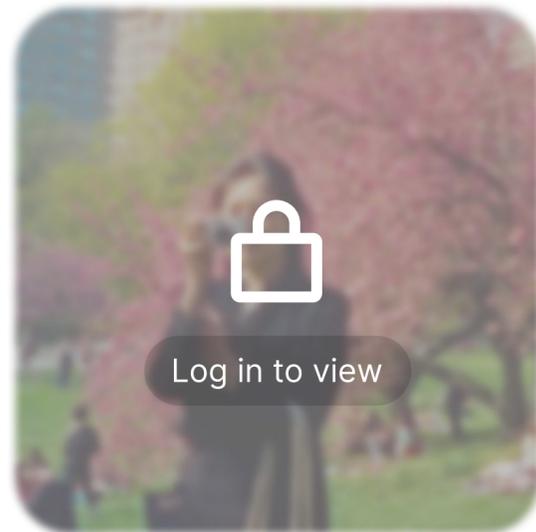
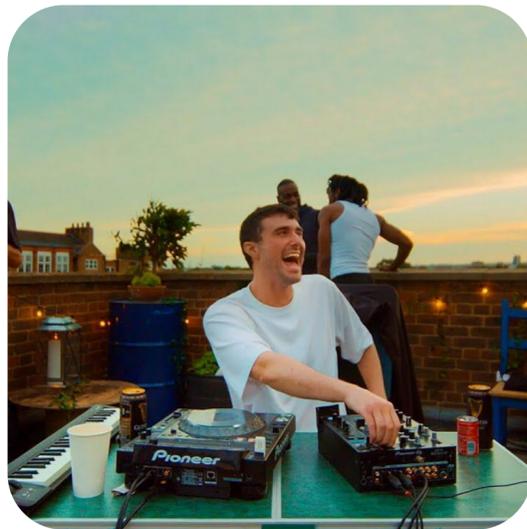


A8 Assignment



timelock

Capture the moment, enjoy the experience



Team



Computer Science



Computer Science



Symbolic Systems / Co-Term Computer Science



Computational Creativity

The Problem

The need to be present, but also have something to remember the night by.

Sharing and aggregating media aesthetically across large groups is difficult.

An easy way for groups to capture and share meaningful memories all in one place.

The Solution

Collaborative app designed to create a time-sensitive multimedia experience for groups

Participants contribute various forms of content, such as photos, videos, voice recordings, songs, locations, and messages, within a specified time-frame

All contributions are compiled into a single, shareable memento that captures the essence of the moment for all participants

