

UNFOLD

Assignment 5: Sketching, Low-Fi Prototyping, Usability Testing

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Roadmap

1

Recap

2

**Sketching
Explorations**

3

**Selected
Interface**

4

**Low-fi
Prototype**

5

Testing

6

Discussion



Recap



Unfold

Your tasks, your story—watch it unfold.

Healthy Behaviors Studio
October 2024





Problem

People often **struggle** to stay accountable with their tasks because they find them **mundane, difficult to stay engaged with, and lacking in shared support.**



Solution

An app that **incentivizes task completion** through **narrative story** updates that evolve their **personalized** avatar, highlighting their progress and accomplishments.

Value Propoposition

- Unfold stands out with a **blend of personal productivity and an evolving narrative**
- Uniquely focuses on a **story-driven experience** vs. basic gamification
 - Motivates users to complete tasks not just for points and streaks, but to reveal the next chapter of their personalized story
 - Added layer of **emotional engagement and curiosity** that keeps users invested with “What happens next?”

Sanity Check:

- Unique niche → uses narrative as the main way to engage users, **unlike most gamified apps that focus on rewards like badges, ranks, or streaks**
- Key difference is Unfold’s continuous storyline
 - **Motivates users beyond simple productivity goals**
 - No other task management apps emphasize storytelling as the primary motivational tool

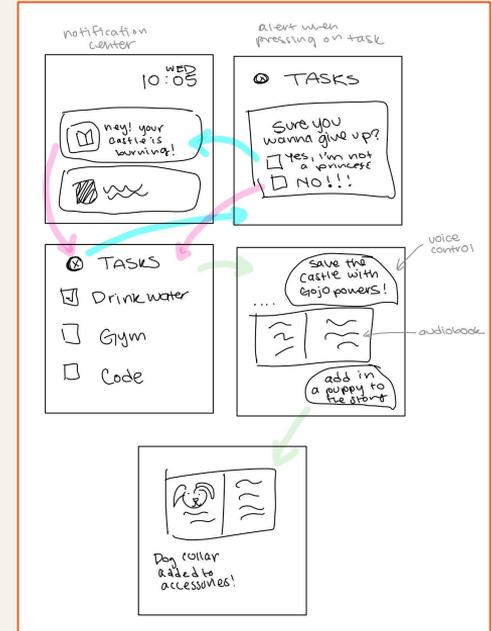
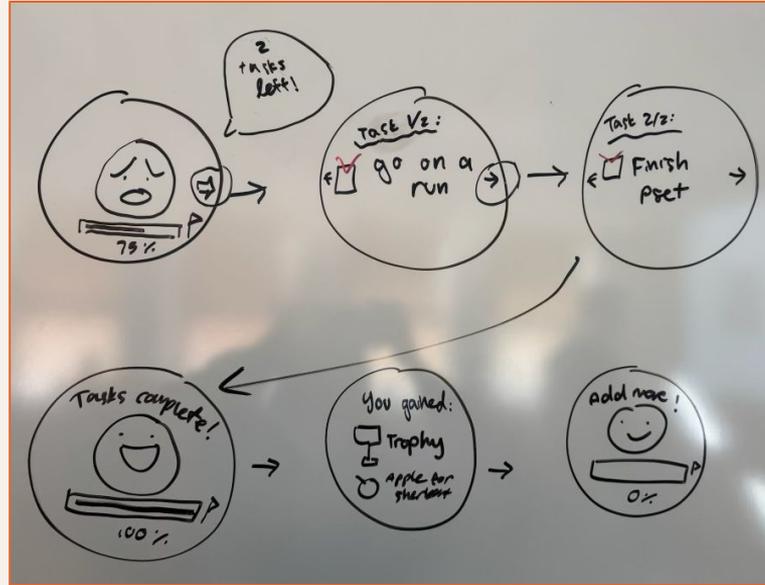


Sketching Explorations

Concept 1: Watch Interface

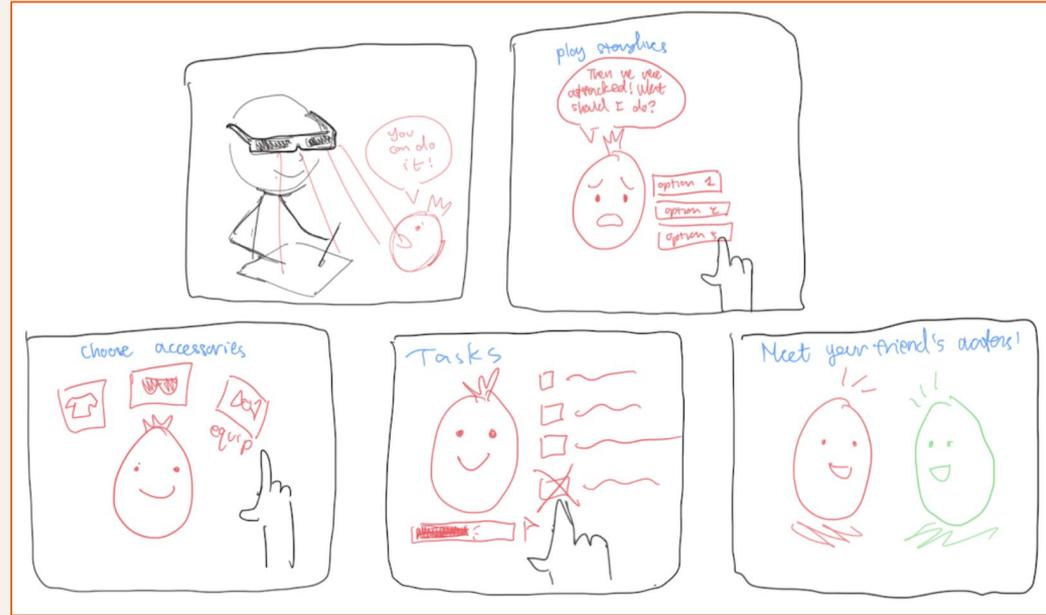


App intended for a watch with a touch screen interface (e.g. Apple Watch or Galaxy Watch).



