Heuristic Evaluation of [Pawse and Pages]

For a more in-depth overview of A9, please refer to the A9 assignment spec.

1. Problem/Prototype Description

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> *Pawse & Pages is a portable digital booklet with two screens that helps stressed and isolated people get outside through guided walks and personal reflection.*

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2. Violations Found

1. **H1: Visibility of System Status / Severity 2 / Found by: A**
    - After tapping the mic at a checkpoint, the waveform and timer change, but the caption still says "Tap to speak." There is no clear recording or stopped label. The waveform gives some feedback, but users still have to guess whether the booklet is listening or has finished recording.
    - Fix: Show "Recording..." with a clear Stop control, then change the label to "Recording stopped."
    - Task: 1. Simple Task — Clear my head on a walk through guided reflection.
2. **H1: Visibility of System Status / Severity 2 / Found by: A**
    - Tapping the X in the walk screen returns home without saying whether the walk ended or whether progress was kept. The opening message says closing the book keeps progress. Returning home without an explanation makes this exit easy to confuse with putting the booklet away.
    - Fix: Label the X "End walk" and confirm when the walk ends, including what progress and reflections were saved.
    - Task: 1. Simple Task — Clear my head on a walk through guided reflection.
3. **H2: Match b/w System & World / Severity 2 / Found by: A, D**
    - The Customize screen offers EASY, MED, and HARD, but does not explain what those levels mean. A user cannot tell whether difficulty refers to hills, distance, or walking pace, so choosing a comfortable walk involves guessing.
    - Fix: Add a short description for each level, such as "Easy: mostly flat, relaxed pace," based on the actual route.
    - Task: 2. Moderate Task — Find a walk that fits my time and location by customizing its duration and difficulty.
4. **H3: User Control & Freedom / Severity 2 / Found by: A, C**
    - Customize has RESET and SAVE, but no Back or Cancel option. Someone who opens settings just to look, or changes their mind, has no clear way to leave while keeping the previous settings. Reset clears the choices instead.
    - Fix: Add Cancel or Back that returns home and keeps the last saved settings.

    - Task: 2. Moderate Task — Find a walk that fits my time and location by customizing its duration and difficulty.
5. **H5: Error Prevention / Severity 3 / Found by: A**
    - At the final checkpoint, tapping FINISH WALK after generating a transcript but before tapping SAVE returns straight home. There is no save warning or autosave confirmation. Users can leave a personal reflection without knowing whether it was kept. The separate SAVE button makes it risky to assume finishing also saves.
    - Fix: Save the draft automatically when finishing and confirm it, or offer "Save and finish," "Discard," and "Keep reflecting."
    - Task: 1. Simple Task — Clear my head on a walk through guided reflection.
6. **H6: Recognition not Recall / Severity 2 / Found by: A**
    - After SAVE in Customize, the home screen shows GO but no summary of the selected duration or difficulty. Users have to remember their choices before starting, or reopen Customize to check them.
    - Fix: Show a short summary beside GO, such as "45 minutes / Medium," with a way to change it.
    - Task: 2. Moderate Task — Find a walk that fits my time and location by customizing its duration and difficulty.
7. **H6: Recognition not Recall / Severity 2 / Found by: A, C, D**
    - The home screen opens past reflections through an unlabeled document icon in the upper-right corner. A blank-page icon could mean a new note or a document. New users have to try it to discover their reflection history.
    - Fix: Add the label "Past reflections" next to or below the icon.
    - Task: 3. Complex Task — Revisit past reflections from previous walks.
8. **H6: Recognition not Recall / Severity 2 / Found by: A, C**
    - Past-reflection cards use date and time as their main headings, with no short title or topic to distinguish entries. To find a particular thought, users have to remember when they wrote it or read through each preview.
    - Fix: Give each card a short topic title or a recognizable first line, with the date and time as secondary details.
    - Task: 3. Complex Task — Revisit past reflections from previous walks.
9. **H11: Accessible Design / Severity 3 / Found by: A, D**
    - On Past Reflections, the preview text is extremely small even at the prototype's actual-size setting, while the date and time take up much larger type. The reflection itself is hard to read, especially for someone with low vision. This gets in the way of the main purpose of revisiting past entries.
    - Fix: Increase the preview text size and line spacing. Use a shorter excerpt so the card stays readable without squeezing in a full paragraph.
    - Task: 3. Complex Task — Revisit past reflections from previous walks.
10. **H11: Accessible Design / Severity 1 / Found by: B**
    - On the cover page, the title and background use the same color, making the title hard to read. The thin white text below is also difficult to read.
    - Fix: Adjust the colors and fonts to improve readability.
    - Task: 5. Extra Violations
11. **H2: Match b/w System & World / Severity 1 / Found by: B, C**

