BlooME

Nourish your body,
Grow your mind.

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FINAL REPORT

CS147 Fall 2025

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Project Name & Value Proposition

Project Name

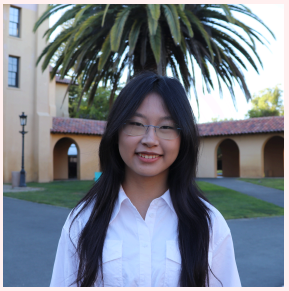
BlooME

Value Proposition

Nourish your body, grow your mind.

Team Member Names and Roles



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Content Strategist User Researcher	UI/UX Designer User Researcher	Software Engineer User Researcher	UI/UX Designer User Researcher

Problem and Solution Overview

The Problem

Many people who struggle with food, whether they fall into subclinical or clinical categories of eating disorders, often keep their pain to themselves. They hesitate to reach out to friends, family, or professionals because they feel a persisting anxiety in being a burden to others, and continue to live with their guilt around eating.

The Solution

BlooMe is a peer-to-peer story-sharing app that pairs community warmth with daily structure. It also offers journaling prompts, a personal “butterfly sanctuary” to store encouraging messages, and meal reminders with affirmations to guide recovery routines.

Needfinding

Interview Methodology

To deepen our understanding of the problem space and people's relationships with food, we conducted 11 semi-structured interviews across two phases.

Phase 1: Broad Exploration
We began with general interviews to capture a wide range of perspectives. This included six members of the general public with varying relationships to food and body image (from no struggles at all to moderate concerns and early disordered-eating patterns), one participant who had experienced significant challenges, and two clinicians working in the eating-disorder field.

Phase 2: Focused Inquiry
To better understand the experiences of our target population, we then conducted interviews with two individuals who had been clinically diagnosed with an eating disorder in the past.

Recruitment & Methods
Interviews took place both in person (Blue Bottle Coffee, Peet's Coffee, Safeway, and an eating-disorder treatment center) and online via Zoom.

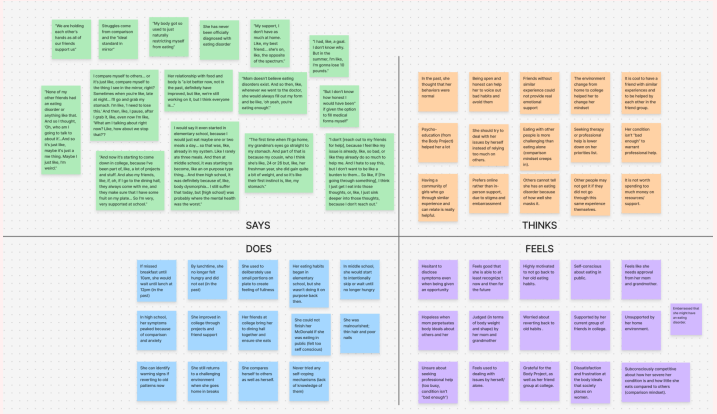
- The six general-public participants were recruited through convenience sampling, approached during fieldwork.

- The remaining five participants—those with lived or clinical experience—were recruited using purposive sampling, pre-scheduled through existing networks.

Each interview was conducted by two user researchers: one leading the conversation and one taking notes. All sessions were audio or video-recorded with participant consent and transcribed using Otter.ai. All participants took part voluntarily and received no compensation.

Interview Synthesis

We synthesized our interview data using empathy maps in Figma, breaking down what each participant says, thinks, does, and feels to draw key observations and insights. A sample empathy map, as well as key points in that map, is shown below.



When analyzing our empathy maps, several key themes emerged across the three groups of interviewees:

General Public:
A recurring theme was the desire to control aspects of food, whether minimizing food waste, ensuring nutritional quality for their children, or managing their own eating routines. When things deviated from their plan, this often triggered guilt or a sense of losing control.

Individuals With Lived Experience:
For those who have personally struggled with eating disorders, experiences were deeply shaped by social context. Comparison and judgment intensified their struggles, whereas supportive friendships and community offered space for healing. Yet despite the importance of support networks, stigma and fear of burdening others often prevented them from reaching out, sometimes even leading them to hide their struggles from family.

Experts:
From the expert perspective, recovery does not end in the clinic. Outside of treatment hours, individuals often face challenges around autonomy, secrecy, and maintaining accountability. Without consistent support in their everyday environment, progress made in structured care settings can quickly unravel.

Taken together, these patterns highlight a critical gap in current support systems: while early struggles with food and body image are shaped by complex emotional, social, and environmental factors, consistent support is rarely available at the moments people need it most. Across all groups, the desire for guidance, connection, and accountability was evident—yet the pathways to access that support remain limited.

POVs & HMWs

Based on the full set of interviews, we selected the three most relevant and insight-rich participants—Sandra, Violet, and Clarisse—for deeper analysis. All three have experienced significant struggles with food and body image, and both Violet and Clarisse have been formally diagnosed with an eating disorder in the past.

For each interviewee, we developed a **Point of View (POV) statement** to capture their core needs, motivations, and challenges. From each POV, we then generated **at least 10 "How Might We" (HMW) statements**, and selected the top three per interviewee to guide our solution brainstorming.

Below, we present the POV statements for each participant, along with a representative sample of their corresponding HMW statements.

Sandra

POV:
We met a sophomore at Azusa University who hasn't been officially diagnosed with an eating disorder, but struggles with restrictive eating patterns and body image concerns.

We were surprised to notice that she felt that her friends helped her recovery process, yet she doesn't reach out and relies mostly on herself because she doesn't want to feel like a "burden" to others.

We were wondering if this means that she is highly self-conscious about her condition and thinks that others would view her differently or more negatively if she is always "bothering" them with her condition, especially when she's not "sick enough" to warrant serious help.

It would be game-changing to have safe communities or support networks that are reflective of individual experiences that allow people to reach out without fear of judgment or burden.

HMW:

- HMW help individuals to realize that their condition *is* serious enough to be worthy of attention and care?
- HMW normalises conversations about struggles with eating so that others can feel less self-conscious about reaching out for help?
- HMW design interventions that meet people "where they are" between wellness and treatment?

Violet

POV:
We met a 21-year-old woman living in Melbourne, who has been officially diagnosed and treated in outpatient settings for anorexia nervosa since 2020.

We were surprised to notice that those who were supposed to be her strongest sources of support, her parents and doctor, were the ones who made her feel most misunderstood and invalidated, often reducing her struggle to "just eat."

We wonder if this means that people with eating disorders are not only battling the illness itself, but also the harm caused by misguided or uninformed support from those closest to them.

It would be game-changing to create recovery ecosystems that equip families and medical professionals with empathy, education, and tools to truly support rather than alienate those in recovery.

HMW:

- HMW create reliable systems for healing outside of formal, professional support?
- HMW make professional appointments just feel like conversations between friends in a safe space?
- HMW expand the support network for recovery to beyond just professionals?

Clarisse

POV:
We met a 43-year-old woman living in the Bay Area who has lived with an eating disorder for over a decade, has gone through repeated hospitalizations and residential stays, and is now using her lived experience to support others as a recovery coach.

We were surprised to notice that her most healing experiences were not ones where she was told what to do, but rather when she was given the freedom to make choices herself, even harmful ones, while others held space for her emotions and supported her through the outcomes.

We wonder if this means that the process of recovery depends less on rigid rules and compliance, and more on personal autonomy, where one feels trusted to guide their own journey with empathetic/compassionate support around them.

It would be game-changing to have healing approaches that prioritize personal autonomy and emotional safety over strict authoritarian control.

HMW:

- HMW design recovery experiences that prioritize personal choice and agency rather than compliance and control?
- HMW shift perceptions of patients from being “too ill to trust” to being capable, self-aware individuals leading their own recovery?
- HMW challenge the tendency to infantilize patients and instead recognize them as autonomous partners in healing?

Top 3 HMWs:

1. HMW design interventions that gently help individuals in the “grey zone” between wellness and treatment to recognize struggles as valid and worthy of attention?
2. HMW support individuals in cultivating the intrinsic motivation and mindset shift needed to sustain recovery?
3. HMW recognize those struggling with food and body image concerns as autonomous partners (and enable their freedom/agency, etc) in healing?

Solutions & Experience Prototypes

From there, we generated potential solutions for each HMW statement and selected our top three to explore further. For each solution, we unpacked the underlying assumptions and designed an experience prototype to test them. These are summarized in the table below.

Solution	An app that sends personalized notes to start the day, like short quotes and stories from people who have gone through similar struggles (encouraging users to recognize that their struggles are valid and deserving of help).	A guided digital journal that prompts users to reflect on values, motivations, and moments for wanting to heal their relationship with food and body image (e.g., "What will life look like if I develop a healthy relationship with food and body image?").	A collective resource that provides psychoeducation and explains the *why* behind common recovery guidelines for healing one's relationship with food and body (e.g., rules like not weighing yourself, eating three consistent meals every day, don't look at any calorie or nutrition labels of foods)- with built-in flexibility and room for customization.
Assumption	Stories from others will foster connection, validation, and hope, rather than triggering harmful social comparison or reinforcing the belief that one's struggles are "not serious enough."	People are more motivated towards this mindset shift when the reflection prompts are framed around future gains and personal values.	Users will be open and curious enough to explore the *why* behind common recovery "rules," rather than disengaging the moment they encounter them.
Experience Prototype	Story Sharing Experiment.	Motivation Framing Experiment.	"Blind rule card" Experiment.

Experience Prototype 1: Story Sharing Experiment

Who we tested: We recruited three participants (ages 19–22) from the restaurant line at Cotogna who answered "yes" to a pre-screening question: "*Do you have complicated feelings or sometimes struggle with food or body image?*"

What we did: We presented each participant with a short personal story from someone describing their struggles with food and body image (shown below). Participants rated their responses to a set of questions—e.g., "How willing are you to take action to improve your relationship with food and body image?" and "How willing are you to confide in others when these struggles arise?"—both before and after reading the story. Afterward, they also responded to an open-ended question: "*How did reading this make you feel?*"

"We would now like you to read a little personal story from someone else we met earlier today who shared their experience with food and body image. Take a minute to read it now and we'll ask you some questions afterwards."

"For a long time, I didn't think anything was wrong. Everyone around me seemed to be "watching what they ate," talking about calories, skipping meals before big dinners. I thought I was just being disciplined — even proud of how much control I had.

It wasn't until I caught myself turning down dinner plans with friends, not because I was busy, but because I didn't want to eat, that something in me paused. My world had quietly shrunk around food and fear, and it was hurting my social relationships.

I used to tell myself it wasn't serious enough to bother anyone with, or to warrant help. But one day, I realized that if something leaves you feeling miserable, anxious, and isolated — that's already "enough." You don't have to wait until things get worse to deserve support. Wanting to feel better, to have your life back, is reason enough to reach out."

What worked:

- Participants related the story to their own lives.
- Increased willingness to act & confide.
- Emotional resonance without judgment.

What didn't work:

- Some wanted more personal depth or variety.

New Insight:

- Stories can spark self-awareness and emotional connection, especially when framed as nonjudgmental and relatable.