Concept 2: AR Interface

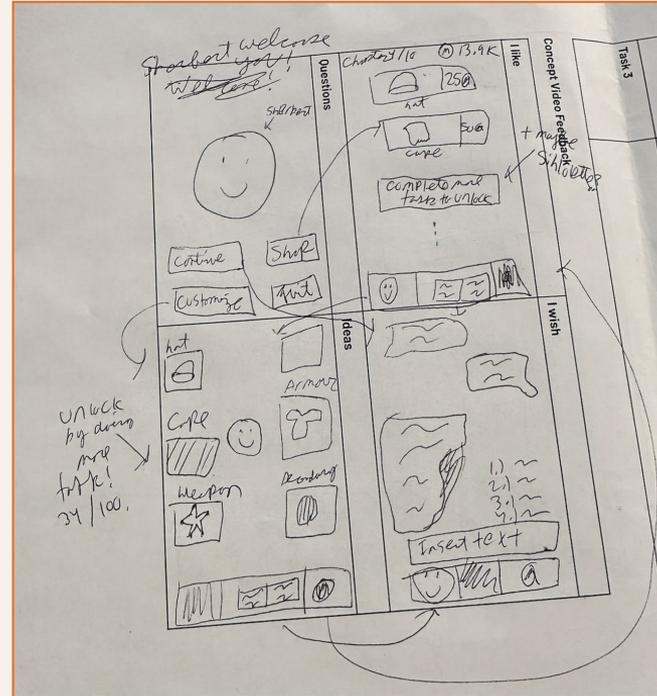
3D character that is visible when the user is wearing AR glasses, allowing the user to see and interact with the character when glasses are worn.



Concept 3: Mobile App

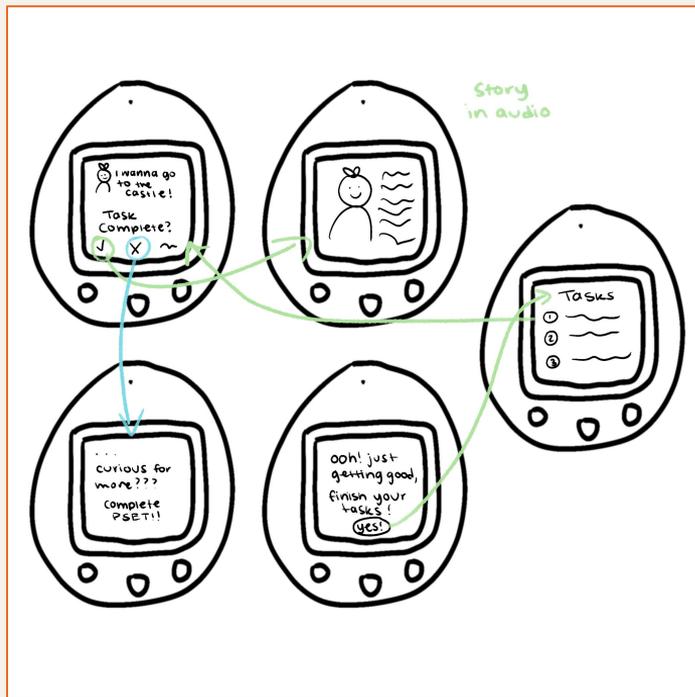


App for mobile phones, featuring different screens the user can toggle between using the navigation bar.



Concept 4: Physical Toy

A Tamagotchi-style physical toy that allows the user to toggle clickable buttons to switch between screens/check off tasks.





**Diverse
Realizations**

Concept 1: Watch Interface

Concept 2: AR Interface

Concept 3: Mobile App

Concept 4: Physical Toy



*Selecting 2
realizations*

Concept 1: Watch App

Concept 3: Mobile App

Fleshed out: Watch Interface



Concept 1: Watch Interface

PROs

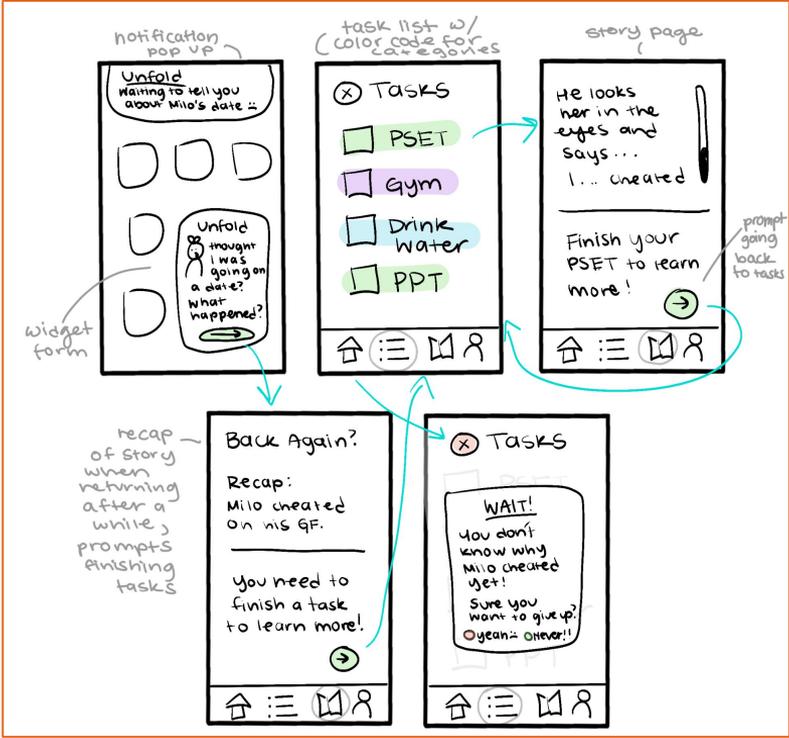
- **Convenience**
Users can easily check off tasks or see progress with a quick glance while on the go
- **Less Distractions**
Users can manage tasks while away from their phones, limiting distraction opportunities during busy periods

