Prototype Description: Open When is a mobile app for supporting users who are going through hard times or life changes by allowing them and their long-distance friends to mutually send and receive time or mood-sensitive voice/text/image notes to counteract these changes as they come/when they're needed most.

IMPORTANT: TO MAKE SURE FORMULAS WORK PROPERLY
1) DO NOT ADD/DELETE ANY COLUMNS
2) ONLY ADD ROWS TO THE BOTTOM OF THE TABLE (NOT THE TOP)

Your TA will remove your names before the document is given to the project team. Under the 'Found by' column, use these letters to identify yourselves

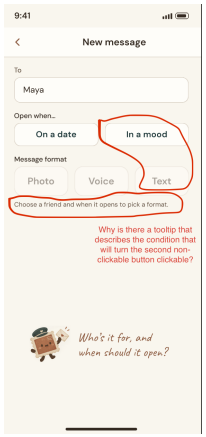
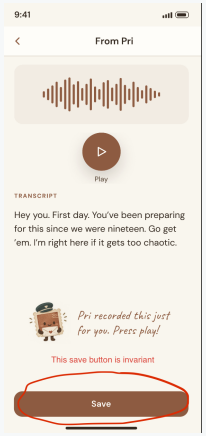
When finished, please double check your numbers under 'evaluation statistics' & let your TA know if there's a bug with the formula

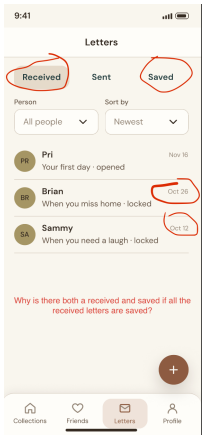
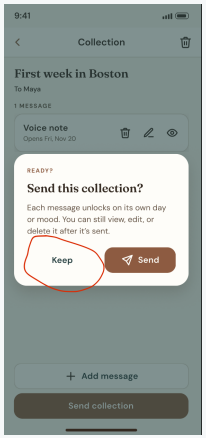
Simple Task	*The user receives and opens a letter from their friend.*
Moderate Task	*The user sends a text, image ,or a voice note letter to their friend.*
Complex Task	*The user builds a collection of past letters they've received.*

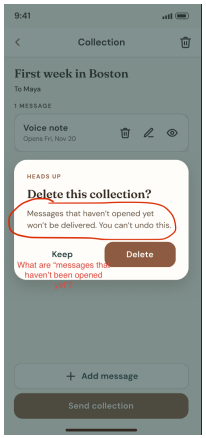
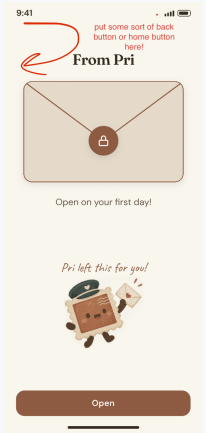
Evaluator A:
Evaluator B:
Evaluator C:
Evaluator D:

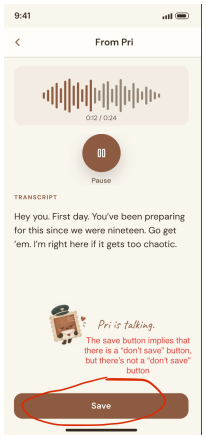
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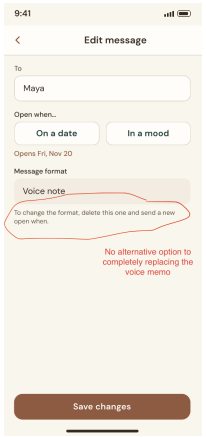
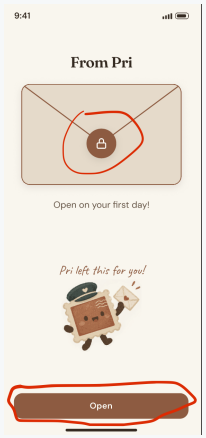
**attach images in this column if helpful*

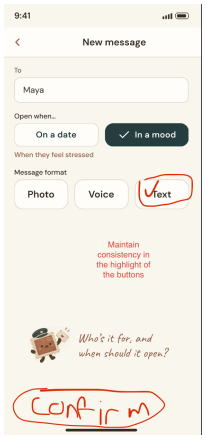
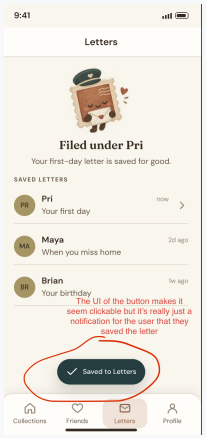
Problem #	Heuristic	Task	Severity	Description	Images	Rationale	Fix	Found by
1	H1: Visibility of System Status	2. Moderate Task	2	There are multiple buttons on a screen but not all of them are interactable.		The user has to read a tiny tooltip that tells them the conditional of whether they can interact with the buttons on the screen. The user is therefore confused by what state the system is in because if they tap the obvious-looking button on the screen only to see it does not react, then they mistrust the system and have to read closer into it on each subsequent screen, slowing them down.	Hide the buttons until the user clicks the previous (open when) button.	B, C
2	H1: Visibility of System Status	1. Simple Task	3	The user can save the same letter multiple times.		The letter is already saved but the user still has the option to save it if they choose to listen to the letter again, confusing the user about the system status. (Additionally, the back button leads back to the first screen of the simple task, but I believe this is just a bug of your prototype)	Either change the save button once the letter is saved to "close", or if you want the user to consistently save the letter, add a separate option (maybe in red) to delete the letter.	C, D

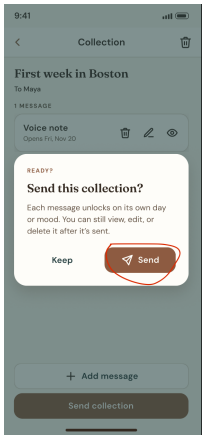
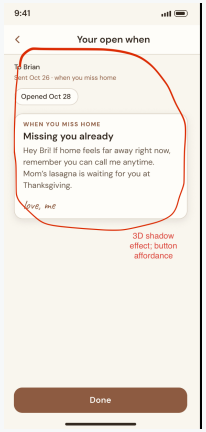
3	H1: Visibility of System Status	2. Moderate Task	3	All received letters are automatically saved in the received tab on the home screen.		There is an option to save a received letter which implies that there are letters that are not saved. Either way, the received letters tab is redundant with the saved letters tab and they serve the same purpose (since the letters which exist in the received tab have dates from before the current date of the prototype). It says locked, but the opened one which the user saved says opened but is not accessible through the saved tab. Overall, these states are inconsistent/hard to navigate for the user.	Either combine the received/saved tabs or delete the old received letters from the received tab/automatically archive them to the saved tab.	C, D
4	H1: Visibility of System Status	3. Complex Task	2	"Keep" is the alternative option to "Send"		Keep may confuse the user that they will keep their collection and never be able to send it.	Change "keep" to "Cancel"	C