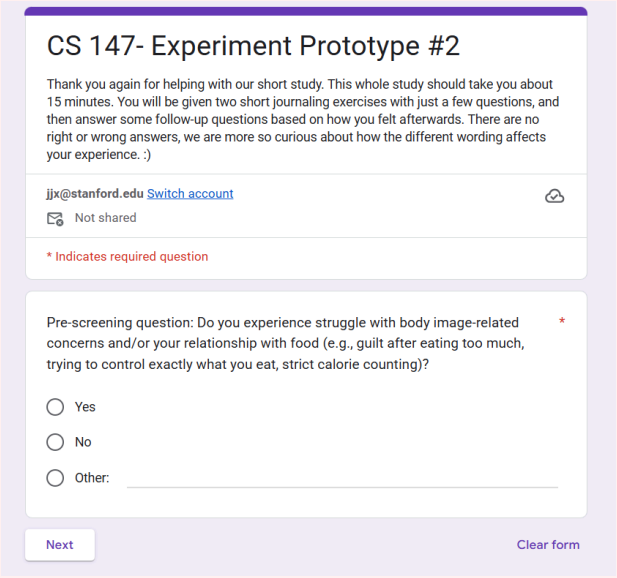
Experience Prototype 2: Motivation Framing Experiment

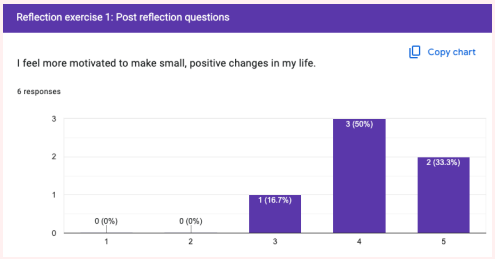
Who we tested: We recruited six participants (ages 18–26) from online google forms who answered "yes" to the same pre-screening question: "*Do you have complicated feelings or sometimes struggle with food or body image*?"

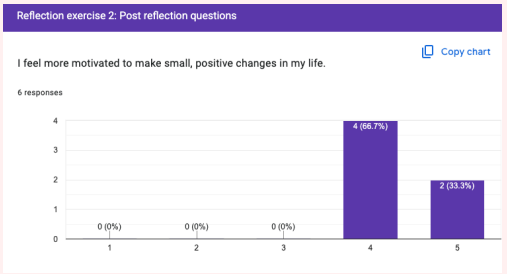
What we did: We asked participants to engage in two reflection prompts, one after the other:

- Hope-Based (what might your life look like if you felt more at peace with food and your body?)
- Loss-Based (what has your struggle with food and body image taken away from your life right now?)

After engaging in each reflection, we asked them to rate their levels of motivations, hopefulness, self-compassion, & emotional safety. We also asked them to answer some open ended questions (e.g. Which reflection felt more motivating or empowering to you? Which felt heavier or more difficult? Did either reflection make you think differently about your relationship with food or body image?).







What worked:

- Both frames felt emotionally safe (4.67 / 5).
- Hope framing is described as "gentle," "encouraging," "easier to start with."

What didn't work:

- Motivation was higher for loss (4.3) compared to hope (4.17)
- Some participants found loss prompts emotionally heavy.
- Loss framing could be overwhelming without support.

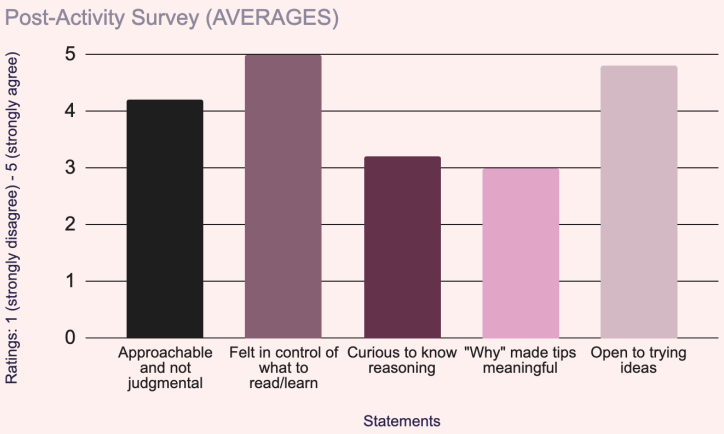
New Insight:

- Hope framing lowers the barrier to entry, while loss framing may be powerful for those who are ready to go deeper.

Experience Prototype 3: Blind Rule Card Experiment

Who we tested: We recruited five participants (ages 22–45) at Verve and Blue Bottle Coffee who answered "yes" to the same pre-screening question: "*Do you have complicated feelings or sometimes struggle with food or body image?*"

What we did: We created ten 'advice cards.' Each had a simple statement on the front, like 'Try not to weigh yourself every day.' On the back of each card was a brief explanation — the why. Participants could flip whichever cards they wanted, or none at all. We measured how often they flipped the cards, as well as their ratings of how approachable, meaningful, or judgmental the experience felt.



What worked:

- Autonomy fostered trust (even non-flippers felt respected)
- No reports of feeling pressured or judged.
- For users with less prior knowledge, explanations increased understanding and willingness to try new behaviors

What didn't work:

- Experienced participants found explanations redundant.
- Low-stakes cards ("no phone while eating") were flipped more than emotionally heavier ones ("You don't need to 'earn' your food through exercise or restriction.")

New Insight:

- Autonomy builds trust and engagement, but the 'why' should be introduced gradually to match user readiness

Design Evolution

Final Solution

From our needfinding interviews, one insight stood out from across users and experts alike: *connection*. Sandra shared that while her social circle was a major protective factor, she still struggled to reach out when she needed help. Experts echoed this tension, noting that "eating disorders thrive in secrecy and shame."

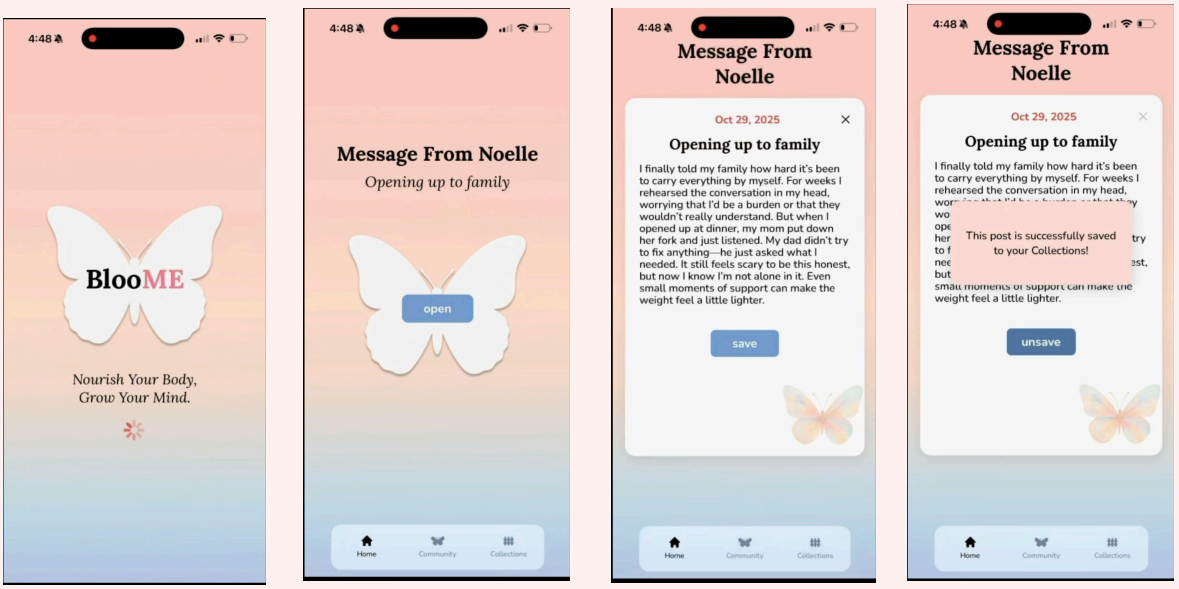
To address this shared barrier, we designed a safe, anonymous, online peer-to-peer story-sharing platform that helps users feel seen, supported, and less alone. The platform enables users to read and share personal reflections, receive encouragement, and be inspired by others' progress, reducing stigma and fostering a warm, supportive community for those in early-stage or subclinical struggles.

Tasks

Our solution evolved into a dynamic platform that supports different levels of emotional readiness and engagement through three core tasks.

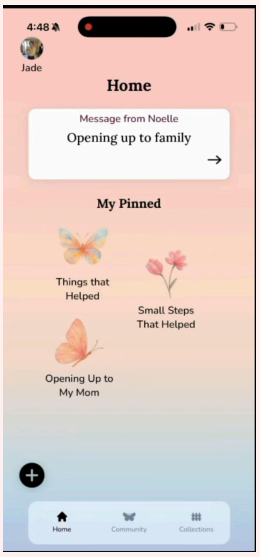
Simple: Collect a Daily Message
The simplest interaction is passively receiving the daily community message. Each time the user opens the app, a supportive note curated from the community appears automatically.

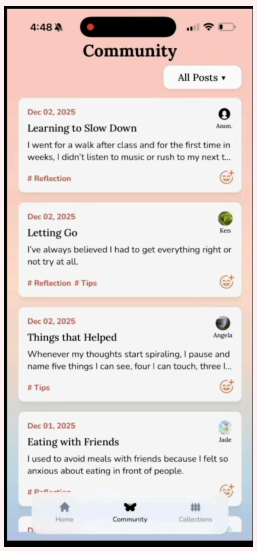
This task is accessible to all users, requiring no action, minimal cognitive effort, and no emotional vulnerability. It's designed to be repeatable, lightweight, and welcoming, making it a gentle entry point into the app.

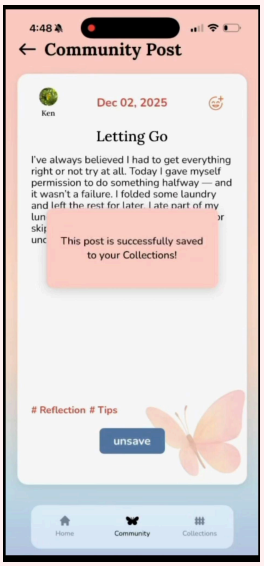


Moderate: Collect a Message From the Community

The moderate task involves navigating to the Community page to browse messages from others, and find a message that resonates with the user to add to their collection. This requires slightly more intentionality, as users must choose to engage, reflect, and identify posts that resonate with them. While more active than simply receiving the daily note, it remains approachable for most users and supports exploration without requiring self-disclosure.

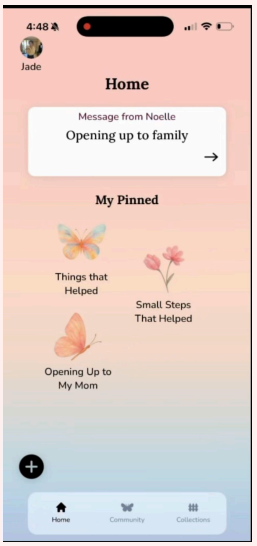


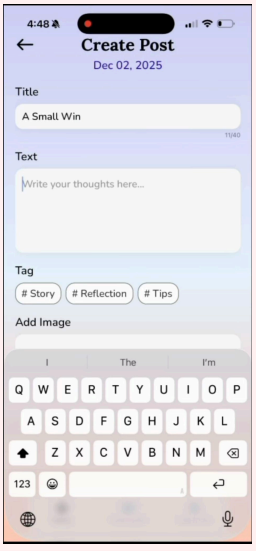


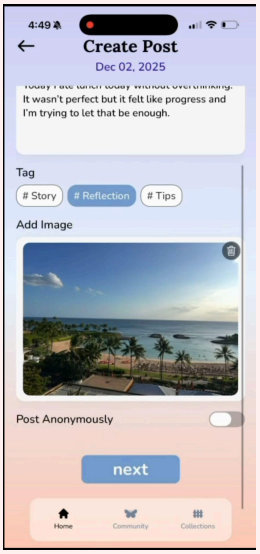


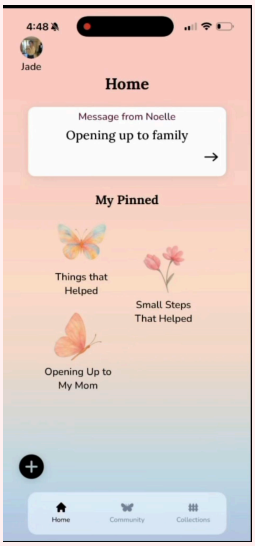
Complex: Write and Share a Personal Message

The complex task requires the user to actively write and post their own message. This task involves sharing personal experiences with a larger community, which required high vulnerability, cognitive effort, as well as intentionality. Not all users will feel ready or willing to do this, so this task will be done by more engaged users who feel comfortable opening up to others.

