



atlas

Atlas Hi-Fi Prototype

Pin Your History, Share Your Story

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HE Report



Checkpoint Presentation Guidelines

One team member who has not yet presented will present the checkpoint in studio. For teams of 3, someone will present a second time and the higher of their 2 grades will be counted. There will be 10 minutes for the presentation and 6 minutes for questions and feedback. The time spent on the demo will not count toward the 10 minute limit; however, it should be brief.

Expected Content

1. Project title & value prop
2. Team
3. Problem/solution overview
4. Presentation outline
5. Heuristic evaluation results
 - a. High-level summary of results: total violations, severity breakdown, most common violations, total number of revisions
 - b. Discuss and justify changes to address severity 3 and 4 violations

CS 147 Autumn 2024 website

<https://hci.stanford.edu/courses/cs147/2024/au/>

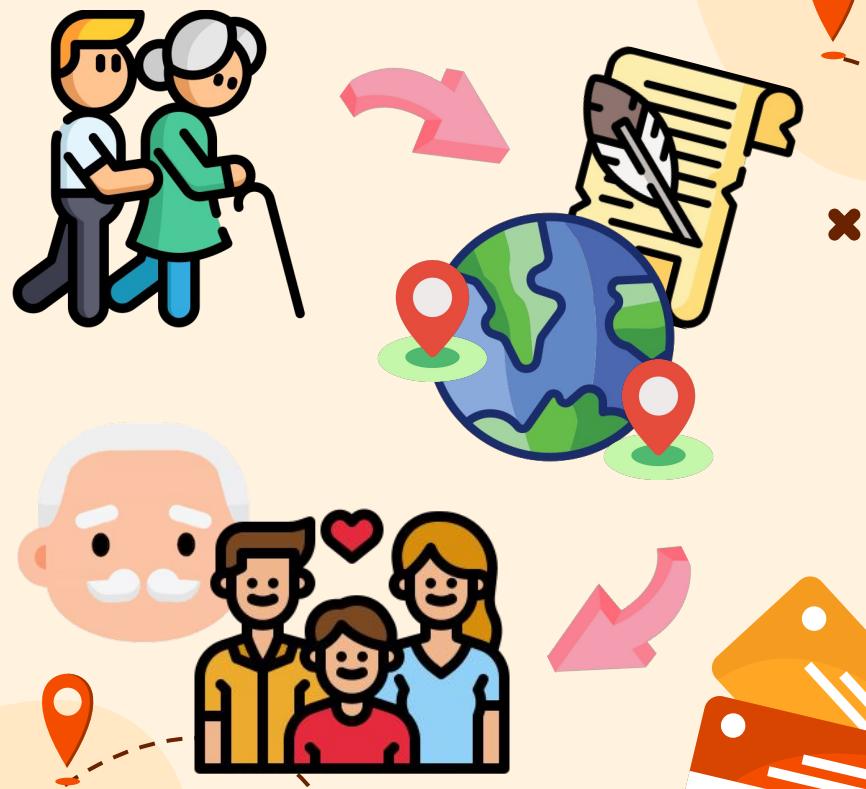
CS 147 Autumn 2024: Assignment 8

Instructor: James Landay

6. All major UI and product revisions
 - a. Before and after shots
 - b. Rationale for changes
 - c. Progress towards usability *goals* made by the revised designs
7. Prototype implementation status – *we expect at least 1 task to be implemented*
 - a. Framework/tools being used
 - b. Implemented features
 - c. Unimplemented features & plans to finish
 - d. Wizard of Oz techniques
 - e. Hard-coded aspects
 - f. Issues/Questions: Anything you are unsure of how to do?
 - g. Discussion on plan for finishing
8. Demo of prototype so far (live or recorded)

Value Proposition

Create a welcoming environment for older adults to share **oral history** to the younger generations, and connect generations through storytelling.