CONs

- **Compressed**
Can't easily read or input the small and detailed text on the screen, especially difficult for a story-based app
- **Incomplete Experience**
Difficult to fit all desired features on the watch without making it necessary to frequently switch between different screens



Fleshed Out: Mobile App



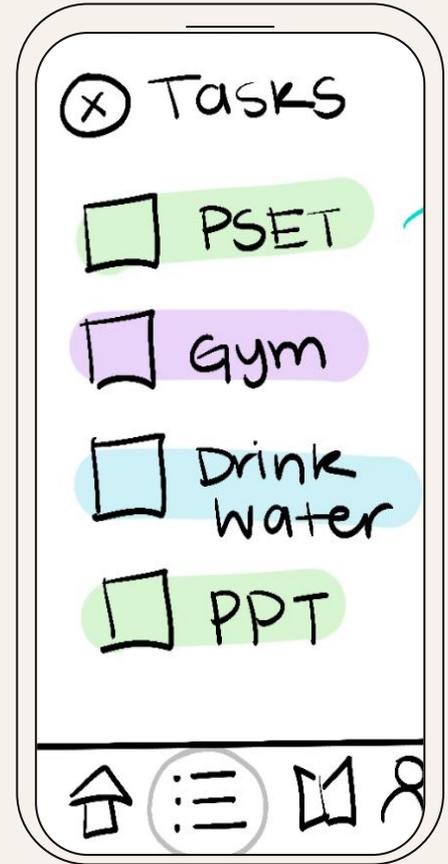
Concept 3: Mobile App

PROs

- **Accessibility**
Most people have phones, making it available to most and easy to sync with other apps and our social features
- **More Possibilities**
Bigger screen allows for better reading experience, and interactive visuals

CONs

- **Distractions**
If the user has to open their phone to access Unfold, they might get distracted by other apps along the way
- **Overwhelming**
More productivity apps can be overwhelming for user to manage and integrate into their existing productivity habits



Our Winner:
Mobile App!

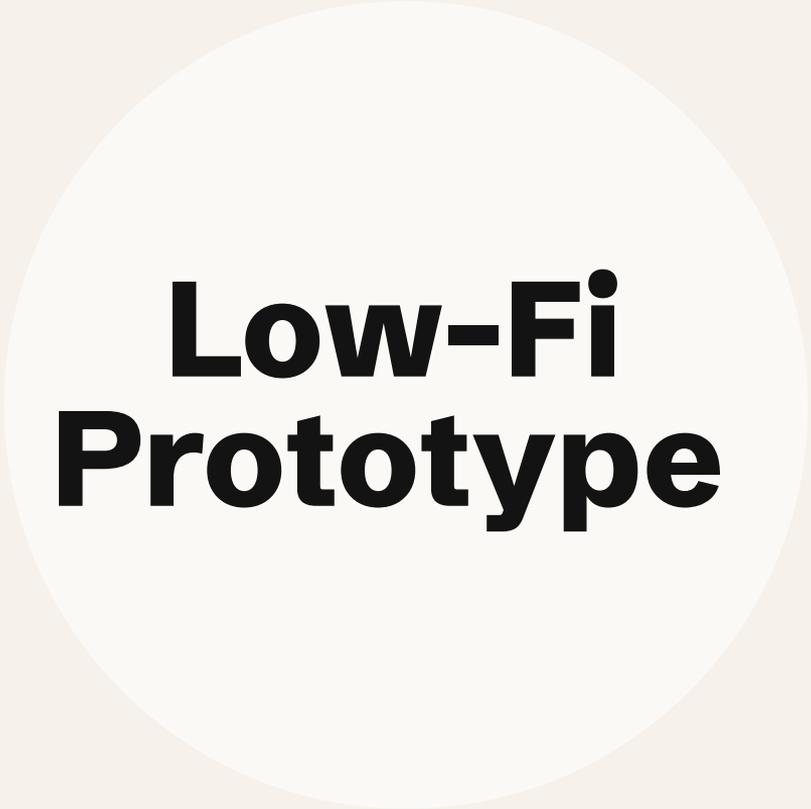
Why Mobile App?

- More **accessible** as our primary user (busy professionals and students) are more likely to have phones than watches
- Best for **storytelling** (screen space for reading, visuals, avatar animations, etc.) which make up Unfold's core experience
- Watch is inconvenient as users want to **access other common mobile productivity apps** (such as calendars and reminders), to better integrate Unfold into their workflow
- Supports **more complex interactions** than watch interface, such as avatar customization and social features

Why Mobile App?

Overall:

A **mobile app is the best platform** for Unfold because of its ability to **support the narrative-driven experience**, which is central to our value proposition. While a watch offers on the go accessibility and quick task-check-ins, the small screen size and limited interactivity restrict the **realization of Unfold's story narrative and avatar evolution** that make the app unique.



**Low-Fi
Prototype**

Prototype Construction

We wanted to explore the different interactions a user might have with Unfold. We drew our prototype on Notability and printed out the screens.