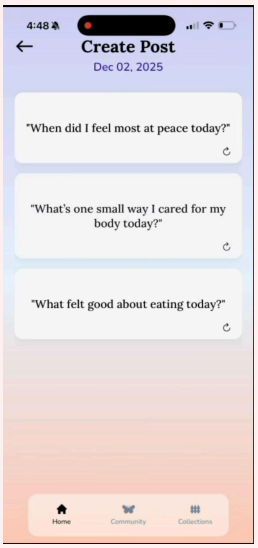


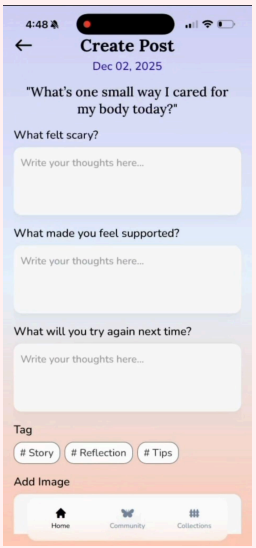


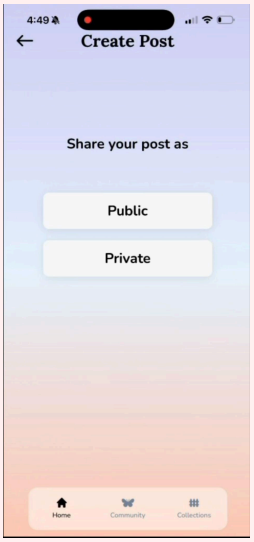


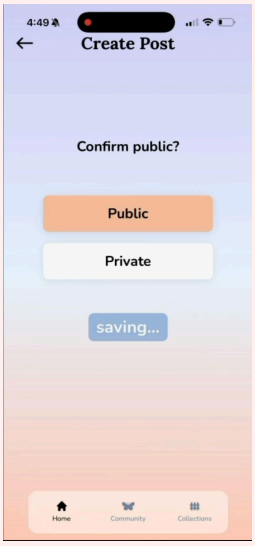

4:48
Jade
Home
Message from Noelle
Opening up to family
My Pinned
Things that Helped
Small Steps That Helped
Opening Up to My Mom
Home
Community
Collections

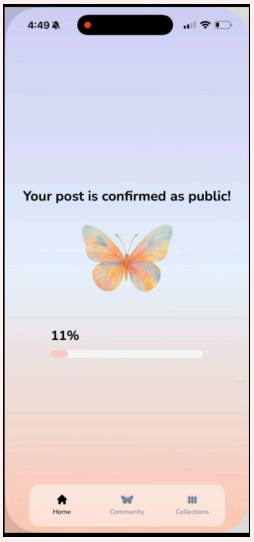

4:48
Create Post
Dec 02, 2025
How would you like to begin?
Free Writing
Guided Reflection
Home
Community
Collections

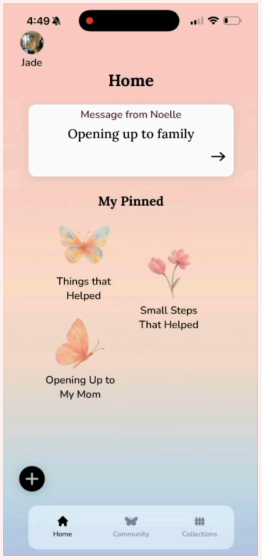

4:48
Create Post
Dec 02, 2025
"When did I feel most at peace today?"
"What's one small way I cared for my body today?"
"What felt good about eating today?"
Home
Community
Collections


4:48
Create Post
Dec 02, 2025
"What's one small way I cared for my body today?"
What felt scary?
Write your thoughts here...
What made you feel supported?
Write your thoughts here...
What will you try again next time?
Write your thoughts here...
Tag
Story
Reflection
Tips
Add Image
Home
Community
Collections


4:49
Create Post
Share your post as
Public
Private
Home
Community
Collections


4:49
Create Post
Confirm public?
Public
Private
saving...
Home
Community
Collections


4:49
Your post is confirmed as public!
11%
Home
Community
Collections


4:49
Jade
Home
Message from Noelle
Opening up to family
My Pinned
Things that Helped
Small Steps That Helped
Opening Up to My Mom
Home
Community
Collections

Design Evolution Visualizations & Rationale

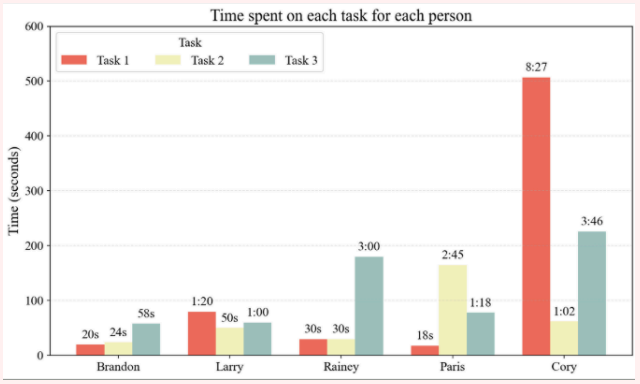
Initial Sketches

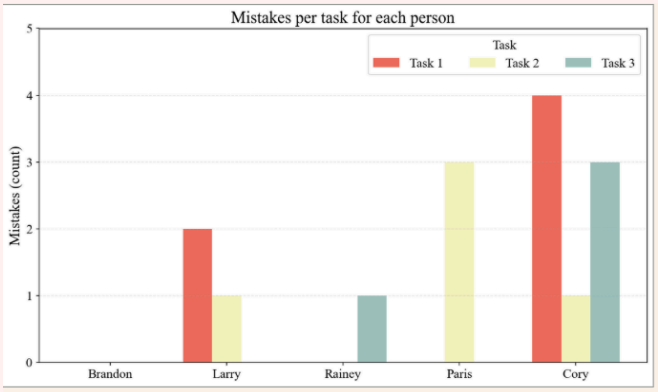
In our initial brainstorming, we explored a wide range of design directions, including a mobile app, a wearable watch interface, and even VR/AR glasses. After comparing the advantages and limitations of each, we chose to move forward with the phone application. Smartphones are nearly universal (with 91% of the population owning one) and provide a far more flexible and expressive design space for nuanced interactions. In contrast, wearables and glasses can be distracting, are not consistently worn throughout the day, and limit usability. An app also offers greater privacy and anonymity, aligning with the core values of our solution and the barriers around stigma that we aim to address.

Lo-Fi Prototype and Evaluation

Having decided on the phone application idea, we then sketched out our tasks on paper. We chose to start with low-fidelity sketches on paper as this method allowed our team to quickly and inexpensively go through different design ideas and make changes as necessary. Our low-fidelity prototype is shown below:

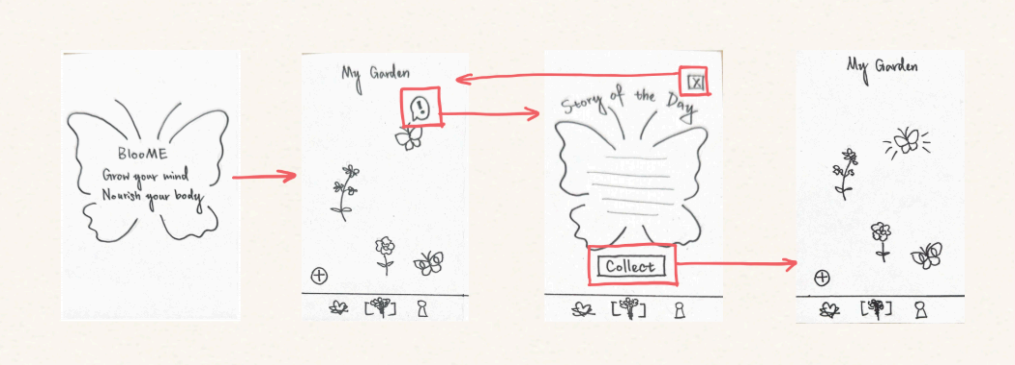
We tested our lo-fi prototype with a variety of non-Stanford participants at different locations including Blue Bottle, Verve, Starbucks, Tongsui, and Bar Zola. The participants varied in ages (20s-40s) and gender (3 women, 4 men). For each user test, we had at least one team member as the “computer” providing screens, and another team member as the facilitator providing instructions and one as the notetaker noting down any critical incidents. For our testing procedure, we first introduced the context of the problem space and our testing purpose. Then, we asked participants to complete the tasks at their best and speak aloud their thinking process. We showed them the task instructions and our prototype, but provided no guidance as to how to complete the tasks. We recorded the testing process for data analysis, measuring our usability goals of efficiency (measured by time spent on each task) and effectiveness (measured by number of misclicks on each task). We also asked for qualitative feedback post-testing to measure the usability goal of enjoyment.





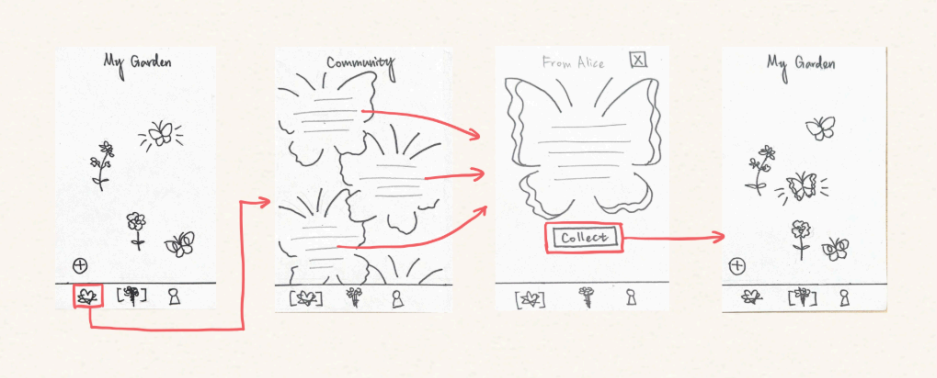
Overall, as shown in the two graphs above, task efficiency was strong: most participants completed each task within a reasonable time frame. The only outlier was one participant who experienced visibility-related accessibility challenges, which made the first task slower to complete. Mistakes per task showed more variability—while some participants completed tasks immediately, others needed a few attempts to get familiar with the interface. Tasks 2 and 3 were generally completed smoothly, whereas Task 1 occasionally caused some confusion. More detailed observations for each task are summarized below.

Lo-fi simple task:



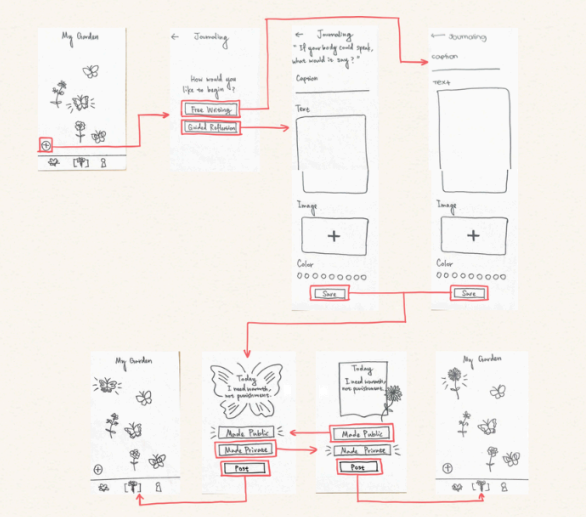
For the first task—collecting the daily message—participants were required to tap the exclamation mark icon. However, this interaction was not intuitive for all users. Several participants noted that the exclamation mark did not stand out visually, causing them to overlook it. In addition, without any initial guidance, users had to infer the meaning of all the butterfly and flower icons on their own, which made it harder to identify the exclamation mark and successfully access the daily message.