Our Team



Brent Ju

BS, CS (AI)
MS, CS (Also AI :/)

Interests: music, exploring the outdoors, cooking, fashion



Maria Wang

BS, Design (AI + UI/UX)
MS, CS (HCI)

Interests: sustainability, drumming, art/music, poetry, concerts



Jenny Huynh

BS, SymSys (HCI)

Interests: video editing & content creation, art



Janice Teoh

BS, CS (HCI)
MS, CS (AI)

Interests: art, figure skating, coffee, fashion

Problem:

Despite having **rich histories** and experiences spanning across the world, older adults often feel **hesitant and apprehensive** about **sharing their stories** with outside audiences.



Solution:

Atlas allows older adults to publicly or anonymously contribute to our **shared map** with pieces of **oral history**.

Users can explore the map and **listen to stories of interest**, or record their own stories and create curated guides about topics or locations.



Outline

- ★ Heuristic Evaluation Results
- ★ All Major UI product Revisions
- ★ Prototype and Implementation Status
- ★ Demo of Prototype

Heuristic Evaluation Results



Total Violations



**79 Total
Violations**

**Severity 0
Total: 2**

**Severity 1
Total: 23**

**Severity 2
Total: 28**

**Severity 3
Total: 24**

**Severity 4
Total: 6**



*Heuristic Evaluation Results



**79 Total
Violations**

Highest:

- **H11:** Accessible Design – **13** violations
- **H3:** User Control & Freedom – **11** violations

Medium

- **H6:** Recognition not Recall – **9** violations
- **H2:** Match Between System & World – **9** violations
- **H1:** Visibility of System Status – **6** violations
- **H8:** Aesthetic & Minimalist Design – **6** violations

Lowest

- **H12:** Value Alignment & Inclusion – **5** violations
- **H9:** Help Users with Errors – **3** violations **H7:** Flexibility & Efficiency of Use – **3** violations
- **H10:** Help & Documentation – **3** violations



Severity Breakdown

Severity 1

- misalignments + inconsistent button designs
- missing alt text or icons for buttons

Severity 0

- hidden menu options
- ambiguities in app features
- app message unclear

Severity 2

- interactive elements are too small
- lack of step indicators (progress bars)

Severity 3

- back buttons are inconsistent
- poor error messages
- missing feedback + status updates

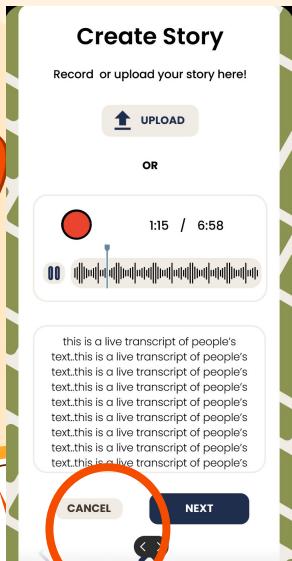
Severity 4

- overcomplicated UI leads to clutter
- confusing navigation buttons
- erased progress





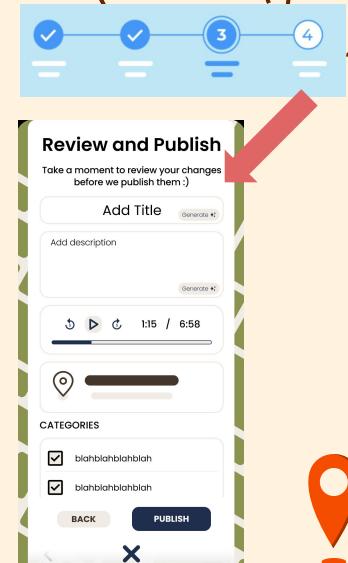
Severity 3



Addressing Severity 3

Problem: There is no feedback/status update on published content (users don't know if their recording was published or not)

Fix: Implement progress bars or step counters for multi-step tasks. Prompt "Your story has been successfully published"



Problem: Grayed out options lack guidance and some buttons are not grayed out if not clickable

Fix: Grey out a button if the option is not available, or add descriptive error messages explaining why an action is grayed out when user clicks on it