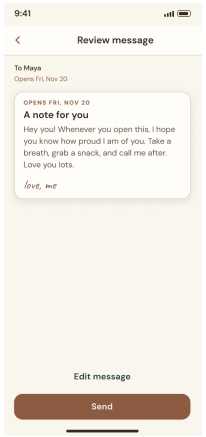
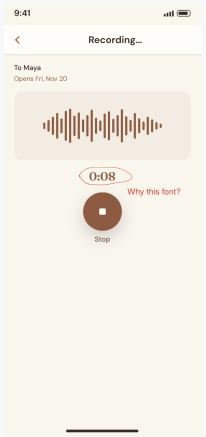
5	H2: Match b/w System & World	3. Complex Task	2	The terminology of an opened message and who opened it unclear to the user.		Because this is clearer to the developer and less clear to the user, the description is asymmetrical and doesn't match the real world demographic of users that will use the app.	Fix the error message to be more clear; who is opening the message if it hasn't been delivered?	C
6	H3: User Control & Freedom	1. Simple Task	3	When the user clicks on a notification to receive a letter, they can only open it rather than going back to the home screen.		This prevents the user from accessing the app freely, or having an "emergency exit" from getting stuck. Thus, the user does not have the control or freedom needed to engage with the app.	Add a "Save for Later" button above the "Open" button	A, C, B, D

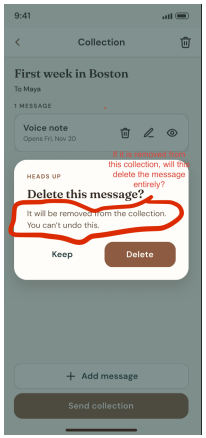
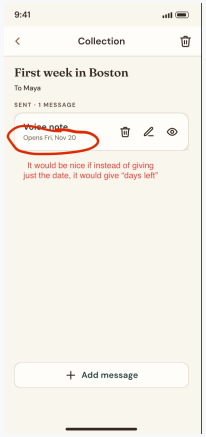
7	H7: Flexibility & Efficiency of Use	1. Simple Task	3	There is a save button but no "don't save" button.		The "save" button implies that the user has an option to not save the letter, but they are not given that freedom/flexibility to do so, meaning they must save every letter they receive.	Add a "don't save" or "delete" button to the letter, or make the letters auto-saved.	C
8	H3: User Control & Freedom	5. Extra Violations	2	Profile and friends tabs in the navigation bar are inacessible.		This might be just for the prototype, but generally, if including tabs in the navigation bar, ideally make them navigatable between each other especially if they contain the simple, moderate, and complex tasks.	Profile tab could include inform	C

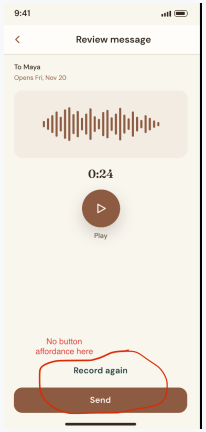
9	H7: Flexibility & Efficiency of Use	4. All Tasks	4	Users cannot edit messages after sending it.		The user has no "emergency exit" or undo button when recording a message; it is instead one-and-done and they cannot extend it, no matter if they believe their existing voice memo is polished and they just want to add more to it. This prevents the user from freely engaging with the messages they created despite being given the option to edit it.	Add a feature that allows direct editing of the message.	A
10	H4: Consistency & Standards	1. Simple Task	2	The color of the letter seal and the color of the "open" button are the same.		The color of affordance is the specific brown color on the Open button. By making them both the same color, the user assumes that both are interactable, while only the Open button is interactable.	Either make the seal interactable or change its color.	C, A, D

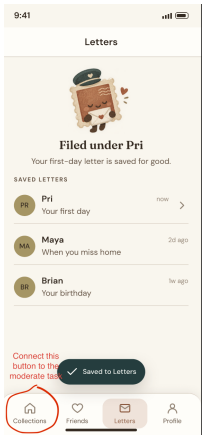
11	H4: Consistency & Standards	2. Moderate Task	3	The user cannot change their existing choices on the screen when sending a message.		The user has a "confirmation" highlight for their "open when" condition but they do not have a confirmation highlight for the modality; this creates dissonance in the user's understanding of the editability of their options and slows them down as they navigate the app.	Add a "Confirm" button at the bottom of the screen and maintaining the green highlighted confirmation status for the modality	C
12	H4: Consistency & Standards	1. Simple Task	2	The "saved to ___" screens have a green border around them that makes them look either like a user selection or something clickable.		By adding the affordance of clickability to the notification that the user has saved a letter, the user is confused and might try to click on that notification because it looks similar to other button formats in the app.	If it was meant to be clickable, make the button clickable; if not, then either remove the border or otherwise change the formatting to make it not look clickable.	C

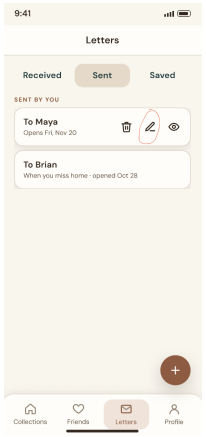
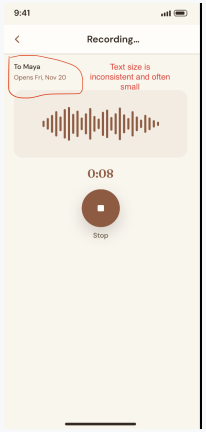
13	H4: Consistency & Standards	4. All Tasks	1	Only on the "send" button of the "send collection" popup is there a paper airplane icon next to send.		This is inconsistent among the app and may confuse the user whether or not the different "send" buttons mean the same thing (i.e. sending to the friend of the user).	Either keep the paper airplane icon among all send buttons in the app or omit the icon from the "send" button in the "send collection" confirmation popup.	C
14	H4: Consistency & Standards	2. Moderate Task	2	The existing sent letter has a 3D shadow around the description.		The 3D shadow and the line around the "Opened Oct 28" and the "Missing you already" fields are previously used as an affordance for interactable buttons. This may confuse the user/slow them down if they second guess what is interactable versus what isn't.	Get rid of the shadow or outline that make the fields seem interactable.	C

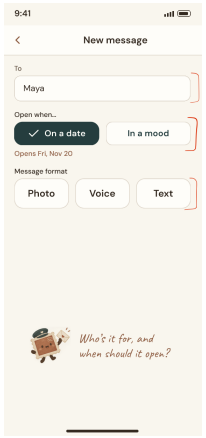
15	H4: Consistency & Standards	2. Moderate Task	2	The "Review Message" screen is redundant.		Everything that can be done on the "Review Message" screen can also be done in the previous screen (in fact, there is a button that brings the user back to the previous screen). This might confuse the user because they are essentially going from an interactable screen to the exact same screen with no interactability.	Remove the "Review Message" screen and just keep the message-writing screen.	C
16	H4: Consistency & Standards	2. Moderate Task	1	The serif font only appears in three unrelated scenarios: when a letter is sent, when a collection is sent, or when a letter is received but only on the first screen where it says "From ___".		This serif font is very special and different from the sans-serif of the rest of the app. It is understandable if it is used for important, must-be-read text, but it is used in random situations which decreases the overall readability of the app (especially when it is used as the timer for the voice recording).	Use the serif font only for important text; otherwise, don't use it.	C, B