- "TIME LEFT 45m" is much larger than "WALKED" and "LEVEL," and the distance values use inconsistent decimal places ("0 mi," "0.76 mi," "1.2 mi," and "2.54 mi"). Users may want to see the miles traveled as well as the walking time.
- Fix: Give time and distance the same font treatment and visual importance.
- Task: 1. Simple Task — Complete a guided walk and reflect on the prompts at different checkpoints.

12. **H4: Consistency & Standards / Severity 1 / Found by: B**
    - "GO" and "CUSTOMIZE" use different fonts, making them look as though they belong to different apps. Their typography does not feel cohesive.
    - Fix: Standardize the font.
    - Task: 4. All Tasks
13. **H4: Consistency & Standards / Severity 1 / Found by: B**
    - The text and buttons on the customization page have inconsistent alignment and styling, making them feel as though they belong to different apps.
    - Fix: Align the text and buttons and use a consistent style.
    - Task: 2. Moderate Task — Customize a walking route based on personal preferences (duration and difficulty).
14. **H4: Consistency & Standards / Severity 1 / Found by: B, C**
    - The duration and difficulty-level text use inconsistent sizes and alignment. This makes the page feel visually inconsistent and may suggest that one choice is more important than the other.
    - Fix: Align the text and use consistent sizing.
    - Task: 2. Moderate Task — Customize a walking route based on personal preferences (duration and difficulty).
15. **H4: Consistency & Standards / Severity 1 / Found by: B**
    - The walk popup uses an all-lowercase title, sentence-case body text in a different serif font, and an uppercase sans-serif button. These text styles do not match one another.
    - Fix: Use consistent text styles.
    - Task: 1. Simple Task — Complete a guided walk and reflect on the prompts at different checkpoints.
16. **H8: Aesthetic & Minimalist Design / Severity 1 / Found by: B**
    - The past-note cards have drop shadows that make them look like buttons, but they cannot be tapped. Users may try to click them because the styling suggests that they are interactive.
    - Fix: Remove the shadows and make the cards clickable. Use a two-screen layout with the map on one screen and past notes on the other.
    - Task: 3. Complex Task — Review, read, and edit previously saved reflection notes.
17. **H8: Aesthetic & Minimalist Design / Severity 1 / Found by: B**
    - On the customization page, the controls are crowded into the bottom third of the screen, while the map above does not show any changes. This creates an awkward layout because the map occupies space without showing activity.
    - Fix: Use the full screen for customization.
    - Task: 2. Moderate Task — Customize a walking route based on personal preferences (duration and difficulty).
18. **H1: Visibility of System Status / Severity 2 / Found by: B, D**