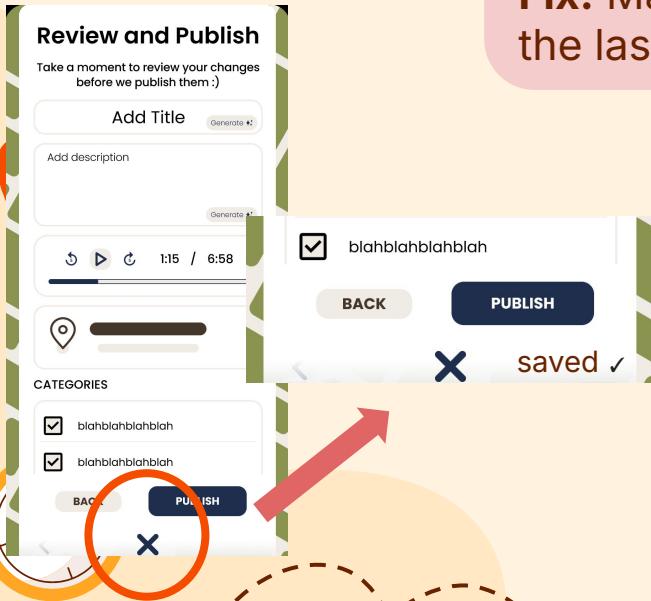


**Severity
4**

Addressing Severity 4

Problem: Navigation Button (mostly back button) leading users to the wrong page/not working

Fix: Make sure back button returns users to the last visited page



Problem: When users accidentally click the x button, all progress is deleted when “reviewing and publishing”

Fix: Save user progress automatically at each step and indicate a progress bar that marks “saved”



*

Severity Breakdown

Severity 1

XXXX

Severity 0

XXXX

Severity 2

XXXX

Severity 3

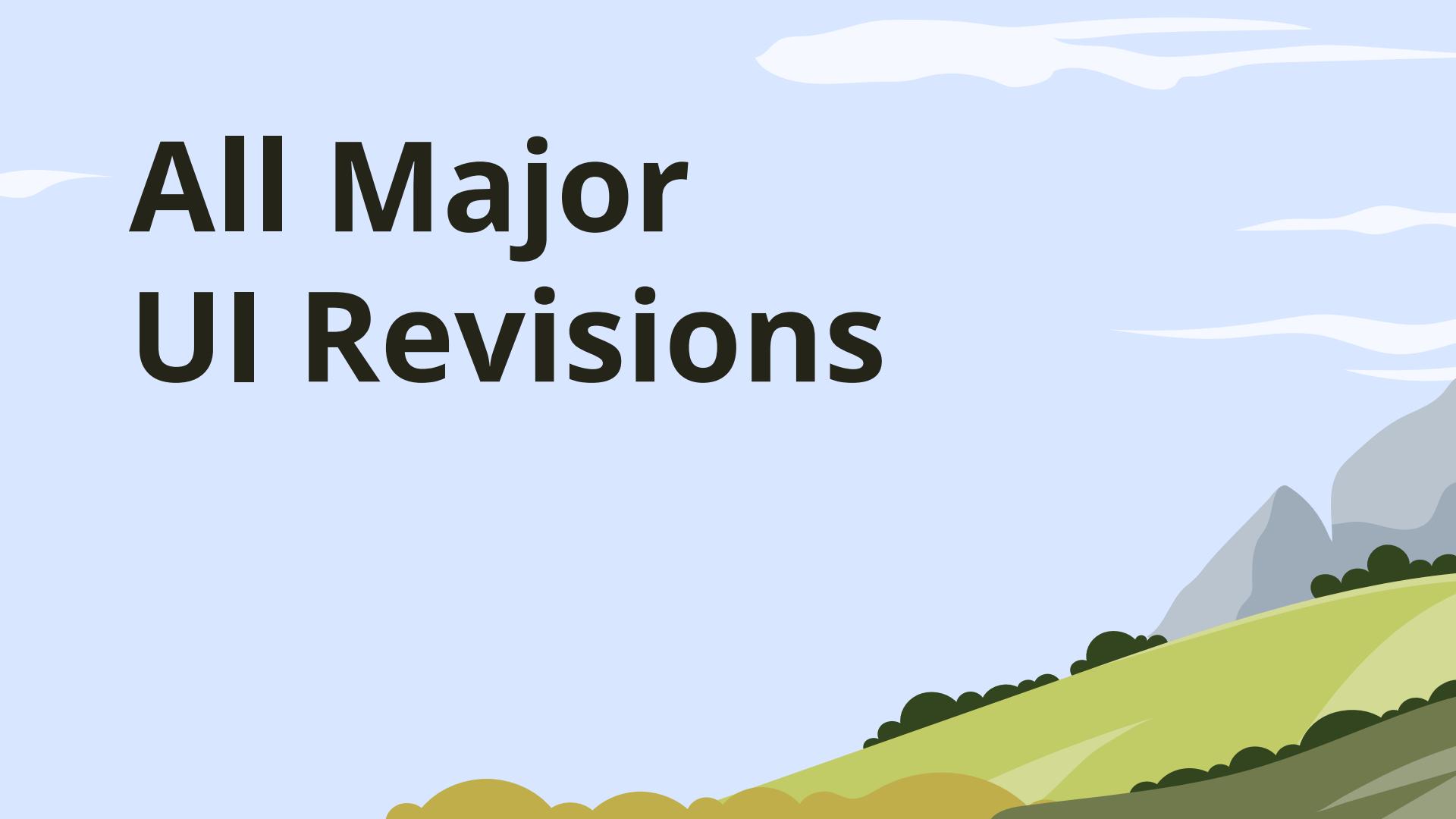
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Severity 4

