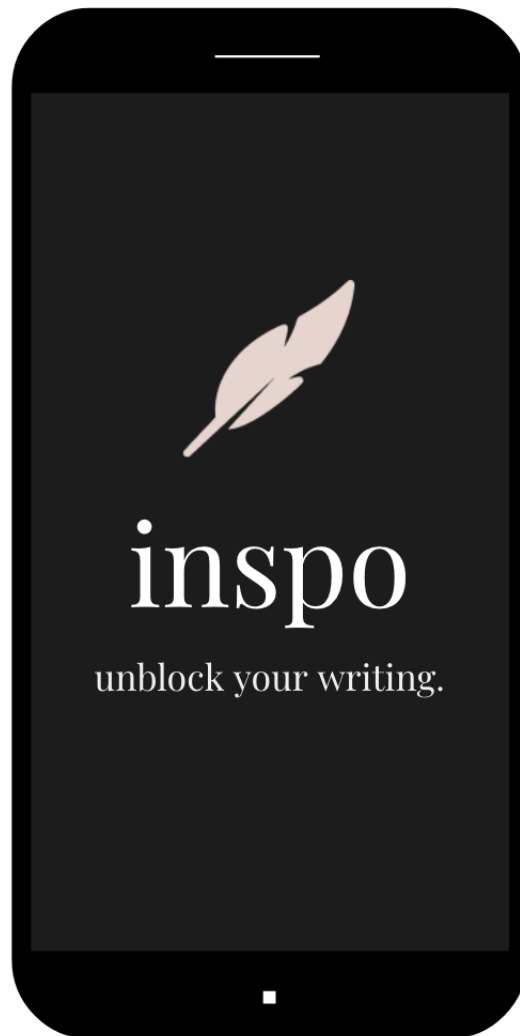


# Hi-fi Prototyping

## Assignment 8: Final Report



**Team Euphoria**

Sameep Mangat, Jake Wagner, David Estrada-Aries, Anatole Schneider

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## Introduction

### Our Team

When we set out to build Inspo, we had no idea where it would take us. We just knew one thing: together, we'd be able to meet the needs of our users. Our team is stacked with key contributors who all possess some amount of technical expertise, thereby making each step in building Inspo a cohesive effort. Our founding team consists of David Estrada [our core iOS developer and designer], Sameep Mangat and Anatole Schneider [our generalized design thinking developers], and Jake Wagner [our one and only product manager]. Teamwork makes the dream work, and this team certainly led to Inspo's success today.

### Problem/Solution Overview

So what *is* Inspo exactly?

We like to say that Inspo's value proposition is to "unblock your writing." Our goal is to empower creators with tools they need to ignite creativity and fuel the writing process in a space catered to them.

You might be wondering how we actually do that. Well, writer's block is an age-old problem, plaguing all creators alike, from novelists to song-writers to poets. Every individual has a different process for how they generate their ideas, but it's clear that a few prevail in consistently inspiring creativity when it just won't come. Inspo provides writers with prompts, old writing samples, and a minimalist workspace for creators not just to write, but to thrive. Our hope is to create the most conducive space for artistry and imagination that makes writing more intuitive.

We wanted to make writing the best part of the day any time of day.



Figure 1: The HiFi Prototype

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## Needfinding Interviews

### Our Process

Inspo wasn't just invented out of the blue. When starting out in this journey, all we knew was that we wanted to focus on solving problems for creators in the writing space. We didn't know what this would look like, so we set out in needfinding to survey where we could fill in gaps.

In order to do this, we first wanted to understand what our problem space was. We took a step back and explored all the types of creation writing that could be done, from fiction writing to poetry to song creation.

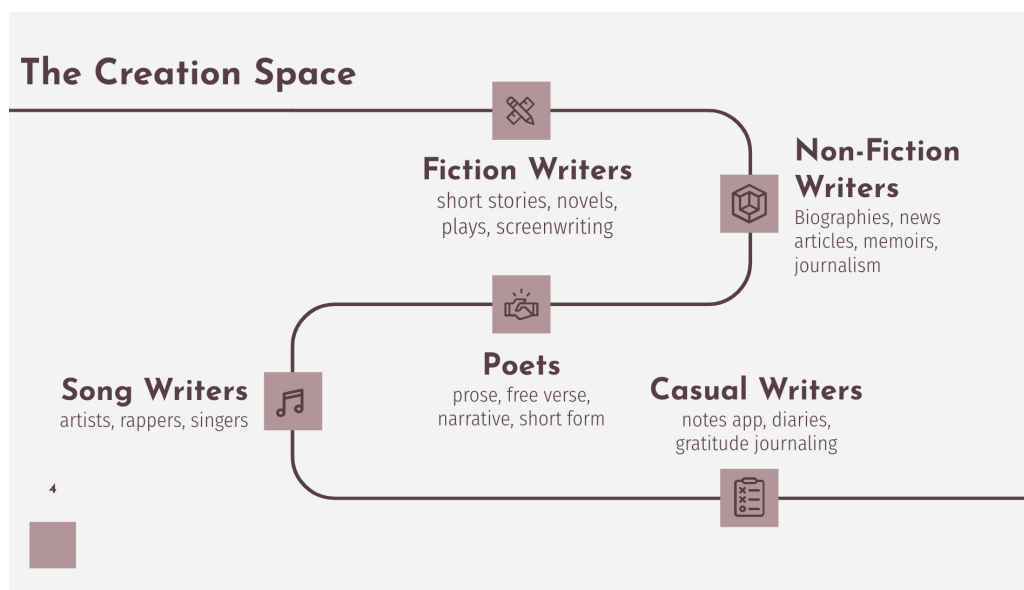


Figure 2: The Creation Space

After zeroing in on the types of writers we could talk to, we found participants that fulfilled various niches across the board.

### Our Participants

*Participant 1: Sohene // niche fulfilled: Casual Writers & Poets*

A pre-med junior with a side passion for singing, writing, Sohene was a perfect representation of a casual writer who would ideate and create constantly.

*Participant 2: Christian (aka C-Detty) // niche fulfilled: Song Writers*

Known by his rap name C-Detty, Christian is a 24 year old aspiring rapper. We chose him as he had a diverse perspective of what writing looked like in the context of musical spaces and lyricism.

*Participant 3: Noelle // niche fulfilled: Fiction Writers*

A 21 year old actress graduated from the American Academy of Dramatic Arts, Noelle constantly writes scripts, edits her friend's works, and sends drafts to be reviewed. She was the perfect

example of someone whose professional life was dependent on churning out work and revising work with others.

*Participant 4: Scott // niche fulfilled: Non-Fiction Writers*

Scott was from Princeton, and had published his own memoir at 22. We chose him as he had been able to start and finish a novel as a student, and understood the lack of resources and needs he experienced as someone still in school.

*Participant 5: Tommy // niche fulfilled: Poets & Song Writers*

A senior at Stanford, Tommy goes by the name Tomasi on Spotify where has released a few singles. He is currently working on an album and writes both poetry and lyrics in his notes app which he then uses for his songs.

*Participant 6: Beatriz // niche fulfilled: Fiction Writers*

Beatriz was unlike any other participant we talked to. A middle aged woman who has dedicated the last couple of years to writing classes and pursuing her creative interests, Beatriz takes a much more spiritual and meditative approach to writing daily.