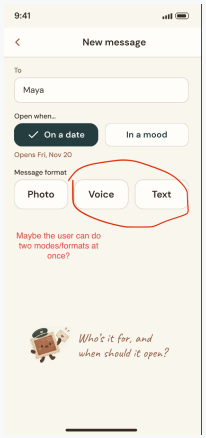
17	H5: Error Prevention	3. Complex Task	3	The terminology of the message deletion is unclear.		If the user deletes a voice memo from their collection, it's unclear whether or not it's removed from just the collection or from the app as a whole.	Be clearer about if deleting the letter from the collection also deletes the letter from the app.	C
18	H5: Error Prevention	3. Complex Task	1	The number of days until a message opens is unclear.		The user might not edit their message in time (error).	Add an indicator of how many days the user has left to edit their letter to their friend.	C

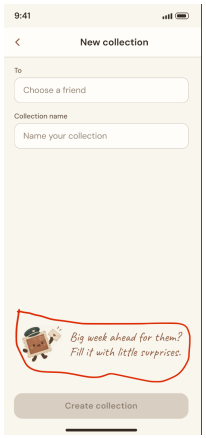
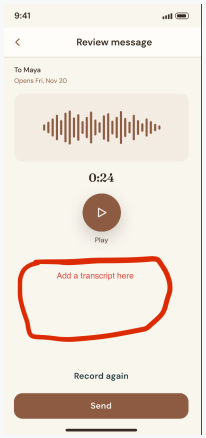
19	H6: Recognition not Recall	2. Moderate Task	1	When sending a letter, there is no "letter" imagery		The lack of letter imagery when sending a letter might detract from the sentiment of sending a letter that will be opened later to the user. This lack of format might make the structure of voice memos or notes less formal or supportive than usual.	Add more letter imagery outside of the simple task that will carry the motif of sending/receiving letters throughout the app.	C
20	H6: Recognition not Recall	4. All Tasks	3	For many of the "record again" or "edit" tasks, the button to enter these tasks has no border.		The previous affordances of clickable buttons in the UI are all colored in/have an outline, whereas these buttons do not. This may slow the user down as they might be confused whether or not they can click to edit their letter.	Add button-like affordances to the UI (whether it be an outline or a clear background color) so the user knows where to click.	C, A

21	H7: Flexibility & Efficiency of Use	4. All Tasks	3	There is no transition between the tasks; they exist as their own screens and the navigation bar is obsolete (not mentioned in README limitations)		This disrupts the overall flexibility of the app because there is no central flow for the user; each task is a one-and-done deal. Navigating between the navigation bar is essential and allows the user to engage in all facets of the app.	Connect the tasks in the prototype through the exisitng navigation bar.	C, D
22	H7: Flexibility & Efficiency of Use	3. Complex Task	3	There is no way for the user to add existing unopened letters to a collection or to move letters from a collection to outside of a collection.		Opening a collection locks a user into committing to add a certain amount of letters to that collection. If they are unsure of this commitment, there is no "emergency exit" for the user.	Allow the user to easily maneuver their letters between and outside of the collections they were generated in.	A, C

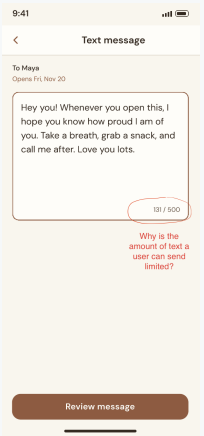
23	H7: Flexibility & Efficiency of Use	2. Moderate Task	3	Once sent but unopened, the user can only edit or delete from the "Letters Sent" screen rather than inside the letter itself.		The user can only edit or delete their sent letters from the "Sent" tab of the Letters screen, but not when they click into that letter. This may confuse the reader because they might want to look at their letter before they edit or delete it and thus would want to edit or delete the letter while viewing its contents.	Add a button within the letter screen that the user clicks into from the sent screen that allows the user to edit or delete it.	A, C
24	H8: Aesthetic & Minimalist Design	5. Extra Violations	2	Some of the descriptive text (i.e. the person the user is writing a letter to) is quite small.		To visually impaired users, this might prevent them from accurately knowing who they are writing their message to until they get the chance to double check. Either way, it's easier to prevent this just by increasing the size of the font.	Increase the size of descriptive text font across the app.	C, D

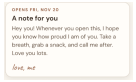
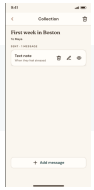
25	H8: Aesthetic & Minimalist Design	4. All Tasks	2	Button sizes are inconsistent.		This affects the readability of the product and slows the user down because their eyes scan over the product slowly (as they differentiate buttons and have to identify what is different between them other than their descriptive texts/captions)	Standardize the height/width of buttons across the app.	C
26	H9: Help Users with Errors	2. Moderate Task	2	There is no screen that tells the user what to do after their text letter character count has gone over the limit.		If the user cannot input more characters and they do not know why, it may frustrate the user and prevent them from conveying their message. The user is not helped with their error which may prevent them from engaging in the mission of the app in the first place.	Add dedicated error UI for if the user goes over the character count specified for writing a text letter.	C

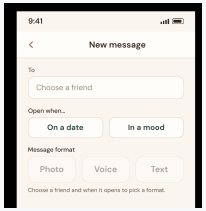
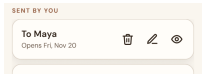
27	H10: Help & Documentation	5. Extra Violations	4	There is no help screen or onboarding for the user.		When entering the app, the user may not understand how to use different parts of the app, especially if they are unfamiliar with the UI of modern apps. The target audience of the app is people who want to support long-distance friends, which doesn't encapuslate a specific age group, so additional help and documentation for people who can't follow the steps higlighted by the interactable objects in the Figma is necessary. The prototype does not visibly provide guidance explaining how scheduled letters and mood-based opening conditions work. These features may be unfamiliar to new users, making it difficult to understand when and how recipients can open their letters.	Add a help/documentation tab that allows the user to get set up and send their first letter and guides them when they are writing their first letter.	C, A
28	H11: Accessible Design	2. Moderate Task	0	When the user sends a message, they can choose between modes but can't choose multiple modes.		The user might want to send multiple images/voice notes/texts that represent the same thing in different ways to make their message more accessible to their friend.	Add a multimodal letter feature which allows the user to send multiple modes to their friend.	C, A

29	H11: Accessible Design	4. All Tasks	1	Stampy is purely text-based rather than multimodal.		If the user is visually impaired, they may not be able to see Stampy's tips/tooltips which seem hand-drawn rather than text-based for visual impairment audio guides.	Either make Stampy's text more readable or add a designated alt text or read-aloud function on Stampy.	C
30	H11: Accessible Design	2. Moderate Task	3	When a user adds their own voice memo, they don't see their own transcript and can't edit it.		The transcript of a received letter (which is shown in the simple task) is not shown to the sender. If the receiver of the letter is hard of hearing and the transcript misconstrues what the user says, it might stress the receiver out more.	Allow the user to view and edit the transcript of their audio-recorded letter.	A, C

31	H11: Accessible Design	5. Extra Violations	0	The app does not support multiple languages.	This makes the app inaccessible to users that don't speak English.	Add multiple language options and a framework to easily change the language of the app.	C
32	H12: Value Alignment & Inclusion	4. All Tasks	0	There does not seem to be any content moderation.	If the point of the app is to help the user navigate through stressful times, a bad actor could make the user unintentionally more stressed out.	Add moderation or allow the user to not open a letter (this goes back to the back button error in problem #1).	C