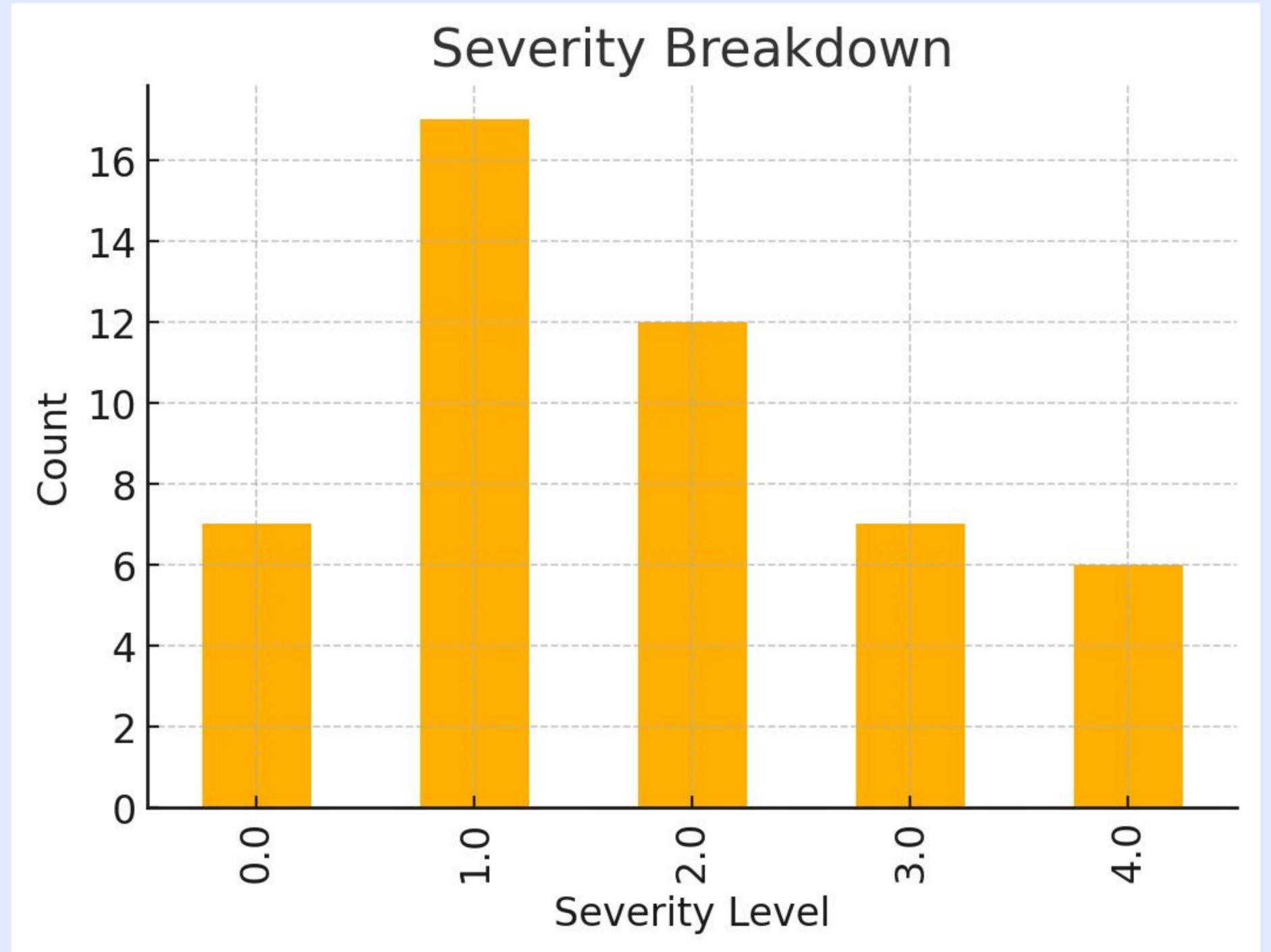
Talk Outline

1. Heuristic Eval Results
2. Product Revisions
3. Prototype Implementation Status

Heuristic Evaluation Results

HEURISTIC EVALUATION

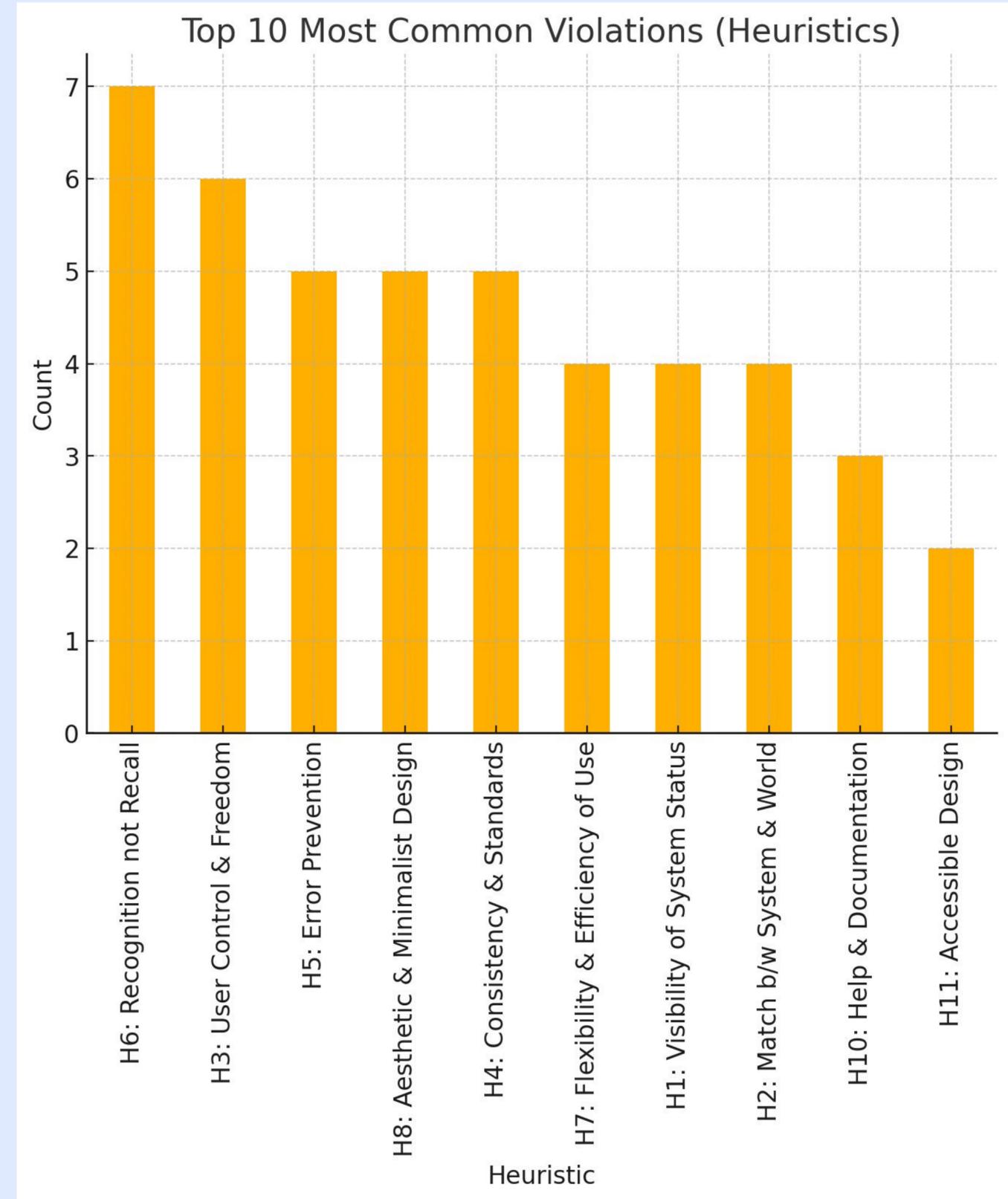
Majority of our issues were in the **1-2 severity range**.



HEURISTIC EVALUATION

The largest number of violations were in:

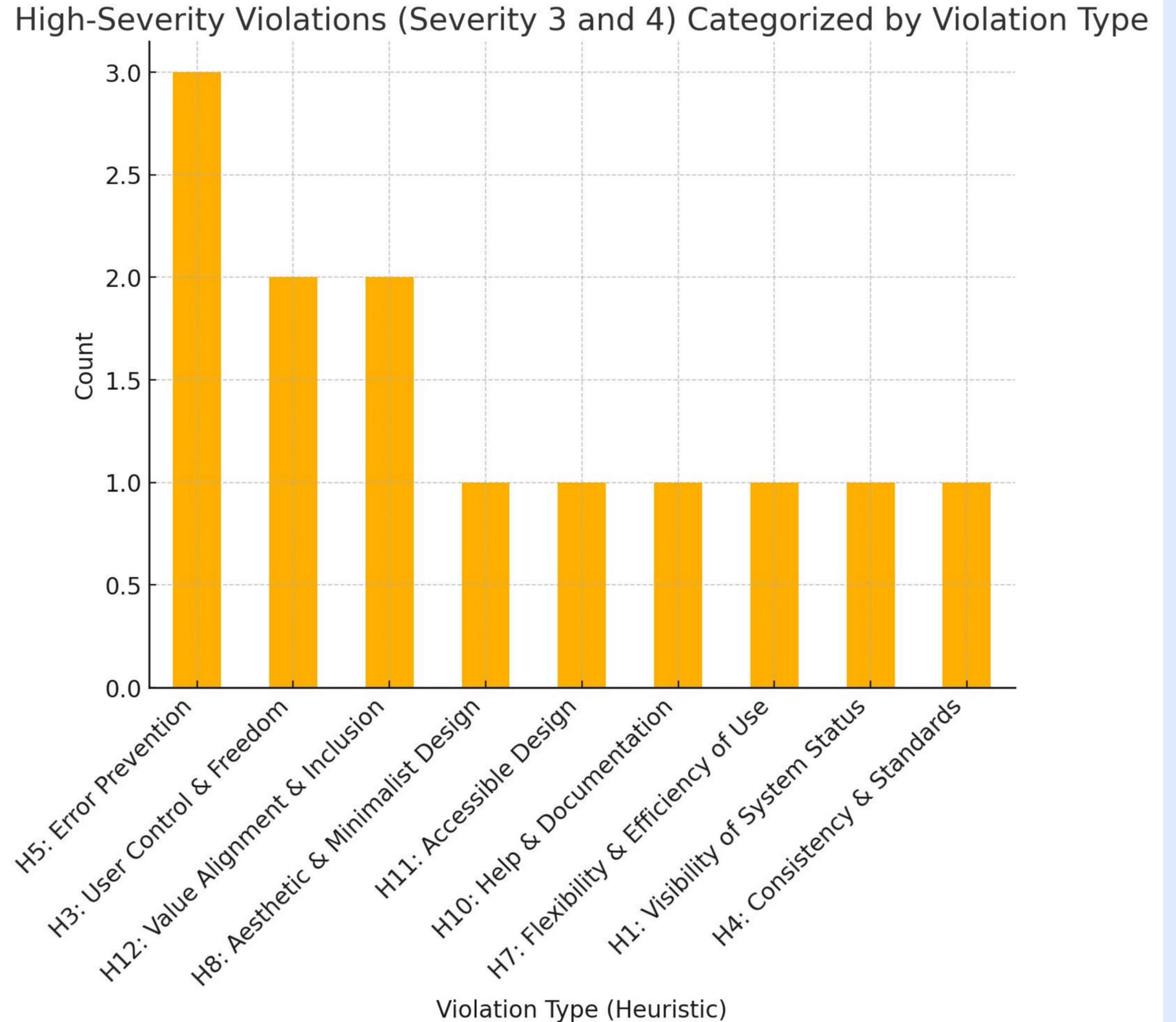
H6: Recognition not Recall and
H3: User Control and Freedom



HEURISTIC EVALUATION

Looking more specifically at 3 and 4 Severity level, most of our issues came from:

H5: Error Prevention and
H3: User Control and Freedom



Common Themes Across Violations

1

Misunderstanding of user interface or design principles

Example Violations

The interface allows the user to submit various mediums to their timelock by having a Snapchat-esque design where you can swipe to select which mediums to submit, but it is not obvious how to submit multiple mediums simultaneously. Also, can the video button also capture a photo like how snapchat works?

TLDR; should be able to submit multiple mediums.

Clarification: multiple mediums is an edge case.

Provide users with an option to add other details (such as location, time, date, etc.) on the page where they can add a comment. Or a redo button to indicate the media is lost

TLDR; should have an option to add other details to image.

Clarification: tags are auto-generated.

2

Suggestions that are related to or solved by OS specific quirks.

Examples

The interface has a progress bar, timer, and information about users on the top center of the second screen, which is blocked by the iPhone dynamic island (top middle oval thing)

Tldr; designs might be blocked by dynamic island pop-ups.

Solve: Apple OS.

Users are able to share the memento, but not save it on their personal device.

Tldr; unable to save on personal device.

Solve: Apple OS sharing module includes saving to personal device.

3

Connecting different tasks so that the app feels cohesive.