### Our Questions

When talking to our participants, we catered each interview to the type of writing they did and attempted to follow a natural flow of conversation in whatever they deemed most important. However, we did focus on a few questions to guide our interview.

- What do you write?
- How would you describe your artistic process?
- What tools do you use?
- How does tech supplement or detract?
- Do you share your work publicly when it's done? Through what mediums?
- How do you feel about revising other people's work?
- How do you combat writer's block?
- Who constitutes the team around you?

### Our Learnings

Our needfinding results shaped a lot of the way in which we approached the creation of Inspo. The first thing we found was that the main technologies utilized in the writing process were Quip, Medium, Evernote, Notes, Twitter, and Final Draft. It was clear that writing happened in spaces that were easily accessible and not overpopulated like Notes and Evernote. Platforms like Twitter and Medium were primarily used for inspiration.

We then created an empathy map to overlay our findings as shown on the right.

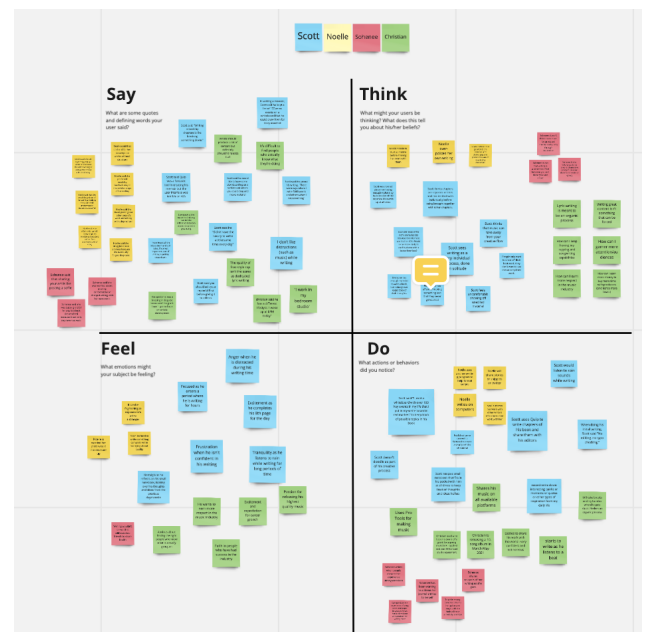


Figure 3: The Zoomed Out Empathy Map



Figure 4: What Our Participants "Said" In Our Interviews



Figure 5: What We Believe Our Participants Are "Thinking"

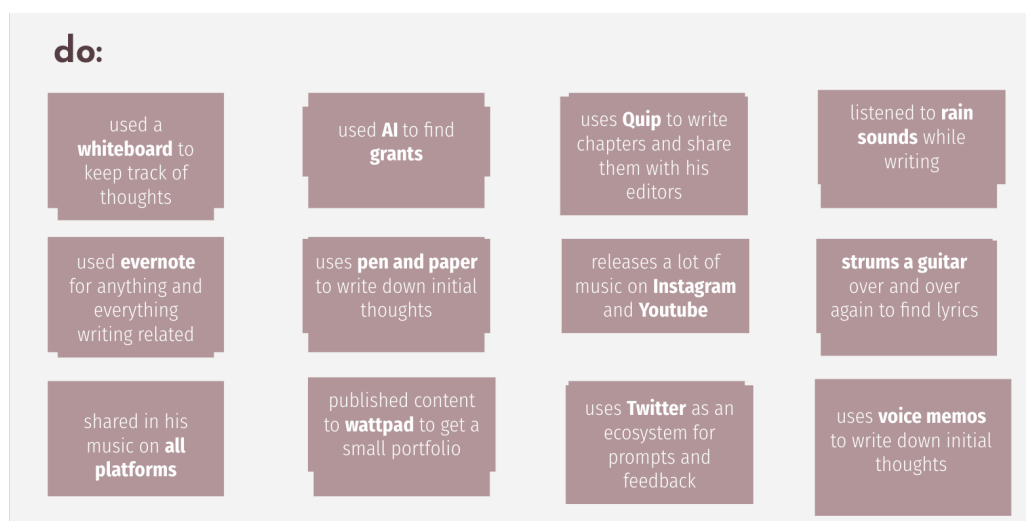


Figure 6: What Our Interviewees "Do" and How They Behave



Figure 7: What Our Interviewers “Feel” Around Writing

In analyzing our empathy maps, we came up with a few key insights that informed the features we wanted to implement in whatever we ended up designing.

- There is a vulnerability around writing, especially in the case it is received poorly. There is no credit for work that is controversial or poorly acclaimed. This helped inform our ultimate decision around choosing how to share work with friends.
- Writers often forget about the mini writing that they do and rediscover their writing later. This ended up being our reasoning for building The Graveyard in Inspo.
- All creators experience writer’s block. Creators need a way to encourage stream of consciousness so that creativity can be born anew. We formed a large part of Inspo around this finding.
- Every writer has a very individualized process for creation that is most conducive for them to create in the way they desire. This made it clear to us how important it was that we design a minimalist platform and focus on a very clear, simple aesthetic.
- Most authors have no centralized way to store a writing portfolio. Many just add writing samples to their websites or make personal instagrams. This again reinforced the need for an easy to access centralized drafts page.

## POVs & Experience Prototypes

Once we located our user needs, we were able to formulate some point of view statements for our potential users. From there, we crafted “How Might We” statements to frame the problem area and intended design goal. We focused on Beatriz, Christian, and Noelle.

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## Beatriz POV + HMWs

**We met** Beatriz, a grandmother studying at the University of Miami who writes every day and is working on her autobiographical novel.

**We were amazed to realize** she meditates every day before writing to clear her mind.

**It would be game changing** if we could make writing more carefree.

### For Beatriz, how might we...

- Create a safe space for writers to experiment in
- Make writing personal and meditative
- Remove the roadblocks to writing
- Find and share productive writing habits

---

## Christian POV + HMWs

**We met** Christian, a 24-year-old aspiring rapper from Houston, TX who will be releasing his debut album in Spring 2021.

**We were amazed to realize** how difficult it was for him to find legitimate sources, both in information and people.

**It would be game changing** if we could provide crucial legitimate info for aspiring artists.

### For Christian, how might we...

- Connect artists to reputable industry figures
- Disseminate info to new artists
- Focus on providing more structured informational guides
- Validate legitimacy of established artists

---

## Noelle POV + HMWs

**We met** Noelle, a writer/actor in New York who abhors sharing early stages of her written work.

**We were amazed to realize** that Noelle uses Twitter as a space to find prompts and work with other writers.

**It would be game changing** if we gave authors a space to collaborate at any time.

### For Noelle, how might we...

- Make the GitHub of story writing
- Introduce authors to one another
- Create trending prompts for quick ideation similar to Twitter
- Show writers immediate and frequent feedback
- Give authors a way to share unfinished story ideas

---

## Our Favorite Solutions

After doing these interviews, there were a few clear needs we identified. The first was the following assumption, particularly inspired after talking to Noelle.