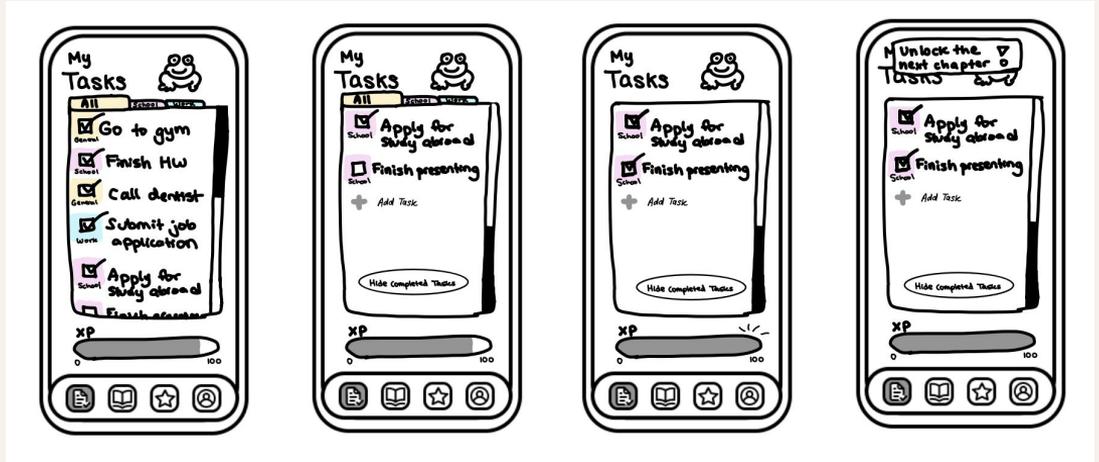
In our prototype, we:

- Integrated **scrolling interactions** to assess ease of navigation between different sections of the app
- Designed an **character customization** feature to enhance user engagement and personalization
- Incorporated **interactive elements that align with user-driven exploration**, allowing participants to discover story at their own pace

Task Management

Main Task Dashboard Novel Interface Exploration:

- **Navigation Bar**
- Tasks **grouped by category** (ex. personal, work, health)
- Progression **XP tracking**
- Ability to hide completed tasks to **minimize distraction**

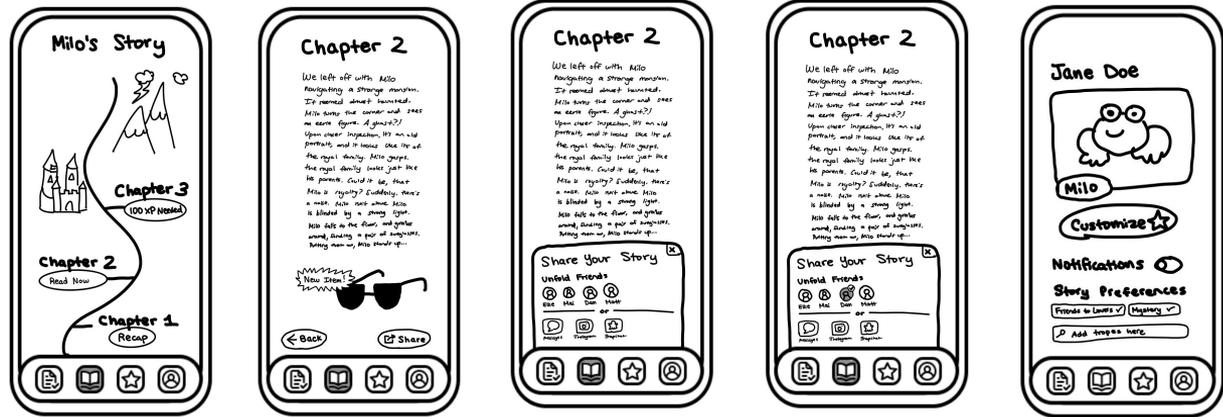


Reading a Story

Story Dashboard

Novel Interface Exploration:

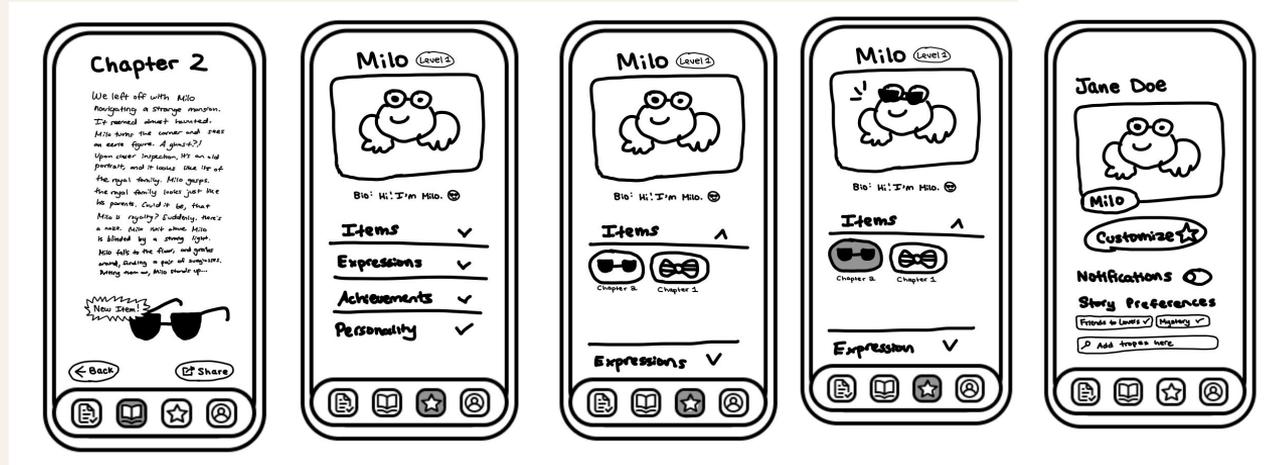
- Home page allows users to **revisit all past story chapters**
- Read story and user can **prompt interesting plots** they want to see
- **Unlock items** to use for customizing avatar
- **Share story with friends** through app or messages