Lo-fi moderate task:



The second task required participants to collect a message from the community and add it to their collection. Some people struggled to identify the heart symbol in the navigation bar as representing the community. However, overall this task was completed successfully with little friction.

Lo-fi complex task:



For the final task, writing and posting your own message, users suggested including the date and time for each post. One participant also mentioned that some people “need more guidance and warm sentences along their journey”, which inspired future change with more supportive scaffolding for reflection.

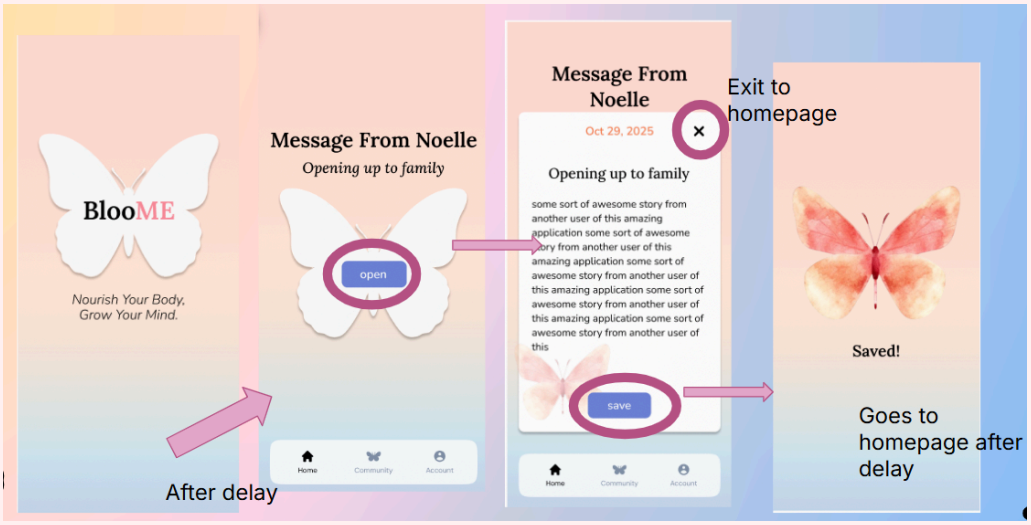
Lo-fi additional comments:

Moreover, more broadly, users also identified confusion with the home screen, as the icons were confusing and the navigation bar unintuitive. This led us to reconsider the design layout & arrangement of the main page.

Med-Fi Prototype and Evaluation

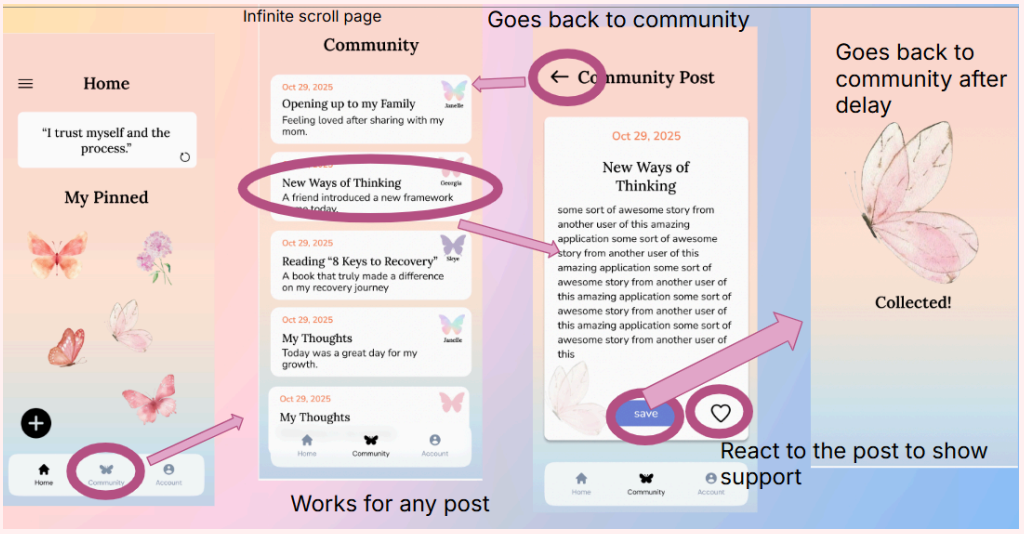
We created a mid-fi prototype using Figma to design the UI and wireframe. The prototype had the same task flows as before, except optimized incorporating user feedback from our low-fi prototype.

<u>Med-fi simple task:</u>



The biggest adjustment to the first task is that instead of making the user click on the exclamation mark to see the message of the day, the message appears automatically. This reduces the level of friction and effort on the user, making it easier to engage with the post.

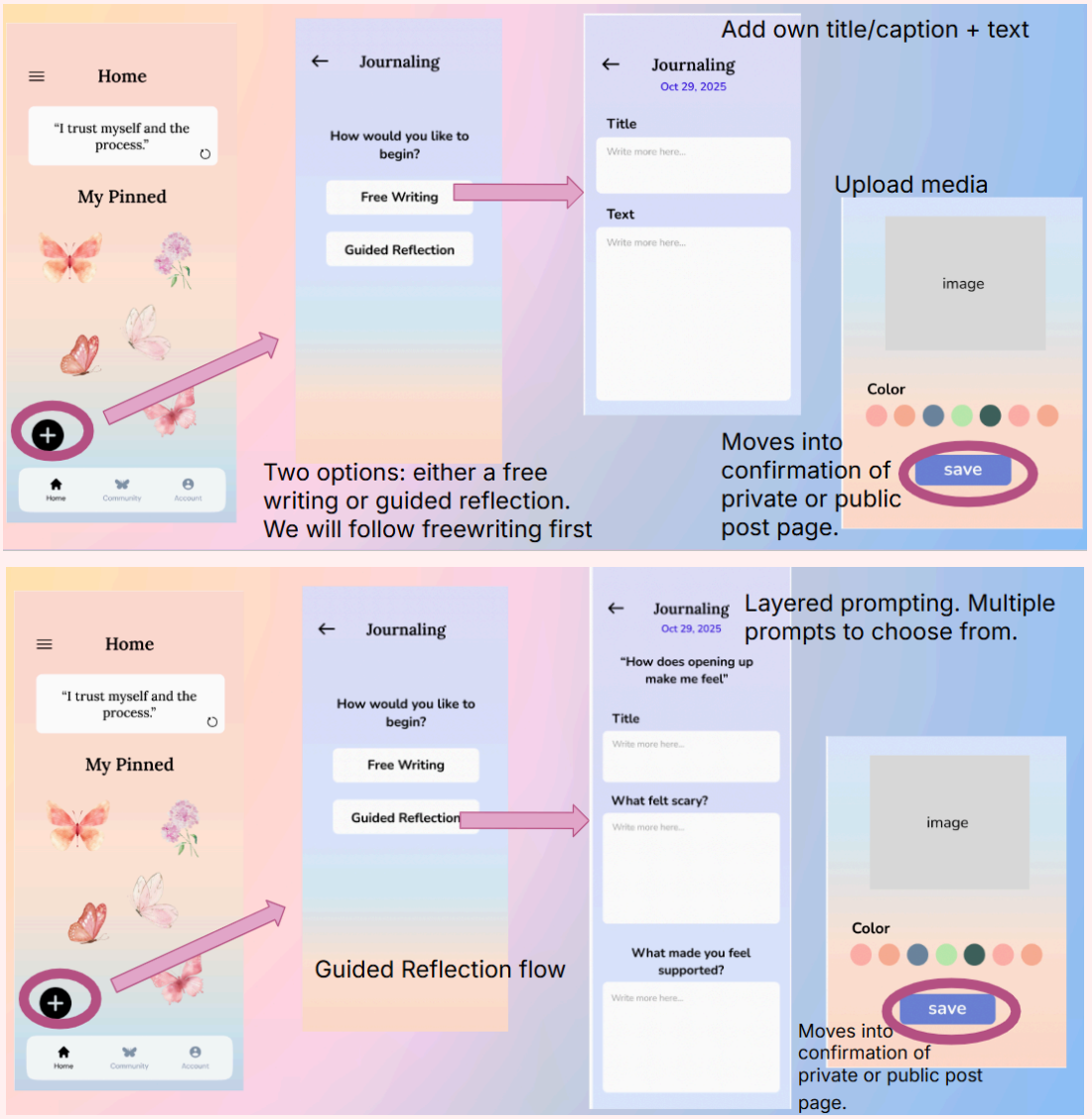
<u>Med-fi moderate task:</u>



The second task was made easier as the navigation bar explicitly had the community icon labelled, and the community page was also changed from butterfly designs to a

straight feed for ease of viewing. Moreover, after saving a post, a confirmation message pops up to confirm the post has been collected.

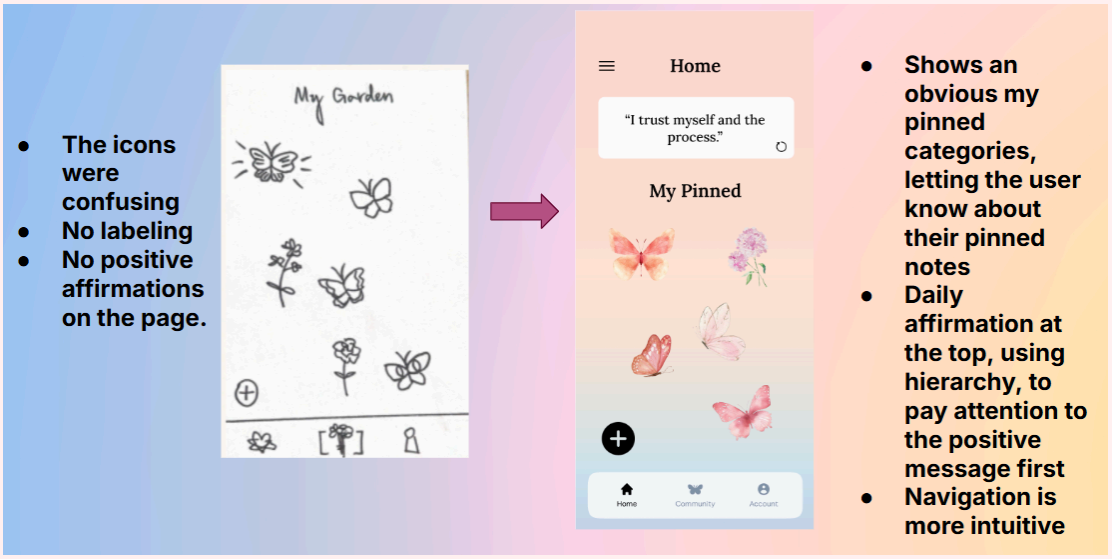
Med-fi complex task:



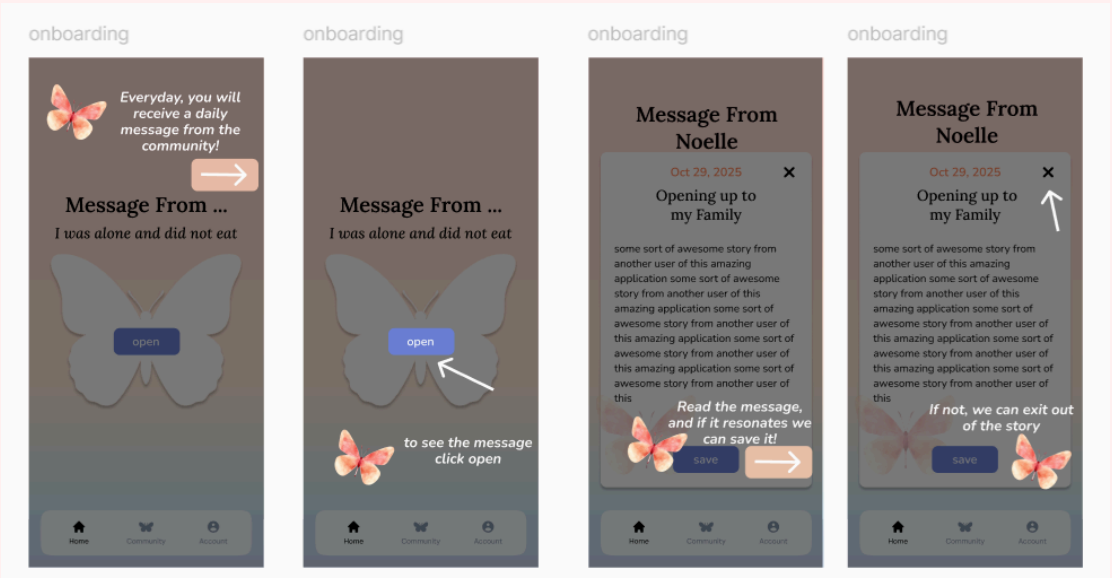
The third task was modified to support deeper, more meaningful reflections. Based on studio feedback, we were encouraged to design prompts that invite reflection while maintaining a positive, ethically mindful tone. During prototype testing, users also expressed a desire for guided reflections that felt supportive rather than heavy. In response, we redesigned the guided journaling feature to include gently framed prompts and layered questions that gradually build on each response, creating a reflective experience that feels safe, encouraging, and manageable.