Examples

In the prototype, it flows from "locked" to "untitled timelock." We understand that these are two different tasks, but it brings up the question of what the "home" or central navigation screen is

Tldr; no transition between simple and moderate task.

Solve: Create a homescreen.

Users do not have an emergency exit once they click the timelock memento and when they submit their individual photos to the timelock. Once users share, they are stuck with no where to go.

Tldr; no emergency exit on timelock memento page.

Solve: Add back button.

Unaddressed Violations

UNADDRESSED VIOLATIONS

2 violations related to:

Media submission interface

Rational for not addressing:

We think the confusion about these two cases is related to the prototype being a click-through prototype where elements suddenly appear as opposed to loading in real time.

H5 - Error Prevention

The interface allows the user to submit various mediums to their timelock by having a Snapchat-esque design where you can swipe to select which mediums to submit, but it is not obvious how to submit multiple mediums simultaneously. Also, can the video button also capture a photo like how snapchat works?

TLDR; should be able to submit multiple mediums.

Clarification: multiple mediums is an edge case.

H4 - User Control and Freedom

Provide users with an option to add other details (such as location, time, date, etc.) on the page where they can add a comment. Or a redo button to indicate the media is lost

TLDR; should have an option to add other details to image.

Clarification: tags are auto-generated.

UNADDRESSED VIOLATIONS

1 violation related to:

Onboarding flow

Rational for not addressing:

A full onboarding flow is not necessary for a first iteration of the app and some guidance is already provided for novice users. Once a timelock has started, users will be prompted to contribute to the timelock via a notification that then guides them directly to the media submission page.

Users will also be doing this in a group setting and can turn to expert users for support in real time.

H10 - Violation

"The interface does not provide any instructions or guidance on what exactly a timelock is and the process of submitting one for a novice user. For instance, what are the different mediums a user can upload besides videos?"

COMMON THEMES

1 violation related to:

The timing of a media submission

Rational for not addressing:

One of our design principles is presence. If a user misses their time slot, they have to wait until their next slot to contribute. By keeping the time slot short and only providing a few time slots throughout the night, we want to keep the user present at their event with only minimal intervention to collect media.

A user is able to add media from their photoroll if they want to add a piece of media but their timelock slot is not open when they capture the piece of media.

H7 - Violation

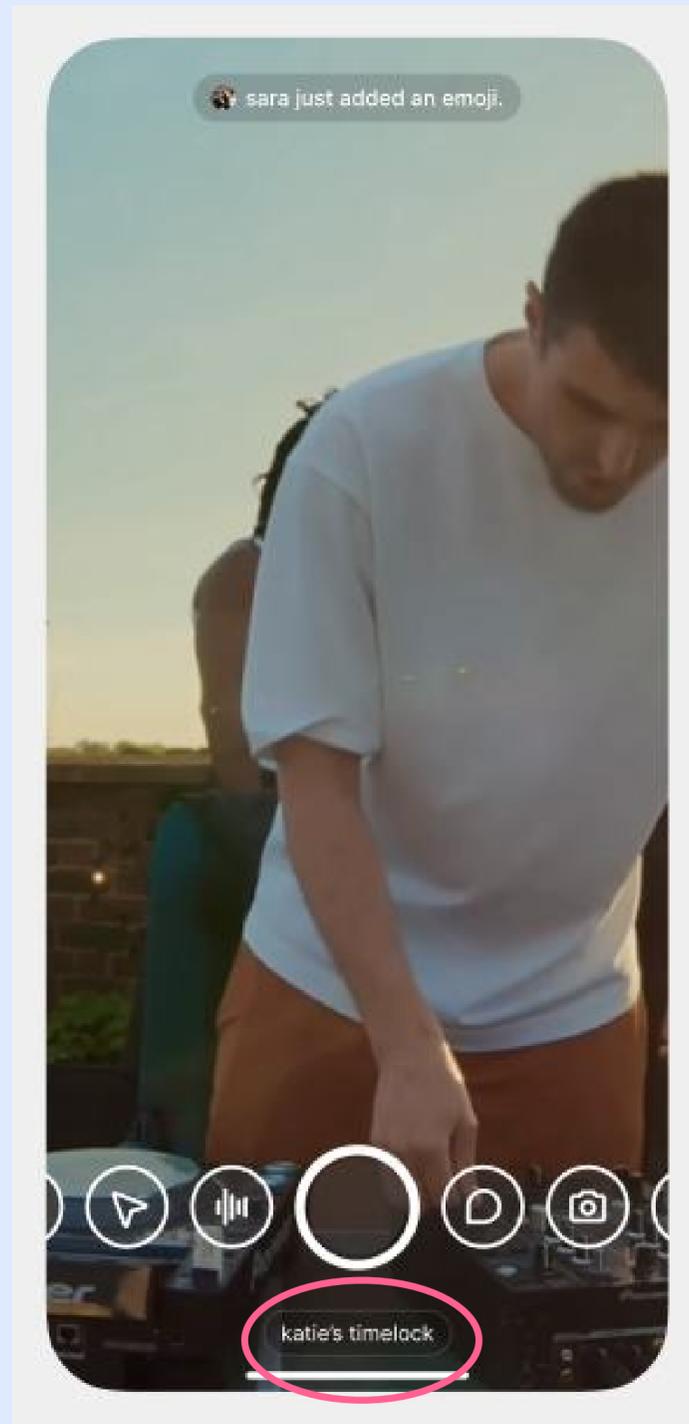
"The current interface is suited for the user to capture a timelock in real time, but what happens when a user misses their time slot?"

All major UI and
product revisions

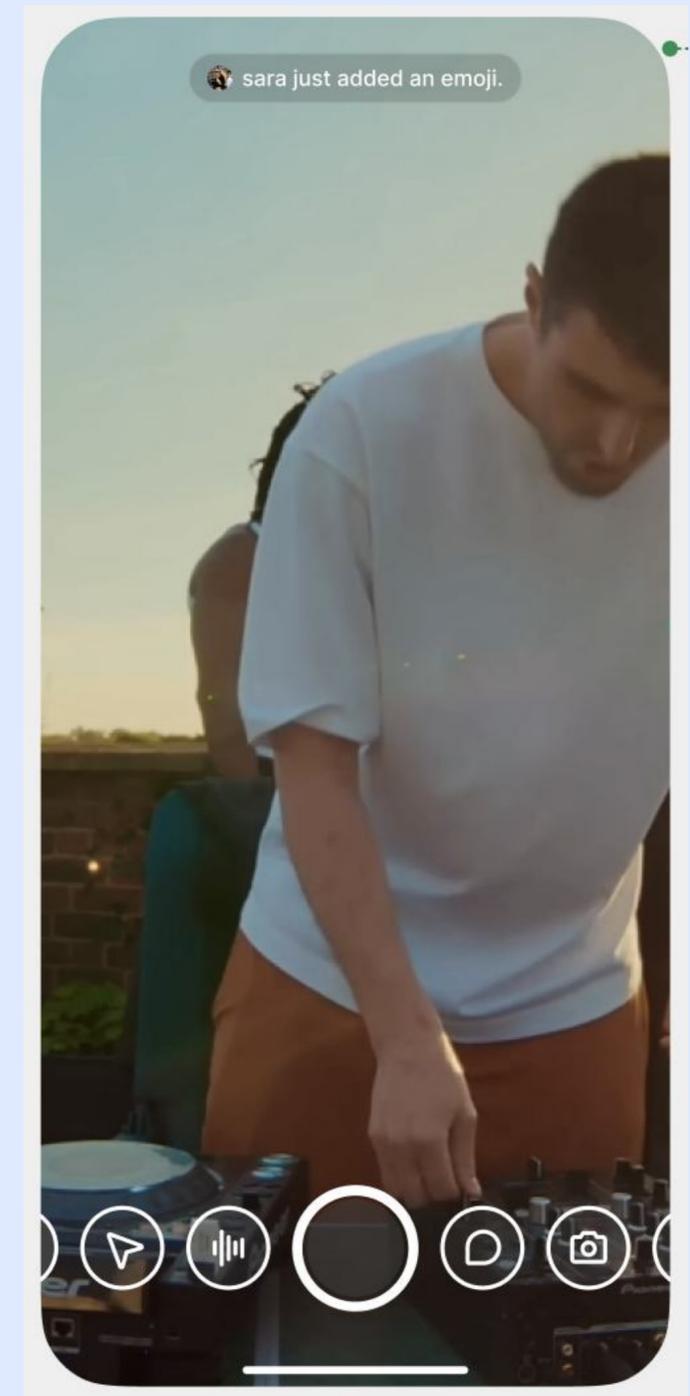
H5 - Error Prevention

There is a button icon on the bottom of the screen, indicating to users whose timelock this is, but its purpose is unclear. Is it clickable? Is it the individual who created the timelock?