    - The checkpoint popup covers the map and partly hides the paw marker. At the end of the walk, the popup completely hides the paw, so users never see themselves reach the finish. This may leave them disappointed and unsure of where they have arrived.
    - Fix: Show a celebration first, or replace the final reflection checkpoint with a celebration page.
    - Task: 1. Simple Task — Complete a guided walk and reflect on the prompts at different checkpoints.
19. **H10: Help & Documentation / Severity 2 / Found by: B**
    - The experience starts abruptly without making clear which task is which, leaving users confused about what they are about to do.
    - Fix: Consider changing “GO” to “Start the adventure,” or use wording that explains the current stage of the experience.
    - Task: 5. Extra Violations
20. **H10: Help & Documentation / Severity 2 / Found by: B**
    - The document icon has no label, so first-time users may not know that it opens past reflections. They may be unsure whether it starts a new note or organizes previous notes.
    - Fix: Replace the ambiguous icon with a “Past notes” label.
    - Task: 4. All Tasks
21. **H10: Help & Documentation / Severity 2 / Found by: B**
    - On the landing page, the right page is blank, and nothing explains that reflections will appear there later. Users may not understand its purpose.
    - Fix: Add a line on the landing page explaining that reflections appear on the right page, before users start customization.
    - Task: 4. All Tasks
22. **H10: Help & Documentation / Severity 2 / Found by: B**
    - The walk-customization screen has no title. Users may not understand what the page does or how it fits into the customization process.
    - Fix: Add a title.
    - Task: 2. Moderate Task — Customize a walking route based on personal preferences (duration and difficulty).
23. **H10: Help & Documentation / Severity 2 / Found by: B, C**
    - The message “Closing the book keeps your progress” does not explain what counts as progress or whether the route continues to be recorded. Users may worry that closing the book will stop recording the route they take.
    - Fix: Revise the message to explain exactly what is being recorded.
    - Task: 1. Simple Task — Complete a guided walk and reflect on the prompts at different checkpoints.
24. **H11: Accessible Design / Severity 2 / Found by: B, C**
    - The body text for past notes is tiny, and its background color is similar to the map behind it. This makes the notes difficult to see and read on a phone-sized screen.
    - Fix: Adjust the font and background color.
    - Task: 3. Complex Task — Review, read, and edit previously saved reflection notes.
25. **H11: Accessible Design / Severity 2 / Found by: B**

    - The selected state for the 45-minute option is barely visible, making it difficult to tell which duration has been chosen.
    - Fix: Change the selected button's color.
    - Task: 2. Moderate Task — Customize a walking route based on personal preferences (duration and difficulty).
26. **H11: Accessible Design / Severity 2 / Found by: B, C**
    - The Reset button uses white text on a pale pink background. Its low contrast makes it look disabled, so users may not realize that they can click it.
    - Fix: Use the same button color as Save so users can tell that both buttons are active.
    - Task: 2. Moderate Task — Customize a walking route based on personal preferences (duration and difficulty).
27. **H11: Accessible Design / Severity 2 / Found by: B**
    - The checkpoint markers A–D on the progress bar are tiny. The bar has no labels or percentage, and completed dots are difficult to distinguish from upcoming ones, making progress hard to read.
    - Fix: Make progress more visually distinct, for example by using a lighter color for the remaining route and a darker color for the completed route.
    - Task: 1. Simple Task — Complete a guided walk and reflect on the prompts at different checkpoints.
28. **H12: Value Alignment & Inclusion / Severity 2 / Found by: B**
    - The checkpoint prompts are very long. The intended audience includes introverted and stressed people who may already feel overwhelmed by information, so the amount of text should be kept low.
    - Fix: Use one or two lines of poetry instead of four lines of small text.
    - Task: 1. Simple Task — Complete a guided walk and reflect on the prompts at different checkpoints.
29. **H2: Match b/w System & World / Severity 2 / Found by: B**
    - On the customization page, "Other" does not explain what it does, and tapping it has no effect. Users may be confused about what the option means.
    - Fix: Change the label to "Choose your own time."
    - Task: 2. Moderate Task — Customize a walking route based on personal preferences (duration and difficulty).
30. **H2: Match b/w System & World / Severity 2 / Found by: B**
    - The wording "If audio is toggled, directions will continue to play" is confusing and difficult to understand.
    - Fix: Use clearer wording.
    - Task: 1. Simple Task — Complete a guided walk and reflect on the prompts at different checkpoints.
31. **H5: Error Prevention / Severity 2 / Found by: B, C**
    - The X in the upper-left corner is very large and ends the walk without asking for confirmation. Because users are expected to close the booklet during a walk, they may accidentally tap the X in the process.
    - Fix: Add a confirmation dialog asking whether the user wants to end the walk.
    - Task: 1. Simple Task — Complete a guided walk and reflect on the prompts at different checkpoints.

