task 2
- b. From the level up notification, it seems as though all businesses will have the same perks on level up.
- c. Fix: Is there any way to customize this or make it clear that those perks are specifically set by that business?

12. H2. Match between system & real world / Severity 3 / Found by: C

a. Task 3.5

Instructor: James Landay

- b. Problem Description: Currently, there is no way to tell whether your message is read after sending it to the other users or even how they are interacting with it.
- c. Suggested Fix: Add read receipts to enable users to be able to know how their friends are interacting with their message.

13. H2. Match between system & real world / Severity 3 / Found by: B, C

- a. Problem Description: Currently, there is no way to tell when the messages were sent, or any distinction based on the day and time messages were sent although this is information that might be important to the user.
- b. Suggested Fix: Adding the time the message was sent to the side of the message.

14. H2. Match between system and the real world / Severity 3 / Found by: B

- a. The store cards do not have the location listed on them. This violates H2 real-world conventions, which suggests that when searching for a store, one of the most important data factors to display is the address of the store.
- b. Fix: Add an address section so the user can view this directly from the store card.

15. H3. User control and freedom / Severity 3 / Found by: A

- a. Task 3.5
- b. How do you start a new chat? There's no clear button to do so, and I'm not sure what happens if you search in your chats and there's no results for a specific person (is that how one would start a new chat?)
- c. Fix: Add a button to allow the user to start a new chat

16. H3. User Control and Freedom / Severity 3 / Found by: C

- a. Task 3.5
- b. Problem Description: Sometimes you want to share a restaurant that you are planning on visiting, not just the ones you've visited already. However, Local.ly limits you to share only restaurants you have already visited with your friends.
- c. Suggested Fix: Be able to share with friends even restaurants you haven't visited yet in order to make planning easier.

17. H3. User Control and Freedom / Severity 3 / Found by: C

- a. Task 3.5
- b. Problem Description: I couldn't go back to select more cards once I'd selected my first card while sharing them.
- c. Suggested Fix: Make the user be able to go back and select more cards to share while they are sharing cards.

18. H3. User control and freedom / Severity 4 / Found by: A, C

- a. Task 1
- b. It doesn't seem like there's any easy way to undo saving a card. When you search for a store and save its card, it's an easy button press, but the reverse action doesn't seem available.
- c. Fix: Make clicking "saved card" undo it being saved

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

- a. Task 3
- b. When notifications appear on the bottom bar, they are represented with red dots, but in the "chat" tab, the "new" notification is displayed in blue.

Instructor: James Landay

c. Fix: Either make both notifications red or blue

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

- a. Tasks 1, 3.5
- b. When searching for places individually, there is a Navigate button, and when you want to share a place with friends, the icons on the buttons look very similar.
- c. Fix: Find more distinct icons to represent these two actions

21. H4. Consistency and Standards / Severity 1 / Found by: C

- a. Task 1
- b. Problem Description: The filter button appears highlighted after you clear filters even though filters haven't been applied so this might be confusing for the user
- c. Suggested Fix: Only add the grey hint to the filter button when the user has applied filters.

22. H4. Consistency and Standards / Severity 1 / Found by: C

- a. Task 3.5
- b. Problem Description: After messaging a friend, the share button changes to "share more." It was unclear whether it stays that way the whole time or changes back after a certain amount of time.
- c. Suggested Fix: It might be better to just consistently use "share a place", or have a "recently shared with" section.

23. H4. Consistency and standards / Severity 1 / Found by: B

- a. In the filters section, there seems to be an inconsistency in the space after the "values" line and space after the "distance" line. It makes the "values" section seem a little squished and the "distance" section more sparse. This violates H4 because the spaces seem inconsistent.
- b. Fix: Adjust the spacing between the labels so that they are the same for both categories.
- c. Additionally: Why is the distance between 0 and 10 miles? This seems to be a weird upper bound distance when searching for stores throughout a city.

24. H4. Help and Documentation / Severity 2 / Found by: C

- a. Task 3.5
- b. Problem Description: The "search" button at the top of the "chats" screen makes it unclear whether the user is searching through the people or for specific words in the messages.
- c. Suggested Fix: Changing the title of the button to either say "Search people" or "Search for word" so that it's clear what information the user should enter.