Rationale: The button is meant to indicate which timelock event a user is a part of, but since the user is highly unlikely to be part of several timelocks at once and it was causing confusion, we removed it entirely.



Before

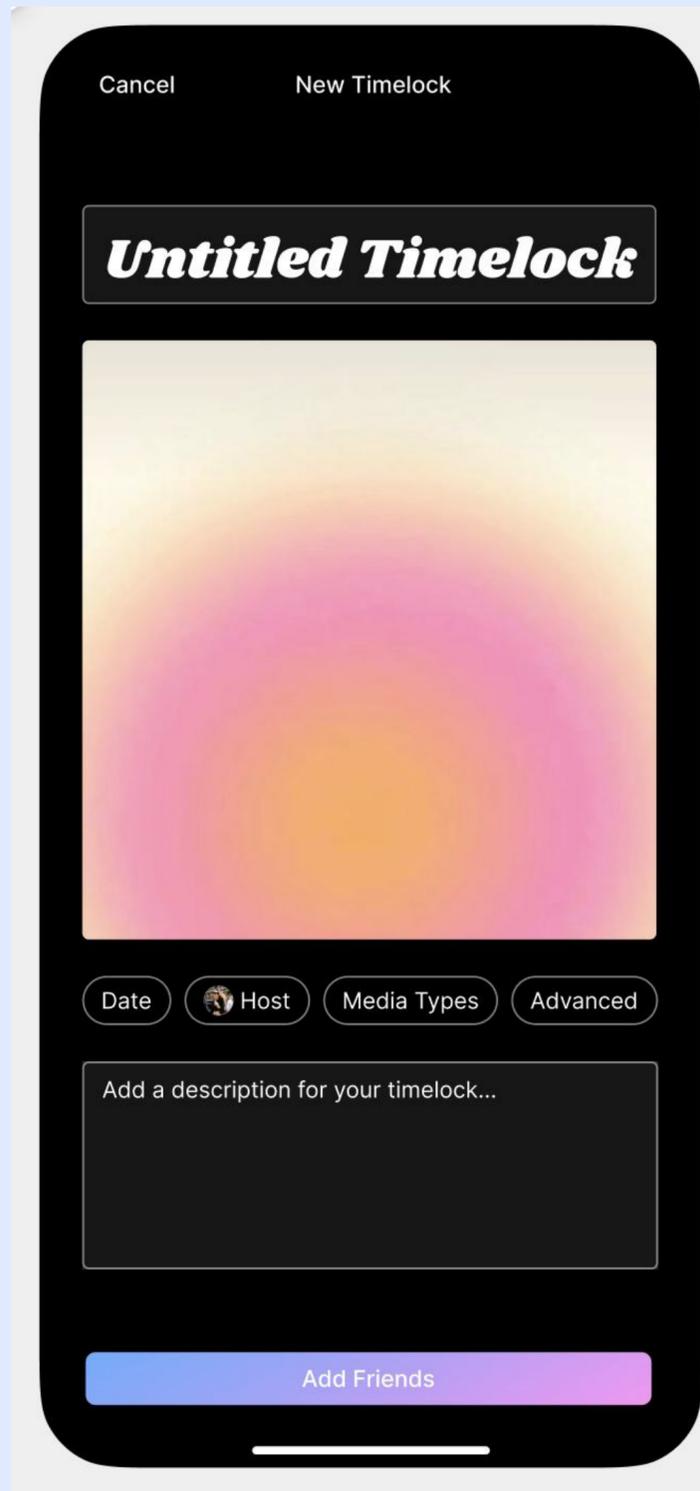


After

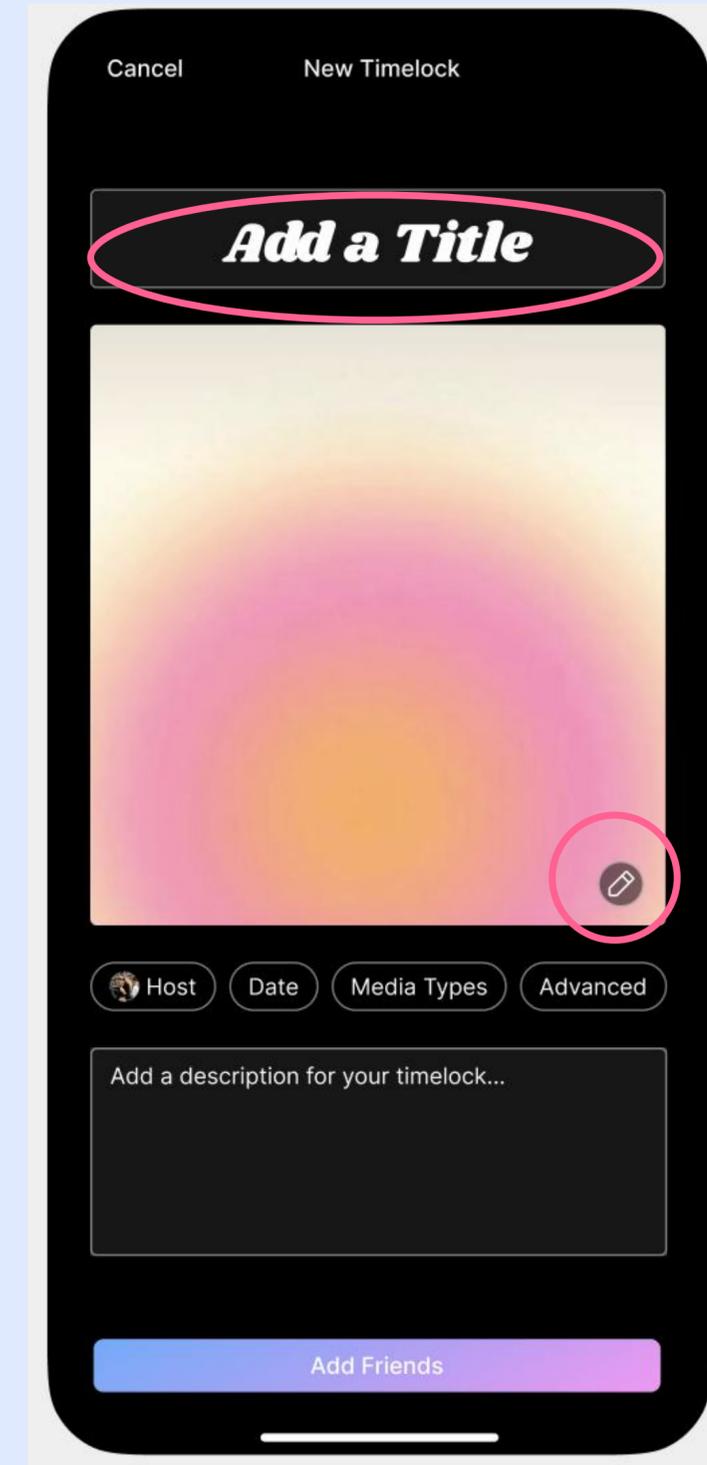
H8 - Aesthetic and Minimalist Design

The interface has a dynamic graphic in the center of the screen, but it is unclear how this is related to the timelock. Give users the ability to choose their own photo either by uploading or designing on the app

Rationale: Added edit button to give user more control and improved copy to better reflect the actions a user needs to take on this page.