Med-fi additional changes:

Beyond the three tasks, we also refined the layout of the Home page. It now displays a Daily Affirmation at the top and highlights the user's pinned notes (up to five), making them easy to revisit at any time. This change directly addressed user confusion around the original iconography and created a clearer, more intuitive landing experience. Inspired by a previous interview, the addition of Daily Affirmations helped establish a stronger visual hierarchy and improved the overall logic and usability of the home screen.

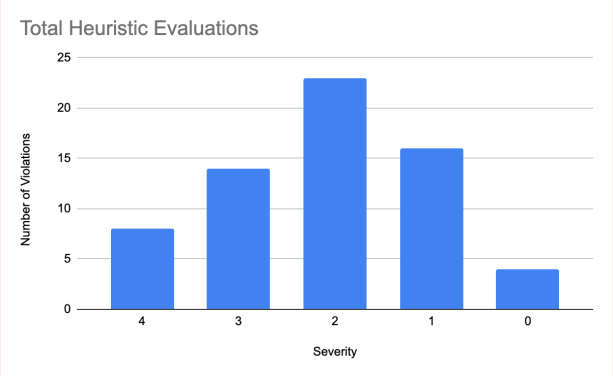


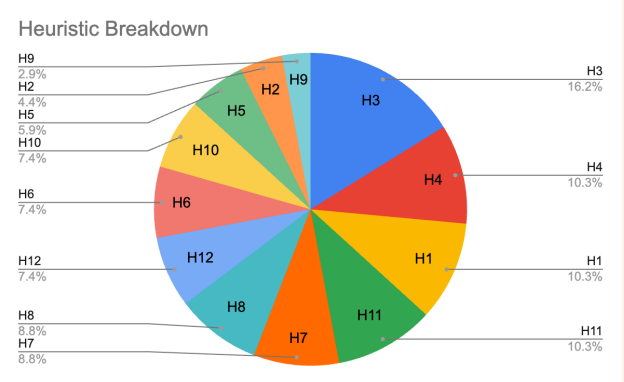
To further aid in learning the meaning of the icons, we also created an onboarding tutorial for the app.



Heuristic evaluation:

To further refine our medium-fi prototype before creating our high-fi prototype, our medium-fi prototype went through a heuristic evaluation with our fellow studio members. Altogether, evaluators found 68 violations, with 8 at severity 4 and 14 at severity 3. The most common violation was H3: User control & freedom. The heuristic violations are summarized by the two graphs below.





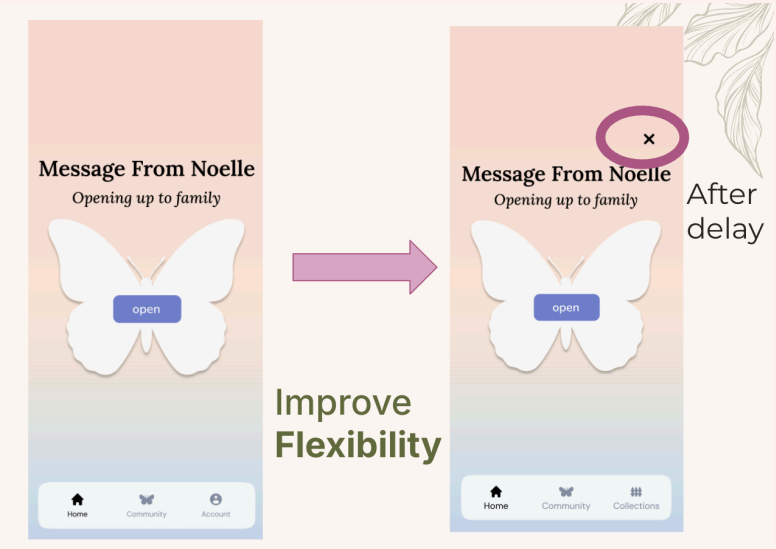
Based on this feedback, we made a total of 14 revisions for severity 3 and 4 violations (3 were cut out due to overlap), and 13 revisions for severity 1 and 2 violations. These are summarized below. Fixes are organized below by [Task] / [Heuristic Evaluation Problem #] / [Type] / [Severity].

Simple Task:

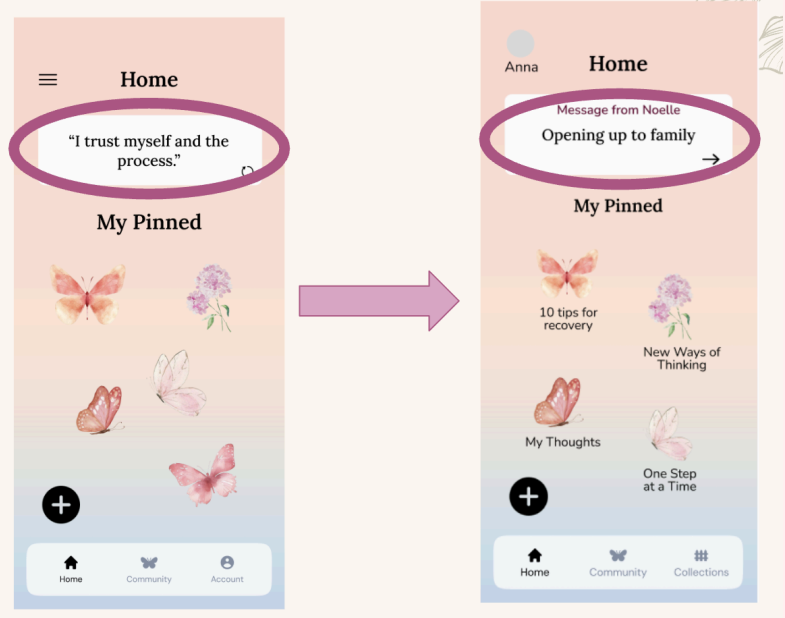
Reject Note of the Day / Heuristic #5 / H3: User Control and Freedom / 3

Issue: The User was unable to reject seeing the message of the day when they first view it and must press into it, but some users might want to utilize other functions of BlooME at the moment.

Fix: Add a 5 second delay for an "x" to pop up, because we want to ultimately nudge the user to first read the note, but still give room for flexibility.



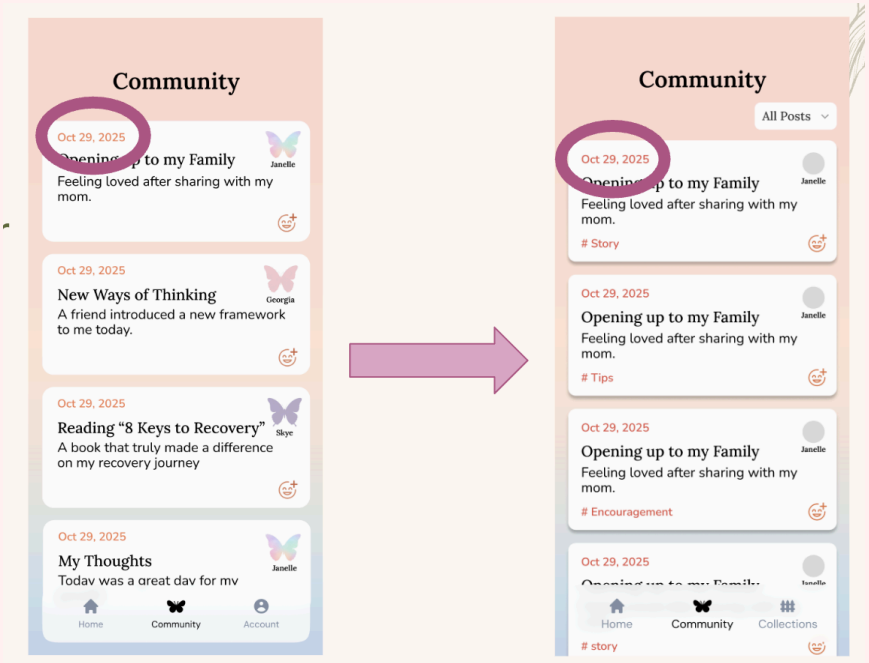
Removing the Daily Affirmation/ Heuristic #3 / H1: Visibility of System Status/ 3
Issue: There was a lack of labeling for the Daily Affirmation, being a confusing quote on the top, and there was also no way to go back to the message of the day after it was exited out of or saved by the user. The user wanting to go back was not considered.
Fix: To remove the problem of confusion with what the Daily Affirmation is, we changed the Daily Affirmation to be the Message of the Day. The User can now revisit or visit it officially and read it after the initial pop up when they first open the app. This will improve flexibility and recognition.



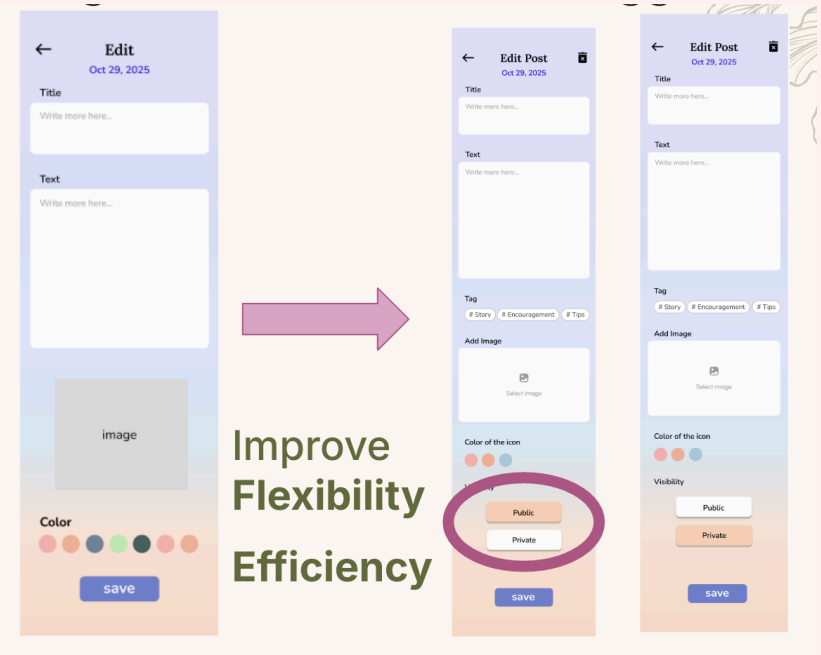
Moderate task:
Scrolling the Community/ Heuristic #15 / H12: Values in Design / 4
Issue: Community feed shows others notes without visibility filters or cultural context. This could expose users to triggering or culturally biased content, conflicting with compassionate design value.
Fix: Incorporated a tags and filtering feature for organization, to be transparent about our product's values. Improve on usability goals of pleasurable while remaining flexible and efficient. When creating the post, the user also must choose a tag for their post.