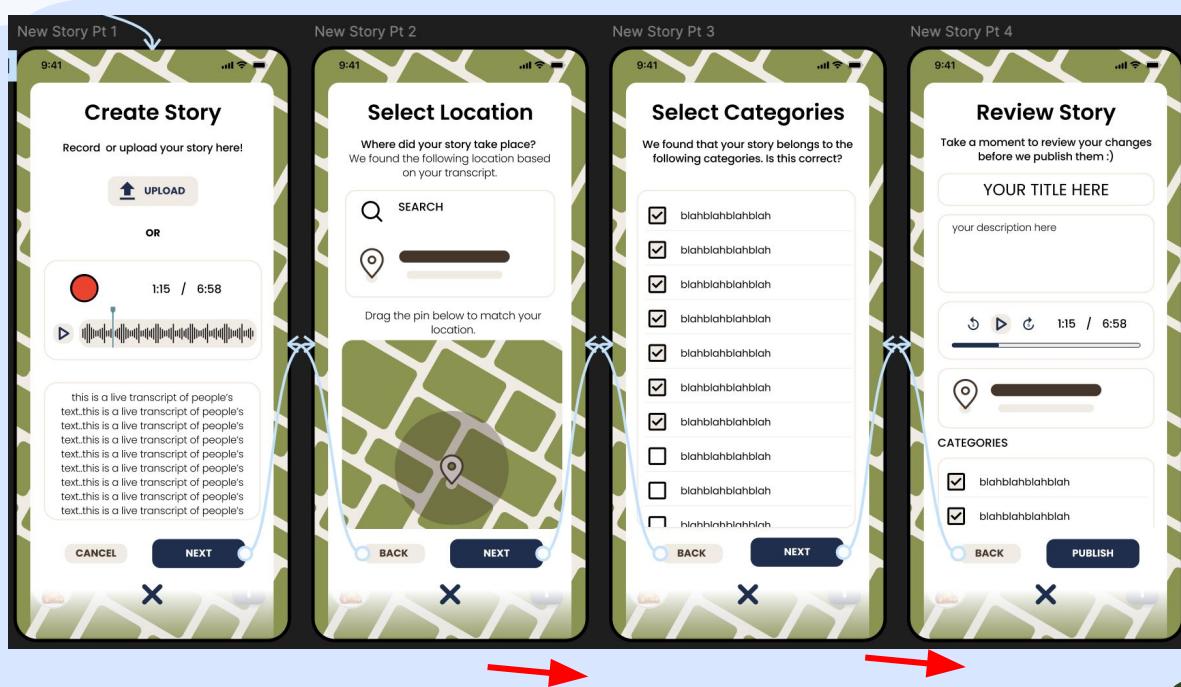
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All Major UI Revisions