Before



After

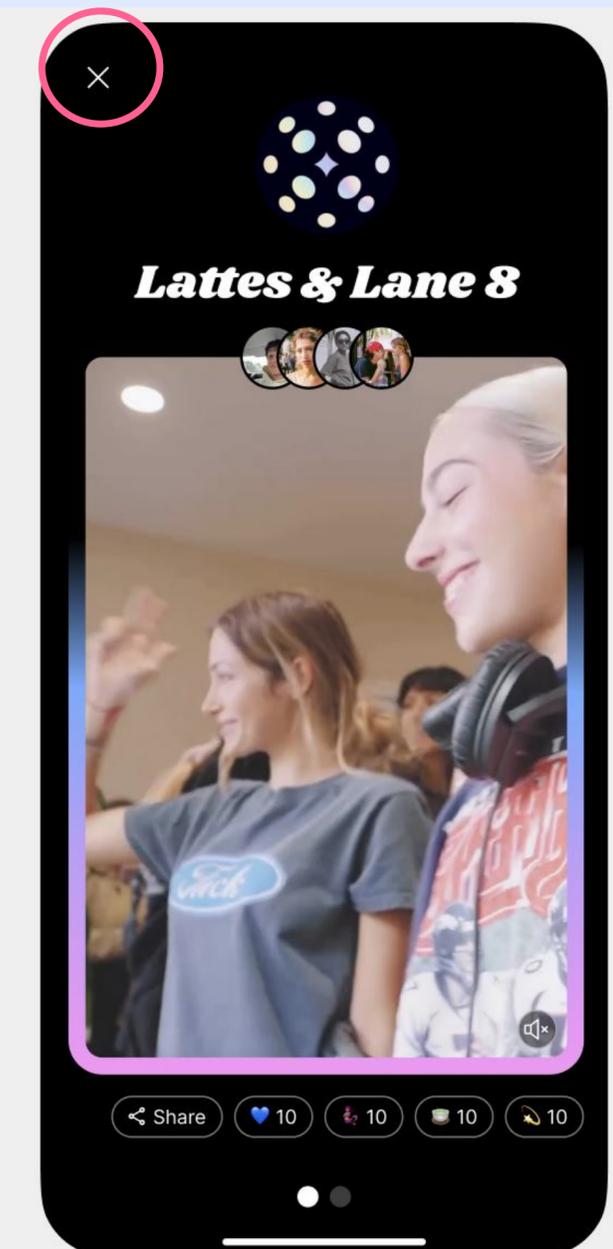
H3 - User Control and Freedom

Users do not have an emergency exit once they click the timelock memento and when they submit their individual photos to the timelock. Once users share, they are stuck with no where to go.

Rationale: Added an exit button (x on top right corner) to address this issue so that users can leave this page.



Before

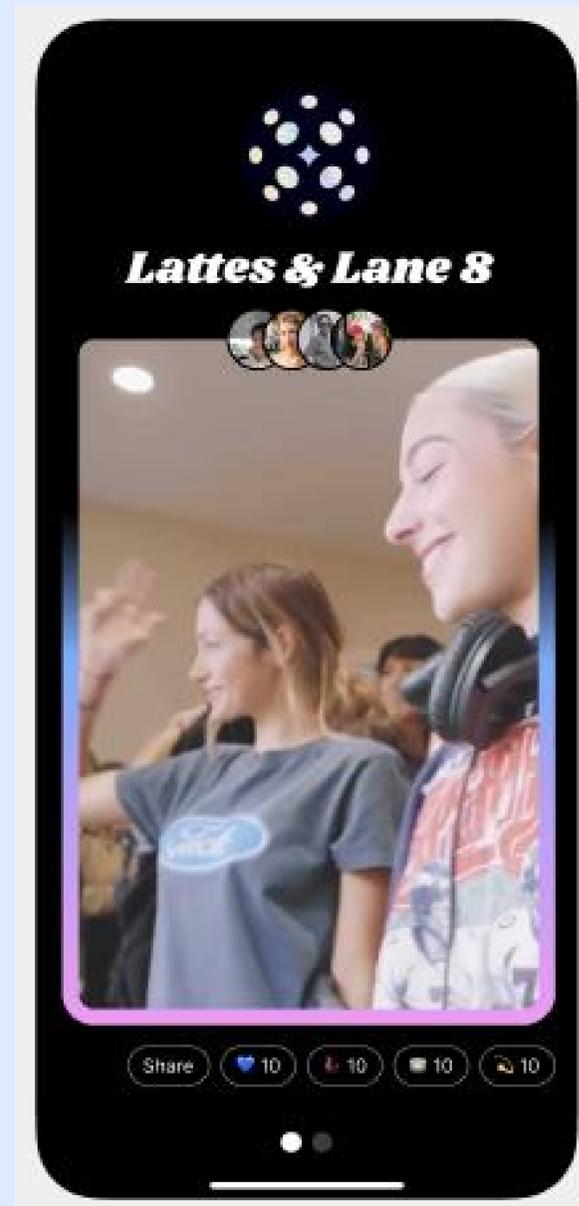


After

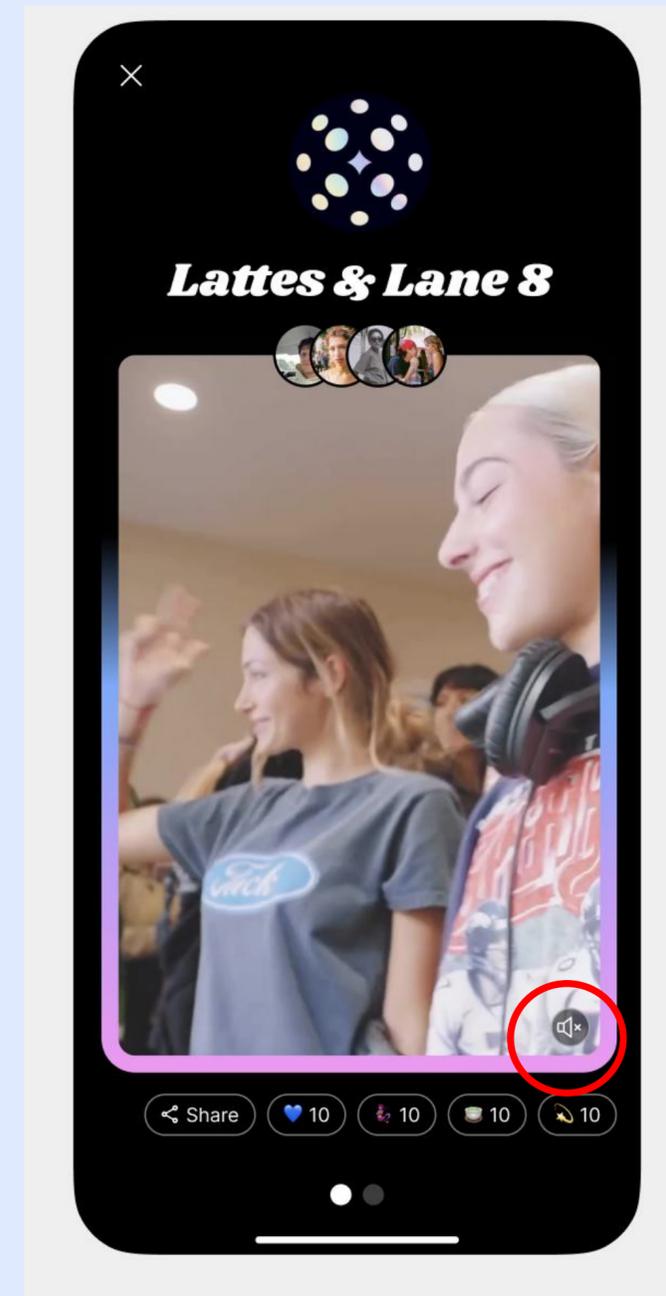
H11 - Accessibility

Users are able to view a memento from the timelock, which may include audio, but this audio can be stuck on loop if the user is trying to read about the details.