Avatar Customization

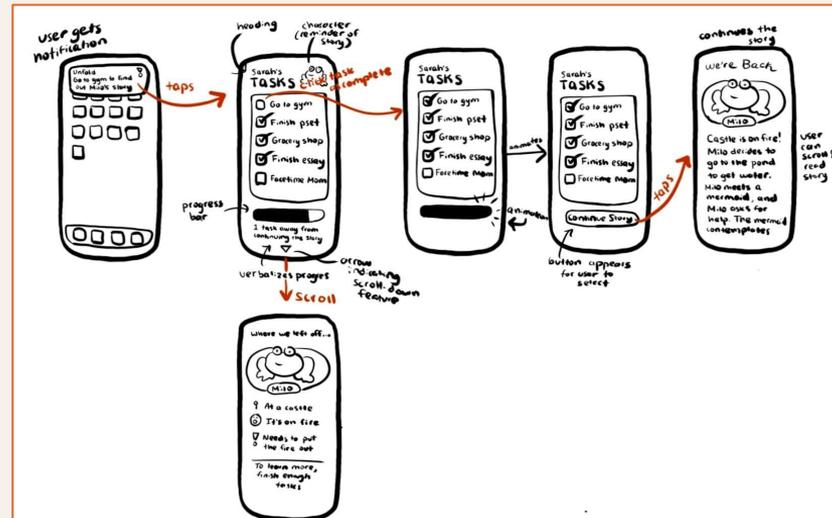
Customization Dashboard Novel Interface Exploration:

- Options **unlocked by story progression** and task completion
- Choose from a **variety of categories** like outfits, accessories, and facial expressions
- Confirm changes to update the avatar's look



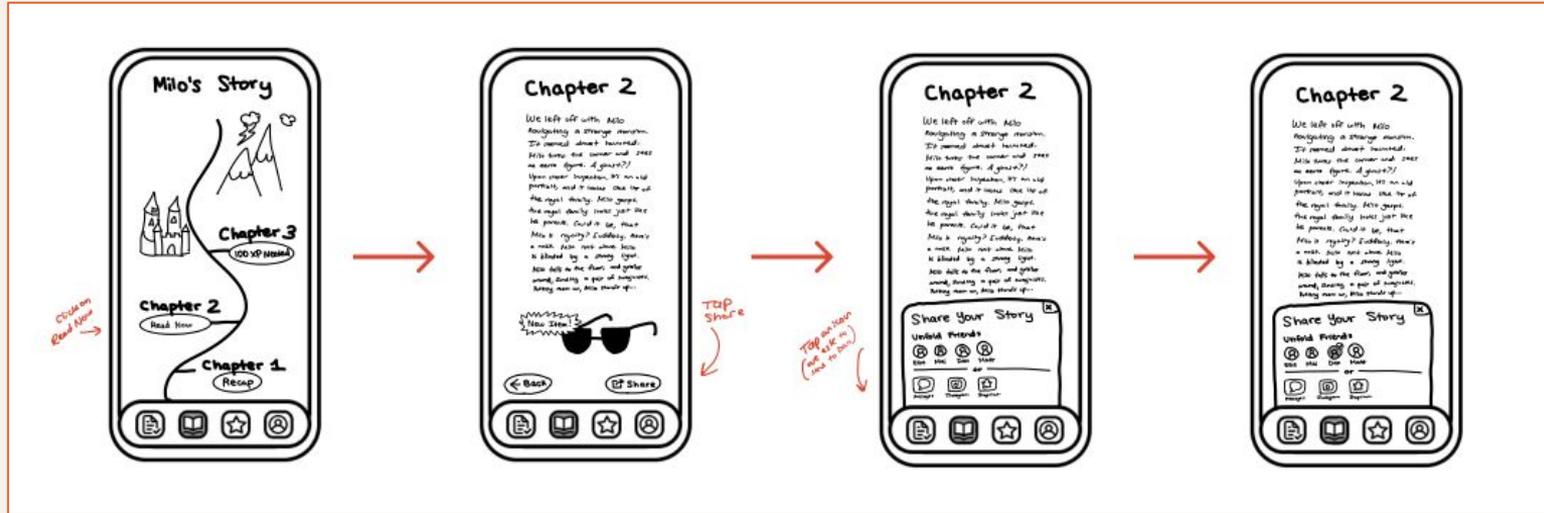
Task Flow: Simple Task

Check off a completed task.



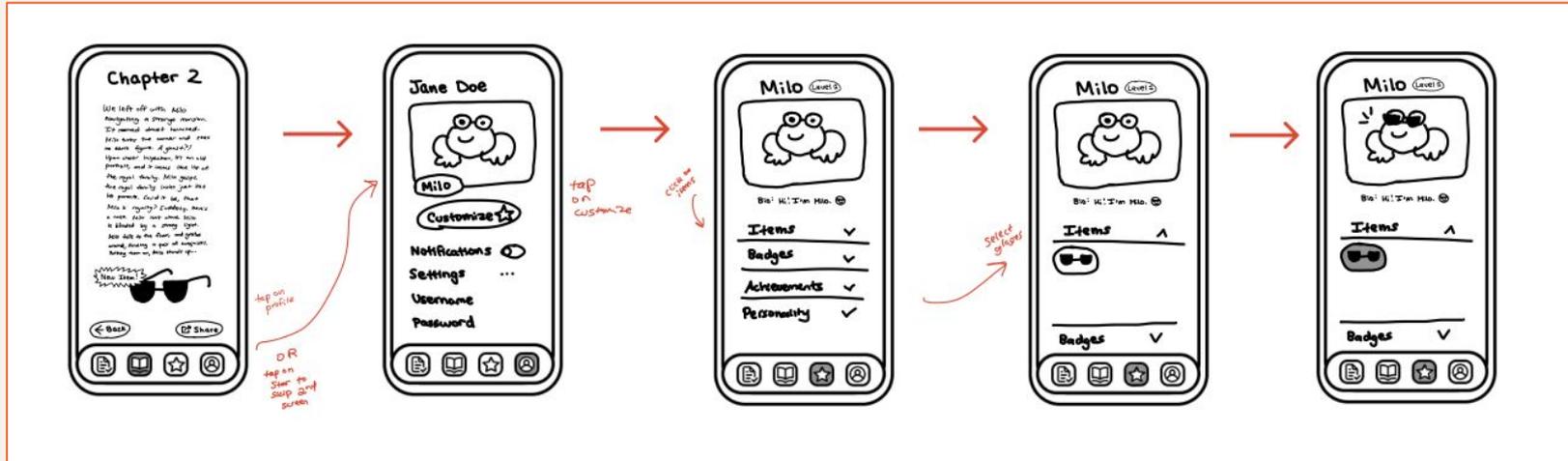
Task Flow: Moderate Task

Share story with friends.