33	H12: Value Alignment & Inclusion	5. Extra Violations	1	The app does not describe its values, mission statement, or intentions		Describing the developer's intentions for the app might help people greater understand the purpose of the app to send intentional, well-thought-out messages rather than memes to their friends (where other methods of voice memos would work better).	Add an about page that lets the user see the values of Open When or encode the values in the onboarding.	C
34	H12: Value Alignment & Inclusion	4. All Tasks	3	The amount of text the user can send in a letter is limited to 500 characters.		This does not align with the values of the app if it is meant for the user to be able to send a heartfelt message to their friend. It restricts the user from saying their full emotions if it fits in more than 500 characters.	Increase the character limit or don't have a character limit at all.	C
35	H1: Visibility of System Status	1. Simple Task	1	The opened letter does not display the reason it became available, even though the sealed envelope previously said "Open on your first day!"		Once the envelope opens, users lose the context explaining why they received this letter at this particular moment.	Keep a small label such as "Pri set this to open on your first day" above the audio message.	B
36	H2: Match b/w System & World	1. Simple Task	2	After the user selects "Save," the confirmation screen displays "Filed under Pri," even though the previous button was labeled "Save."		Filed under suggests a different action than saving a letter. Users may wonder whether the letter was saved normally or not.	Filed under Pri with "Saved letter from Pri" to maintain familiar terminology throughout the flow.	B
37	H5: Error Prevention	1. Simple Task	3	The listening screen presents a "Save" button while the voice message is still playing.		If saving immediately navigates away and interrupts playback, users could unintentionally leave before hearing the full message.	Allow users to save the letter without interrupting playback, or clarify that saving will return them to the Letters screen.	B
38	H1: Visibility of System Status	2. Moderate Task	2	On the final Sent tab, Maya's new message only shows "When they feel stressed," without indicating that it is still locked.		Users cannot easily tell whether their message is waiting, delivered, or opened.	Show a status in the same position such as "Locked, waiting for mood trigger."	B
39	H3: User Control & Freedom	2. Moderate Task	2	On the New Message and Review screens, there is a back arrow but no clearly labeled option to cancel or discard the current message.		Users may be unsure whether leaving the flow saves or discards their progress.	Add a Cancel option with a choice to save or discard the draft, or also add a popup confirmation with the back arrow.	B

40	H4: Consistency & Standards	2. Moderate Task	1	Across the Review Message screens, users see "Record again" for voice, "Edit message" for text, and "Change photo" for images.		Similar actions use different terms.	Use consistent language, such as "Edit recording," "Edit text," and "Change photo."	B
41	H7: Flexibility & Efficiency of Use	2. Moderate Task	2	On the Review Message screens, changing the recipient or unlock condition requires returning to New Message rather than editing those details directly.		Users who frequently create letters must repeat navigation whenever they want to revise earlier choices.	Let users edit all message details from the review screen.	B, D
42	H4: Consistency & Standards	2. Moderate Task	2	On the Letters screen, Received has "Person" and "Sort by" dropdowns, but the Sent tab has no corresponding filtering or sorting options.		Users with many scheduled letters may have difficulty finding a particular message to edit.	Add person filtering and sorting to Sent.	B
43	H8: Aesthetic & Minimalist Design	2. Moderate Task	0	On the New Message screen, the mascot asks "Who's it for and when should it open?" while the form already has "To" and "Open when..." fields.		The mascot repeats instructions already conveyed by the form and adds unnecessary information.	Shorten the mascot's text or use it for guidance not already provided.	B
44	H9: Help Users with Errors	2. Moderate Task	2	On the New Message screen, there is no visible explanation of what happens if a selected mood condition cannot be detected or the recipient has not enabled mood sensing.		Users may not know why a message failed to unlock or how to correct its condition.	Provide an explanatory error state and an alternative unlock method.	B
45	H10: Help & Documentation	2. Moderate Task	2	On the New Message screen, users can select "In a mood" but have no visible help or explanation of the ring's role in unlocking messages.		First-time users may not understand how mood-based delivery differs from date-based delivery.	Add a short explanation or information icon next to the mood option.	B, D
46	H11: Accessible Design	2. Moderate Task	2	On the final Sent tab, delete, edit, and view appear only as a trash can, pencil, and eye without visible text labels.		Users unfamiliar with the icons may have difficulty identifying their functions, especially the eye icon.	Add text labels or accessible descriptions for each action.	B
47	H12: Value Alignment & Inclusion	2. Moderate Task	3	On the Text Review screen, the app adds "A note for you" and "love, me," even though neither was entered on the Text Message screen.		Senders may unintentionally send wording that does not reflect their intended tone or relationship.	Let users edit or remove automatically added titles and signatures.	B, C
48	H1: Visibility of System Status	3. Complex Task	1	On the Collections home screen after creating the Maya collection, but before sending it, the collection does not show it is a draft.		Users cannot easily distinguish unfinished collections from those already delivered.	Display clear "Draft" status.	B, D
49	H2: Match b/w System & World	3. Complex Task	1	On the Collection screen, the title is simply "Collection," while the actual collection name appears below.		The generic heading makes it less immediately clear which collection is being edited.	Use "First week in Boston" as the navigation title.	B
50	H3: User Control & Freedom	3. Complex Task	3	On the Collection screen, users can delete the collection but have no visible way to rename it or change the recipient after creating it.		Users cannot easily correct mistakes in collection details without starting again.	Add an "Edit collection" option to change its name and recipient before sending.	A, B, D
51	H11: Accessible Design	3. Complex Task	2	On the Collection screen, the trash icon for deleting the entire collection is positioned in the top-right corner without a text label.		Users may mistake it for deleting a single message, risking the entire collection.	Label it "Delete collection" or move it into a collection settings menu.	B, D
52	H6: Recognition not Recall	3. Complex Task	2	On the Collection screen, a message is labeled only "Text note" and "Opens Fri, Nov 20."		Multiple text messages could look identical, forcing users to open each one to identify its contents.	Show a short preview of each message or its title.	B
53	H6: Recognition not Recall	3. Complex Task	1	On the Collections home screen, "First week in Boston" is shortened to "First week in Bost..."		Users with similarly named collections may struggle to identify the correct one.	Allow the complete collection name to wrap onto two lines.	B
54	H7: Flexibility & Efficiency of Use	3. Complex Task	2	On the Collections home screen, there is no search or sorting option for existing collections.		Users managing many collections may need to scroll through them to find a particular friend or event.	Add search or filtering by recipient and status.	B
55	H8: Aesthetic & Minimalist Design	3. Complex Task	1	On the Collections home screen, every collection card displays the same generic image placeholder.		Repeated graphics occupy space without helping users distinguish collections.	Include a settings tab to then use a friend's photo or a smaller visual indicator	B