32. **H7: Flexibility & Efficiency of Use / Severity 2 / Found by: B**
    - There is no way to resume a canceled walk, skip a checkpoint, pause, or reuse a previous walk's settings. Every walk starts from scratch, leaving frequent walkers without shortcuts and requiring them to follow a fixed route in the simple task, which is the most frequently used task.
    - Fix: Add the ability to resume a walk and change checkpoints.
    - Task: 1. Simple Task — Complete a guided walk and reflect on the prompts at different checkpoints.
33. **H7: Flexibility & Efficiency of Use / Severity 2 / Found by: B**
    - Finishing the walk returns users directly to the home page, without giving them time to relax, read their writing, or review the route they walked.
    - Fix: Add a summary page.
    - Task: 1. Simple Task — Complete a guided walk and reflect on the prompts at different checkpoints.
34. **H1: Visibility of System Status / Severity 3 / Found by: B**
    - The customization page has no back button, so users must click Save to leave. They may still be unsure whether their customized route has been saved.
    - Fix: Add a visible "Save it!" message on the page and explicitly show the update on the home page.
    - Task: 2. Moderate Task — Customize a walking route based on personal preferences (duration and difficulty).
35. **H10: Help & Documentation / Severity 3 / Found by: B**
    - The customization page does not explain what can be customized. Users may expect to change the path, but the available freedom is limited. Although difficulty and time appear customizable, it is unclear what else can be changed.
    - Fix: Add a short explanation of which aspects can be customized.
    - Task: 2. Moderate Task — Customize a walking route based on personal preferences (duration and difficulty).
36. **H11: Accessible Design / Severity 3 / Found by: B**
    - The right-hand reflection page provides a speaking button and the words "Write here," but no stylus or pen and no explanation of how to write. Users may want another way to record their thoughts, especially if speaking outside feels uncomfortable.
    - Fix: Add documentation explaining what users should use to write on the right-hand page.
    - Task: 1. Simple Task — Complete a guided walk and reflect on the prompts at different checkpoints.
37. **H2: Match b/w System & World / Severity 3 / Found by: B**
    - The right-hand reflection page indicates that users can record, but the README says recording only works at checkpoints. This makes it unclear when the microphone can be used.
    - Fix: Show the microphone or recording control only when recording can be activated.
    - Task: 1. Simple Task — Complete a guided walk and reflect on the prompts at different checkpoints.
38. **H3: User Control & Freedom / Severity 3 / Found by: B**

- "GO" does not explain what it starts, how long the walk will be, or which settings it will use. Users need to understand what the system is about to do and have a chance to decide whether they want the proposed route.
- Fix: Add a popup asking whether the user wants to take the proposed route.
- Task: 4. All Tasks

39. **H5: Error Prevention / Severity 3 / Found by: B, D**
    - The map shows checkpoints without route guidance, so users may get lost. Although the checkpoints identify specific destinations, users may not know how to reach them or distinguish the streets on the map.
    - Fix: Consider adding a route that users can follow.
    - Task: 1. Simple Task — Complete a guided walk and reflect on the prompts at different checkpoints.
40. **H6: Recognition not Recall / Severity 3 / Found by: B**
    - Past notes show only a date and time, with no title, route, distance, or mood. This makes it hard to distinguish notes and connect reflections to their checkpoints. Users must recall the route themselves to understand the context of each record.
    - Fix: In the reflection view, show a map on the right screen and the notes on the left screen.
    - Task: 3. Complex Task — Review, read, and edit previously saved reflection notes.
41. **H6: Recognition not Recall / Severity 3 / Found by: B**
    - The time-left display never changes, requiring users to keep track of the remaining time themselves, which can become tiring.
    - Fix: Decrease the displayed time remaining as the walk progresses.
    - Task: 1. Simple Task — Complete a guided walk and reflect on the prompts at different checkpoints.
42. **H9: Help Users with Errors / Severity 3 / Found by: B**
    - Finishing a walk returns users to the landing page with no summary and no confirmation that the walk or reflection was saved. If saving fails, there is no plain-language error message or way to recover the reflection.
    - Fix: Add a summary page and take users directly to their saved notes. If the notes are not saved, show a popup explaining the circumstances in which saving may fail and suggest recording the notes manually.
    - Task: 1. Simple Task — Complete a guided walk and reflect on the prompts at different checkpoints.
43. **H3: User Control & Freedom / Severity 4 / Found by: B**
    - After customization, users return directly to the home page with the GO button. The page does not make clear what was changed, leaving users unsure whether their customized route was saved.
    - Fix: Add a short explanation of what was customized.
    - Task: 5. Extra Violations
44. **H9: Help Users with Errors / Severity 4 / Found by: B**
    - The system does not confirm how it interpreted the user's writing and provides no place to correct it. Errors in transcription or handwriting recognition may misrepresent what the user recorded and worsen the experience.
    - Fix: Add a page where users can edit their writing with a keyboard.

