Instructor: James Landay

Heuristic Evaluation of [amble]

1. Problem/Prototype Description

The amble app wants to help people who struggle with choice paralysis by providing users with direction to achieve goals they are aware of and present them with new subjects to explore.

2. Violations Found

1. H1. Visibility of system status / Severity 2 / Found by C

On the 'paint' screen, there is not a status percent(although there is one on the home page). So the user is unable to check in with what progress they have made in terms of live status on the paint page.

Fix: copy over percent completion from home page!

2. H1. Visibility of system status / Severity 1 / Found by C, D

When the user clicks between 'paint' and 'cook', there is no directional indication of the change that has occurred aside from the circles switching in size, which is slightly abrupt and confusing. This could just be due to med-fi limitations!

Fix: in the high-fi, maybe include an animation for the circles changing over/rotating like a ferris wheel type of motion. Sounds like you may be addressing already with carousel design.

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

When you click "Lets go" on a suggested topic you're take to same type of screen as if you clicked "Lets Go" on a topic you already had on your homescreen. Therefore, its not clear if I added the new subject.

Fix: Have a more clear add flow, perhaps a "save/add/follow subject" button.

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

There is no feedback given for creating a new note in inspiration. This may be due to limitations of Figma and your med-fi prototype, given that you hard-coded the note taking functionality, but if not be sure to provide the user with feedback in the form of having the completed note show up on the screen and be added to list of notes.

Fix: Provide user with feedback after creating a new note.

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

Instructor: James Landay

Terminology on the discover page is a bit indistinguishable between 'for you' and 'community'. Difficult to know what is the difference between 'explore' and 'suggested' for example. Other than that, great on this section!

Fix: Clear, simple categories that don't have overlap: remove 'global' and 'explore' categories perhaps?

6. H2 Match between system and real world/ Severity 4/ Found by B

In the interface for "Suggested", the "Based on your history..." graph is difficult to understand: it's unclear what it is showing and what the axes mean. It is also unclear why the users would want to see this in the first place.

Fix: Label the graph with a title and the axess. Reconsider if the graph is necessary.

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

After the user clicks "let's go!" in the "Because you liked paint.." section in "Suggested", there is no back button in case the user clicked by mistake or wants to view another suggestion.

Fix: Add a back button to the "plein air paint" view after the user clicks on a suggested option.

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

No obvious way to remove a tutorial/activity/note from a profile. So hard to know whether or not things can be deleted. I.e. if I accidentally clicked Plein Air Paint and decided I didn't actually want to do it, how could I remove it from my profile?

Fix: Add a simple 'cancel', or 'quit' button on the initial page of a new task. I think this is slightly different than a back button because it allows removal from profile.

9. H3 User control and Freedom / Severity 3/ Found by B, D

After a user clicks "Tutorials" under "Paint" and then clicks "Back", the options under "Paint" can no longer be interacted with.

Fix: Allow users to interact normally after using "Back"

Instructor: James Landay

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

Tutorials page is much skinnier and longer than the other pages, so it is a bit distracting when you navigate to that page/from that page because of the abrupt change in screen dimensions

Fix: Just crop the one page, should be an easy fix!

11. H4. Consistency and standards / Severity 2 / Found by C, D

'Start here' button is present on the paint page, but is missing on the Plein air paint page. I like it's inclusion in the first instance because it indicates that supplies are a good place to start.

Fix: Add 'Start here' to plein air paint/other tutorials page!

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

Some words/labels are capitalized and some are not throughout the prototype. I personally like the lowercase look because it is similar to your logo.

Fix: Pick one style, whether upper or lowercase, and stick to it throughout!

13. H4 Consistency and standards / Severity 1 / Found by A

"Lets Go" button is a specific shade of red in the main screen but it has no color (just white background) in the suggested screen. Therefore, it doesn't stand out as a button and isn't immediately clear if it has the same function as its colored counterpart.

Fix: Color the background so it looks like a button.

14. H4 Consistency and standards/ Severity 1/ Found by B

The first time a user navigates to the "your amble" home screen, there is a "New Byte!" message/button that can't be interacted with, and the message/button disappears if you navigate away and then come back to the screen.

Fix: Remove "New Byte!".