Moderate Task: Create a Story (Before)



Problem

- Progress Indicator Missing
- Back Buttons don't lead to the previous page

Rationale for Changes



Why? We prioritized changes that were most frequently seen in our heuristic evaluation feedback

We want to make the app **accessible and intuitive** for older adults → so we wanted to make changes in button sizes, navigate that simplified the app

- **Reduced clutter** to not only make the app ✨ prettier ✨, but also to improve visual hierarchies (highlight primary actions), enhances usability + reduces cognitive Load



Prototype Implementation Status



Our Tasks



Simple

Allow users to **search for stories**, and **Listen/view other's stories**



Moderate

Users can **share their story** using voice recording

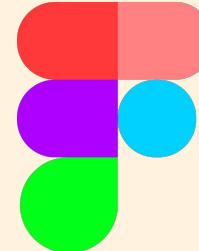
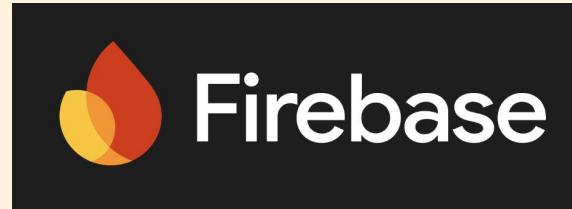
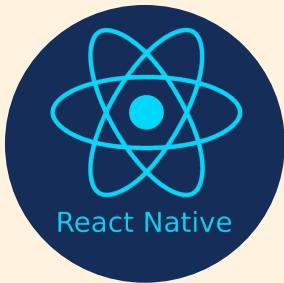


Complex

Create **Story Guides** (similar to playlists), organize stories into categories



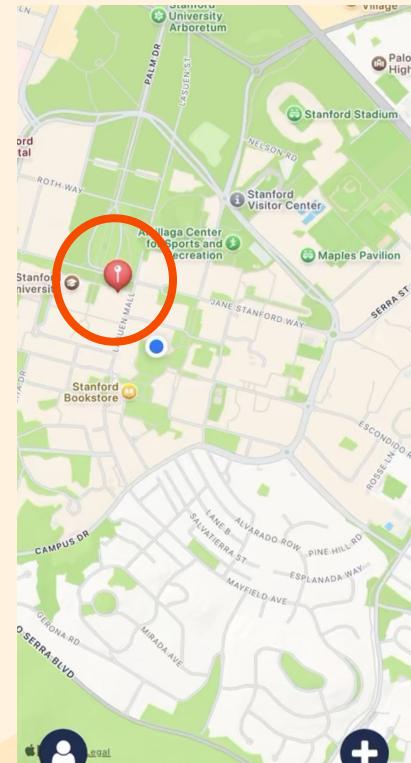
Framework/ Tools Used



- Mainly used **React Native** for implementations
- **Supabase** for backend
- **Figma** for reference when doing UI/UX
- Next Steps: Firebase

Wizard of Oz/Hardcoded Features

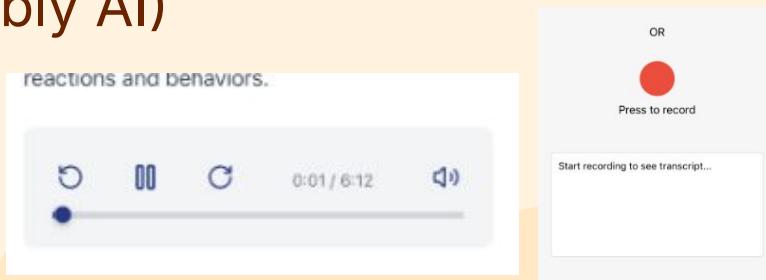
- Map location is currently set to Stanford Psychology Department (we only currently have 1 pin)
- Available stories for viewing are hardcoded