    - Task: 1. Simple Task — Complete a guided walk and reflect on the prompts at different checkpoints.

45. **H3: User Control & Freedom / Severity 3 / Found by: C**
    - After tapping GO, there is no clear way to get back to Customize to change the walk's duration or difficulty while keeping the walk in progress. Users who start with the wrong settings, or find that the walk no longer fits their time, cannot correct the choice without restarting.
    - Fix: Let users adjust duration and difficulty during a walk without losing their progress.
    - Task: 2. Moderate Task — Find a walk that fits my time and location by customizing its duration and difficulty.
46. **H3: User Control & Freedom / Severity 2 / Found by: C, D**
    - Each checkpoint prompt appears only as a popup when the user reaches that stop, and KEEP WALKING is its only action. Once it is dismissed, there is no way to reread an earlier prompt, either during the walk or after FINISH WALK. Users who close popups quickly or advance too soon lose the prompt they were reflecting on.
    - Fix: Make past checkpoints tappable (for example, a speech-bubble icon for each stop) or add a Previous button so earlier prompts can be reopened.
    - Task: 1. Simple Task — Clear my head on a walk through guided reflection.
47. **H6: Recognition not Recall / Severity 2 / Found by: C**
    - On the home screen, CUSTOMIZE does not read as a tappable button. Its square corners make it look less like a control than the rounded GO button, so users may not recognize it as the way into walk settings without trial and error.
    - Fix: Style CUSTOMIZE as a clear button, consistent with the other controls.
    - Task: 2. Moderate Task — Find a walk that fits my time and location by customizing its duration and difficulty.
48. **H6: Recognition not Recall / Severity 2 / Found by: C**
    - Checkpoint markers on the map and progress strip are labeled only A, B, C, and D. The letters show order but not what each stop contains, so users have to open a stop or remember it from earlier to know what it is.
    - Fix: Give each checkpoint a short title or topic in addition to its letter.
    - Task: 1. Simple Task — Clear my head on a walk through guided reflection.
49. **H11: Accessible Design / Severity 2 / Found by: C**
    - GO, CUSTOMIZE, and many other elements share the same brown emphasis, so the action that starts a walk does not stand out from the secondary setup action. Users spend extra attention deciding which one to tap first.
    - Fix: Make GO the primary button and CUSTOMIZE a secondary one through contrast, size, or placement.
    - Task: 4. All Tasks
50. **H11: Accessible Design / Severity 1 / Found by: C, D**
    - On Customize, the pale green difficulty buttons blend into the light background, and the white difficulty dots barely stand out from the pale fill. The dark labels stay readable, but the button edges are hard to see for users with reduced contrast sensitivity.
    - Fix: Add dark borders and stronger contrast to the buttons and dots.

    - Task: 2. Moderate Task — Find a walk that fits my time and location by customizing its duration and difficulty.
50. **H11: Accessible Design / Severity 1 / Found by: C**
    - During the walk, the paw marker showing the user's position is small and has a pale fill close to the map's colors. It is hard to find at a glance, especially for users with low vision or in bright outdoor light.
    - Fix: Make the marker larger and give it a stronger outline or a contrasting background.
    - Task: 1. Simple Task — Clear my head on a walk through guided reflection.
51. **H11: Accessible Design / Severity 2 / Found by: C**
    - The reflection page has a fixed ruled writing area with no way to increase the line spacing or make room for larger handwriting. Users who need larger writing or enlarged content may struggle with the fixed paper layout.
    - Fix: Let users expand the writing area or adjust the line spacing.
    - Task: 1. Simple Task — Clear my head on a walk through guided reflection.