15. H4 Consistency and standards/ Severity 2/ Found by B

The interface for "Inspiration" has two sections, ostensibly one for text and the other for images. However, in the "new note" interface, there is an option on the keyboard for adding images, causing confusion as to where images should be placed.

Fix: Either use one note section that supports both text and images, or remove the option to add images from the text section.

16. H6 Recognition rather than recall/ Severity 4/ Found by B

In the interface for viewing "Tutorials", the screen is quite cluttered, and it is unclear what each of the yellow sections are supposed to represent. Furthermore, it's unclear why there is "written" in one of the columns but not the other.

Instructor: James Landay

Fix: Consider splitting the "Tutorials" interface to multiple screens so it is easier for users to understand.

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

Making the notes/inspiration tab more instantly accessible to an expert user would be helpful. Expert users likely want to store and process ideas or creative explorations frequently and easily, and as of now they have to click on the drop down, then click 'inspiration' before getting to notes and images.

Fix: include a little icon to skip straight to the notes functionality somewhere on the landing page so an expert user can quickly make a note upon entering the app.

18. H7 Flexibility and efficiency of use/ Severity 1/ Found by B, A, D

The interface for viewing "your amble" where you have to horizontally scroll through is interesting but ultimately inefficient compared to a list view where you can see multiple tasks at once.

Fix: Provide a list as an option of viewing "your amble"

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

The suggested page is a little bit busy. The font in the description of 'plein air paint' is small and hard to read; each part of the page could also be made a bit bigger and could introduce a downward scrolling feature to make more space. All the smaller font text is a bit too small.

Fix: Only have a button for the task and have the description show up in a pop up when a user clicks. Increase the size of icons and font just a bit!

20. H8. Aesthetic and minimalist design / Severity 2 / Found by B, C, A, D

The 'let's go' button seems redundant at the moment, because the user can access the same page by clicking the big task icons. That being said it does not have a cluttering effect or take up too much space, just is unnecessary technically speaking.

Fix: Pick whether the user clicks the icon or clicks 'let's go' and stick to it. If you pick 'let's go', maybe enlarge the button a little bit. I like that as a task starting phrase a lot!

21. H8: Aesthetic and minimalist design / Severity 1 / Found by D

Instructor: James Landay

The banner that remains at the top of the screen specifying which activity the user is exploring is helpful, but a bit overboard in providing information from other dialogues. The name and icon take up a lot of valuable screen real estate at the top no matter where the user is in the activity navigation. At the point a user is exploring supplies and tutorials, it should be clear to the user what activity they are in and it does not need to be so prominent at the top.

Fix: Remove the top banner when the user is exploring supplies and tutorials within the activity.

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

The interface for "your amble" has a "x% Completed" label. It is unclear what this means, how it's calculated, and what the users can do with this information.

Fix: Explain the significance of the percentage completed to the user, or remove it.

23. H10. Help and documentation / Severity 3 / Found by C, A, B

As of now, the only help included in the prototype is the 'Start here' indicator in the paint task which I really like! However, there is no 'help' tab or 'info' button on any pages to indicate how a user should go about navigating a task, adding a task, or exploring a new area.

Fix: include a 'help' tab in the drop down menu with FAQs or a short tutorial for new users!

24. H10 Help and documentation / Severity 3/ Found by A, B

The purpose of "inspiration" isn't immediately obvious as a note taking section. Once you click on it it's clear that it's for notes but there's no guidance on how notetaking should be used in conjunction with the rest of the app. How should I use this section?

Fix: A quick snippet suggesting what types of notes you should be taking.

25. H10 Help and documentation / Severity 3 / Found by A

The app offers new topics to explore but doesn't explain them. I know what painting is but had never heard of "plein air paint" so I had no idea how it was different from the painting subject I already had.

Fix: This might already be resolved in the tutorial section but it would also be useful to have a quick description of a topic so I can decide if I want to learn more without having to click into the suggested subject.

26. H11. Accessible / Severity 3 / Found by C

Instructor: James Landay

No obvious alternative presentation of options/usability yet (but I like how there is a button to dictate text-to-speech in the notes!). There is a 'your amble' tab where I would imagine accessibility settings could go, but as of yet it is not interactive in the prototype.