*Assumption A: **Users fear negative feedback** and will alter viewing permissions on further publications dependent on feedback. The typical user will **publish anonymously** to everyone but will **offer their name to friends**.*

In order to cater to this assumption, we decided on the following solution:

*Solution A: An **interface** that allows for writing to be uploaded with **toggled viewing permissions**. Users can **decide viewing, feedback, and anonymity options**.*

The next need we identified was one we saw across the board around desiring inspiration.

*Assumption B: Users want **prompts** as they push individuals **out of writers' block** and into creative flow.*

Since this was such a clear need, we decided to do just that with the following solution:

*Solution B: **Provide prompts** or rapid fire questions writers in the form of quotes, questions, and unfinished writing to promote creativity.*

The last assumption was one built primarily on observing the way in which many writers stored old works even if they didn't want to use it in the moment. We assumed they did this for the following reason:

*Assumption C: **Viewing old writing** will spark creative inspiration, encouraging better revisions and increasing output from the writer.*

This informed one of our main solution features that made it into the final version of the app.

*Solution C: **The Graveyard**: providing writers a platform to rediscover their old work.*

## Prototype Experiences

With these insights in mind, we set out to confirm whether our above assumptions were correct and whether our corresponding solutions would cater to our users how we wanted.

---

### Experience Prototype A:

In Prototype A, we wanted to see how prompts and feedback would affect permission toggling. We had our users repeat the process below 3 times over, receiving different feedback each time. We then analyzed how the user behavior changed, depending on the feedback they received.

---

user picks a prompt and then writes for 2 minutes



user picks permissions (anonymity and who to share w/)



arbitrary feedback given



To test this prototype, we used a 26 year old named Simar who is a casual writer and often journals for fun. We found that he felt confused by the task at hand, since **some prompts are not built to receive feedback** (specifically the personal ones). Simar saw identity as an opportunity for writers to connect with audiences but would choose anonymity if a topic was contentious. The biggest takeaway we had from this experience was that **the prompt that he wrote changed the audience he chose** to share the piece with.

---

### Experience Prototype B:

In Prototype B, we wanted to explore how helpful prompts would be in igniting creativity. We guided our user through the following experience:

user writes without a prompt



user writes with a prompt



compare the results



To test this prototype, we used a middle aged man named aris who was pursuing writing professionally. We found that **the amount of writing was roughly equal** with or without prompts. Aris personally didn't feel a difference in how much he was able to write, but realized that the free-write allowed him to continue a thought he had earlier in the day, while the **prompts led him to personal reflections**. This reframed our understanding of how prompts might inspire and the mental state of a writer when they're writing **fiction versus non-fiction**.

---

### Experience Prototype C:

Our final prototype fixated on this idea of The Graveyard. We wanted to see whether and how old writing would inspire new writing. We walked them through the following process:

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user brings 3 old pieces they've written in the past



allow writer 5 minutes to read over old writing and then 5 minutes to write more



observe how old work influences new writing and whether writer revised vs restarted



Our user was a 22 year old poet named Valo. When moving to the second part of the prototype experience, Valo **opted for editing and adding** to her previous work and acknowledged the **friction of starting a new piece**. She recounted that fresh eyes gave her the space to see **what she could fix**. However, the other reason she chose to edit her work rather than start a new piece was due to the time constraint we gave her. Thus she might have chosen to create a new piece had she not been time bound.

## Design Evolution

### Our Final Solution

Armed with our new understanding of the problem space and the users we were designing for, we set out to create what is now known as Inspo. When starting out, we ambitiously wanted to include all of the following features:

*Writer's Block*: rapid fire creative exercises

*Toggle Permissions*: diversity in publishing options

*The Graveyard*: a record of all past work

*Daily Write*: a feature to encourage writing every day

It was clear to us that writer's block was a creator wide problem. It didn't matter whether it was song writing, poetry, or a novel, every writer seemed to struggle sometimes with putting words down on paper and needed inspiration, whether that be from prompts or exercises. Prototype B also suggested that having a place for old abandoned work like The Graveyard could help with that mental block. Finally, Prototype A confirmed our suspicions about the sensitivity of sharing work and that toggling permissions would be a key part in making users feel like the platform was not only useful but also safe and comfortable.

This coalesced into one final solution: We believed there was an opportunity to provide artists with a **writing method-agnostic platform** that at once **spurs creativity** and provides a **safe medium** through which to **share work** as they please.

---

## Our Three Tasks

In order to properly capture our utility and core value prop of our product, we focused on ensuring that 3 tasks were designed and implemented thoroughly on Inspo.

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**Simple Task:** *Choose a story in “Drafts” and share it.*

We knew from talking to Noelle that there is a clear need for sharing drafts with friends and other individuals. Whether just for the purpose of fun sharing with friends or actually getting and giving feedback from and to peers, sharing writing pieces and choosing with whom is important and necessary to maximize user engagement. We decided to make this one of our tasks, as we knew it would be a simple action but would greatly augment the utility of the app and the benefit of cross communication between other writers.

---

**Moderate Task:** *Pick a prompt and use it as inspiration to start writing.*

One of the ways Inspo strives to be different is in how we aim to inspire and ignite the writing process. Thus, we felt like this task was the perfect example of how we could do that. We wanted to make sure that our users could seamlessly be inspired by a prompt and channel that creativity instantly into a draft. We also knew that draft creation would be one of the most crucial parts of our app. This would be the home base for our users to create, and needed to be aesthetic, not overwhelming, and easily accessible, which we kept in mind while designing it.

---

**Complex Task:** *Choose a work that has already been written and revise it.*

Our final task was one that also is a must-have for writers. Writing is almost never a one-step process and requires constant iteration and revision to create the best possible quality of work. Thus, we knew that revising old work would be a crucial and frequent behavior exhibited by our users.

# Initial Sketches

During the stage of our initial sketches, we explored multiple different concepts and how Inspo might manifest distinctly on each of the platforms. We explored VR, Voice, Mobile, Web, and Wearable. However, it became apparent that there two interfaces that were the most productive for our user’s goal of creation and ideation: Inspo Web, designed for more intensive writing on desktop, and Inspo Mobile, a more lightweight version meant for ideation and idea storage.

However, we ultimately chose **mobile**, as it made more sense for our ideal user. We wanted our user to have **instant access** even when on the go, making it ideal for looking for inspiration or jotting down notes. The speech-to-text functionality also offered a great place for users to quickly get their work off the ground and create with limited feelings of pressure.