56	H4: Consistency & Standards	2. Moderate Task		1	Header is not aligned in the letter writing screen		The headers appear visually misaligned with the rest of the interface, creating an inconsistent layout and reducing visual harmony.	Ensure the header is properly centered and follows consistent alignment and spacing guidelines.	A
57	H5: Error Prevention	2. Moderate Task		2	No confirmation before sending a letter		The prototype does not clearly establish whether users receive a confirmation before sending a letter. Without confirmation, users could accidentally send letters before they are ready.	Add a review step before sending one.	A
58	H7: Flexibility & Efficiency of Use	2. Moderate Task		2	Users can't choose the time		When scheduling a letter to open on a specific date, users can only select the day, not the time. This limits flexibility, especially for users who want their letters to arrive at meaningful moments. Additionally, the interface does not clarify what time the letter will become available.	Allow users to select both a date and a time when scheduling a letter. Display the exact opening date and time, including the recipient's time zone, to avoid confusion.	A, D
59	H8: Aesthetic & Minimalist Design	2. Moderate Task		1	Eye icon is redundant		The eye icon appears to be redundant, as tapping it performs the same action as tapping the letter card itself. This adds unnecessary visual clutter without providing additional functionality.	Remove the eye icon and allow users to view the letter by tapping anywhere on the card. This would simplify the interface and make the available actions clearer.	A
60	H9: Help Users with Errors	2. Moderate Task		2	What happens if there is missing information?		It is unclear how the interface handles incomplete or invalid messages, such as missing recipients, empty content, or invalid opening dates. Without clear error messages, users may struggle to understand why they cannot proceed.	Provide specific, actionable error messages next to the relevant fields, explaining what needs to be corrected.	A
61	H7: Flexibility & Efficiency of Use	3. Complex Task		2	Single vs multiple senders		Collections appear to be limited to messages created by a single sender. The prototype does not demonstrate whether multiple users can contribute messages to the same collection, limiting flexibility for group experiences such as birthdays, graduations, or other special occasions.	Allow users to create shared collections where multiple friends or family members can contribute messages for the same recipient.	A
62	H12: Value Alignment & Inclusion	3. Complex Task		2	Unclear participation on letters		Collections contain personal and potentially sensitive messages, but the prototype does not clearly communicate who can access them or whether multiple users can contribute. This lack of clarity may raise privacy concerns and make users hesitant to share personal content.	Clearly display who has access to each collection and allow users to manage privacy settings and permissions, including who can view or contribute messages.	A
63	H2: Match b/w System & World	1. Simple Task		2	Lock icon makes the letter seem unavailable even though Open works		The lock icon makes it seem like the letter can't be opened yet but there's also an Open button. It's a bit confusing, especially since the whole idea of the app is that letters stay locked until a certain time	Show an unlocked seal or a clearer "Ready to open" status once the letter is available	D
64	H1: Visibility of System Status	1. Simple Task		1	After tapping Open, the screen says "The seal is broken" while the button still says "Opening..." and appears disabled. It wasn't immediately clear whether the letter had finished opening or whether I still needed to wait.		The two messages seemed to suggest different states. Users need to know whether something is still processing or whether the action has finished	Keep the messaging consistent. Show "Opening..." while the animation is running, then move to the letter once it's ready.	D

65	H4: Consistency & Standards	1. Simple Task	2	When pressed Play, the button changed to pause but the transcript stayed the same and the mascot's instruction changed from "Press play!" to "Pri is talking." When I paused and returned to the original screen, the mascot still said "Press play!" even though I had already started listening	Play and Pause buttons change, which is good, l	Have the mascot's text change	D
66	H8: Aesthetic & Minimalist Design	1. Simple Task	1	On the saved letter screen, it says "File	The repeated messages feel a bit unnecessary since it's already clear that the letter was saved. One confirmation would probably be enough.	Keep one clear confirmation s	D
67	H7: Flexibility & Efficiency of Use	2. Moderate Task	2	After taking/selecting the photo, the review screen only gives me the option to "Change photo." I was expecting some basic options like cropping or adjusting the picture before sending it	Since these are personal letters, I think users might want a little more control over the photos they send. Right now it feels like I can only keep the picture or replace it completely.	Add a few basic photo editing	D
68	H6: Recognition not Recall	2. Moderate Task	2	When I clicked to choose a friend, it jus	It wasn't very clear whether Maya was already se	Add a dropdown arrow or a contact selection screen so it's more obvious that users can choose a friend	D
69	H6: Recognition not Recall	2. Moderate Task	2	When choosing "On a date," it just fills i	Picking the opening date is a pretty important part of sending the letter. I think seeing a calendar would make the process easier to understand.	Show a calendar when users s	D
70	H6: Recognition not Recall	3. Complex Task	1	These collection cards only show the person's name, collection name and number of messages. I couldn't really tell what kind of letters were inside or when they were meant to open	If someone has several collections for the same	Maybe show a short preview c	D
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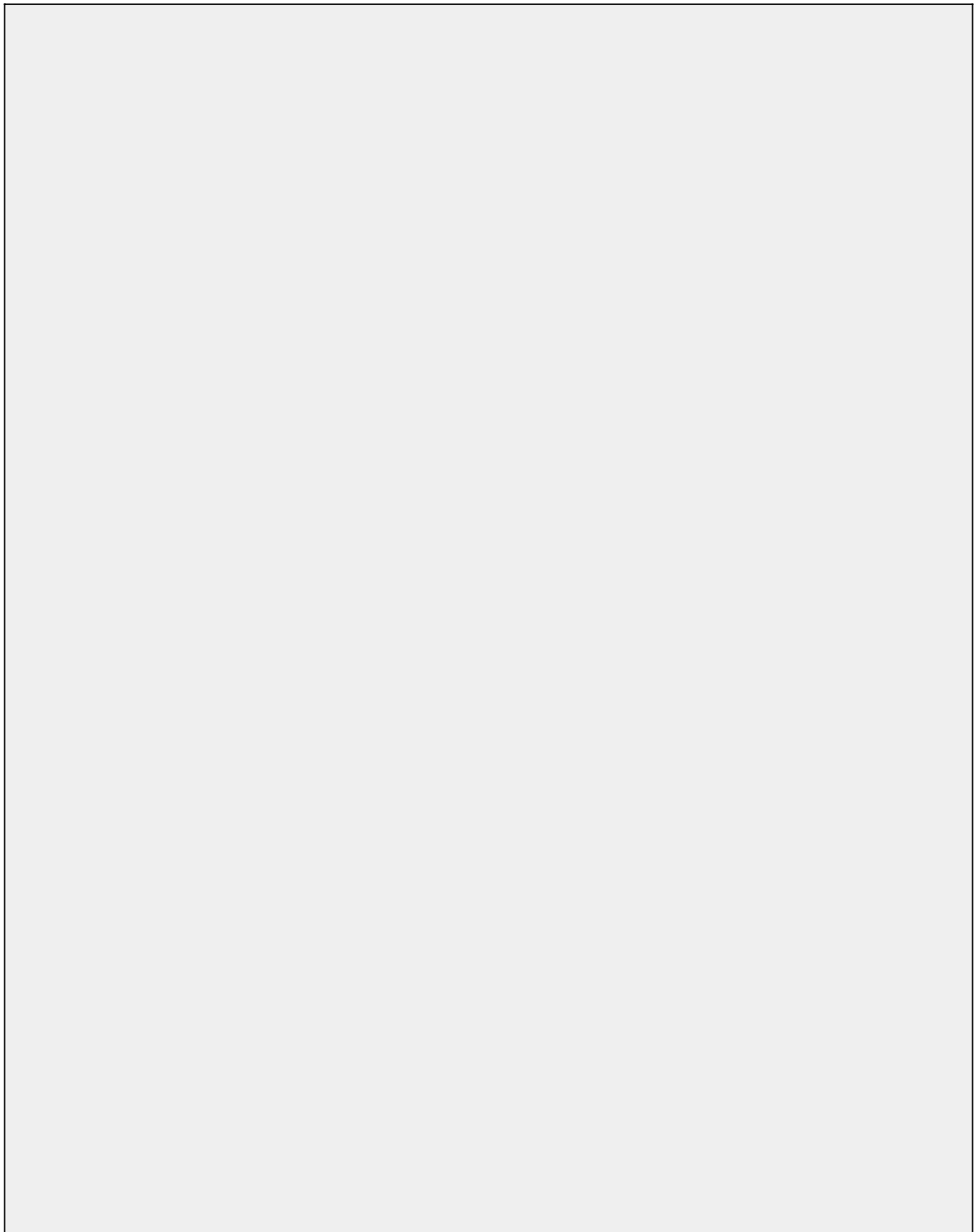
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Heuristic	# Viol. (sev 0)	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (total)
H1: Visibility of System Status	0	3	3	2	0	8
H2: Match b/w System & World	0	1	3	0	0	4
H3: User Control & Freedom	0	0	2	2	0	4
H4: Consistency & Standards	0	4	6	1	0	11
H5: Error Prevention	0	1	1	2	0	4
H6: Recognition not Recall	0	3	3	1	0	7
H7: Flexibility & Efficiency of Use	0	0	5	4	1	10
H8: Aesthetic & Minimalist Design	1	3	2	0	0	6
H9: Help Users with Errors	0	0	3	0	0	3
H10: Help & Documentation	0	0	1	0	1	2
H11: Accessible Design	2	1	2	1	0	6
H12. Value Alignment & Inclusion	1	1	1	2	0	5
Total Violations	4	17	32	15	2	70