Task Flow: Complex Task

Customize personal character with items gained from story.



Team Member Roles



Krystal Li
Greeter



Sarah Jacob
Computer



Steven Le
Facilitator



Lauren Yu
Observer



Testing Environment

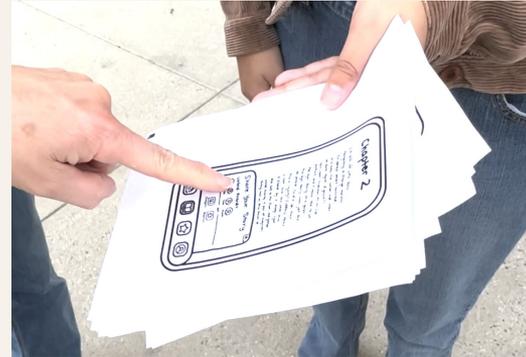
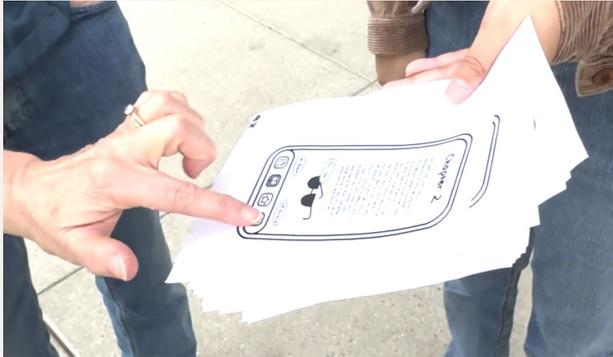
We went to **Main Quad** to test our paper prototypes.

We aimed to get diverse range of participants from age, gender, etc. - targeting non-Stanford students.

Prototype Apparatus

We created a **paper prototype** and manually responded to user actions.

These paper prototypes were swapped in front of our participants as we consulted our **script** to keep testing consistent among participants.



Usability Goals & Metrics

Efficient

How many clicks total did the user take to accomplish the intended task?

Measured

Easy to Navigate

How many misclicks did the user make?

How easy is the app to navigate from 1-10 (1: extremely difficult, 10: extremely easy)?

Asked

Eagerness to Use App

How likely would you be to actually install the app (1: extremely unlikely, 10: extremely likely)?

Testing Procedure

1. **Introduction:** Who we are and what we are testing
2. **Context:** Give our participant context about our app, such as the purpose, goals, etc.
3. **User Interface Introduction:** Show participant the screen they will be working with for their task, demonstrating very basic interactions
4. **Tasks:** Present user with tasks we want them to complete
5. **Execution:** Without guidance, allow the user to work through the tasks
6. **Final Feedback:** Asked participant for thoughts on our app and areas of improvement

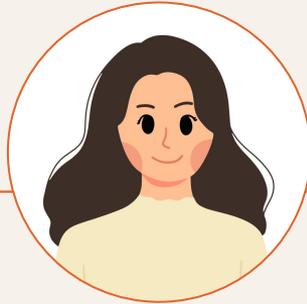


Testing Results

Prototyping Participants



1. Carl
41 yrs old
Lawyer



2. Katherine
27 yrs old
Consultant



3. Vennie
23 yrs old
Software Engineer



4. Michael
76 yrs old
Retired
Stanford
Alumni

Prototyping Participants



5. Karla

22 yrs old
Software
Engineer



6. Emmanuel

21 yrs old
Stanford
SymSys Student



7. Tracy

68 yrs old
Retired
Stanford
Alumni

Participants

Demographics:

Range from 21-76 years old, Diversity in gender, Range of careers and socioeconomic status



21



22



23



27



41



68



76

Recruitment: Asking people at Main Quad with posters

Compensation: Offered coffee on us for their time, established trust through conversation





Process Data

Most workflows were straightforward,
especially with using the navigation bar.

All participants successfully completed tasks
without getting stuck or needing extra assistance.

Some participants were confused about clickability,
particularly wanting to directly click the character/accessory to interact with it.

All participants were eager to use the app.



Bottom-Line Data

EFFICIENCY

11 clicks

on average to navigate all workflows, 10 being the least amount of clicks needed.

EASE OF NAVIGATION

6 misclicks

total across all participants.

8.83/10

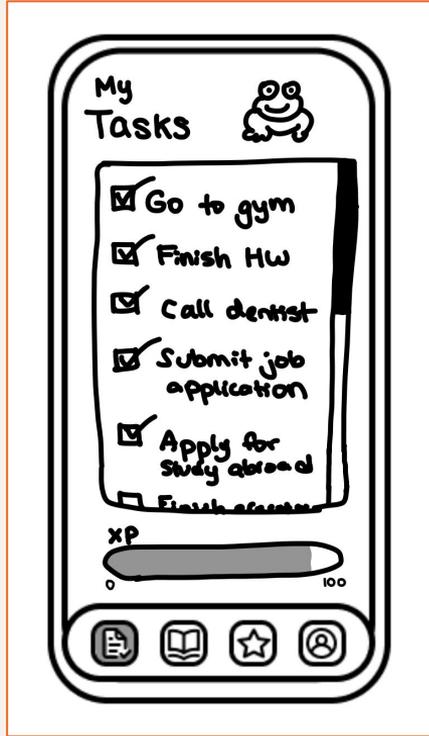
average ease of navigation rating across all participants.