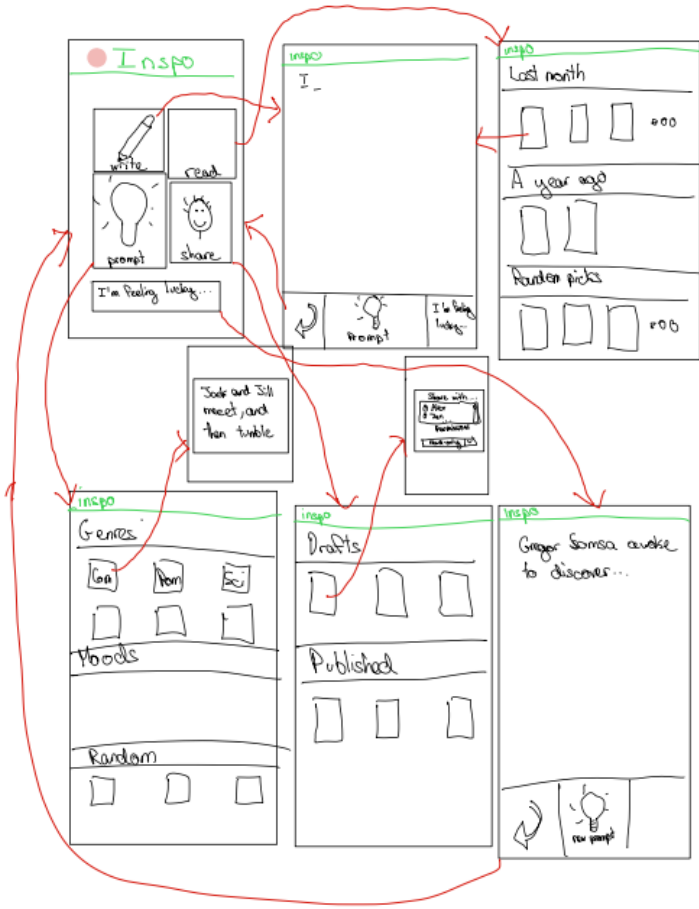


Figure 8: Initial Storyboard Sketches

We then got to work storyboarding out each task and what it would look like on a phone.

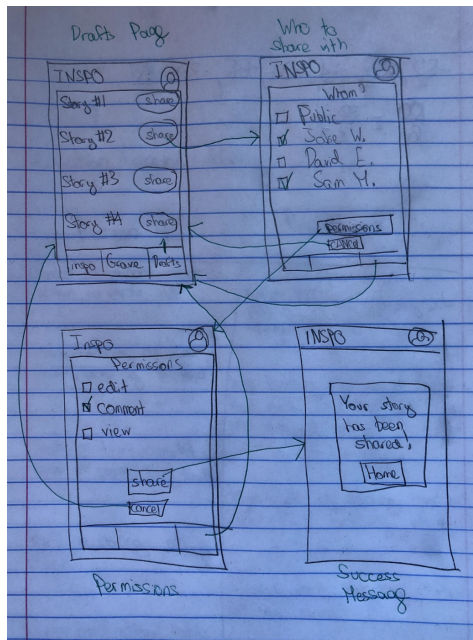


Figure 9: (Simple Task)

Share work with friends.

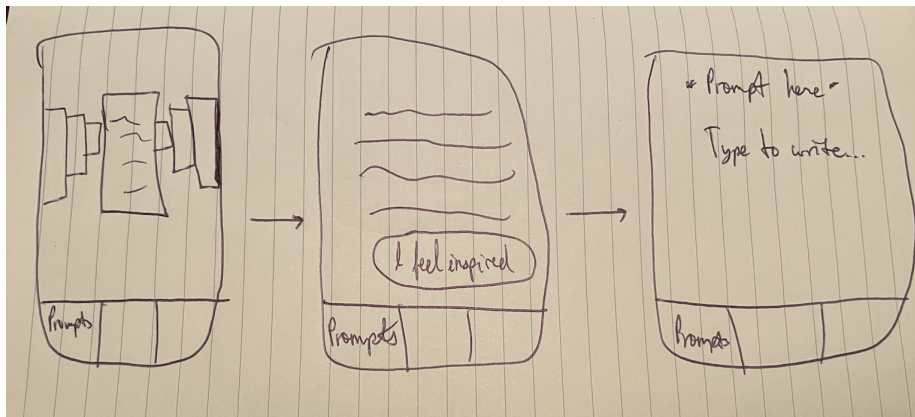


Figure 10: (Moderate Task) Use a prompt as writing inspiration.

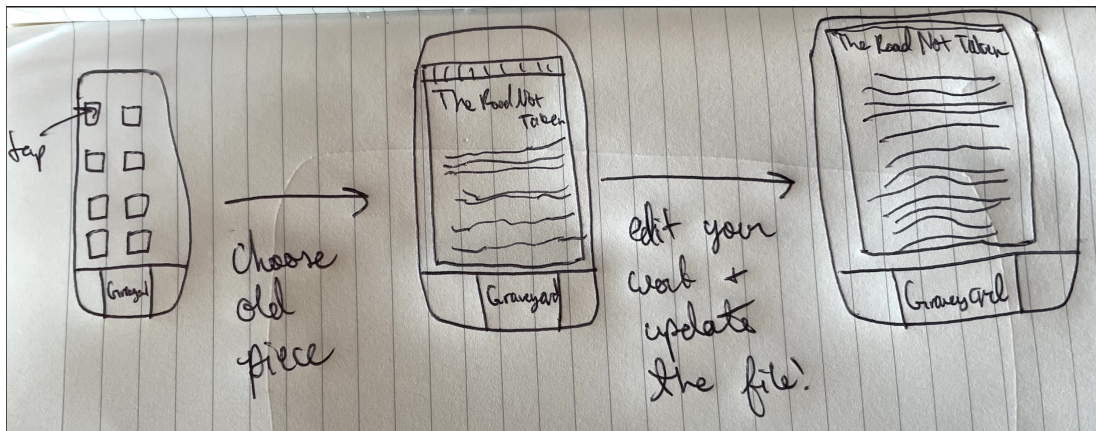


Figure 11: (Complex Task) Revise an old work.

## Low-fi Prototype

Our next step was creating a very basic prototype that we could begin to do user testing with. We used a platform called Balsamiq to prototype this experience and had our users interact with the interface. This was still very early on in our design process, so we stuck to a very clean / minimal design.

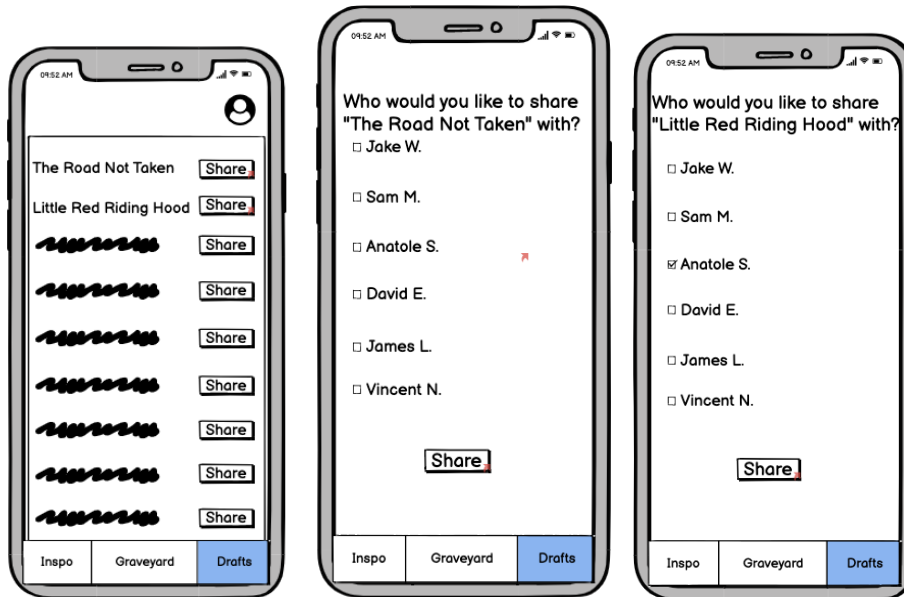


Figure 12: (Simple Task) Share work with friends.