25. H4. Consistency and Standards / Severity 2 / Found by: B

- a. In the profile tab there is a "search local.ly" at the top of the page. This violates standards because profile tabs typically only contain information pertaining to the user and their profile/options. The main search function of the prototype should not be on this page.
- b. Fix: Simply remove the search bar at the top of the profile tab. It does not need to be replaced with anything else. Another option would be to change the search bar to search for things only within settings (similar to Apple Settings search bar).

Instructor: James Landay

26. H4. Consistency and Standards / Severity 2 / Found by: C

- a. Task 3
- b. Problem Description: The user can't save cards to their profile until after they have clicked on filters. The prototype doesn't proceed until some filters are selected.
- c. Suggested Fix: Make users be able to proceed from the search page even without filters selected.

27. H4. Consistency and standards / Severity 2 / Found by: A, B

- a. Task 1
- b. The icon for "save(d) card" doesn't look like anything recognizably card-related, nor does that icon appear anywhere else in the app (the icon for the "cards" component of the bottom navigation bar is just, well, a card). Is it supposed to represent a card being put in a pocket/wallet of some sort?
- c. Fix: Make the icon more clearly related to the "card" icon in the bottom navbar

28. H4. Consistency and standards / Severity 3 / Found by: A, B, C

- a. Task 3
- b. There's two different "versions" of the cards that look very similar: the one where you can save the card, see its rating out of five stars, and see how many friends trust it; and the one where you can scan receipts, level up your relationship with the business, and call. You can navigate on both, but it seems especially odd to me that you can't see the rating or rate a business easily on the second version of a card.
- c. Fix: Add an "expanded" view of cards, perhaps with additional information, and make the two versions of each card look different (perhaps after you've saved a place, it immediately changes to the second version? But then add undo/redo functionality for saving)

29. H4. Consistency and standards / Severity 3 / Found by: B

- a. There are no indications on any screens that they are scrollable. For example, when searching for stores, three cards are listed, but it is unclear if there would be more listed. This is also true for friends, chats, and stores cards. This violates H4 because apps with searches such as this typically have a way to indicate to the user that there are more options available if they scroll or click.
- b. Fix: Add a visible scroll bar to the right or have a counter system that lets the user know how many hits were found in the search. Ex, "12 of 100 matches".

30. H5. Error Prevention / Severity 2 / Found by: C

- a. General
- b. Problem Description: While creating the password, the user cannot see it. As such the user might be prone to making errors during the creation of the password and might not recall it correctly.
- c. Suggested Fix: Give the user the ability to make the password visible/hide it easily.

31. H5. Error Prevention / Severity 2 / Found by: C

- a. Task 3
- b. Problem Description: There is no way to resolve the post without having to delete it after you've found the restaurant. As a result, people might still keep contacting you about a recommendation that you have already resolved.

Instructor: James Landay

c. Suggested Fix: Having the option to see whether your request has been resolved or not.

32. H5. Error Prevention / Severity 2 / Found by: D

- a. Task 1
- b. The user doesn't know how many values they can select as filters. Is there an upper limit that they will encounter down the line?
- c. Fix: Make it clear how many filters the user can select

33. H5. Error Prevention / Severity 3 / Found by: B, C

- a. General
- b. Problem Description: While filling in the password on the Sign-Up screen, the user does not confirm the password by entering it again in a "confirm password" component. As such if the user made an error while creating the password they might lose access to their account temporarily.
- c. Suggested Fix: Add an extra password component for the user to confirm that the password they entered is correct and that they remember it.

34. H5. Error prevention / Severity 3 / Found by: A, C

- a. Task 1
- b. There's the tag "low-fat" on the bakery, which seems very food-focused. Is there any way to prevent the user from choosing tags that conflict with multiple different businesses? Is there a way to filter by business type, not just by business values?
- c. Fix: Make more distinct sections between tags that would only correspond to a specific type of business, and make different types of businesses labelled more clearly

35. H5. Error Prevention / Severity 3 / Found by: C

- a. General
- b. Problem Description: Users can't customize their profile pictures and also don't have unique usernames. Therefore, it might be hard to search for a friend with a common name since there is no unique item to identify them with.
- c. Suggested Fix: Making the name unique, giving users a unique username option, or having the option of finding friends through their email address.