52. **H3: User Control & Freedom / Severity 3 / Found by: D**
    - The reflection editor accepts speech and typing, but RESET is the only editing control, and it appears to clear everything entered. There is no undo and no way to change just one part of a reflection, which adds friction to writing while walking.
    - Fix: Add an undo action, and split the text into segments (for example, one per checkpoint in walk order) that can be edited separately.
    - Task: 1. Simple Task — Clear my head on a walk through guided reflection.
53. **H11: Accessible Design / Severity 2 / Found by: C**
    - The reflection page has a fixed ruled writing area with no way to increase the line spacing or make room for larger handwriting. Users who need larger writing or enlarged content may struggle with the fixed paper layout.
    - Fix: Let users expand the writing area or adjust the line spacing.
    - Task: 1. Simple Task — Clear my head on a walk through guided reflection.
54. **H3: User Control & Freedom / Severity 2 / Found by: D**
    - There is no way to choose or customize the reflection prompts. Customize covers only duration and difficulty, while the prompts span many topics that users have no control over.
    - Fix: Add a section in Customize for choosing reflection topics.
    - Task: 2. Moderate Task — Find a walk that fits my time and location by customizing its duration and difficulty.
55. **H3: User Control & Freedom / Severity 4 / Found by: D**
    - Past Reflections shows each entry only as a short preview, and there is no way to open an individual reflection. Longer reflections, which are likely because speech input is supported, cannot be read in full.
    - Fix: Let users tap a reflection to open it in full with larger text, and show only a title and first sentence in the list.
    - Task: 3. Complex Task — Revisit past reflections from previous walks.
56. **H7: Flexibility & Efficiency of Use / Severity 2 / Found by: D**
    - Finding a specific reflection means scrolling through small preview text. There is no search or filter, which gets slower as entries accumulate.

    - Fix: Add search by text and by date range, and let users open entries individually.
    - Task: 3. Complex Task — Revisit past reflections from previous walks.
57. **H8: Aesthetic & Minimalist Design / Severity 1 / Found by: D**
    - The checkpoint prompt opens as a popup over the left screen with several buttons and long text, which looks cluttered, while the right screen stays empty.
    - Fix: Show the prompt on the right screen next to the reflection editor, and keep only a simple KEEP WALKING button on the left, for example in the bottom panel.
    - Task: 1. Simple Task — Clear my head on a walk through guided reflection.
58. **H8: Aesthetic & Minimalist Design / Severity 1 / Found by: D**
    - The RESET button on Customize seems redundant. A reset set of options cannot be saved, so users have to pick new options anyway.
    - Fix: Remove the RESET button.
    - Task: 2. Moderate Task — Find a walk that fits my time and location by customizing its duration and difficulty.
59. **H9: Help Users with Errors / Severity 1 / Found by: D**
    - Users may walk off the route during a reflection walk, and nothing detects this or guides them back, so they can get stuck.
    - Fix: Detect when the user goes off track and show a popup that guides them back to the route.
    - Task: 4. All Tasks
60. **H8: Aesthetic & Minimalist Design / Severity 2 / Found by: D**
    - The live walk status panel mixes several typefaces, capitalizations, and font styles, which makes it look disorganized.
    - Fix: Use one typeface and arrange the text in a clearer layout. TIME LEFT can stay the largest because users check it most often.
    - Task: 1. Simple Task — Clear my head on a walk through guided reflection.

3. Summary of Violations

A Google Sheet Template is provided here to help you calculate numbers.