Figure 13: (Moderate Task) Use a prompt as writing inspiration.



Figure 14: (Complex Task) Revise an old work.



Figure 15: All Lofi Prototype Views

## Med-fi Prototype

With our initial understanding of our design components complete, we then built our medium-fidelity prototype using Figma. This was where we started to narrow in on color palettes, different design choices, and the overall aesthetic of what we wanted Inspo to embody.

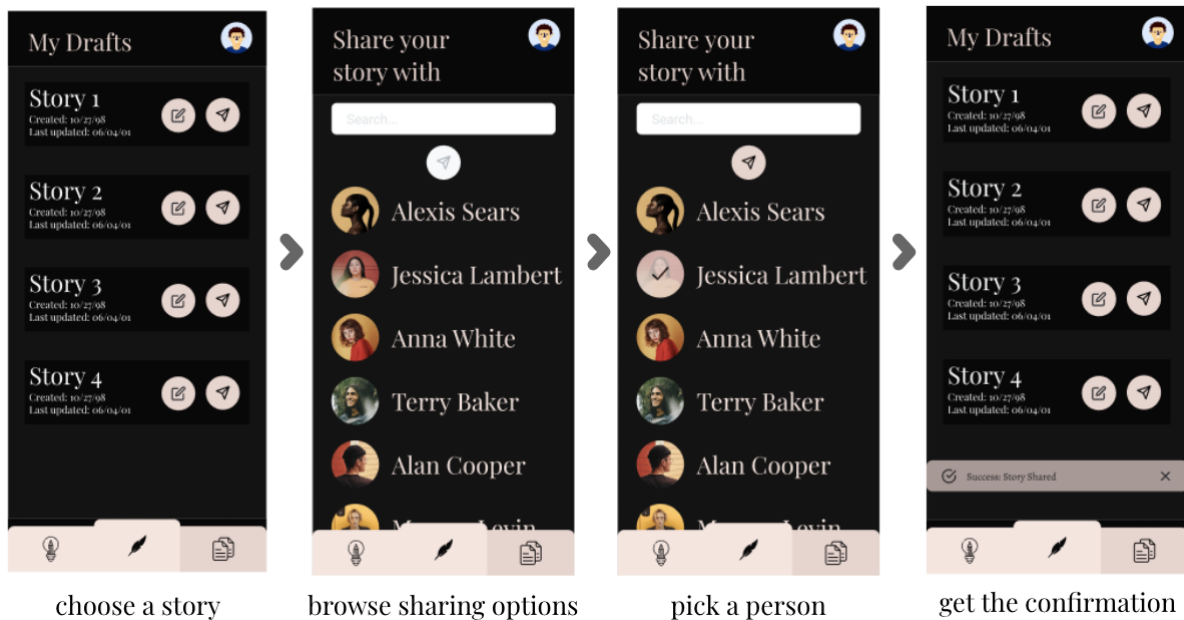


Figure 16: (Task 1) Sharing With Friends

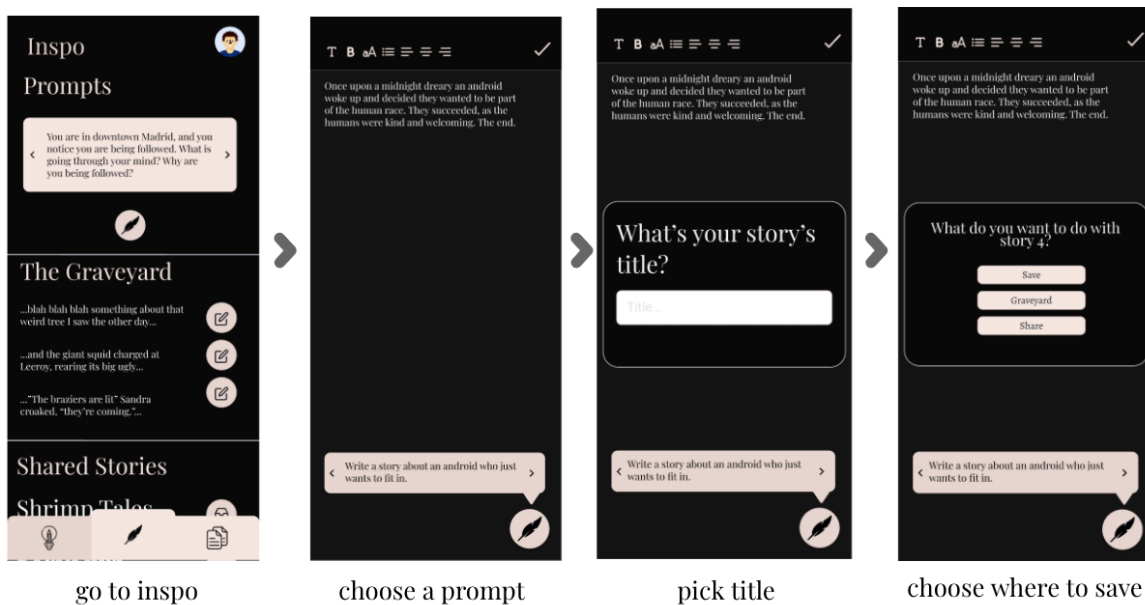


Figure 17: (Task 2) Draft Creation with Prompt

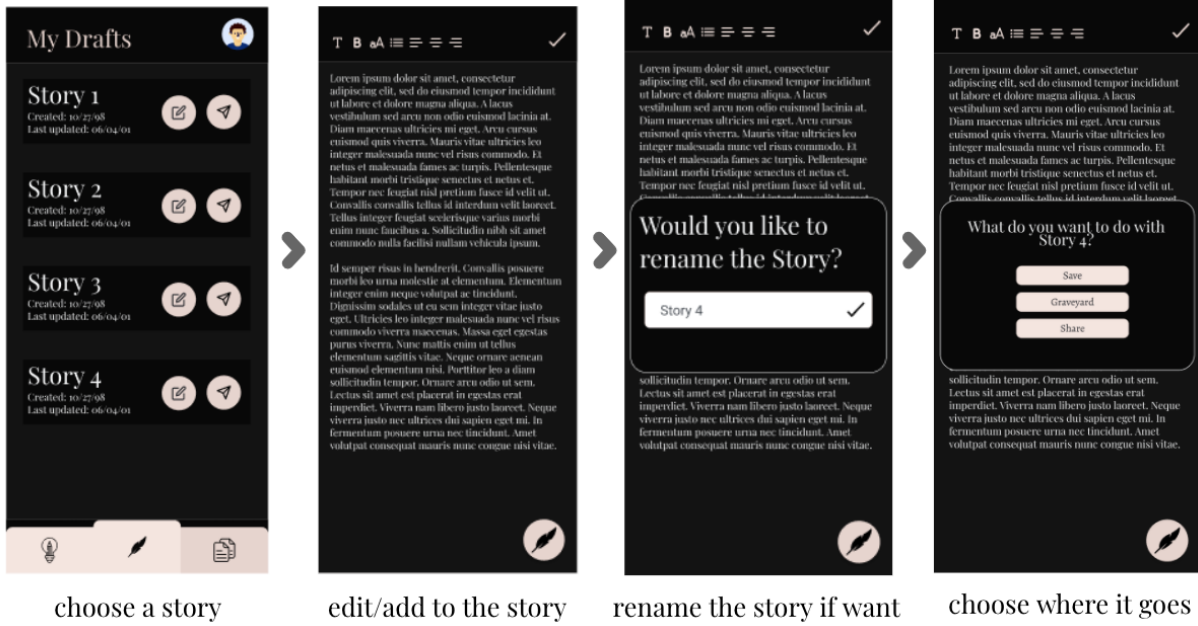


Figure 18: (Task 3) Revising a Work

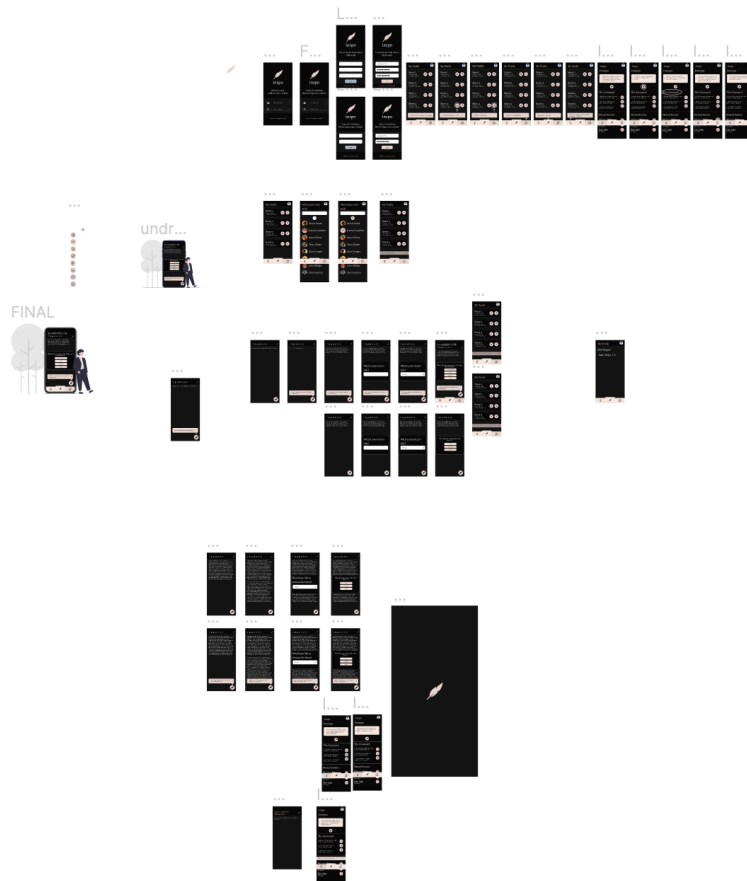


Figure 19: All Figma Screens

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## Major Design Changes from Initial Sketches to Med-fi Prototype

During our usability testing, we unearthed some confusion that helped us narrow in on our problems with design in our sketches and our lo-fi prototype. We realized that there were some key things that made our app way more complex and confusing than it needed to be, and thus we decided to change some things around.

---

### Change #1:

Users struggled with understanding the **point of the graveyard**, and it was clear that having the graveyard as its own separate tab didn't make sense. The Prompts page was also a little cumbersome, as **users had to pick a prompt** before beginning the writing process, which many didn't like.