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

- a. Task 1
- b. Problem Description: The user can't see the filters they had selected when they return to the main search page. This might be a source of confusion, especially if they are using multiple filters.
- c. Suggested Fix: Show selected filters at the top when you return to the main page displaying the cards.

d.

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

- a. Task 1
- b. Problem Description: If you save multiple cards, the app still lets you go onto the map. This might create confusion, especially when deciding between two different places.
- c. Suggested Fix: Limiting the map to only open with one card selected or coming up with a criterion by which to search when multiple cards are selected.

Instructor: James Landay

38. H6. Recognition rather than recall / Severity 2 / Found by: A, B, C

- a. Task 1
- b. The button for "save card" and "saved card" look practically identical, with the only difference being the extra "d" at the end of the word "saved." Both the icons and the button color do not change depending on whether or not the user has saved the card
- c. Fix: Either make the button a different (darker?) color when the card has been saved already, or make the icon different when a card is saved (or both!)

39. H6. Recognition rather than recall / Severity 2 / Found by: B

- a. In chats, the "[NEW CARD]" notification is somewhat hard to notice. Because it is the same text font and strength as the rest of the message, it can be easy to mistake the "[NEW CARD]" as part of a message. This violates H6 because it requires more effort for the user to recognize they have a new card from a friend.
- b. Fix: Have a "new card" section or notification that lets the user know when they receive a new store card as opposed to just a simple chat message.

40. H6. Recognition rather than recall / Severity 2 / Found by: D

- a. Task 1
- b. The filter's page has a distance section. However, it isn't clear what the distance is referring to uses would have to infer that this is distance from their location to the store.
- c. Fix: Change the wording to 'Distance to store'

41. H6. Recognition rather than recall / Severity 2 / Found by: B, D

- a. Task 1
- b. When using the word 'values' on the filter page, the user has to remember that this is in relation to the stores they are looking at. However, the relationship between the word values and the stores is not clear on the filters page.
- c. Fix: Change the wording on the 'filters' page from 'values' to 'store values'.

42. H6. Recognition rather than recall / Severity 2 / Found by: D

- a. Task 2
- b. When navigating to the 'cards' section, it is unclear what cards are being displayed. I assume these are the cards that the user has saved, but that would require the user to remember what cards they saved, thus violating H6.
- c. Fix: Add labelling to indicate what cards are being displayed in this category

43. H7. Flexibility and efficiency of use / Severity 2 / Found by: A

- a. Task 2
- b. What if a user doesn't realize that the "level up" needs to be claimed? What if a user has multiple receipts to upload, and one of them in the middle of that batch causes a level up? Will future "experience" be lost?
- c. Fix: If an upload is success and causes a user to level up, perhaps display both of those on one popup

44. H7. Flexibility and efficiency of use / Severity 2 / Found by: A

a. Task 2

Instructor: James Landay

- b. If a power user had a bunch of receipts that they wanted to upload at once, would they have to do it one at a time, getting booted back to the "cards" screen between each receipt?
- c. Fix: Create a way to upload multiple receipts for a single place without going back to that screen

45. H7. Flexibility and efficiency of use / Severity 2 / Found by: A

- a. Task 3.5
- b. What if multiple friends are asking for similar recommendations? From what it looks like, one would have to share a place with each individual one at a time.
- c. Fix: Allow multiple friends to be selected and share a card with all of them at once

46. H7. Flexibility and efficiency of use / Severity 2 / Found by: A

- a. Task 3
- b. When searching for cards to add, there's a robust list of filters, but when you want to look through cards you've already saved, there's only a list of categories to sort your cards by (and maybe a "favorites" filter? Not fully sure about that feature)
- c. Fix: Add a filter menu to the user's list of already-saved cards to allow for more robust searching

47. H7. Flexibility and efficiency of use / Severity 2 / Found by: A

- a. Task 1
- b. When searching for cards to add, there's a robust list of filters, but no way to sort the cards that result after the filters.
- c. Fix: Add sorting options, either within the filter menu or elsewhere. I see that there's already a "distance" sort

48. H7. Flexibility and efficiency of use / Severity 2 / Found by: A

- a. Task 3.5
- b. When sending a card to a friend, there's a tiny dialogue box that pops up to add an additional message. I don't see the reason why this additional screen exists when there's already a chat screen where cards are embedded into the conversation.
- c. Fix: Send the user to the chat screen, perhaps with an indicator that shows that a card or cards are embedded in the message, so the user can type in the more familiar chat screen, rather than a separate dialogue

49. H7. Flexibility and efficiency of use / Severity 2 / Found by: C

- a. Task 3.5
- b. Problem Description: Users can only share one restaurant with one friend at a time. This might make it cumbersome to find restaurants while deciding among large groups of people.
- c. Suggested Fix: Adding the option to send cards to multiple numbers of people or to a selected list of people.