Fix: Include options in the settings to dictate buttons/screens, and an option to increase text size or change visibility settings (lots of this may in fact be covered by the users phone settings)

27. H11 Accessible/ Severity 3/ Found by B, D

The interface for viewing "your amble" where you have to horizontally scroll through is not friendly to those who are using a screen reader, as only the current "amble" is labeled with text.

Fix: Label the options to the left and to the fit with text as well, or provide a list view.

28. H11 Accessible/ Severity 4/ Found by B

In the interface for "Suggested", the "Top picks for you..." are not labeled with text, thus inaccessible to those using a screen reader.

Fix: Label the picks with text.

29. H11 Accessible/ Severity 1/ Found by B

In the "Supplies" interface, the "Stores near you" text is very small, making it difficult for visually impaired users to use.

Fix: Make the text larger.

30. H11: Accessible / Severity 1 / Found by D

The text on the discover page (popular, global, friends, explore) is too light and small, making it difficult to read.

Fix: Add more contrast and/or make the text larger. Optionally, add icons to make the buttons more clear and be more consistent with the icons in the rest of the app.

31. H12. Fairness and inclusion / Severity 3 / Found by C

This ties into H11, but those who are less physically able may find it hard to perform tasks simply using the digital interface and tools provided by amble as represented in this prototype

Fix: have a way to connect users with volunteer helpers, in person teachers, or have a category for accessible tasks. This is a hard one, so sorry for nitpicking!

Instructor: James Landay

3. Summary of Violations

Category	#	#	# Viol.	# Viol.	#	# Viol.
	Viol.	Viol.	(sev 2)	(sev 3)	Viol.	(total)
	(sev	(sev			(sev	
	0)	1)			4)	
H1: Visibility of Status	0	1	1	1	1	4
H2: Match Sys & World	0	0	1	0	1	2
H3: User Control	0	0	0	2	1	3
H4: Consistency & Standards	0	4	2	0	0	6
H5: Error Prevention	0	0	0	0	0	0
H6: Recognition not Recall	0	0	0	0	1	1
H7: Efficiency of Use	0	1	1	0	0	2
H8: Minimalist Design	0	2	2	0	0	4
H9: Help Users with Errors	0	0	0	0	0	0
H10: Help & Documentation	0	0	0	3	0	3
H11: Accessible	0	2	0	2	1	5
H12: Fairness & Inclusion	0	0	0	1	0	1
H13: Value Alignment	0	0	0	0	0	0
Total Violations by Severity	0	10	7	9	5	31

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)

Instructor: James Landay

4. Evaluation Statistics

Severity /	Evaluato	Evaluator	Evaluator	Evaluator	Evaluator E
Evaluator	rA	В	C	D	
Sev. 0	0	0	0	0	
Sev. 1	2/10	3/10	4/10	4/10	
Sev. 2	1/7	3/7	5/7	3/7	
Sev. 3	3/9	5/9	3/9	3/9	
Sev. 4	2/5	3/5	1/5	0/5	
Total (sevs. 3 &	5/14	8/14	4	3	
4)					
Total	8/31	14/31	13	10/31	
(all severity levels)					

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

5. Summary Recommendations

A: Overall the app was well designed and thoughtfully laid out so it didn't have many obvious violations. In general there seems to be some small but fundamental details missing in the prototype. For example, there's no way to delete subjects that appear in my home screen. Additionally, I like the carousel idea for browsing through my subjects but I'm worried that this won't scale well with users who want to add a lot of subjects, it might make browsing too difficult. Therefore, I think it would be nice to have a broader view of all the subjects (maybe in a similar style to how the Apple watch displays all the apps).

The other big concern I have is that many aspects of the app are confusing or unclear, especially on first use. For example, even after using the app for a while the "based on your history" component is still unclear. Also, what happens if I don't like what it suggests for me? Is there a way to get rid of it or explore other subjects? Along those lines, is there a way for me to explore subjects freely via a search bar or some other method? In general, It would be nice to have some sort of explanation on how someone should use the app when they're first getting started.