In order to accommodate this, we combined both the graveyard and the prompts into one tab called "inspiration" which served as the **hub for generating creativity**. WE wanted to have one place where if users needed inspiration, they could look at old works or use prompts, making it much more intuitive about when to use that tab.

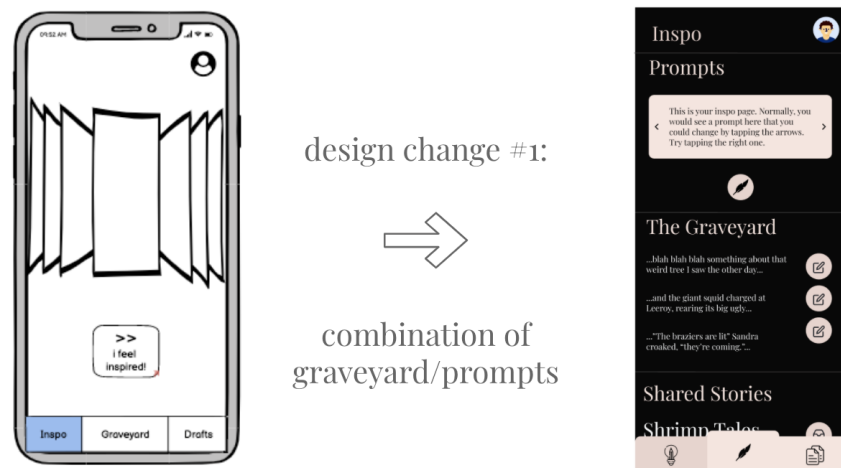


Figure 20: Design Change #1 (Graveyard/Prompt Combination)

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### Change #2:

The prompt feature forced a writer to be **constantly reminded** of the prompt and **confined to a writing space** with the prompt at the top. It also made it **difficult to switch prompts** in the middle, so even if a prompt had been exhausted or the user didn't want to use it anymore, they had no way of getting rid of it.

To fix this, we created a quill button at the bottom that allows for inspiration to be sought in the middle of writing a new draft, and offers **easy browsing** through other prompts with the different areas. The prompt can also be **minimized** by re-clicking the button.

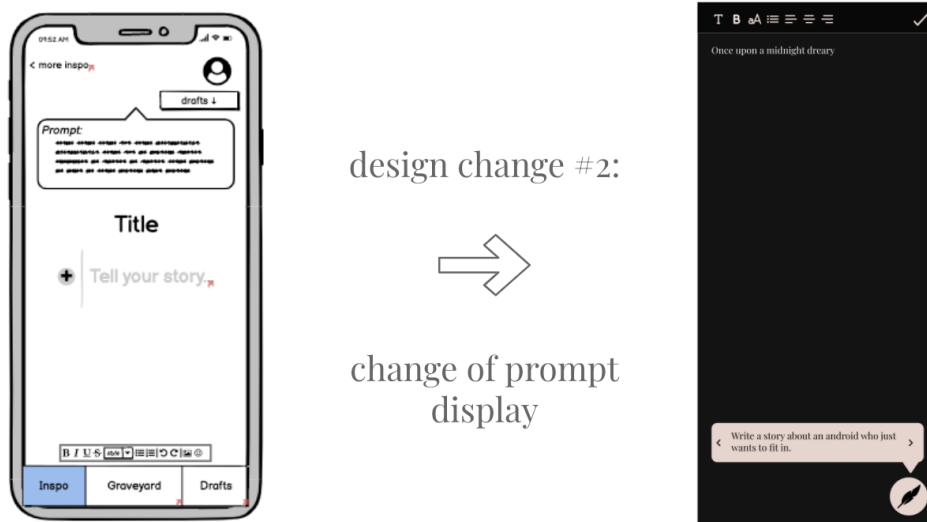


Figure 21: Design Change #2 (Prompt Display)

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### Change #3:

The graveyard tile view was cute in theory but made it **difficult to actually see** the stories & titles, especially on a phone. The graveyard in the way it was currently created also made it **easy to confuse** for unfinished works that would instead make more sense to categorize as drafts.