Implemented Features

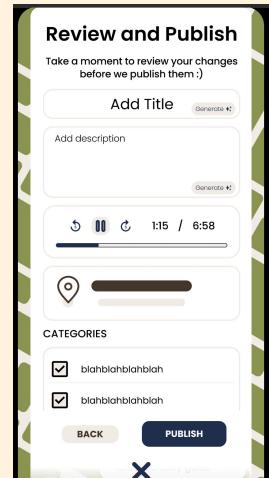
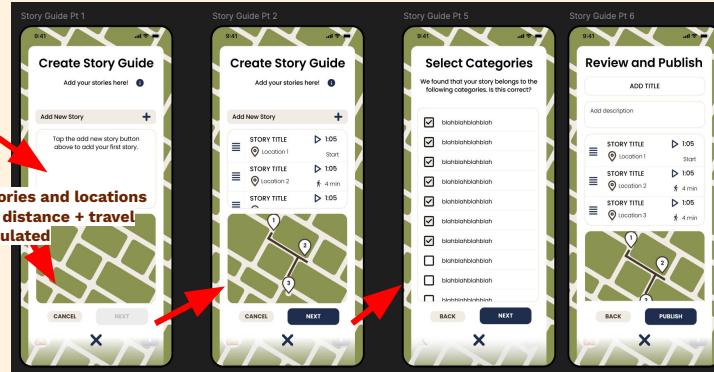


- Simple Task: search for stories, and Listen/view other's stories
- Playing the story audio
- React Native Map / Google Maps
- Moderate Task: share their story using voice recording
- Audio recording and live-transcript (Expo AV and Assembly AI)

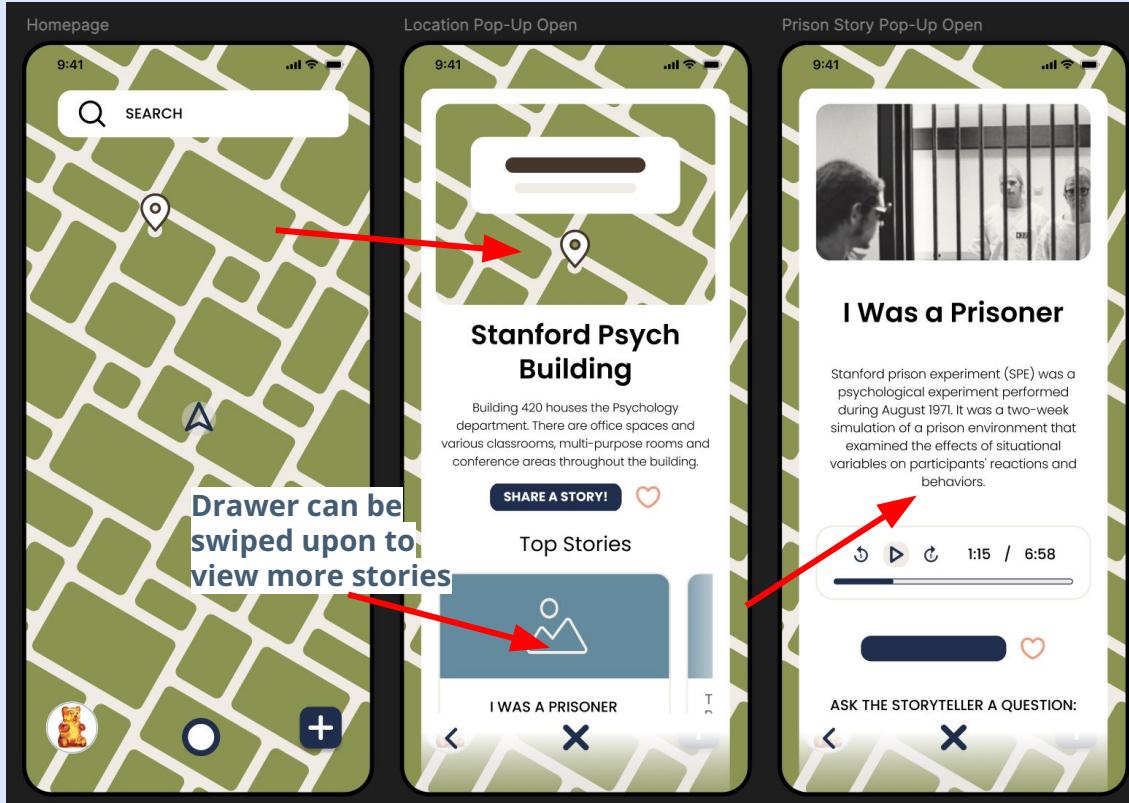


Un-implemented Features

- Story Guide (Complex Task)
 - Selecting Categories and Last page/publishing page of creating a story (Moderate Task)
 - Adding more stories and pinned locations