** for this to calculate properly, **delete** any unused rows from your 'Group Heuristic Evaluation' chart!*

Severity	Evaluator A *[your name here]*	Evaluator B *[your name here]*	Evaluator C *[your name here]*	Evaluator D *[your name here]*
0	0.01428571429	0.01428571429	0.04285714286	0
1	0.02857142857	0.1	0.08571428571	0.05714285714
2	0.08571428571	0.1714285714	0.1571428571	0.1571428571
3	0.08571428571	0.05714285714	0.1857142857	0.07142857143
4	0.02857142857	0	0.01428571429	0
Total (sevs. 3 & 4)	0.1142857143	0.05714285714	0.2	0.07142857143
Total (all sevs)	0.2428571429	0.3428571429	0.4857142857	0.2857142857



We really enjoyed exploring Open When through your mid-fi prototype. Overall, this is a really well-polished piece of work and it was easy to see how much care and effort you put into the prototype, and you'll notice that most of our heuristic evaluations are non-obvious. We have five general takeaways we want to focus on for this summary: the letter screen, the navigation bar, aesthetic affordances, collections editing, and the workflow of editing the letters.

For the letter screen/when interacting with the letter-editing workflow, for example, you need to delete an entire message to edit your content. This makes you go through more pages (go back to Letters, delete it, go back and start a new letter, a whole workflow.) This could be solved by just being able to edit the content from the Edit Letter page.

For the navigation bar, you'll notice that we pointed out that your navigation bar wasn't working and therefore was obsolete between your screens; we noticed this wasn't listed in your limitations so we wanted to mention it. Because of this, there were no transitions between your simple, moderate, and complex tasks. We recommend that for your high-fi prototype, you thoroughly flesh out how you want your screens to interact with each other, as we personally were not able to get a full feel of the app just through heuristically evaluating your mid-fi; this may involve revisiting A5 and looking at how you maintained a home screen in a lo-fi prototype, which can definitely guide you in linking your task flows for A8 (we checked out your task flows from the Open When website and they look really solid).

For aesthetic affordances, we mainly recommend consistent formatting of buttons. Another trend we noticed was the affordances of buttons among your screens. While your app is designed beautifully, there are some inconsistencies in how buttons, and specifically the design formatting of these buttons, may make the app less readable to the reader and therefore more clunky. For example, we mentioned that the color of the seal of the letter and the color of the Open button were the same, and how they both had white line (whether font or icon) on them. To the user, both shapes are effectively clickable buttons; however, only the latter was interactable, which would slow a user down if they believed they could click either/or. We recommend overall standardizing your buttons, and furthermore, differentiating between types of buttons (toggles, single-clicks) so that that according to H4, H6, and H8, the user can read your interface more smoothly and not be confused on what objects are clickable, reversible, etcetera.

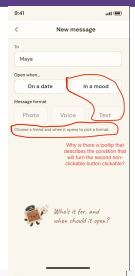
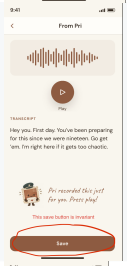
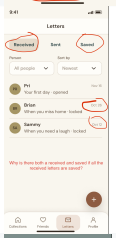
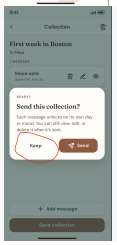
When editing collections, there should be an icon that replaces the current delete collection icon to encompass different actions the user can take in regard to their collection. Here, they should be able to rename the collection, choose another recipient if they misclicked the first time, or even delete the entire collection. This gives the user more agency in their personal collections, especially given the larger meaning associated with these collections.

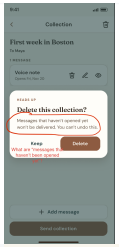
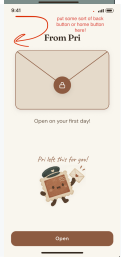
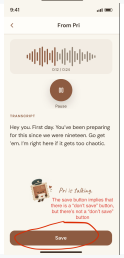
Another thing we noticed was that the date and mood section could use a but more clarification as it's pretty important part of Open When. Upon selecting "in a mood" it just showed "When they feel stressed" and that wasn't obvious enough, why it was already selected. We think showing the different mood options and maybe explaining a bit how that works would be helpful. Also the locked and opened states of the letters felt a little confusing at times. As the letter still has an unopened lock (the envelop icon) even after opening, it was a little confusing.