To fix this, we created a **list view** for the graveyard in the inspiration tab that made it much less similar to the drafts and much more **focused on abandoned lines or phrases** that could be used to inspire new work.

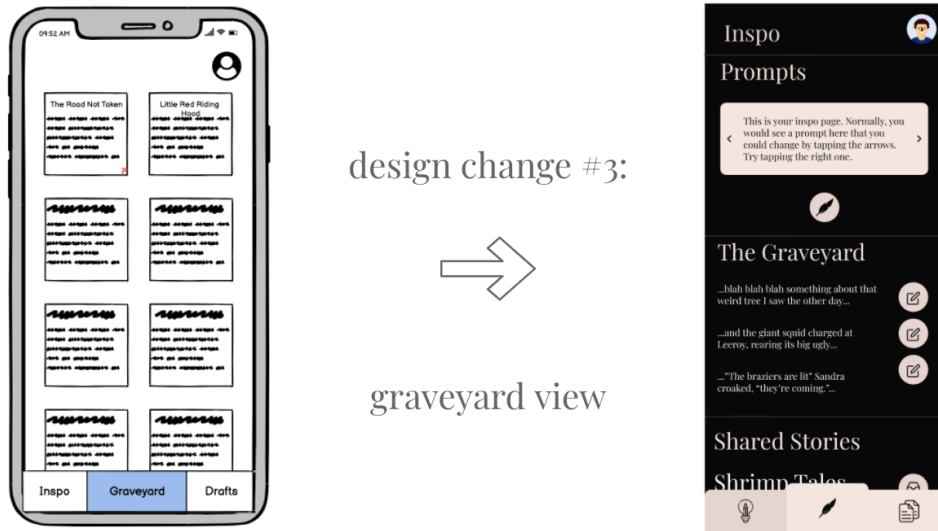


Figure 22: Design Change #3 (Graveyard View)

Change #4:

The drafts only had **one button** which was to share. There was **no editing accessibility** from the drafts, and also had no details about the actual work itself / the date last edited.

To fix this, we created a **new button palette** to facilitate both editing and sharing. We also included a **“date created”** and **“date last edited”** tag to each story to encourage individuals to reflect on which stories were most recently edited and ready to share.

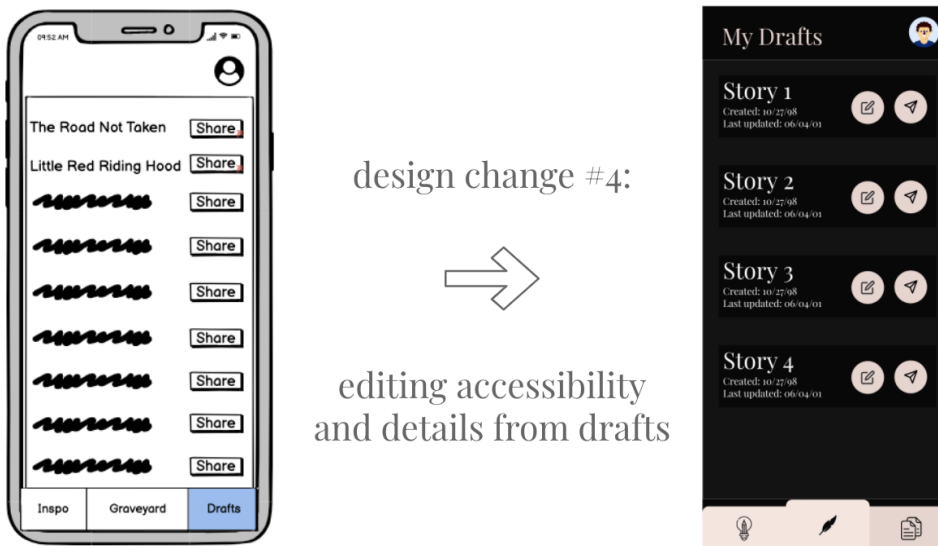


Figure 23: Design Change #4 (Editing)

## High-fi Prototype

After weeks of hard work, we finally arrived at our last phase of the prototyping process: the High-fi prototype.

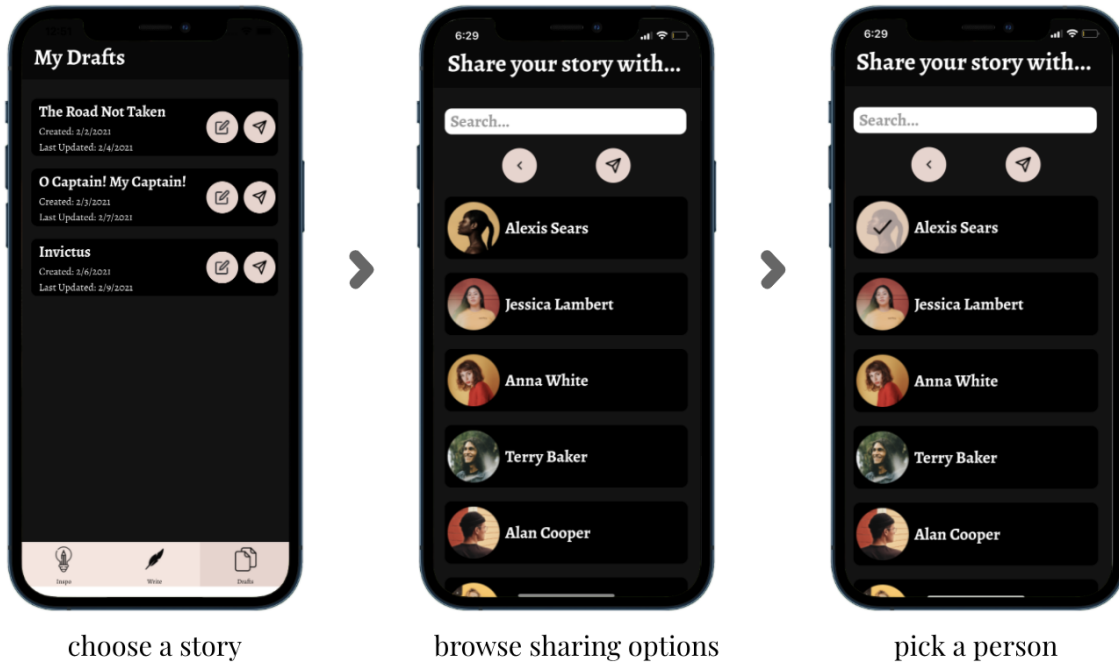


Figure 24: (Simple Task) Share work with friends.



Figure 25: (Moderate Task) Use a prompt as writing inspiration.