Profile Icon Change/ Heuristic 49 / H2: Match b/w System and World / 3
Issue: Butterfly icons represent multiple functions (posts, profiles, categories). The overlapping metaphors can confuse the users as to what each feature is and what each symbol represents if there are multiple definitions.
Fix: We changed the butterfly icon for the posts to the posters id. This way users can clearly see that this icon is meant to represent which user made this post and improve recognition.

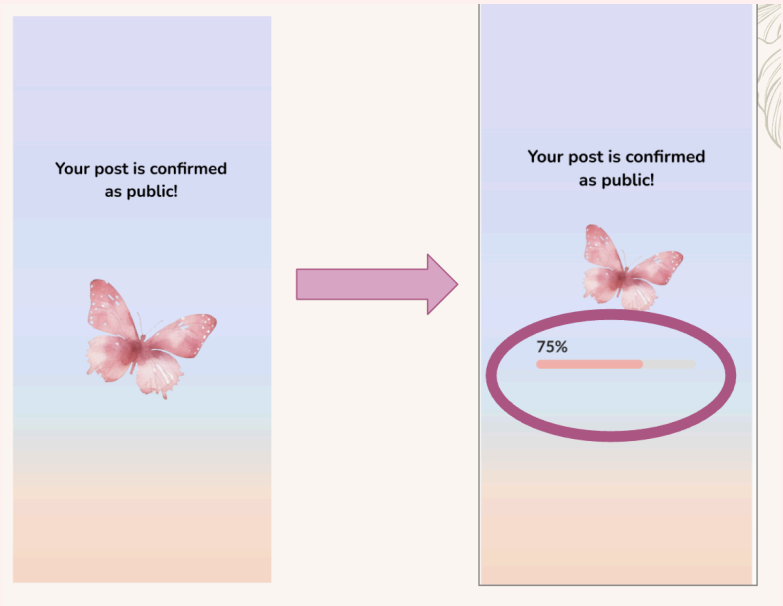
Adjusting Luminance and Saturation/ Heuristic #45 / H11: Accessible Design/ 4
Issue: The pastel colors on the light background (the white) could be difficult for people to see and can be inaccessible, especially with a thinner and smaller font as well.
Fix: We chose a darker orange color for it to pop out more on top of the white background so it is easier to see for users and doesn't blend in with the pastel gradient.



Complex Task:
Sharing and Editing a Post/ Heuristic #31 / H3: User Control and Freedom / 3
Issue: After selecting "Public," users can't easily revert to "Private" without re-entering the full note flow. Reflection often involves sensitivity; inability to change visibility undermines safety.
Fix: A user can now go back and edit the post and also toggle between private and public if they add content and want to change the status of their post.

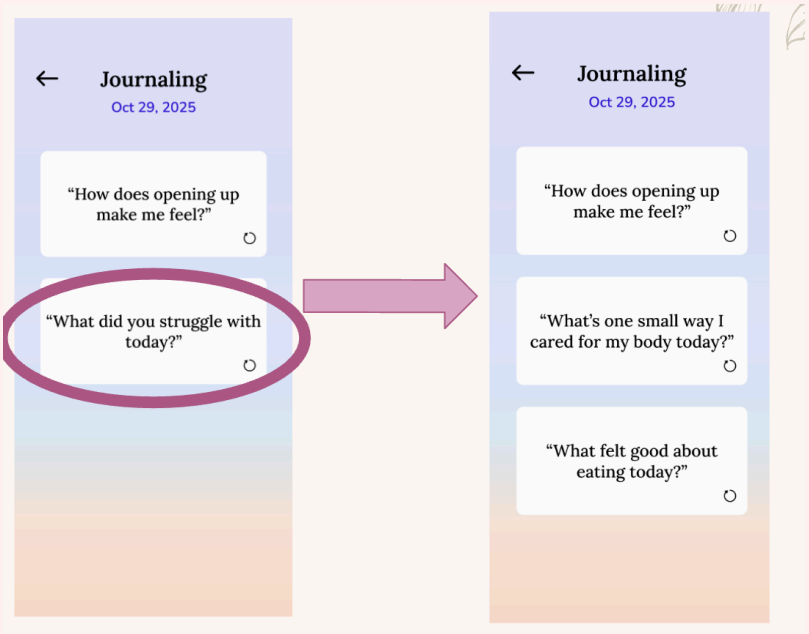


Adding Progress Bar/ Heuristic #30 / H1: Visibility of System Status / 3
Issue: During the "Post Note" flow, the transition between writing and confirmation happens abruptly with no delay or loading cue. There is no indication that the system is actively updating the system with their post as the users idly wait.
Fix: We added a progress bar to show the system status of the posting happening so the users have a clear understanding that their post has been uploaded.

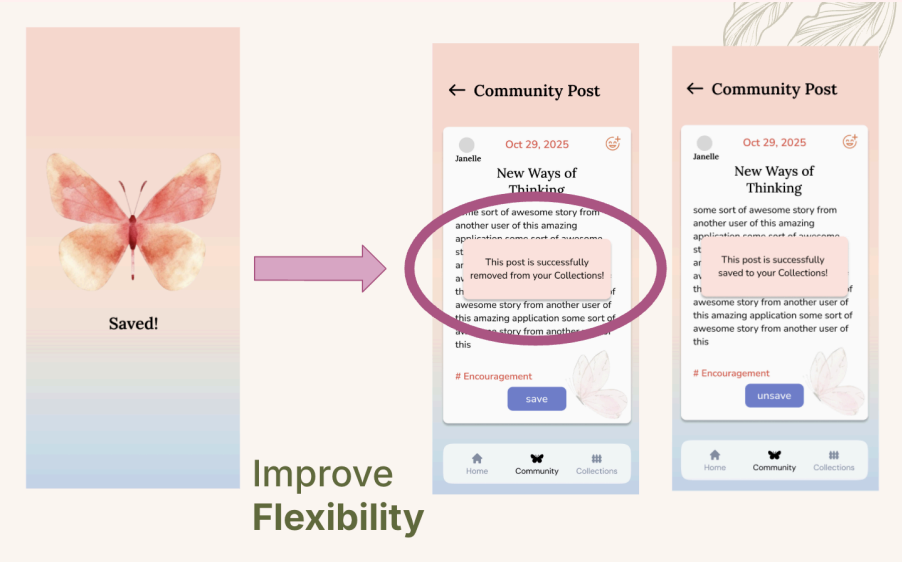


Rephrasing Journal Prompts/ Heuristic #37 / H12: Values in Design/ 2
Issue: Some prompts ("What did you struggle with today?") appear without tone balancing or reflective framing. The language may trigger guilt or shame, contradicting app values of compassion and gentle growth, going against the values of our app.

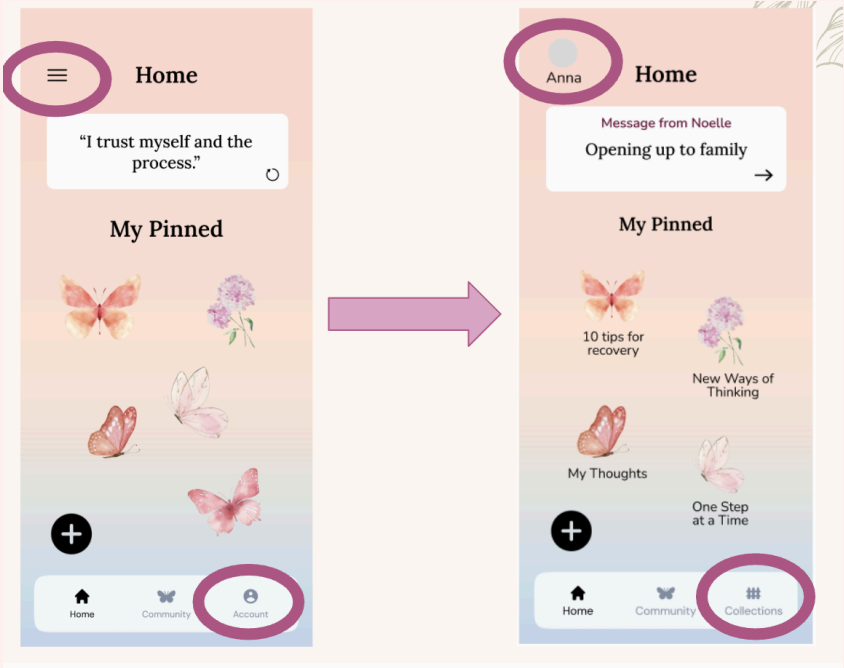
Fix: We Rre-framed the prompts positively (“What challenge did you move through today?”) and shows an encouraging sub-line (“Every step counts”). We also engineered these journaling prompts to be reflective with multiple steps and to push forward a growth mindset within a community.



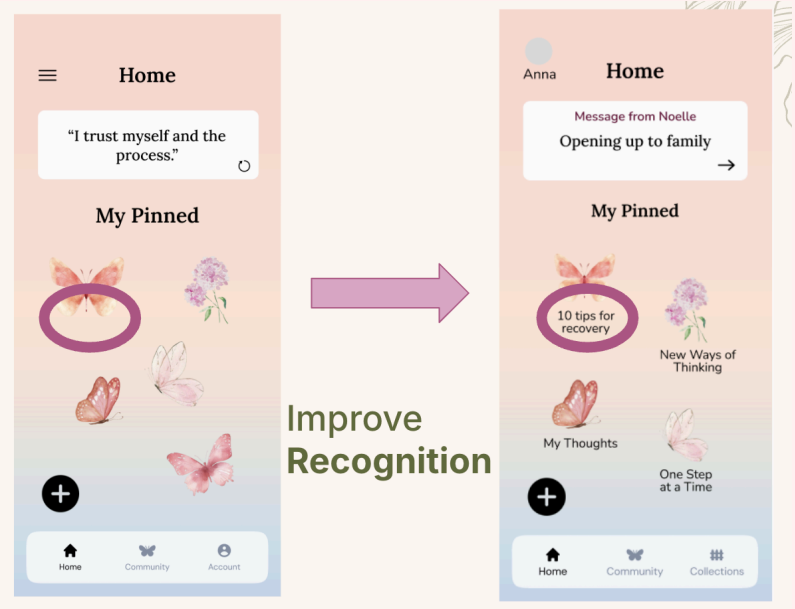
Extra (All Tasks + Miscellaneous):
Saving a Post/ Heuristic #16 / H3: User Control and Freedom / 3
Issue: When "save" is pressed, the user exits the message that was being viewed. Users might want to continue viewing a message they save, instead of viewing it once and leaving the message after pressing "save".
Fix: Have a pop up message that indicates that a message is saved, that will disappear after delay and the user can continue interacting with the post (reacting, unsaving, reading). Improves user flexibility and freedom.