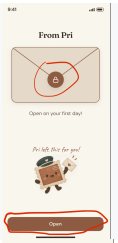
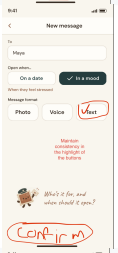
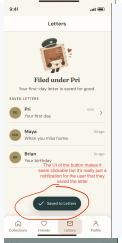
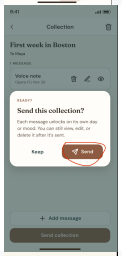
Prototype Description: *Open When is a mobile app for supporting users who are going through hard times or life changes by allowing them and their long-distance friends to mutually send and receive time or mood-sensitive voice notes to counteract these changes as they come/when they're needed most.*

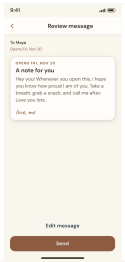
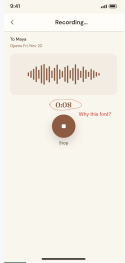
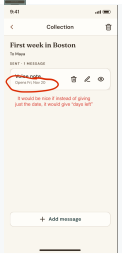
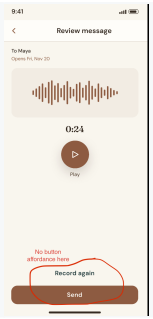
Simple Task	*The user receives and opens a letter from their friend.*
Moderate Task	*The user sends either an image or a voice note letter to their friend.*
Complex Task	*The user builds a collection of past letters they've received.*

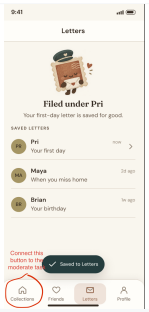
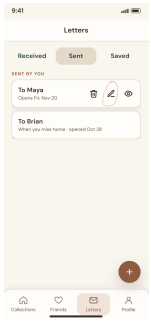
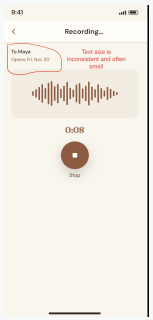
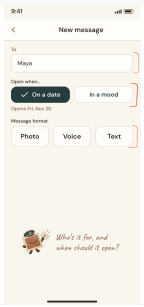
**attach images in this column if helpful*

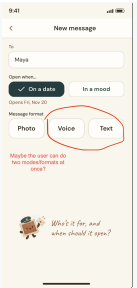
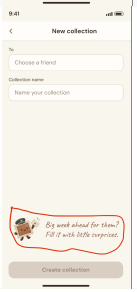
Problem #	Heuristic	Task	Severity	Description	Images	Rationale	Fix	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
2	H1: Visibility of System Status	2. Moderate Task	1	There are multiple buttons on a screen but not all of them are interactable.		The user has to read a tiny tooltip that tells them the conditional of whether they can interact with the buttons on the screen. The user is therefore confused by what state the system is in because if they tap the obvious-looking button on the screen only to see it does not react, then they mistrust the system and have to read closer into it on each subsequent screen, slowing them down.	Make the buttons permanently interactable or hide them until the user clicks the previous (open when) button.							
3	H1: Visibility of System Status	1. Simple Task	3	The user can save the same letter multiple times.		The letter is already saved but the user still has the option to save it if they choose to listen to the letter again, confusing the user about the system status. (Additionally, the back button leads back to the first screen of the simple task, but I believe this is just a bug of your prototype)	Either change the save button once the letter is saved to "close", or if you want the user to consistently save the letter, add a separate option (maybe in red) to delete the letter.							
4	H1: Visibility of System Status	2. Moderate Task	3	All received letters are automatically saved in the received tab on the home screen.		There is an option to save a received letter which implies that there are letters that are not saved. Either way, the received letters tab is redundant with the saved letters tab and they serve the same purpose (since the letters which exist in the received tab have dates from before the current date of the prototype). It says locked, but the opened one which the user saved says opened but is not accessible through the saved tab. Overall, these states are inconsistent/hard to navigate for the user.	Either combine the received/saved tabs or delete the old received letters from the received tab/automatically archive them to the saved tab.							
5	H1: Visibility of System Status	3. Complex Task	1	"Keep" is the alternative option to "Send"		Keep may confuse the user that they will keep their collection and never be able to send it.	Change "keep" to "Cancel"							

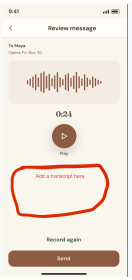
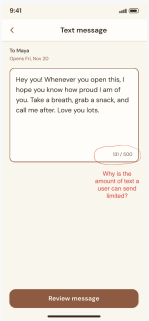
6	H2: Match b/w System & World	3. Complex Task	2	The terminology of an opened message and who opened it unclear to the user.		Because this is clearer to the developer and less clear to the user, the description is asymmetrical and doesn't match the real world demographic of users that will use the app.	Fix the error message to be more clear; who is opening the message if it hasn't been delivered?
7	H3: User Control & Freedom	1. Simple Task	3	When the user clicks on a notification to receive a letter, they can only open it rather than going back to the home screen.		This prevents the user from accessing the app freely, or having an "emergency exit" from getting stuck. Thus, the user does not have the control or freedom needed to engage with the app and engage in its values.	Add a back button to the "open letter" screen.
8	H3: User Control & Freedom	1. Simple Task	3	There is a save button but no "don't save" button.		The "save" button implies that the user has an option to not save the letter, but they are not given that freedom/flexibility to do so, meaning they must save every letter they receive.	Add a "don't save" or "delete" button to the letter, or make the letters auto-saved.
9	H3: User Control & Freedom	5. Extra Violations	2	Profile and friends tabs in the navigation bar are inacessible.		This might be just for the prototype, but generally, if including tabs in the navigation bar, ideally make them navigatable between each other especially if they contain the simple, moderate, and complex tasks.	
10	H3: User Control & Freedom	2. Moderate Task	2	When editing a voice letter, you can only replace it (rather than extending it)		The user has no "emergency exit" or undo button when recording a voice memo; it is instead one-and-done and they cannot extend it, no matter if they believe their existing voice memo is polished and they just want to add more to it. This prevents the user from freely engaging with the voice memo they created despite being given the option to edit it.	Add a feature to extend the recording of the voice memo.

11	H4: Consistency & Standards	1. Simple Task	2	The color of the letter seal and the color of the "open" button are the same.		The color of affordance is the specific brown color on the Open button. By making them both the same color, the user assumes that both are interactable, while only the Open button is interactable.	Either make the seal interactable or change its color.
12	H4: Consistency & Standards	2. Moderate Task	3	The user cannot change their existing choices on the screen when sending a message.		The user has a "confirmation" highlight for their "open when" condition but they do not have a confirmation highlight for the modality; this creates dissonance in the user's understanding of the editability of their options and slows them down as they navigate the app.	Add a "Confirm" button at the bottom of the screen and maintaining the green highlighted confirmation status for the modality
13	H4: Consistency & Standards	1. Simple Task	1	The "saved to ___" screens have a green border around them that makes them look either like a user selection or something clickable.		By adding the affordance of clickability to the notification that the user has saved a letter, the user is confused and might try to click on that notification because it looks similar to other button formats in the app.	If it was meant to be clickable, make the button clickable; if not, then either remove the border or otherwise change the formatting to make it not look clickable.
14	H4: Consistency & Standards	4. All Tasks	2	Only on the "send" button of the "send collection" popup is there a paper airplane icon next to send.		This is inconsistent among the app and may confuse the user whether or not the different "send" buttons mean the same thing (i.e. sending to the friend of the user).	Either keep the paper airplane icon among all send buttons in the app or omit the icon from the "send" button in the "send collection" confirmation popup.
15	H4: Consistency & Standards	2. Moderate Task	2	The existing sent letter has a 3D shadow around the description.		The 3D shadow and the line around the "Opened Oct 28" and the "Missing you already" fields are previously used as an affordance for interactable buttons. This may confuse the user/slow them down if they second guess what is interactable versus what isn't.	Get rid of the shadow or outline that make the fields seem interactable.