50. H7. Flexibility and efficiency of use / Severity 2 / Found by: B

a. The home screen is very bare. Home screens typically display the most relevant or useful information for the user so it is the first thing they see when opening the app. This violates "efficiency of use" in H7 because it requires users to take extra steps to

Instructor: James Landay

- see the information that would be most relevant. This does not allow the user to tailor any frequent actions or information.
- b. Fix: In the home screen, allow for customization so the user can choose what information would be most relevant to them such that it can be displayed first in the home screen.

51. H7. Flexibility and efficiency of use / Severity 3 / Found by: B

- a. When searching in the home tab, it doesn't seem to recognize whether you already have a store saved or if you already have a rapport with this store. This violates H7 because it makes the app less efficient if the user has to cross reference the stores listed within the user's card section.
- b. Fix: Have the app recognize which apps have been visited already and indicate if they have to the user.

52. H7. Flexibility and efficiency of use / Severity 3 / Found by: A

- a. Task 3.5
- b. If you go to chat with a friend and the conversation leads in a direction where you want to share a card from that conversation, it doesn't look like there's any clear way to do so.
- c. Fix: Add an easily-accessible "share card" button (I feel like it'd fit to the right of the text entry, like in most other texting apps nowadays?)

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

- a. Task 3.5
- b. If you went to the chat menu to chat with someone you thought you added, there's no easy way to add them from that screen. Instead, one would need to go to their user profile to add them there, which seems unnecessary and less intuitive. Additionally, there's no clear way to add a friend from the "friends" tab (via a "plus" button or something similar), so that seems like it could be streamlined.
- c. Fix: Add a clear "add friends" button on the "chat" and "friends" pages, or make it such that friends can be added if you search in the friends page and no friends with that name exist yet.

54. H7. Frequency and efficiency of use / Severity 3 / Found by: D

- a. Task 1
- b. There is no way for users to see recent/frequent searches, as well as recent/frequent filters applied in the app. They also can't add their favourite filters. so they have to select them at every search.
- c. Fix: Add a recent and/or frequent section to the search box and features area. A favourite filters section, i.e. ones that are selected at the onboarding stage, linked to the user's profile, and then appear in the favourites section of filters would also improve the UX in this section.

55. H8. Aesthetic and minimalist design / Severity 1 / Found by: A

- a. Tasks 1, 2, and 3
- b. Font can be tricky to read, especially in the smaller text of the cards (tags, hours, etc.) Using a comic font was interesting to make the app look unique, but I think the other accessibility tradeoffs are not worth it.

Instructor: James Landay

c. Fix: Choose a more standard sans-serif font to make the app easier to read

56. H8. Aesthetic and minimalist design / Severity 1 / Found by: A, B

- a. Task 3.5
- b. The colors for the sender/recipient text boxes in the chat screen are quite similar, and may be challenging for a color blind person to tell the difference between.
- c. Fix: Choose more distinct (lighter/darker) colors to represent the sender/recipient in the chat window

57. H8. Aesthetic and Minimalist Design / Severity 1 / Found by: B

- a. On the store cards, there is a lot of extra white space between the store info and the buttons beneath. This violates H8 because there are several ways to make better use of this space, which could enhance the user's experience.
- b. Fix: You can remove the white space and make the cards smaller. Or you can make button sizes bigger or add additional information to these cards.

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

- a. In every tab, the header for the page is too small. It is only slightly larger than the next largest font, which makes it hard to distinguish as the main header for the screen. This violates H8 because with all the text the same size, every component is vying for attention, making it difficult to see the header.
- b. Fix: Make the size of the header larger so that it can be more easily distinguished and noticed.