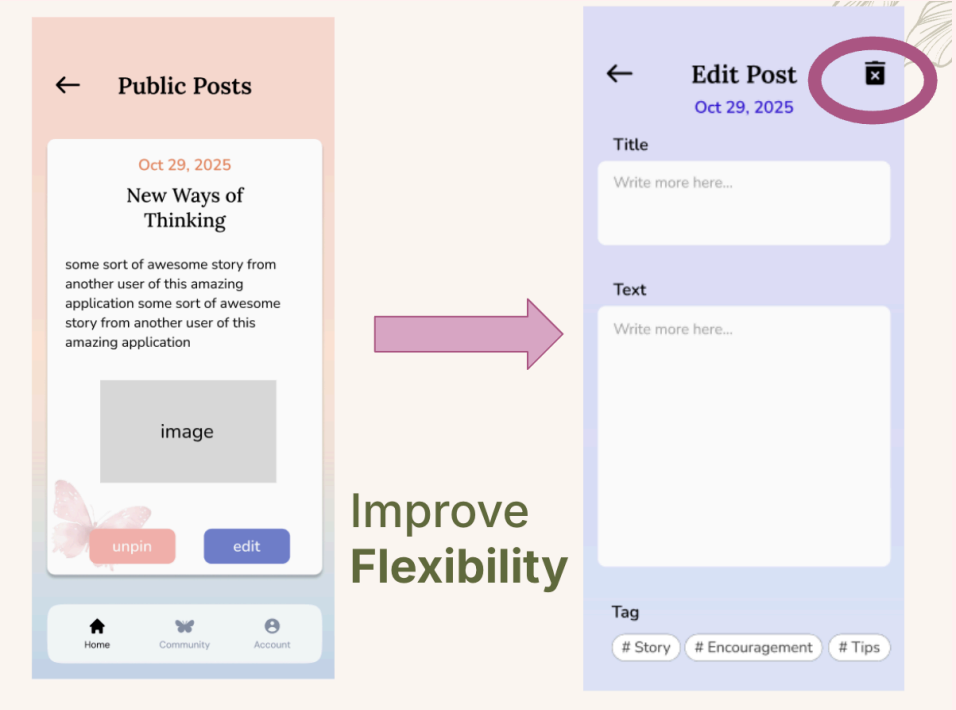
Icon Placement Change/ Heuristic #47 / H6: Recognition over Recall/3
Issue: The user learns that the top-left menu item is how you toggle "collections.", but it is confusing as to why collections doesn't have its own icon. The sandwich menu indicates something but doesn't immediately point to the fact that it is our collections page.
Fix: Rather than just adding a fourth button on the navigation bar, we wanted something in the left top corner, and following external consistencies with social media apps of profile pictures in the top left corner. Pressing the profile will lead to the accounts page for further set up.



Captioning Pinned Posts/ Heuristic #17 / H6: Recognition over Recall/ 3
Issue: There is no indication of what the pinned icons mean forcing the user to recall the feature and also the specific post they pinned for each icon. This makes it difficult and requires lots of cognitive power from the user.
Fix: We added captions underneath each pinned, following the title of the post, so users can recognize which posts it is and interact with it however they want (reading it, removing it from pins, etc.)

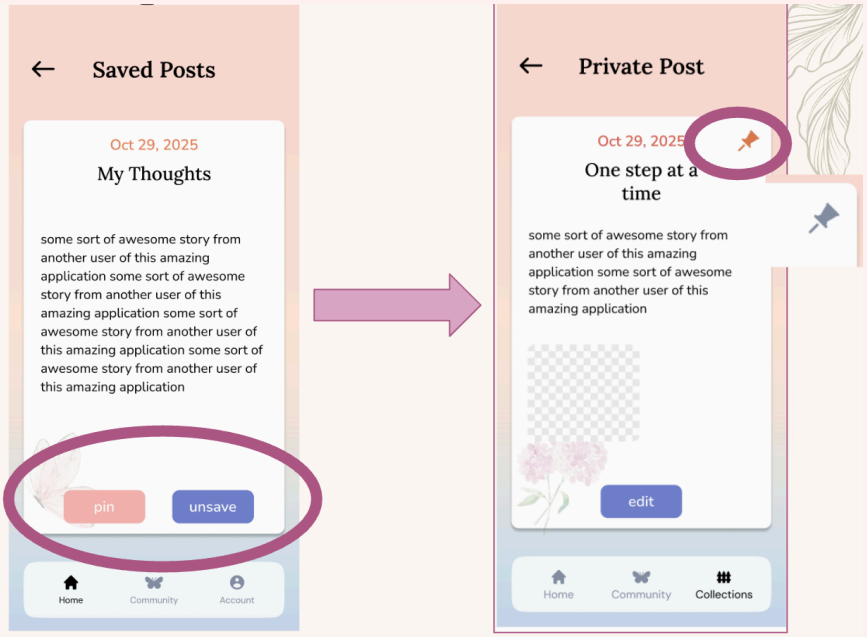


Ability to Delete Post/ Heuristic #29 / H3: User Control and Freedom / 4
Issue: User is unable to delete a post after posting it. It remains in the system forever, but what if a user no longer wants the post up and wants to delete it. There is currently no functionality for this.
Fix: Added a delete option when a user chooses to edit the post to increase flexibility for the user.

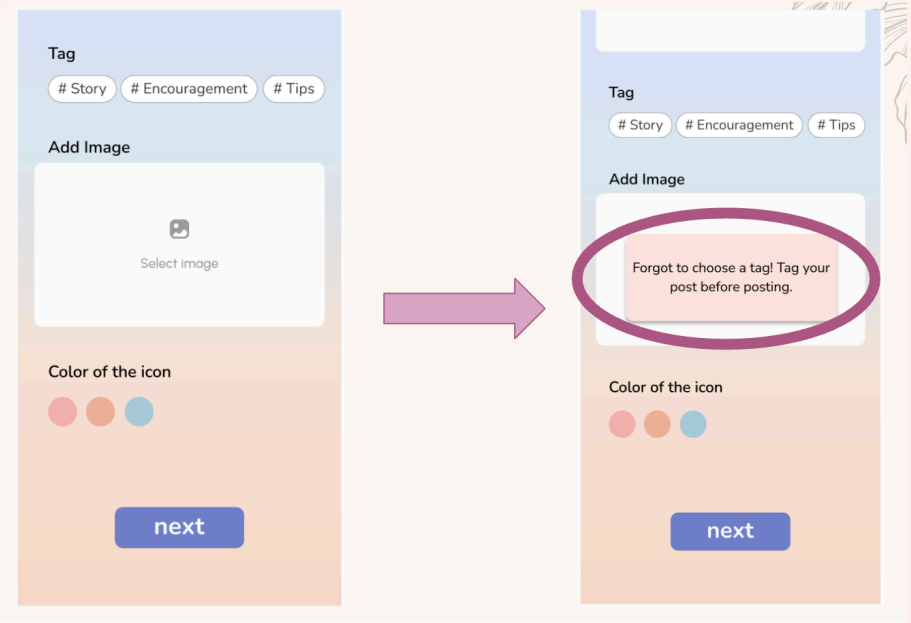


Changing Pin Icon/ Heuristic #10 / H5: Error Prevention/ 2
Issue: The save and pin buttons were all very similar in look and the functions could be confusing. Too many overlapping visual components for drastically different functions.

Fix: Focusing on consistency with outside systems, we used a pin to show if a post is pinned for the user or not. If the pin is orange, this means it is actively being pinned, where a gray pin means there is an ability to pin.



Adding Error Messages/ Heuristic #57 / H9: Help Users with Errors/ 2
Issue: We originally did not implement error messages for several features. This can confuse the user if they cannot move onto other features if they didn't complete something and cannot identify the problem.
Fix: For the places where an error message is needed, such as an empty section, a password mishap, and more, we now have written error messages to help the user.



Overlapping Vocabulary/ Heuristic #48 / H4: Consistency and Standards/ 4
Issue: The terms “message”, “post”, “story” and “journal entry” are used interchangeably which can be confusing. Inconsistent labeling breaks recognition and increases cognitive load.
Fix: To pick consistent vocabulary and standardize the labeling across all the screens. This will help the user recognize that these features are the same thing and you are making changes to the one thing being the post.

Task Flows/ Heuristic #1 / H3: User Control and Freedom/ 4
Issue: The pathways were inconsistent on the Figma, and certain buttons led to unrelated screens due to mishaps in the wireframing.
Fix: Fixing the pathways and making sure in code that the buttons lead to the right screen.

Rabbit Holed Flow/ Heuristic #51 and #52 / H7:Flexibility and Efficiency of Use/ 3
Issue: There were times where the user was stuck in a flow and can’t access home from the other screens. It reduces efficiency and requires the user to go all the way through in order to get home
Fix: Add buttons to return and also if there is a menu bar, if any of the buttons are tapped on, they will navigate to the page that is related to the icon.

Font Size/ Heuristic #63 / H11: Accessible Design/ 2
Issue: The text can be quite small, especially at the login screen, and it is difficult to click certain functions
Fix: Enlarge the text and redesign certain buttons according to Fitt’s law in order to make navigation much simpler and efficient.

A minor UI change we had to make was fixing our alignment issues throughout different visual screens. We utilized the grids and paid extra attention to what elements were being covered if there were pop up elements to ensure that visual cohesion and clarity remained.

In addition, one severe heuristic violation remains unaddressed: H11: Accessible Design, which notes that the prototype lacks keyboard navigation and screen-reader support. While accessibility is important, implementing these features was not feasible within our timeline and was not a top priority for this iteration. However, we plan to incorporate more achievable accessibility improvements, such as adjustable text sizes and optional voice dictation for creating posts, in future versions.

Values in Design

We identified three core values in our design process: compassion, community, and growth. These values are explained in more detail below:

Compassion: By approaching healing with gentleness, care, and understanding, users should feel compassion and empathy. They feel seen throughout their struggles. The app is designed with the user's experiences and struggles in mind, and uses soothing, compassionate language and color scheme to reflect the user's experiences.

Community: The key tenant of our app is community connection. By sharing a story from another person everyday, the user encounters a moment of connection. Our logo, the butterfly, also represents how our messages spread throughout the world and bring people together. Moreover, beyond the story of the day, users can continue to connect and read other public stories, resonating with similar experiences.

Growth: We recognize that healing is a journey of continuous inner expansion and blooming. By being able to create notes, public or private, users can see how their mindset changes and bloom. The journaling feature with dates also allows users to track progress, serving as a reminder of how far they have come.

Beyond our core values, we also considered cases where our values may come in conflict with each other. Some of these potential conflicts are noted below:

Community and Compassion: As a social sharing application focused on healing, there is the ethical tension of encouraging compassion without allowing users to overshare or experience any emotional burnout. To address this, we will intentionally limit and simplify sharing features, as well as utilizing content filters that flag sensitive keywords. This minimalist and balanced approach will help to ensure that users can express vulnerability within boundaries that protect themselves and others.

Community and Growth: While community interactions can spark growth, there is also the tension of pressure or comparisons with others. To address this, BlooME will put an emphasis on personal milestones and have gentle reflection tools, instead of a public metric. Along with having a self-check in feature, this will encourage users to celebrate their own progress within a community that encourages growth.

Final Prototype Implementation

For our final prototype, we developed an application that can be used on IOS, Android, and Web browsers. This final section unpacks our tools used in this process and other details regarding the final implementation process.

Tools Used

Our high-fidelity prototype was built using React Native and Expo to implement core functionality and interface flows, supported by Supabase for backend data management. Ongoing testing occurred through Apple's Xcode Simulator and physical devices running the Expo Go app. The full toolset included:

- **React Native** as our development framework
- **Expo & Expo Router** for navigation, app framework, and rapid testing
- **Supabase** for our database
- **Visual Studio Code** as our primary development environment
- **Figma** to design interface components and interaction flows
- **GitHub** for version control and collaboration

These tools came with their pros and cons. For example, React Native and Expo allowed for rapid iteration, cross-platform development, and streamlined testing on physical devices. However, they occasionally introduced compatibility issues and came with a learning curve that required some time to navigate. Expo Router simplified navigation but offered limited flexibility when implementing more complex routing logic. Supabase provided an intuitive backend with real-time capabilities, yet required learning new conventions and added setup time for authentication and data modeling. Because of this complexity and steep learning curve, only our main developer worked on configuring the database, as it was challenging for others to get up to speed quickly. Figma enabled clear interface planning and smooth handoff, though translating detailed designs into React Native components sometimes required adjustments. Finally, GitHub supported collaborative version control, but merging conflicts, especially with multiple contributors still learning the frameworks, added friction to our workflow. We needed to take extra care when managing branches, ensuring that we do not accidentally make unwanted changes to the main branch.