B: Overall, I felt that the interface was intuitive to use, and the interfaces included make sense for an app with the goal of helping users with their creative tasks. The heuristic evaluation above mainly focuses on the execution of certain details that might cause confusion. Of note, I strongly feel that a tutorial is needed not just to show users how to navigate the app, but also to illustrate to the users how they can incorporate the app into their lives. I think the app has a lot of potential to help people, but currently it's a little unclear when I should be using the discovery, how often I should mark my progress in the app etc. I also want to reiterate that the horizontal scrolling interface for the "your amble" screen is cool, but might ultimately cause more trouble due to its "non-standard" and "non-accessible" nature. New users might not understand how it works,

Instructor: James Landay

experienced users might be frustrated at how it's slow to navigate, and visually impaired users with a screen reader might fail to use it all together. I definitely suggest rethinking this interface. Finally, I wasn't sure how to fit this feedback under Heuristic evaluation, but your Discover interface mentions "Friends", even though I don't see a way of viewing friends or adding friends. I suggest removing "Friends" from the app altogether and focusing on the other aspects of the app.

D: You all did a great job with your med-fi prototype! I really like the clean, sleek design. The app is generally very intuitive and easy to navigate, which I think is a mark of solid design. With that said, I think there are a lot of small improvements that you guys can make to make your design even better. In particular, I think H1 (visibility of system status) is an important one that could benefit your design a lot by improving it. The app could do a better job of keeping the user informed about where they are in the navigation of the app, and provide more intuitive and useful controls to quickly navigate back and forth between related pages. Additionally, there are a good number of small tweaks with respect to H8 (aesthetic and minimalist design) that I think could clarify some task flows in the app and make it easier to use.

Overall, the prototype looks super nice and has great consistency with style and color scheme that make it very visually appealing. The concept for your app is really cool and I am excited to see where you guys take it with your high-fi prototype!

C:

The simple, well-curated user interface allows the user to focus on the tasks and the app's functionality rather than distracting them with lots of visuals and options. One general point of feedback I have is to keep the button options consistent from page to page, for example trying to always provide a back button and a home button. I also think your app/prototype could benefit from showcasing a profile and user customizability: it seems like a big aspect of the app is to cater recommendations and stored information to the user, but in this prototype there was no access to the 'your amble' tab so I wasn't exactly sure what direction the profile aspect would be going in. I think the biggest heuristic category to check in on would be design consistency; this is an especially scrutinous category, and your app overall was very nicely designed and constructed based on a style profile, but little things like capitalization, screen layout, and button transitions are very noticeable when going from page to page so it's important to keep them consistent. I think there will also be some room to add in accessibility functionality in later versions, which will be straightforward since navigation of your app is not a problem I saw occurring.

Outside of your heuristics, there is a bit of inconsistency in the medium task/complex task described on the slides and the task-flows you layout later on. This is probably due to tweaks you decided to make after lo-fi prototyping. When you try to click the filter option, it goes back to a different page, which is a bit disorienting. The learnability and efficiency values

Instructor: James Landay

very clearly come out in the design and structure, but the inclusivity aspect is not quite there yet (at least from what I observed). I'm really excited to see your High fidelity prototype and I think you have a great idea and a wonderful start to the app!

Severity Ratings

- 0 not a usability problem
- 1 cosmetic problem
- 2 minor usability problem
- 3 major usability problem; important to fix
- 4 usability catastrophe; imperative to fix

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

- Words, actions, and UI elements should be consistent across the entire platform
- Follow platform and industry conventions

H5: Error Prevention

- Minimize error-prone conditions
- Remove memory burdens, support undoing, and warn your users when necessary

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, keyboard shortcuts)
- Allow users to tailor frequent actions (e.g., macros)

H8: Aesthetic & Minimalist Design

• No irrelevant information. Focus on the essentials.

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

H11: Accessible

- Users can interact with the system using alternative input methods.
- Content is legible with distinguishable contrast and text size.

Instructor: James Landay

- Key information is upfront and not nested for screen readers.
- Purely visual or auditory content has text-based alternatives for users with low vision and low hearing.

H12: Fairness and Inclusion

- Users shouldn't feel that the design is not made for them.
- The design should meet all users' needs equally and prevent the reproduction of pre-existing inequities.
- It should not create additional burdens for members of disadvantaged populations.

H13: Value Alignment

- The design should encode values that users can understand and relate to.
- Conflicting collateral values should not emerge when the user interacts with the product.
- Encoded values should match users' values in a broad set of use-contexts.