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

- a. When searching, there is a lot of empty space between the search bar and the keyboard. This violates H8 because there are better ways to display information within this space. This could also violate H4 because it is common practice to give suggestions to the user in this space rather than leaving it blank.
- b. Fix: Display suggestions in the empty space between the search bar and the keyboard.

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

- a. Task 3.5 Friends page
- b. "Is searching for" is written on top of each friend, when it applies to everyone. This makes the page look busier than it needs to, and is an extra unit of information that is not necessary.
- c. Fix: Write "What are you friends looking for?" at the top, and just include people's name

61. H8. Aesthetic & Minimalist Design / Severity 1 / Found by: B, D

- a. Task 3
- b. "Scan receipt", "call", and "navigate" are listed on the cards when we are trying to share with our friends. However, those commands are not necessary for sharing, therefore they constitute additional units of information which distract from the minimalist design.
- c. Fix: Hide the "scan", "call" and "navigate" buttons from the card's display on the screens where their sole purpose is to be shared.

62. H8. Aesthetic and Minimalist Design / Severity 2 / Found by: B

Instructor: James Landay

a. The buttons on the cards are quite small on the card and can be difficult for the user to press, especially if they are using these buttons frequently. This is a violation of Fitts' Law because by making the buttons smaller, you are increasing the time it takes for the user to reach the button.

b. Fix: Make the buttons bigger to that way it is more only more visible, but easier to reach and press as well.

63. H9. Help users recognize, diagnose, and recover from errors / Severity 2 / Found by: A

- a. Task 1
- b. If a user is searching for different shops using the filters, is there any system in place to help the user recover if there are no shops set using their specific filters? This relates to the "error prevention" violation I stated above -- will the app help guide users to select tags that don't conflict?
- c. Fix: Have suggestions for specific tags to remove to get results if the user's filters are too strict. There's nothing worse than filtering to your perfect expectations and slowly trying to take off filters one at a time, whilst lowering your own standards and expectations!

64. H9. Help users recognize, diagnose, and recover from errors / Severity 3 / Found by: B

- a. There is no way to see errors occurring if there are no hits, cards, etc., to be displayed. For example, if conducting a search, there is no way to know if there are no hits found by the search. Another example, if a user tries to share a store card without having any store cards saved, then there would be an error. This violates H9 because then the ser would be coming across an error without knowing how to fix it.
- b. Fix: Add error screens/pop ups that inform the user of how to fix a problem they come across.

65. H9. Help users recognize, diagnose, & recover from errors / Severity 3 / Found by: C

- a. General
- b. Problem Description: Users have no way of resetting the password. This might make it harder for users to gain access to their accounts if they forget the password.
- c. Suggested Fix: Having a button that helps users reset their passwords or coming up with a process through which they can do that.

66. H10. Help and documentation / Severity 2 / Found by: A

- a. Task 2
- b. It can be slightly unclear what leads to gaining more experience and a better relationship with a shop, and what actions lead to what experience gains.
- c. Fix: Maybe add a guide on the cards page (or maybe shops can set their own rules) for what actions lead to what amount of "experience"

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

- a. Task 1
- b. Problem Description: The main page only has a search button. Users using the app for the first time might not know immediately how to proceed or even what to put in the search bar.
- c. Suggested Fix: Giving users suggestions on common restaurants or information on what to try searching for.

Instructor: James Landay

68. H10. Help and documentation / Severity 2 / Found by: A, B

- a. Task 2
- b. Users may not remember what constitutes a "percent" when it comes to levelling up. Do different stores also get to set different milestones for users to level up? Is it determined by dollars spent, number of visits... how is it all standardized? Do many small purchases count more than one big purchase of the same monetary value? Vice versa?
- c. Fix: Make it more clear what leads to more experience and what being "ten percent away from levelling up" means. Maybe add a screen with more details if the user clicks on the percentage bar?

69. H10. Help and documentation / Severity 3 / Found by: A, C, D

- a. Task 3
- b. What's considered "minority-owned" versus just "asian-owned" or "black-owned"? Is "minority-owned" just those tags combined? Are there other nationalities/ethnicities that are included within the term "minority"? If you can stack tags, why make a separate individual tag that represents multiple stacked tags in the first place?
- c. Fix: Clarify terminology when it comes to "minorities"

70. H10. Help and Documentation / Severity 3 / Found by: B, C

- a. Task 2
- b. Problem Description: It doesn't say whether you import the receipt you scan for points from your gallery or take the picture of the receipt with your phone. There is also a high chance the user will make some sort of error when scanning: wrong store, wrong part of receipt, scanning distance, etc.
- c. Suggested Fix: Providing documentation on how the receipt is uploaded onto the app.