Rationale: Added a mute button so that video and use has more flexibility about how to interact with their media.



Before

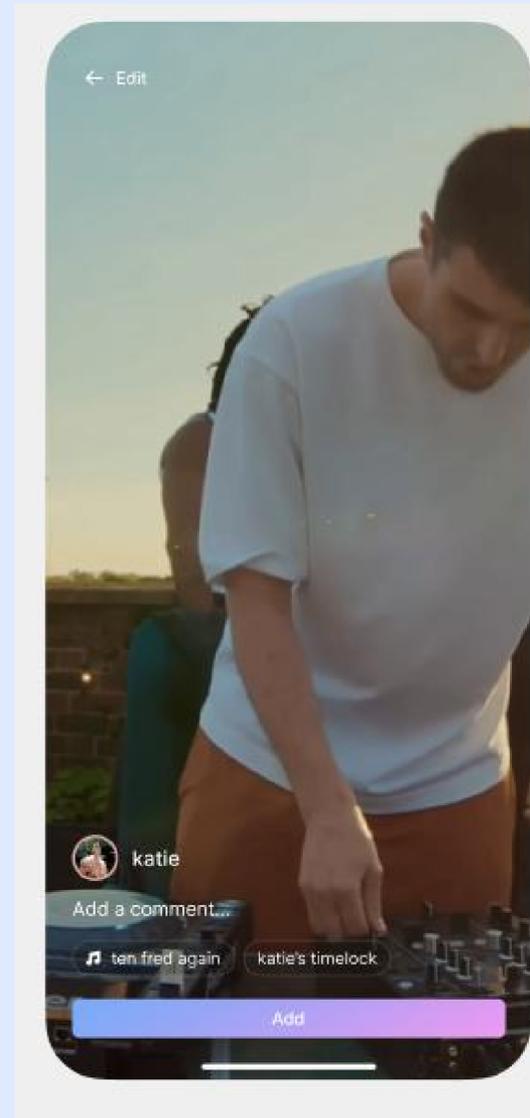


After

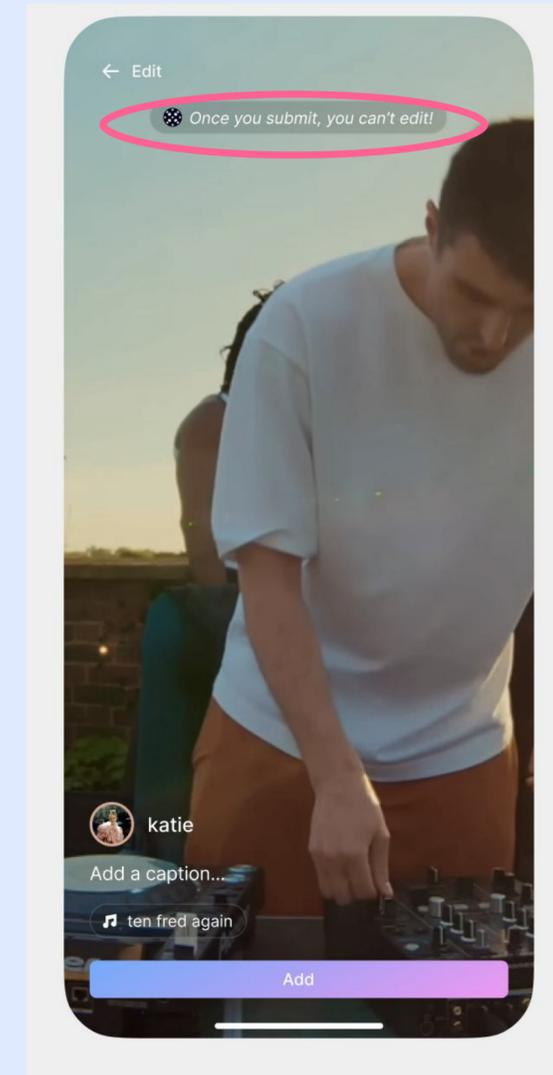
H5 - Error Prevention

The interface locks the media once it's been added to the timelock, making it uneditable, which can take users by surprise.

Rationale: Locking the media once it is submitted is part of our design principles, but we should give fair warning to the user, so we added a flag/toast to warn the user before they submit.



Before



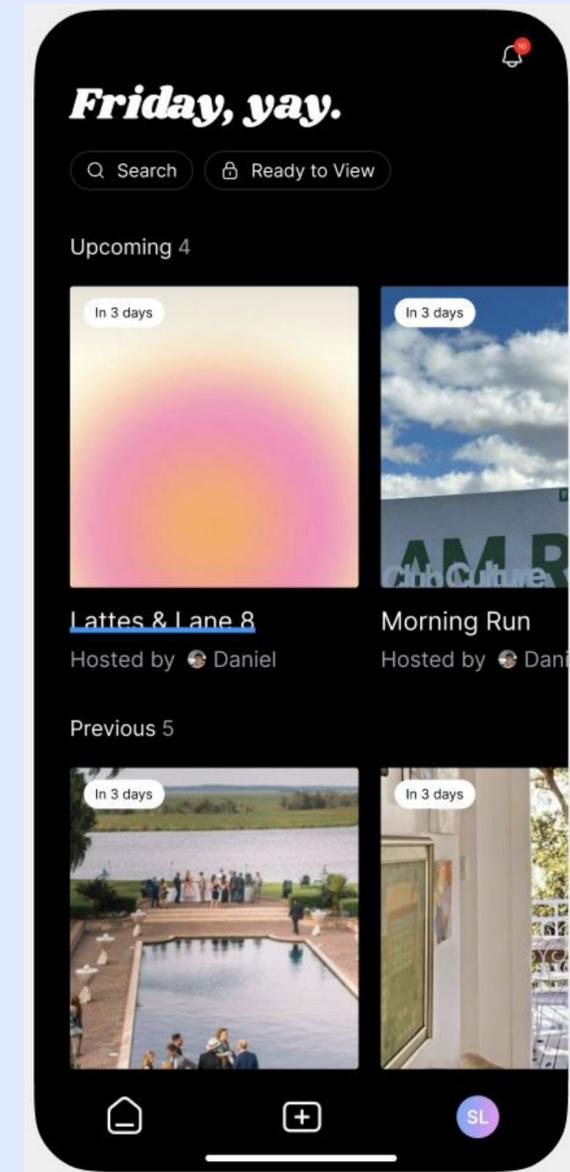
After

H1: Visibility of System Status

In the prototype, it flows from "locked" to "untitled timelock." We understand that these are two different tasks, but it brings up the question of what the "home" or central navigation screen is

Rationale: Adding a home screen is important to make the tasks flow together more cohesively.

There was previously no home screen



Before

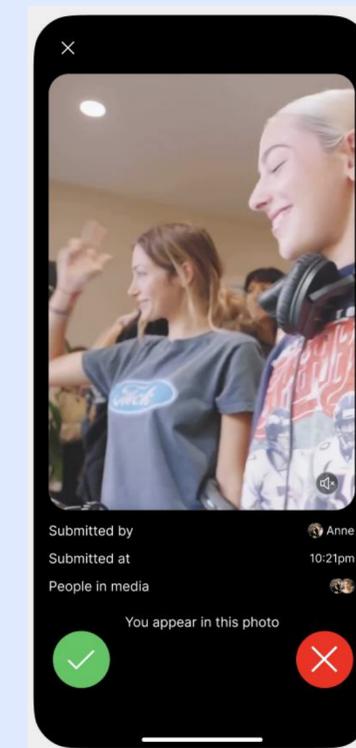
After

H2 - Value Alignment & Inclusion

Users do not know what will be in the timelock, until the memento is released, which can raise issues if there is something uploaded that a user doesn't want to be seen.

