

Heuristic Evaluation of [Bento]

1. Problem

Bento is a mobile application that allows users to record inspiration in the form of text and multimedia in customizable documents; it then sets intelligent reminders for users to act on their inspiration.

2. Violations Found

1. **[H2-1 Visibility of System Status] [Severity 1] [Found by: A]**
The header remains as the logo throughout the experience. It would be nice if the header dynamically changed based off the current interface purpose. If you have a title for each canvas, you can also utilize the top bar real estate as a place to set/edit/display the canvas name.
2. **[H2-8 Aesthetic and minimalist design] [Severity 1] [Found by: A]**
The header and icon bar at the top and bottom currently take up a significant amount of real estate on the screen. When creating a canvas, it might be more important to have as much space as possible to view the canvas. Perhaps you could consider make the header/footer bars smaller, consolidating some of the actions, or creating a way to optionally hide the buttons.
3. **[H2-4 Consistency and Standards] [Severity 2] [Found by: A, B,C,D]**
The camera icon and media icon invoke the same photo gallery view. It's a bit redundant to have two different icons that show the same view. Alternatively, you could just have one media button.
4. **[H2-3 User control and freedom] [Severity 3] [Found by: A,B,C,D]**
There is ability to add new content but not the ability to delete content after adding to the canvas.
5. **[H2-3 User control and freedom] [Severity 3] [Found by: A,B,C,D]**
There is ability to add new content but not the ability to undo parts of the content creation actions when creating content after adding to the canvas.
6. **[H2-3 User control and freedom] [Severity 3] [Found by: A,C,D]**
There should be a way to exit from the media selection ("All Photos" page) without having to select a photo/video.
7. **[H2-2 Consistency and Standards] [Severity 1] [Found by: A]**
Generally when you click on a media or photo, it shows a full screen preview. When you click

on an image in Bento, it immediately selects the image and goes back to the canvas. It might be useful to have a way to preview the image before adding it to the canvas.

8. **[H2-1 Visibility of System Status] [Severity 1] [Found by: A,C]**
In the photo selection interface, the current header bars don't indicate the purpose of the screen which is to add media. Perhaps you could indicate that through header text or a more prominent call to action.
9. **[H2-4 Consistency and Standards] [Severity 1] [Found by: A,B,C,D]**
The image selection and photo library adopts the native IOS interface, so users have associated behaviors and assumptions when encountered with the familiarity. However, when you select something in the native photo library app, it has a different behavior than the one implemented in Bento. You click the text icon "Select" and it allows you to select one or multiple images. In your prototype, you can't click select. Instead, a user clicks on the photo and it automatically adds it. Perhaps you could add a bigger design distinction in the interface so people don't assume it behaves the same way as the native library.
10. **[H2-6 Recognition over Recall] [Severity 3] [Found by: A,B,C,D]**
It wasn't immediately clear to me that I have to re-click Text to complete the text entry; the same applies for adding all different types of multimedia to an entry. I wanted to be able to move the text or multimedia around as I was typing. (I was expecting it to be similar to an editing interface where the editing mode is always "on") Perhaps you could add a message to prompt this behavior, especially if the user is consistency trying to access other things without having re-clicked the icon to finalize the entry type.
11. **[H2-4 Consistency and Standards] [Severity 1] [Found by: A,B,C]**
Users can move images around without re-clicking on the camera icon again, which is inconsistent with the way a user can edit the text.
12. **[H2-1 Visibility of system status] [Severity 1] [Found by: A]**
When you have the editing mode on for different types of content, it could be useful to have an indication that the user is currently in "text/img/audio creation" mode.
13. **[H2-10 Help and Documentation] [Severity 1] [Found by: A]**
In the README document, the instructions said to click on the camera icon again to save placement of image, but even after clicking it, users can still move the photo around (which defeats the purpose of saving the image). These behaviors are also inconsistent with other types of content addition (as mentioned in 12).
14. **[H2-10 Help and Documentation] [Severity 2] [Found by: A,B,C,D]**
When I start off in a blank canvas, it wasn't immediately clear to me what I had to do. I actually wanted to start by just typing on the canvas, expecting the keyboard to pop up (similar to how Notes works). Perhaps you could explore a filler text/instructions for a blank canvas to prompt user to begin.
15. **[H2-3 User control and freedom] [Severity 2] [Found by: A,C]**
I wasn't sure how to exit out of the canvas creation interface. I wondered whether the

header logo was an actionable area.