71. H10. Help & Documentation / Severity 3 / Found by: D

- a. General
- b. Throughout the app, there is no FAQ section, or help button. This means that if users have a question regarding the application, they are left with nowhere to turn.
- c. Fix: Add a "?" button on each page which displays help relevant to the section, as well as directing users to a general help selection.

Instructor: James Landay

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 | 1 | 2 | 1 | 5 |
| H2: Match Sys & World | 0 | 0 | 4 | 5 | 0 | 9 |
| H3: User Control | 0 | 0 | 0 | 3 | 1 | 4 |
| H4: Consistency | 0 | 5 | 4 | 2 | 0 | 11 |
| H5: Error Prevention | 0 | 0 | 3 | 3 | 0 | 6 |
| H6: Recognition not Recall | 0 | 2 | 5 | 0 | 0 | 7 |
| H7: Efficiency of Use | 0 | 0 | 8 | 4 | 0 | 12 |
| H8: Minimalist Design | 0 | 7 | 1 | 0 | 0 | 8 |
| H9: Help Users with Errors | 0 | 0 | 1 | 2 | 0 | 3 |
| H10: Documentation | 0 | 0 | 3 | 3 | 0 | 6 |
| Total Violations by Severity | 1 | 14 | 30 | 24 | 2 | 71 |

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 A | Evaluator B | Evaluator C | Evaluator D |
|--------------------------------|-------------|-------------|-------------|-------------|
| Evaluator | | | | |
| sev. 0 | 0% | 100% | 0% | 0% |
| sev. 1 | 29% | 42% | 29% | 14% |
| sev. 2 | 47% | 36% | 27% | 27% |
| sev. 3 | 33% | 37% | 46% | 21% |
| sev. 4 | 50% | 50% | 0% | 50% |
| total (sev. 3 & 4) | 35% | 38% | 46% | 23% |
| total (all severity levels) | 38% | 39% | 27% | 24% |

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

Instructor: James Landay

5. Summary Recommendations

Overall, fantastic job with the medium-fidelity prototype! I really love the colors you chose, it makes the app seem cozy and familiar. One thing that I would like to comment on in more detail is your font choice. I'm not sure if it gives off the impression that you want to achieve, but using a font that is so close to comic sans almost made your prototype seem "meme-y" to me at first. Of course, after using it for a bit and looking through it more thoroughly, I can tell that you definitely took the assignment seriously, but I just wanted to make sure you were aware of the connotation a "comic" font has.

Another thing was that Task 1 and 3 seemed pretty similar, so it was hard to categorize certain violations if they seemed like they could fit in both tasks 1 and 3. I tried my best to differentiate between Task 3 and 3.5 as well, but I thought it might be a bit more straightforward if 1 and 3 were combined and 3.5 was the actual task 3. Something that doesn't really fit into any of the heuristics is the light-mode single tone theme of the app. It looks clean and minimalistic, but if a user opens the app at night, it might be difficult for their eyes to adjust. Since a lot of the colors are similarly toned, it can be difficult to tell at a glance what the different elements on a screen are; in particular, the cards on the friends screen have a very similar color to the background.

The app uses a lot of terminology such as "cards", "search" etc. which isn't explained in the context of the application. This means that the end user is left unsure of what the action actually does in the context of the application, or once they have figured it out, the user successfully navigating the application depends on what they have managed to figure out from previous screens. Using jargon that makes sense to you and your team, but not the end users, is a very easy mistake to make, especially when you have been working on a product for a long time.

Overall, your app seems fairly well designed for a moderate user, but for power users, a lot of the tools to make repetitive tasks more streamlined didn't seem present. There were a few tweaks that I thought could be made from the standpoint of a moderate user as well, mainly more ways to share cards in larger volume. Again, I just wanted to reiterate how much I enjoyed looking through your prototype and learning more about the app. Great job on the medium-fidelity prototype, and I look forward to seeing more about local.ly during studio!

Instructor: James Landay

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

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