Rationale: Adding a dedicated screen for users to accept/deny images that are in the timelock to enable better privacy controls.

There was previously no way to report images



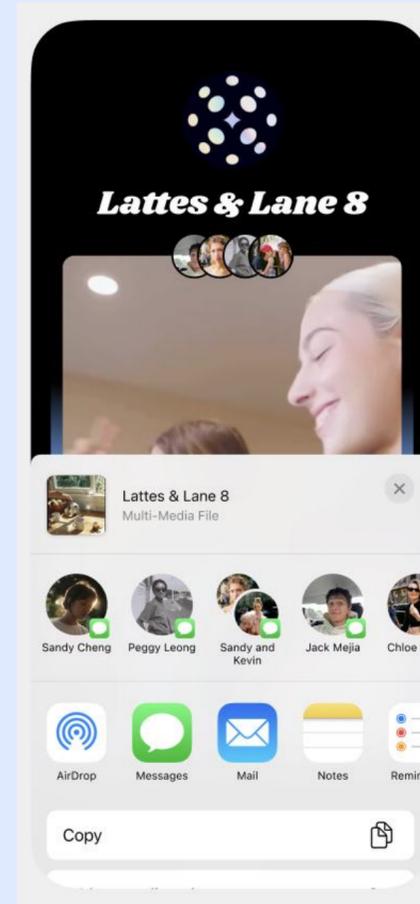
Before

After

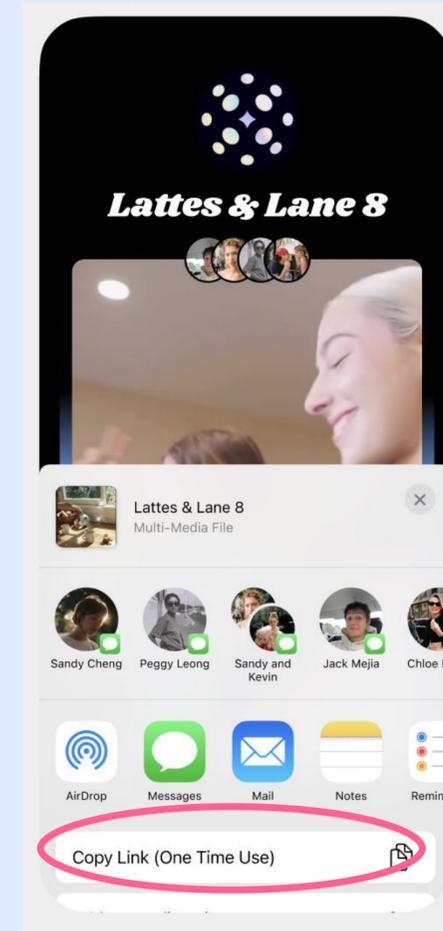
H2 - Value Alignment & Inclusion

Once the timelock is shared with friends outside of the event, can they then share the timelock with whoever they want? Or is it a sort of protected link or one time use

Rationale: One of our values is privacy, so this suggestion helps us further that value, while still enabling sharing. A one time link means that the media can be shared from a person within the timelock to their trusted party.



Before



After

Usability Goals

Learnable

Our revisions improve how learnable our app is by addressing error prevention, and user control and freedom. Specifically, we...

- Improved copy that guides users throughout the app, e.g., “Add a title” on the create a timelock event page.
- Removed unnecessary or confusing buttons, e.g., timelock tag at the bottom of the add media screen.
- Warning users about the impact of their actions, e.g., once submitted, a timelock cannot be edited.

Pleasing/ fun:

Being able to add your own image for a timelock, being able to see a home screen overview of all your timelock, and increased user privacy enables the user to have more customized features that are enjoyable and a stressless experience.

Prototype Implementation Status

Our Tasks

For this week we implemented..

SIMPLE

- Contribute a piece of media/a memory to a timelock event.

MODERATE

- Starting a timelock event, so that you can invite friends to begin sharing media.

COMPLEX

- Share the final memento with friends outside of the event attendees.

Tools



React Native

Open-source framework for building cross-platform mobile apps using JavaScript and React

- Rich library ecosystem
- Used to manage app routing with React Navigation for screen transitions/user flows



Expo Go

Created a new expo project and implemented the core navigation and functionality



Figma Inspect -> React Styling

- Inspect tool on Figma task flow
- shows relevant react styling information
- Used this styling info to make the expo project better match the Figma mid-fi prototype

Framework

- 1. Designs Created in Figma** → Figma inspect tools help translate designs into initial React Native code.
- 2. React Native** used to refine functionality, add logic (e.g., description inputs, selecting contacts), and manage navigation.
- 3. Expo Go** utilized to preview, test, and share the prototype with team members.

Benefits of the Stack:

- **Rapid prototyping:** Figma tools and Expo Go streamline the transition from design to a functional app
- **Scalability:** The stack is flexible and supports future development needs, such as adding notifications or integrating with APIs for media sharing