EAGERNESS TO USE APP

9/10 eagerness

average rating across all participants.

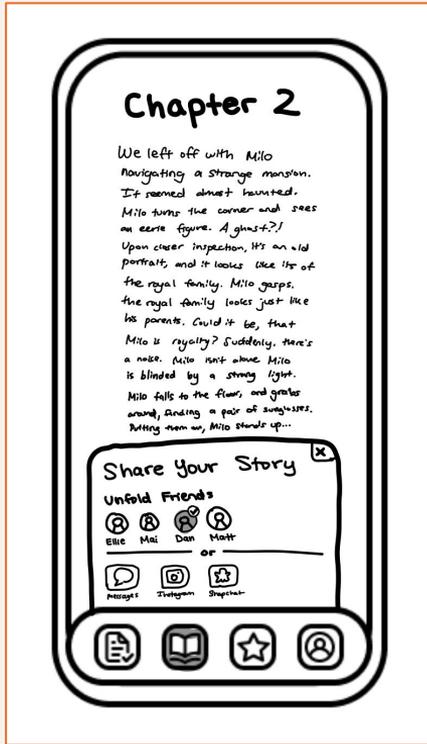
Task #1 Results



Check off a completed task.

- 0 misclicks
- Straightforward, little confusion
- Navigation bar was easy to interpret

Task #2 Results



Share story with friends.

- 3 misclicks
- Awkward placement: Might hit Messages app first when you're trying to share something in-app

Task #3 Results



Customize personal character with items gained from story.

- 3 misclicks
- Clickability confusion: Wanted to click on the object or the character directly instead of navigating to different page

Other Observations

- Some users were confused about what differentiated us from other accountability/productivity apps
- Gathering user feedback in-person may have skewed rankings/feedback to be more positive

Overall, **we achieved our usability goals well** but discovered opportunities for improvement and potentially inefficient design choices in our prototype.

Discussion

Implications



- The **storytelling focus** isn't obvious enough to immediately differentiate Unfold from other apps.
- Users expect to **directly tap** on characters/accessories to interact with them.
- **Inputting a task** is a feature users immediately expect to see/access when opening the app.

Design Changes



- Emphasize the story-based motivation using **clear icons and theming**, and by including a **information page** to clear up confusion.



- Allow users to **directly tap on characters/accessories** to open relevant menus.



- Restructure the tasks page to allow users to **input new tasks without scrolling**, placing the feature at the top of the screen.

What couldn't testing reveal?

- How often users would actually share stories with their friends?
- How consistently users would use the app over an extended duration of time?
- The difference between a user's typical productivity and their productivity using Unfold?



**Thank
You!**



Appendix







Concept 1: Watch Interface

PROs

- Convenience
- Less distractions
- More accessible notifications and task list
- Voice command and audiobook possibility
- Easier habit tracking on the move

CONs

- Compressed
- Battery may run out
- Limited story possibilities
- Not much space for interactivity
- Learning Curve
- Awkward visuals
- Limited customization
- Incomplete experience (can't read the full story on watch)