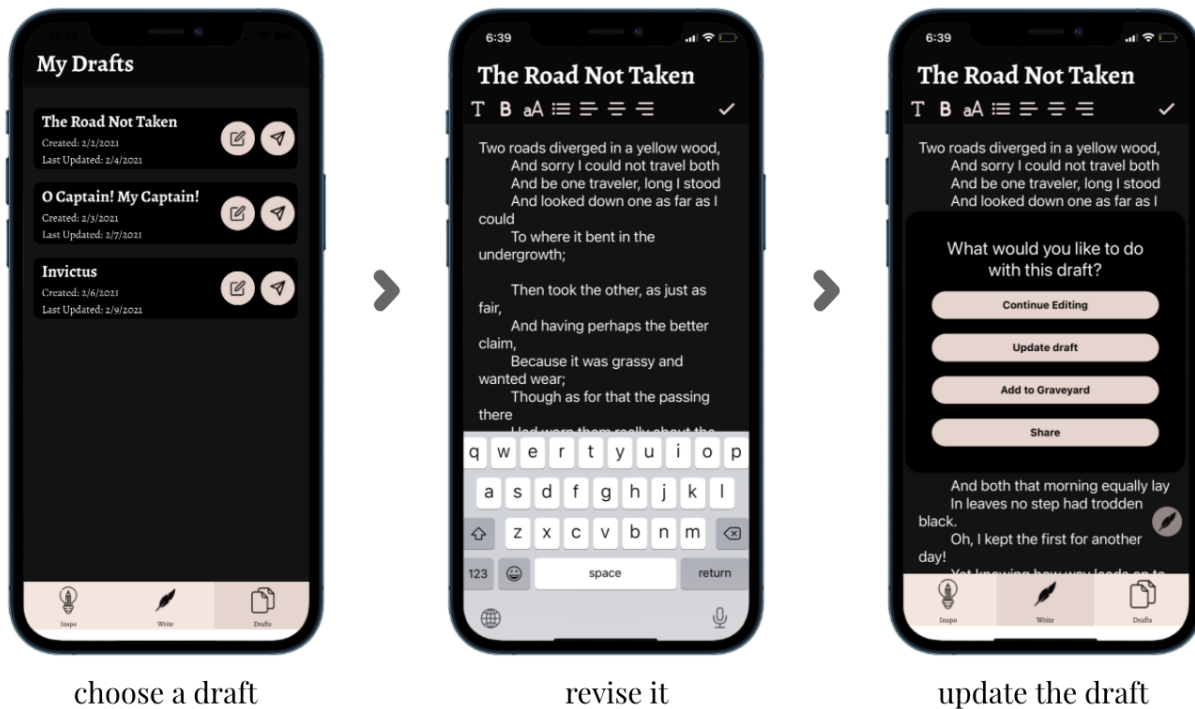


Figure 26: (Complex Task) Revise an old work.

## Major Usability Problems Addressed

Our heuristic evaluation pointed out a few major issues to us. We had a total of 19 severity 3-4 violations and 28 total severity 1-2 violations. Since we didn't have enough time to cater to all of the severity 3 and 4 violations, we categorized them by three types.

### Exit Ability

We found that when users were attempting to save their drafts, they couldn't easily navigate away from the writing page. Many of the modals lacked exit buttons, which made it confusing for our users.

### Clear Terminology

Participants were confused by the use of "Save" or the interchangeability of "Drafts" and "Graveyard" so we made it more consistent. We also tried to clarify the distinction between "Drafts" and "Graveyard" with our user tutorial.

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## **Redefine Icons**

We found that some of our icons were confusing so we changed them to be more intuitive. Instead of using ambiguous icons the “done” button we used text.

## **Final Prototype Implementation**

### **Tools Used**

In creating the app, we relied on three main tools: React Native for creation, Exponent for deployment, and GitHub for version control

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### **React Native**

We used React Native for building our prototype. This proved to be extremely useful, especially since our entire team had used it before. It offered many useful modules and due to its pervasiveness in the coding world, there were many helpful tutorials and guides in using it. Thankfully, we were able to integrate it with Material UI which created a much easier experience when building. However, styling in CSS was a big pain and it was very difficult to mirror many of our design choices from Figma without writing a lot of code. Small details were more difficult to fine tune.

---

### **Exponent**

To share our prototype, we used Exponent. Exponent was incredibly useful and made the entire process of uploading the app for others to use as well as using it on our own phones very easy. It took a few tweaks to get it up and running but once we were able to, the process was seamless.

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### **GitHub**

To ensure version control, we used Git. Setting up with Git was at first a little confusing, but made collaboration a lot easier in the long run. Using GitHub for all our pushing/pulling/revising needs was incredibly helpful and streamlined the entire process for our developers.

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## Wizard of Oz Techniques

Much of the app's content has been simulated so that the user can experience what the app might look like after a few weeks of use. Obviously, a new user would not have any work in the "drafts" section, so we decided to include some placeholder works so the user can experience the UI design. Similarly, we have pre-populated the user's friends list and simulated a small profile for the user.

The second feature of Wizard of Oz within our prototype comes in the way pieces are displayed in the graveyard within the Inspo tab. At this point, it is hard coded but in theory there would be some algorithm that selects historical pieces from a users' works that the user may be interested in picking back up.

## Hard-coded Data

Much of the app's content has been hardcoded. Because we were limited on time, we didn't connect the app to an actual database. Thus the data presented on the app isn't updated and is simply hard coded into the app. Like mentioned above, the user's friends are hard coded as we haven't fully flushed out the adding friends/maintaining friends feature. In addition, we hard coded the drafts and the prompts. Ideally the prompts would be pulled from a database that is continuously updated and the drafts would be stored in some sort of database. However, in our final prototype, we simply hard code the drafts in an array within the app itself. The login/registration information was also hardcoded. Currently, any credentials would allow for access to the app.

## Summary and Next Steps

### Main Learnings

In creating this app, we realized the major distinction between functionality and accessibility. Web based applications have more screen space and thorough functionality, but lack accessibility throughout the day. Phone applications are much more accessible throughout the day, but because of limited screen space and processing ability, these applications will often lack functionality. Consistently teams must find the balance between this functionality and accessibility depending on the modality they choose.

For our users, this dilemma between functionality and accessibility was paramount. We found that our users may have inspiration throughout the day, but without access to their

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laptop or computer, they were often out of luck. Yet, when using their Notes app on their phone, it lacked serious functionality. To solve this issue, we developed the Inspo app in hopes of providing both functionality and accessibility to writers.

## Future Versions

For future iterations of the app, we intend to focusing on three main features:

**Friends:** In our current iteration of the prototype, there is no way to actually add, maintain, or remove friends that you can share prompts with. This is a feature we would want to flush out and develop properly.

**Database Integration:** Like mentioned above, much of our app is hard coded, and so in future versions we would want to integrate some sort of database like Firebase for real time maintenance of drafts, user info, friends, and prompts.

**Profile:** Currently, we have no way to change settings in your user profile. When adding friends this would be particularly important to have. We would want to add this as a proper feature.

**Tutorial:** In our initial mockups, we had an idea for some sort of tutorial that guided users through the app. Due to time constraints, we abandoned this idea, but is something we would want to come back to (it is developed in Figma).

**Login flow:** Currently our login flow is hardcoded, so we would want to actually integrate this and do authentication using Firebase Auth.

**Attachments:** Currently, there is no way to attach audio recordings or images to drafts. Moving forward, we believe this is a feature that would be particularly useful for rappers, singers, and anyone who wants to use the app for ideation inspiration.