16. **[H2-5 Error prevention] [Severity 1] [Found by: A,B]**
Will users be allowed to have overlapping content? If not, there could be an error message to show that user is trying to drag content onto another content or maybe more resolute boundaries for which the content can be placed.
17. **[H2-3 User control and freedom] [Severity 1] [Found by: A,B,C]**
There could be a confirmation modal or preview interface after clicking the checkmark when finishing a canvas.
18. **[H2-4 Consistency and Standards] [Severity 1] [Found by: A,B,C]**
The text inputs are displayed differently. For example, why does the text for “Tomatoes look too good right now, such a good flavor combo with tarragon, or maybe some green garlic?” change into typography with greater line height?
19. **[H2-4 Consistency and Standards] [Severity 2] [Found by: A,B,C]**
Users can’t drag around the tomatoes text even after clicking out of the text icon.
20. **[H2-3 User control and freedom] [Severity 1] [Found by: A,B,C]**
How do users preview recording? If the recording is really long, does the generated audio icon maintain the same UI no matter what the recording is? I also was curious about what the actual recording interface looked like.
21. **[H2-10 Help and Documentation] [Severity 4] [Found by: A,B,C,D]**
Reminders are set automatically, but there is no way to view them or know when they will trigger. The application fails to keep users informed (in advance) about when their reminders will be triggered. Thus, the system status is not visible to the users. *Suggestion:* Allow users to view the reminder criteria (time-based, location-based, etc.) for their entries.
22. **[H2-8 Aesthetic and Minimalist design] [Severity 1] [Found by: A]**
The look and feel of the photo library prompt and interface seems inconsistent with the UI of bento which is primarily a darker, charcoal gray background with white text.
23. **[H2-8 User control and freedom] [Severity 0] [Found by: A]**
Is there a way to customize the aesthetics? For example, a way to set the background color of the canvas or set different colors and typography for the font? It could be interesting for the user to set a theme for their bento app.
24. **[H2-10 Help and documentation] [Severity 2] [Found by: A,B,C,D]**
How is the preview of each canvas generated in the scrolling feed? Why does it only show certain text / images? Is it assumed that users will have a title text in each of the canvases? Conversely, is there a way for users to set what they want to see in the top-level preview of the interface?
25. **[H2-7 Flexibility and efficiency of use] [Severity 2] [Found by: A]**
If I have a lot of canvases, is there a way to easily search or navigate through all of my canvases? In general, how do users navigate through their feed after having generated

multiple canvases? Is it only chronologically ordered?

26. **[H2-7 Flexibility and efficiency of use] [Severity 2] [Found by: A,D]**

If a user knows the type of canvas they want to generate, can they templatize a previous canvas or use a “copy and paste” mechanism to replicate aspects of previously made canvases?

27. **[H2-8 Aesthetic and Minimalist Design] [Severity 2] [Found by: A,B,C,D]**

The entry snippets on the home screen don’t have a consistent structure, so it looks messy. The snippets contain many pieces of information and many different types of information. These extra units of information decrease all units’ relative visibility, so it ends up being a jumble of information. Create a simple, standard template for these snippets. Chose one multimedia component to display on the left and two or three lines of text to display to its right.

3. Summary of Violations

Category	# Viol. (sev 0)	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (total)
[H2-1: Visibility of Status]		3				3
[H2-2: Match Sys & World]						0
[H2-3: User Control]		2	2	3		7
[H2-4: Consistency]		5	1			6
[H2-5: Error Prevention]		1				1
[H2-6: Recognition not Recall]				1		1
[H2-7: Efficiency of Use]			2			2
[H2-8: Minimalist Design]	1	2	1			4
[H2-9: Help Users with Errors]						0
[H2-10: Documentation]		1	2			1
Total Violations by Severity	1	13	8	4	1	27
Note: check your answer for the green box by making sure the sum of the last column is equal to the sum of the last row (not including the green box)						

4. Evaluation Statistics

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C	Evaluator D	Evaluator E
sev. 0	1	0	0	0	
sev. 1	13	6	6	1	
sev. 2	8	5	6	5	
sev. 3	4	3	4	4	
sev. 4	1	1	1	1	
total (sev. 3 & 4)	5	4	5	5	
total (all severity levels)	27	15	22	11	

5. Summary Recommendations

Overall, these canvases seem to be primarily aesthetically powered, but there's not much flexibility in designing the canvases besides dragging and resizing. The major usability issues I observed center around the lack of flexibility in performing the simple task of "setting a reminder for an inspiration entry." Rather than solely relying on an "intelligent backend" to set reminders about inspiration, users should have the control to view and modify these automatic notifications and the flexibility to set their own customized reminders. I would recommend adding a "settings" button of some sort to each entry where users can view, create, and modify the reminders associated with that entry. The home screen, which is associated with the medium task of "scrolling through a journal of inspiration," has aesthetic issues resulting from the excess amount of and many different types of information displayed. I recommend reducing the amount of text on this screen and displaying only one photo or video for each entry, which would make the information more clear and minimalist. Finally, performing the complex task of "creating an inspiration entry" was initially difficult due to lack of help and documentation. To make the set/save functionality more clear, I recommend adding a separate "set" button in the top toolbar, which appears only when a user adds something to the post. Furthermore, I recommend allowing users to create quick, simple text entries without requiring them to reposition/resize the text snippets. While the majority of violations pertain to the complex task of creating an entry, I would love to see the simple task fleshed out in more detail; it is unclear how to accomplish the simple task of setting a reminder on inspiration, without having to go through the creation process and being automatically subscribed to notifications. By staying cognizant of adhering to real-world conventions and giving users greater control and freedom, this app would be even more enjoyable for the user.

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

[H2-1: Visibility of System Status]

- keep users informed about what is going on

[H2-2: Match Between System & Real World]

- speak the users' language
- follow real world conventions

[H2-3: User Control & Freedom]

- "exits" for mistaken choices, undo, redo
- don't force down fixed paths

[H2-4: Consistency & Standards]

[H2-5: Error Prevention]

[H2-6: Recognition Rather Than Recall]

- make objects, actions, options, & directions visible or easily retrievable

[H2-7: Flexibility & Efficiency of Use]

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

[H2-8: Aesthetic & Minimalist Design]

- no irrelevant information in dialogues

[H2-9: Help Users Recognize, Diagnose, & Recover from Errors]

- error messages in plain language
- precisely indicate the problem
- constructively suggest a solution

[H2-10: Help & Documentation]

- easy to search
- focused on the user's task
- list concrete steps to carry out
- not too large