Implemented features

Core Navigation

TODAY'S DATE

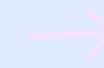
Starter Homepage



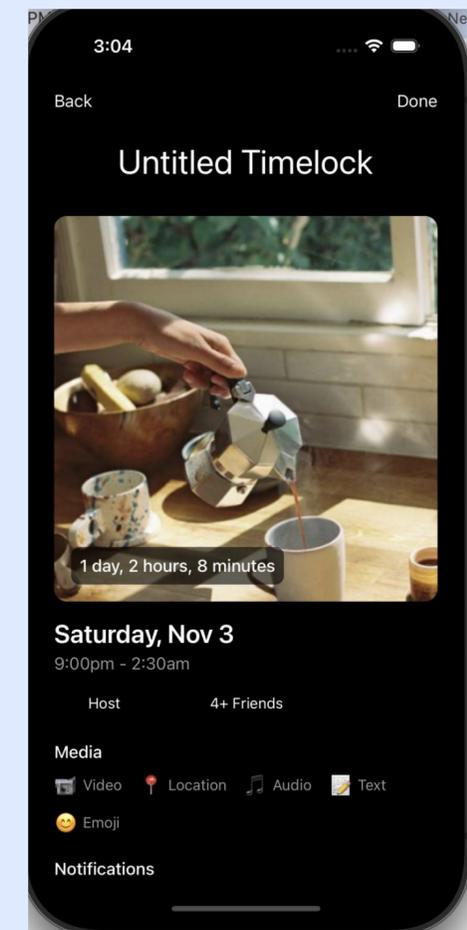
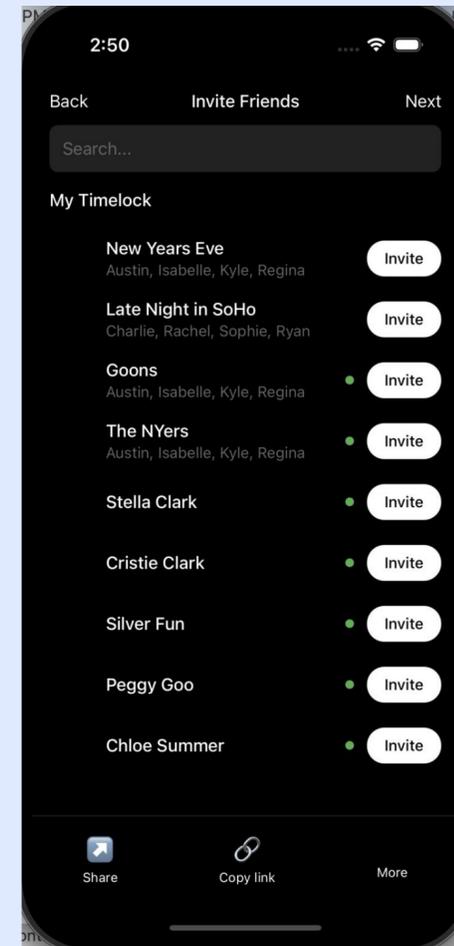
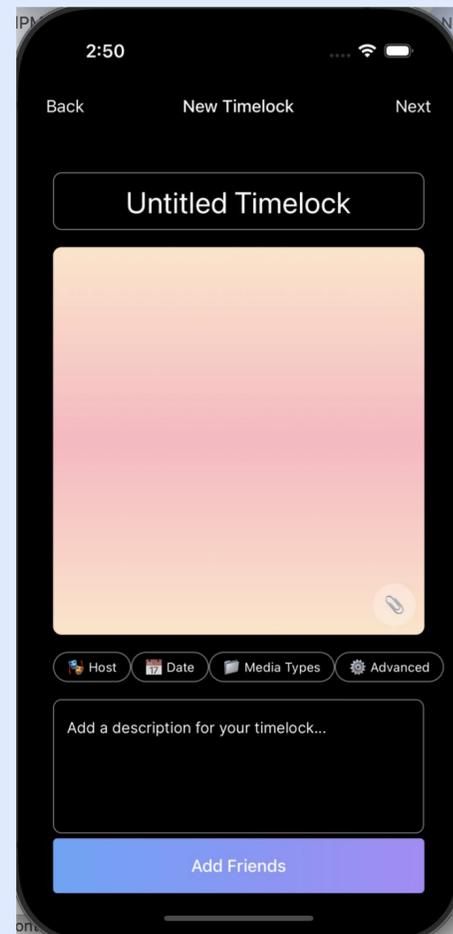
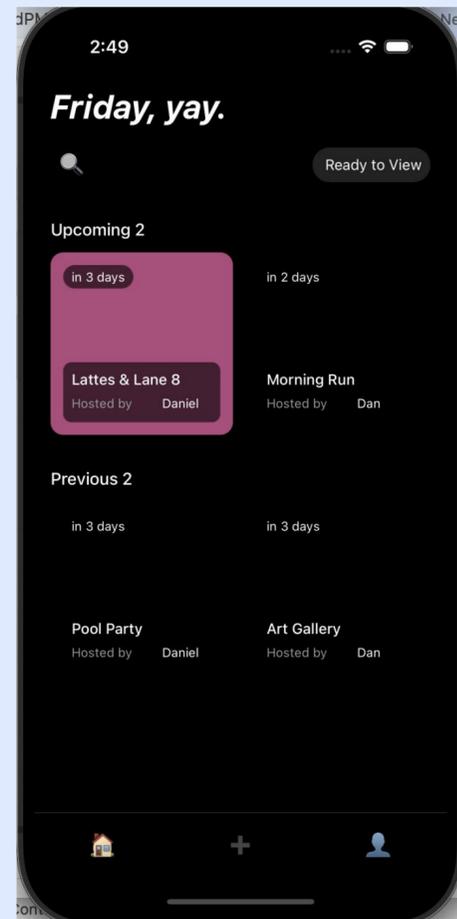
Enter Timelock Details



Invite Friends



View Created Timelock



PROJECT NAME

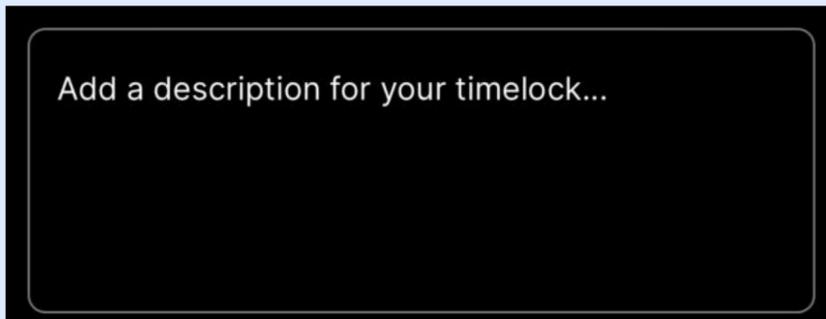
Core Functionality

Enter Timelock Details

- On click: enter timelock title
- On click: enter timelock description



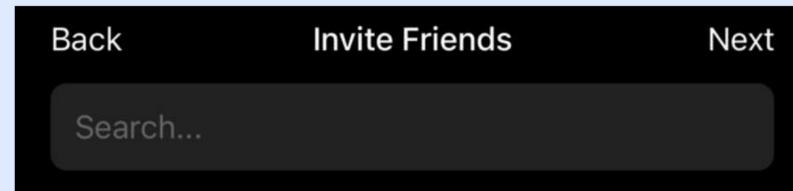
Untitled Timelock



Add a description for your timelock...

Invite Friends

- On click: can enter friend to search for



Back Invite Friends Next

Search...

View Created Timelock

- View timelock with the name you chose

Hard Coded Aspects

- Date and Time of Timelock
- Contacts on the Invite Friends Page
- Timelock cover image placeholder

Wizard of Oz Techniques

- The contacts on the invite friends page are currently predetermined text on the screen, not loaded from phone contacts
- Countdown: Appears to be a countdown on the created timelock screen, but it isn't functional

Un-Implemented Features

Feature	Description
time details	Add functionality to specify time for timelock
countdown	Active Countdown once timelock is created
invite contacts	Add Functionality to Invite Contacts
shareable link	Add functionality to share and copy link buttons on 'Invite Friends Screen'
customization	If we have time, add more unique customization features

Plan for Finishing Discussion

Our Tasks

We plan to implement...

SIMPLE

- Contribute a piece of media/a memory to a timelock event.

MODERATE

- Starting a timelock event, so that you can invite friends to begin sharing media.

COMPLEX

- Share the final memento with friends outside of the event attendees.

OBJECTIVE

First Priority:

Implement Core Navigation and Functionality for all task flows

Second Priority:

Focus on refining style and making the High-fi prototype match the Figma mid-fi prototype

TODAY'S DATE

PROJECT NAME

Issues/Questions

We foresee difficulties in implementing **Voice Memo** and **Location Pinning** integration.

Key Challenges

- What are the trade-offs to using a library like *react-native-audio-recorder-player* or Expo's Audio API? ... *react-native-maps* or Google Maps API?
- How should users add pins? Should it be automatic (based on GPS) or manual (via a map search)?
- Addressing possible privacy concerns with storing user locations or audio recordings

Demo of our prototype
so far

3:05



Friday, yay.



Ready to View

Upcoming 2

in 3 days

Lattes & Lane 8

Hosted by Daniel

in 2 days

Morning Run

Hosted by Dan

Previous 2

in 3 days

Pool Party

Hosted by Daniel

in 3 days

Art Gallery

Hosted by Dan



Thank you.

Appendix

Usability Goals:

Key Measurements

Learnable: Ease of first time use

- Relative time it takes for users to complete each task
- Whether or not users successfully completing the task
- Users minimally running into “dead ends”

Usability Goals:

Key Measurements

Pleasing: easy and fun
to use

- Users enjoy engaging with features
- Verbally assessing user satisfaction after testing
- Verbally assessing if users would use again and/or recommend to friends

Common themes across violations

Misunderstanding of user interface or design principles.

- Violation (11): “how can a user submit multiple pieces of media at once”
- Violation (12): “user should be able to save all the tags”

Suggestions that are related to Apple specific design decisions that we cannot control.

- Dynamic island (24)
- Apple Menu pop up (32)

Connecting different tasks so the app feels more cohesive.

- Creating a home screen
- Visibility of system status throughout the app
- Exits