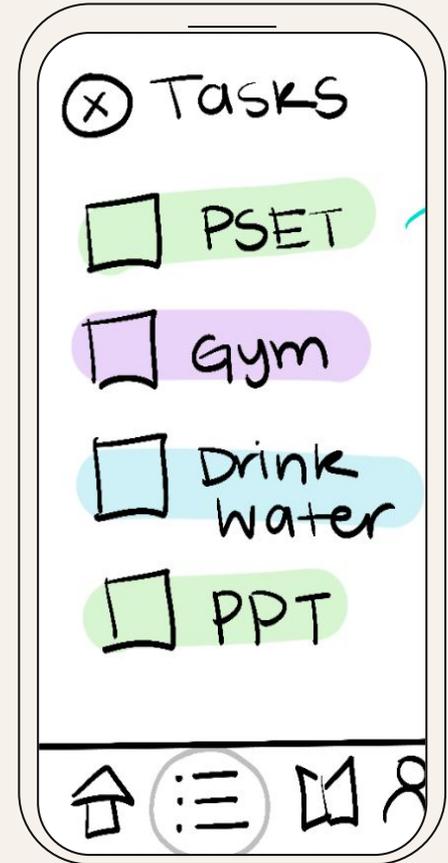
Concept 3: Mobile App

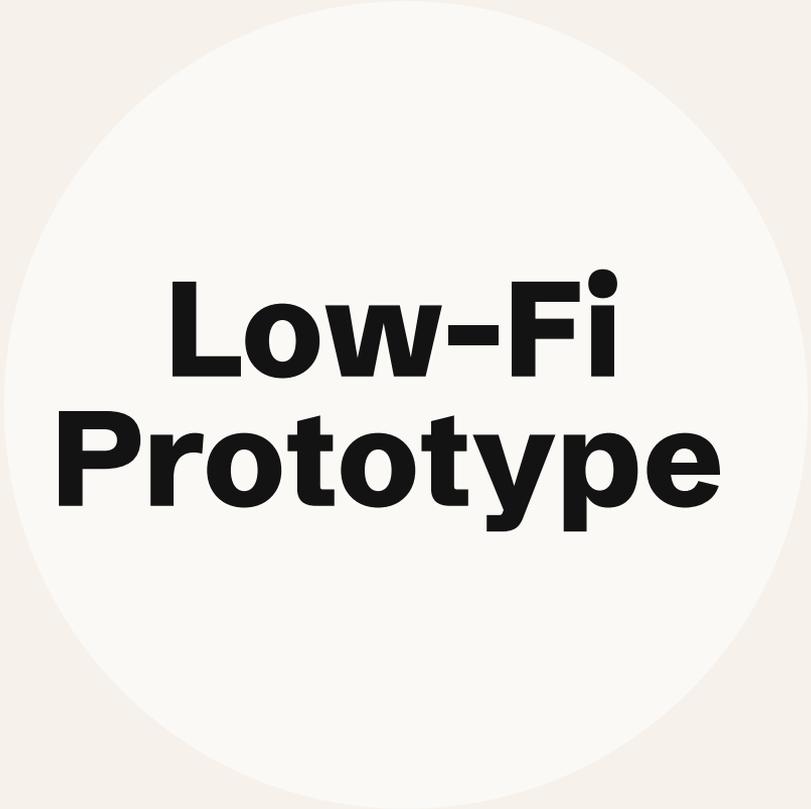
PROs

- Screen space for story
- Most people have one
- More interactive possibilities (visuals, sound, etc)
- More frequently used
- Go hand in hand with other phone apps like Calendar
- Easier to incorporate social features (friend progress, leaderboards, etc.)

CONs

- More distractions as other apps/notifs may be more attractive
- Less quick access
- Cross-platform needs
- More productivity apps can be overwhelming





**Low-Fi
Prototype**

Prototype Testing Script

Our Script

Our Tasks



Simple

User checks off a task that they completed.



Moderate

User shares their stories with friends.



Complex

User customizes their personal character with items gained from story progression.

Critical Incidents

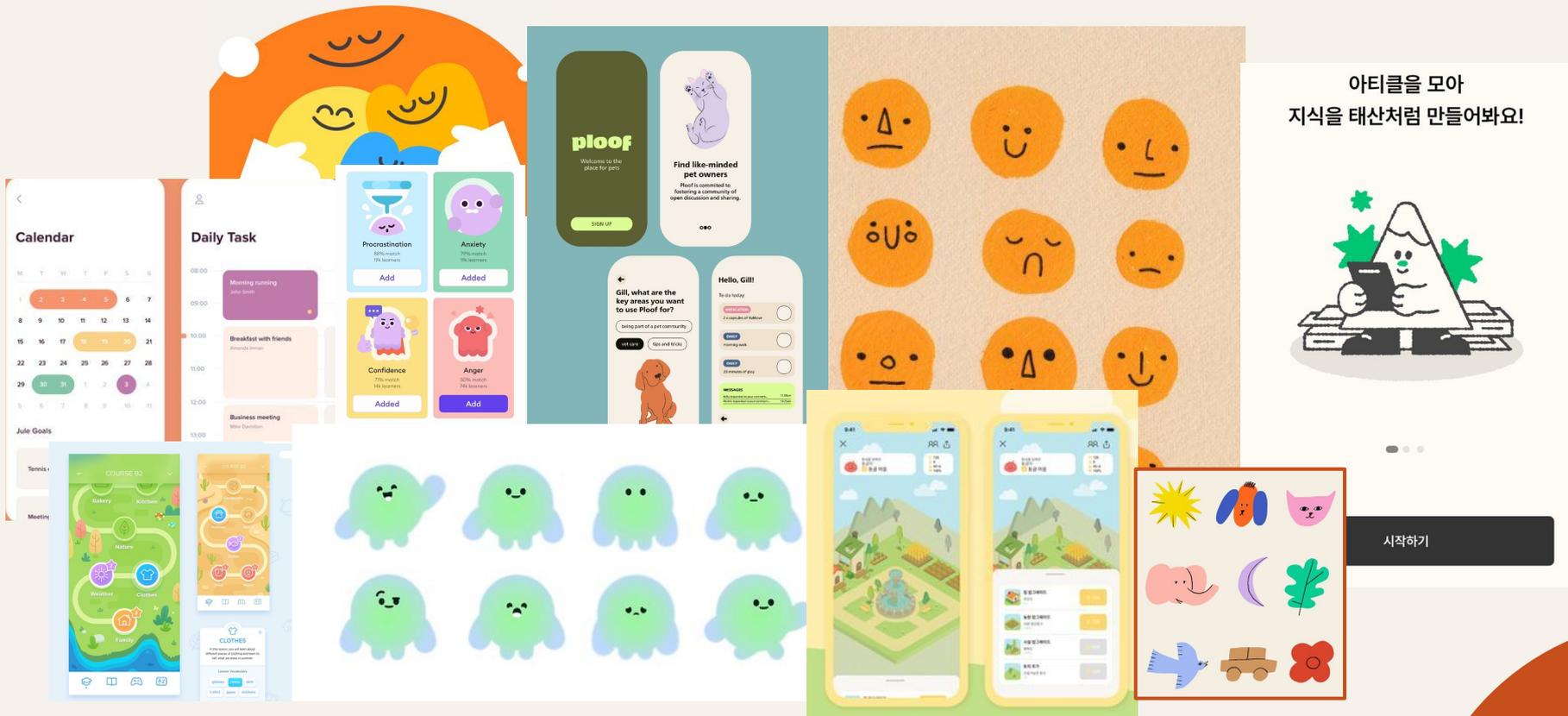
Incident	Severity
“I’d probably hit messages first...I’d probably hit messages before hitting Dan’s name.”	2
Confused about how the app would distinguish itself from other accountability apps.	3
Misclick - Assumed they should click the item directly to add it to their character.	2
Had to pull out reading glasses to read text and navigate adding the accessory to the character.	1

Critical Incidents

Incident	Severity
Misclick - Assumed they could navigate straight to the “people” tab on the bottom tab to share their story.	2
“I’m trying to explain to my dad that the arrow here means share.”	1
“I’m sorry, what is the app, what does it do?”	3
“That was so cute, I loved it.”	0

Moodboard

Cute, Playful, Bright



Task Flow: Simple Task

Check off a completed task.