1	H4: Consistency & Standards	2. Moderate Task	3	The "Review Message" screen is redundant.		Everything that can be done on the "Review Message" screen can also be done in the previous screen (in fact, there is a button that brings the user back to the previous screen). This might confuse the user because they are essentially going from an interactable screen to the exact same screen with no interactability.	Remove the "Review Message" screen and just keep the message-writing screen.
17	H4: Consistency & Standards	2. Moderate Task	3	The serif font only appears in three unrelated scenarios: when a letter is sent, when a collection is sent, or when a letter is received but only on the first screen where it says "From ___".		This serif font is very special and different from the sans-serif of the rest of the app. It is understandable if it is used for important, must-be-read text, but it is used in random situations which decreases the overall readability of the app (especially when it is used as the timer for the voice recording).	Use the serif font only for important text; otherwise, don't use it.
18	H5: Error Prevention	3. Complex Task	3	The terminology of the message deletion is unclear.		If the user deletes a voice memo from their collection, it's unclear whether or not it's removed from just the collection or from the app as a whole.	Be clearer about if deleting the letter from the collection also deletes the letter from the app.
19	H5: Error Prevention	3. Complex Task	0	The number of days until a message opens is unclear.		The user might not edit their message in time (error).	Add an indicator of how many days the user has left to edit their letter to their friend.
20	H6: Recognition not Recall	2. Moderate Task	2	When sending a letter, there is no "letter" imagery		The lack of letter imagery when sending a letter might detract from the sentiment of sending a letter that will be opened later to the user. This lack of format might make the structure of voice memos or notes less formal or supportive than usual.	Add more letter imagery outside of the simple task that will carry the motif of sending/receiving letters throughout the app.
21	H6: Recognition not Recall	4. All Tasks	2	For many of the "record again" or "edit" tasks, the button to enter these tasks has no border.		The previous affordances of clickable buttons in the UI are all colored in/have an outline, whereas these buttons do not. This may slow the user down as they might be confused whether or not they can click to edit their letter.	Add button-like affordances to the UI (whether it be an outline or a clear background color) so the user knows where to click.

22	H7: Flexibility & Efficiency of Use	4. All Tasks	4	There is no transition between the tasks; they exist as their own screens and the navigation bar is obsolete (not mentioned in README limitations)		This disrupts the overall flexibility of the app because there is no central flow for the user; each task is a one-and-done deal. Navigating between the navigation bar is essential and allows the user to engage in all facets of the app.	Connect the tasks in the prototype through the exisitng navigation bar.
23	H7: Flexibility & Efficiency of Use	3. Complex Task	3	There is no way for the user to add existing unopened letters to a collection or to move letters from a collection to outside of a collection.		Opening a collection locks a user into committing to add a certain amount of letters to that collection. If they are unsure of this commitment, there is no "emergency exit" for the user.	Allow the user to easily maneuver their letters between and outside of the collections they were generated in.
24	H7: Flexibility & Efficiency of Use	2. Moderate Task	3	Once sent but unopened, the user can only edit or delete from the "Letters Sent" screen rather than inside the letter itself.		The user can only edit or delete their sent letters from the "Sent" tab of the Letters screen, but not when they click into that letter. This may confuse the reader because they might want to look at their letter before they edit or delete it and thus would want to edit or delete the letter while viewing its contents.	Add a button within the letter screen that the user clicks into from the sent screen that allows the user to edit or delete it.
25	H8: Aesthetic & Minimalist Design	5. Extra Violations	2	Some of the descriptive text (i.e. the person the user is writing a letter to) is quite small.		To visually impaired users, this might prevent them from accurately knowing who they are writing their message to until they get the chance to double check. Either way, it's easier to prevent this just by increasing the size of the font.	Increase the size of descriptive text font across the app.
26	H8: Aesthetic & Minimalist Design	4. All Tasks	3	Button sizes are inconsistent.		This affects the readability of the product and slows the user down because their eyes scan over the product slowly (as they differentiate buttons and have to identify what is different between them other than their descriptive texts/captions)	Standardize the height/width of buttons across the app.

27	H9: Help Users with Errors	2. Moderate Task	2	There is no screen that tells the user what to do after their text letter character count has gone over the limit.		If the user cannot input more characters and they do not know why, it may frustrate the user and prevent them from conveying their message. The user is not helped with their error which may prevent them from engaging in the mission of the app in the first place.	Add dedicated error UI for if the user goes over the character count specified for writing a text letter.
28	H10: Help & Documentation	5. Extra Violations	4	There is no help screen or onboarding for the user.		When entering the app, the user may not understand how to use different parts of the app, especially if they are unfamiliar with the UI of modern apps. The target audience of the app is people who want to support long-distance friends, which doesn't encapuslate a specific age group, so additional help and documentation for people who can't follow the steps higlighted by the interactable objects in the Figma is necessary.	Add a help/documentation tab that allows the user to get set up and send their first letter.
29	H11: Accessible Design	2. Moderate Task	0	When the user sends a message, they can choose between modes but can't choose multiple modes.		The user might want to send multiple images/voice notes/texts that represent the same thing in different ways to make their message more accessible to their friend.	Add a multimodal letter feature which allows the user to send multiple modes to their friend.
30	H11: Accessible Design	4. All Tasks	2	Stampy is purely text-based rather than multimodal.		If the user is visually impaired, they may not be able to see Stampy's tips/tooltips which seem hand-drawn rather than text-based for visual impairment audio guides.	Either make Stampy's text more readable or add a designated alt text or read-aloud function on Stampy.

31	H11: Accessible Design	2. Moderate Task	2	When a user adds their own voice memo, they don't see their own transcript and can't edit it.		The transcript of a received letter (which is shown in the simple task) is not shown to the sender. If the receiver of the letter is hard of hearing and the transcript misconstrues what the user says, it might stress the receiver out more.	Allow the user to view and edit the transcript of their audio-recorded letter.
32	H11: Accessible Design	5. Extra Violations	1	The app does not support multiple languages.		This makes the app inaccessible to users that don't speak English.	Add multiple language options and a framework to easily change the language of the app.
33	H12: Value Alignment & Inclusion	4. All Tasks	3	There does not seem to be any content moderation.		If the point of the app is to help the user navigate through stressful times, a bad actor could make the user unintentionally more stressed out.	Add moderation or allow the user to not open a letter (this goes back to the back button error in problem #1).
34	H12: Value Alignment & Inclusion	5. Extra Violations	2	The app does not describe its values, mission statement, or intentions		Describing the developer's intentions for the app might help people greater understand the purpose of the app to send intentional, well-thought-out messages rather than memes to their friends (where other methods of voice memos would work better)	Add an about page that lets the user see the values of Open When.
35	H12: Value Alignment & Inclusion	4. All Tasks	3	The amount of text the user can send in a letter is limited to 500 characters.		This does not align with the values of the app if it is meant for the user to be able to send a heartfelt message to their friend. It restricts the user from saying their full emotions if it fits in more than 500 characters.	Increase the character limit or don't have a character limit at all.

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