Category	# Viol. (sev 0)	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (total)
H1: Visibility of Status			3	1		**4**
H2: Match Sys & World		1	3	1		**5**
H3: User Control			3	3	2	**8**
H4: Consistency & Standards		4				**4**
H5: Error Prevention			1	2		**3**
H6: Recognition not Recall			5	2		**7**
H7: Efficiency of Use			3			**3**
H8: Minimalist Design		4	1			**5**
H9: Help Users with Errors		1		1	1	**3**
H10: Help & Documentation			5	1		**6**
H11: Accessible		3	6	2		**11**
H12: Value Alignment & Inclusion			1			**1**

Total Violations by Severity	0	13	31	13	3	**60**

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 (in %)

Severity / Evaluator	**Evaluator A**	**Evaluator B**	**Evaluator C**	**Evaluator D**
Sev. 0 Ex: Eval A count / total sevs 0 in table #3	*0%*	0%	0%	0%
Sev. 1 Ex: Eval A count / total sevs 1 in table #3	0%	62%	31%	31%
Sev. 2 Ex: Eval A count / total sevs 2 in table #3	23%	52%	39%	23%
Sev. 3 Ex: Eval A count / total sevs 3 in table #3	15%	69%	8%	23%
Sev. 4 Ex: Eval A count / total sevs 4 in table #3	0%	67%	0%	33%
Total (sevs. 3 & 4) Ex: Eval A = sum(sev 3: sev 4 counts) / sum(sev 3: sev 4 in table #3)	13%	69%	6%	25%
Total (all severity levels) Ex: Eval A total sev count / total sevs (green cell) in table #3	15%	58%	28%	25%

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

5. Summary Recommendations

Overall, we think Pawse & Pages presents a refreshing way for people to interact with nature by combining guided walks, nature-related information, and personal reflection. One of the strongest aspects of the concept is its physical booklet metaphor, which makes the experience feel more immersive and encourages users to engage with their surroundings rather than simply bringing another digital device into nature. To go a step further, it might be worth exploring higher utilization of the right side of the booklet. The large GO button and the ability to skip prompts also make the experience feel approachable, especially for users who may already be stressed or overwhelmed. However, we think the product could benefit from clearer guidance on how the different features work

together and how the interface can better support the sense of autonomy and mindfulness that the product aims to promote.

First, we would recommend simplifying the interaction flow during walks and making the interface more intuitive and glanceable. Since the target users are individuals who may already experience stress or cognitive overload, the product should minimize the mental effort required to navigate the experience. Currently, some interactions require users to make assumptions about the system, such as whether the microphone is actively recording, what happens when they exit a walk, or which settings are currently applied. Providing clearer system feedback, automatically saving reflection drafts, and explicitly indicating when recording starts or stops would help prevent errors and improve users' confidence in the interface. We would also recommend improving the consistency of visual elements, including typography and colors, while making important settings and route difficulty more visible before users begin a walk. These changes would improve the visibility of system status and reduce the need for users to remember information across different screens. Reducing errors and achieving higher levels of workflow automation would also free users from interacting with the UI while reflecting mentally.

Second, we think greater emphasis should be placed on users' emotional comfort, privacy, and ability to revisit their reflections. Since personal reflections can contain sensitive thoughts, the interface should clearly communicate how entries are saved, accessed, and managed. The Past Reflections section could also be improved by introducing more descriptive labels, short topic headings, and larger text previews to help users recognize previous entries without having to open each one individually. We would also suggest reconsidering the complexity assigned to different tasks in the prototype. Reviewing past reflections might be better suited as a moderate task, since it more directly supports the reflective experience, while customizing a walking route could serve as the complex task because it requires users to consider multiple preferences and make more decisions. Ultimately, we think these improvements would help Pawse & Pages maintain a balance between providing useful guidance and giving users the freedom to engage with nature and their own thoughts without unnecessary distractions.

Third, adding in more flexibility in the way users interact with the app—such as enabling users to change the sizing of the lines in the reflection-notebook page—will enable users to have a more tailored experience. Given that this is an app that, ideally, users are using multiple times a day, every day, it is important that users can customize the flows/features/sizing of the app’s components. Ultimately, when people journal in real life, people can be really picky about the journal that they buy (the size, color, the size of the lines, the feel), so consider applying this same level of personalization to this “digitized journal” as well.

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

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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

- 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.

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- 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: Value Alignment and Inclusion

- The design should encode values that users can understand and relate to.
- It should make a diverse group of users feel included and respected.
- The design should prevent the reproduction of pre-existing inequities and not create additional burdens for members of disadvantaged populations.