Overall, this toolset allowed us to build a functional and polished high-fidelity prototype within a short time frame, while also teaching us valuable lessons about choosing

technologies that balance learning curves, flexibility, and implementation speed.

Wizard of Oz

To simulate the experience of a fully functioning peer community without having a real user base, we embedded several Wizard-of-Oz techniques throughout our high-fidelity prototype. These techniques allowed us to create the illusion of an active platform while bypassing the need for fully built backend systems or a large set of real users.

Prepopulated Peer Community: The community feed appears active, but the initial set of posts is entirely prepopulated. These posts were created through WoZ to give first-time users a sense that the platform already has engagement and momentum. Although real user posts are sent to a database and do appear on the user's feed, the broader peer activity (e.g., other users posting, commenting, or reacting) is simulated.

Simulated Reactions and Engagement: The reactions displayed under prepopulated posts are not generated by actual users. They are WoZ-designed placeholders meant to mimic real social engagement. When the user reacts to a post, their reaction is stored, but they are the only real "user" in the system. Everything else in the community is simulated.

Simulated "Message of the Day": The message of the day appears as if it is dynamically selected by the system, but in reality it is predetermined. We used WoZ to create the illusion that the app has a rotating, algorithmically chosen daily message, when in fact it is manually chosen from our single prepopulated message.

Simulated Terms & Conditions Flow: The terms and conditions page presented during sign-up is also a WoZ placeholder. Although it looks like an integrated part of a full onboarding flow, the underlying system is not yet implemented. It visually represents a feature we plan to build later.

Overall, because key social features—peer posts, active community engagement, dynamic content generation, and onboarding infrastructure—require backend systems and a real population of users, we used Wizard-of-Oz techniques to stand in for those elements. This allowed us to demonstrate the intended social experience and evaluate the core peer-support concept, even in the absence of a live multi-user system.

Hard Coded Aspects and Limitations

Because we did not yet have real users interacting with the platform and given the time required to implement backend logic for dynamic content, we chose to hardcode several aspects of the app. This allowed us to simulate core user flows, focus on the UX

experience, and maintain consistent behavior during testing without building full backend infrastructure. The hardcoded elements include:

Hard-Coded Message of the Day: Although the message of the day appears as if it is being dynamically selected or algorithmically generated, it is actually a single predetermined message. The system always displays the same hardcoded text, simulating the presence of a daily rotating message.

Hard-Coded Reaction Options: Users can react to posts, but the emojis they can choose from come from a fixed, predefined set. The feature works visually and functionally, but users cannot add their own emojis or customize reactions. This restriction reflects the fact that reaction sets are hard coded rather than dynamically generated or extensible.

Hard-Coded Tags System: The tags displayed on posts are also fixed. Rather than supporting user-generated tags or algorithmic theme detection, the system simply offers a set list of tags that users must choose from. This makes the tagging feature feel functional but does not represent a full tagging or categorization algorithm.

Hard-Coded Daily Affirmations: Daily affirmations and refreshing phrases are drawn from a static list rather than being dynamically selected or personalized. The “refresh” button gives the illusion of algorithmic variation, but each phrase is manually created and stored in the prototype.

Hard-Coded Journal Prompts & Guided Sub-Questions: Journal prompts do not change based on user behavior or any real-time logic. Instead, each prompt is pulled from a preset library created for testing. The layered reflection questions that follow each prompt are also hard coded: the sequence, moving from acknowledging the difficult feelings to encouraging growth or positive reframing, was intentionally designed and fixed during development rather than dynamically generated.

However, while hardcoding saved time and ensured feasibility, it also introduced a significant limitation. Because peer-to-peer support is central to our concept, the absence of real user interactions, replaced instead by hardcoded content, limits our ability to evaluate authentic community dynamics. More specifically, because tags, affirmations, reactions, and prompts all come from static lists, we cannot yet observe:

- how users would generate their own tags,
- how dynamic content personalization would function, or
- how real-time algorithms might respond to user needs.

As a result, the prototype illustrates the structural flow of social features but not the complexities of a live, multi-user environment.

AI Tools used

While the majority of our implementation was completed without AI assistance, we incorporated AI tools for several targeted tasks that enhanced efficiency and consistency.

Icon Generation: To create original icons for the butterflies and flowers, we used ChatGPT. We began with basic concepts and hand-drawn sketches inspired by Pinterest references, then passed these through the model to generate cohesive digital illustrations. This approach allowed us to avoid copyright issues associated with using existing online icons while also overcoming the limitations of purely hand-drawn assets, which can be inconsistent and difficult to digitize cleanly. ChatGPT enabled us to transform our sketches into polished, unified visual assets suitable for app use.

Code Support and Implementation: Although most of the codebase was developed manually in VS Code, AI tools such as Claude and ChatGPT supported team members with less programming experience in contributing to the implementation. Because only one member had prior front-end coursework, these tools were essential for helping others quickly learn new frameworks—particularly React Native—and build basic components and code structures. Overall, AI-assisted guidance allowed the entire team to participate more meaningfully in the technical development process, rather than placing the full burden on the single team member with the requisite expertise.

Reflection and Next Step

Main Learnings

Building BlooME challenged us to balance technical feasibility, emotional sensitivity, and the complexities of designing for mental health. Even within a short timeline, we learned how to translate user insights into thoughtful features, make intentional trade-offs, and navigate the unique responsibilities of designing for individuals in vulnerable states. This project ultimately taught us to understand users deeply, design responsibly, and create technology that centers emotional wellbeing. More specifically, our learnings fall into three main categories: the Design Thinking Process, the Studio Theme, and our Project Theme of Eating Disorders. Below is a summary of the key insights in each.

Design Thinking Process

Our first key learning was the needfinding methodology. Approaching a project by focusing on the problem space rather than jumping to solutions or becoming attached to early ideas was a new mindset for us. We learned how to conduct emotionally rich, story-driven interviews and avoid leading questions that might bias responses. From there, we developed skills in unpacking interviews, particularly in writing effective POV statements that distill observations into deeper insights. We learned that strong insights often involve inference, identifying contradictions, tensions, and surprises that lie beneath the surface.

We also learned the importance of iteration. This helped us let go of perfectionistic tendencies and embrace the idea that early versions are stepping stones, not final products. Feedback from users and evaluators became central to our process. “Progress, not perfection” became an important reminder throughout our iterations.

Finally, we gained a deeper appreciation for effective teamwork. Design is inherently collaborative, and creating a judgment-free environment allowed us to generate more ideas and build on each other’s contributions using the “yes, and…” principle (afterall, quantity matters more than quality in the idea generation stage!). Prioritizing team relationships and psychological safety was essential: a positive team dynamic leads to a better product. So rather than fixating on perfecting every detail, it is more important to focus on creating a supportive, respectful, and engaged working environment, and a good product would come naturally.

Studio Theme

One key learning about our studio theme of mental health is that mental health exists on a spectrum, and it is important to capture different users on the spectrum (while some might show only light symptoms, others might be more severe, and they would all interact with the product in different ways).

Another important learning is to consider the perspectives of different stakeholders in mental health. While people often think about the affected individual as the main stakeholder, in reality clinicians and experts, as well as friends and families of these individuals are also equally important. Our user interviews highlighted why some individuals hesitate to reach out to these groups, reinforcing the importance of understanding their needs and constraints to design a solution that meaningfully complements real-world support systems.

Another important insight involved the implicit psychological messaging embedded in design choices. We learned how color, typography, and visual patterns subtly influence emotional states. For example, in our studio when we had outside experts come evaluate our projects, they mentioned how muted blues can create calm while vibrant reds may evoke stress. Overall, we became more aware of how subtle patterns can either support or undermine mental wellbeing, making us more attentive to every visual element we chose.

Our Project
For our project, we focused specifically on the realm of eating disorders, which revealed several surprising and meaningful insights.

First, we learned how much eating disorder recovery often depends on internal mindset shifts, not solely professional intervention. Many interviewees emphasized that self-driven reflection or internal "turning points" were what ultimately helped them improve. This insight suggests a strong opportunity for self-guided, low-barrier tools like BlooME.

Second, we saw how critical autonomy is for individuals with disordered eating. Clarisse's experience underscored that the most helpful clinicians were those who offered space and acceptance rather than imposing rigid rules. This reinforced our design choice to give users full flexibility in how much they share and how they engage with the app.

Third, we learned how often individuals wait until symptoms become extremely severe before seeking help. Many interviewees minimized their struggles or felt they were "not sick enough" to deserve care, leading to help-seeking only at crisis points. This highlighted the urgency of creating early, accessible, non-intimidating opportunities for support.

Most importantly, we uncovered the deeply social nature of eating disorders. Interviewees told us how their symptoms affected relationships, how connection was often the most healing element of recovery, and how shame or comparison prevented them from reaching out. The theme of interpersonal connection and the difficulty of accessing it emerged repeatedly. This insight became the foundation of BlooME: eating disorders are not only individual struggles with food but also inherently social ones, making connection an essential part of the solution.

Next Steps

If we had more time to work on BlooME, we would have made several additional adjustments to enhance the existing product:

1. **Full Backend and Multi-User Functionality:** Our current prototype does not include true backend logic or real-time multi-user interactions. Community features—such as posts, reactions, and published journals—are simulated with hardcoded or locally stored content. Because peer-to-peer support is central to our concept, the absence of authentic user interactions limits our ability to test real community dynamics, such as diverse posting behaviors, engagement patterns, or the management of inappropriate content. With more time, we

would build a functioning backend to support a live, safe, multi-user environment.

2. **Expanded Accessibility Features:** Our heuristic evaluation identified accessibility opportunities, such as keyboard navigation and screen-reader support, that we were unable to implement due to time constraints. We improved readability through larger text and clearer visual hierarchy, but future iterations could include voice dictation for writing or listening to posts, benefitting users who prefer or require non-visual modes of interaction.
3. **Personalized Recommendation Algorithm:** Given the deeply personal nature of disordered eating experiences, personalization would significantly enhance user support. Future versions could include an AI-based recommendation engine that tailors the daily message to the user's recovery stage and previous engagement. This algorithm could also power a "Recommended for You" filter on the community page, sorting posts by relevance and emotional fit.
4. **Integrating Professional Support**: Because of scope limitations, our current design focuses primarily on peer-generated content. Moving forward, we could onboard licensed therapists and dietitians to contribute professional messages or guidance. While direct messaging between users is intentionally excluded due to safety and moderation challenges, professionals could safely offer one-on-one follow-ups for users who want more personalized support after engaging with a post.
5. **Push notifications:** Notifications, such as alerts for new daily messages or reactions to a user's post, would help sustain engagement and support ongoing connection with the app. Implementing a thoughtful notification system would increase consistency of use while reinforcing moments of encouragement and care.

Overall, developing BlooME began with a simple yet meaningful question: **How might we help people feel less alone in their relationship with food?** While there were additional features we would have implemented with more time, we are proud of what we created and of everything we learned throughout this process.

We hope that interacting with BlooME offers you a moment of that warmth. It certainly gave us a deeper appreciation for how intentional design can foster empathy, safety, and belonging.

Final note from creators: *Thank you for taking the time to explore BlooME. We are grateful for the opportunity to build something meaningful rooted in care and share it with you. We hope it inspires the same sense of support and connection in those who use it.*

- Jade, Jasmine, Yujen, Clare