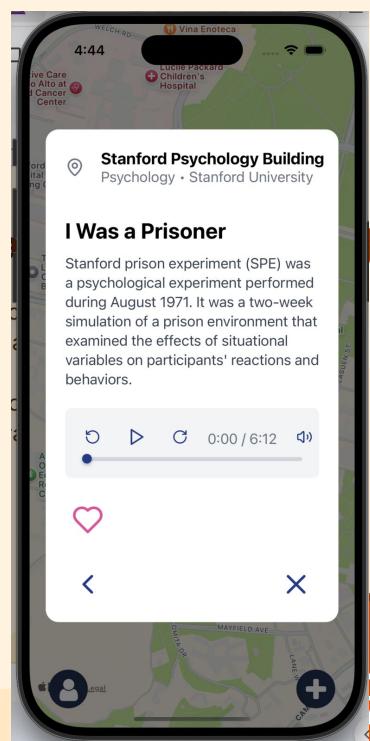
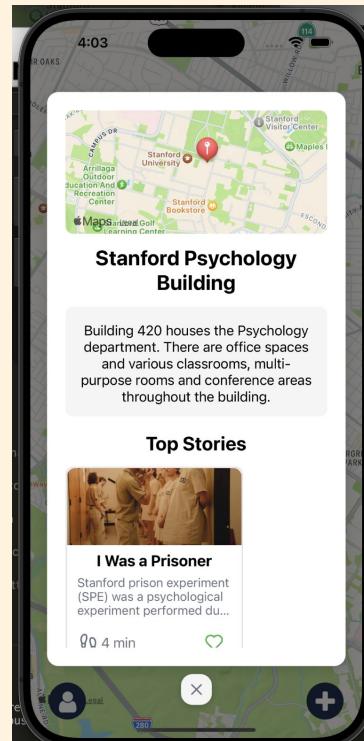
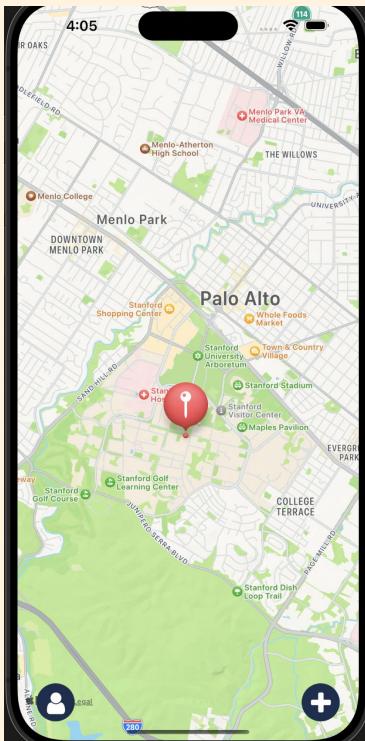
Simple Task (Mid-Fi)



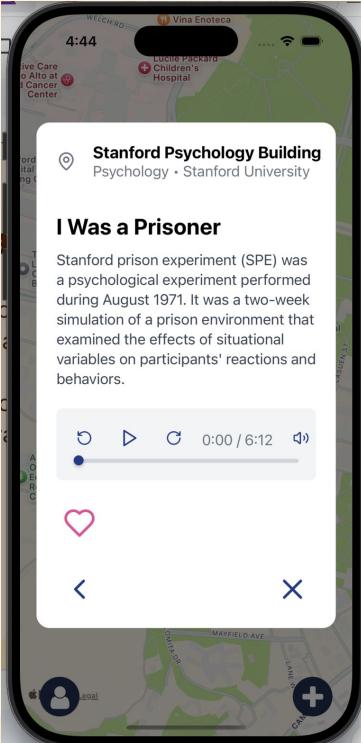
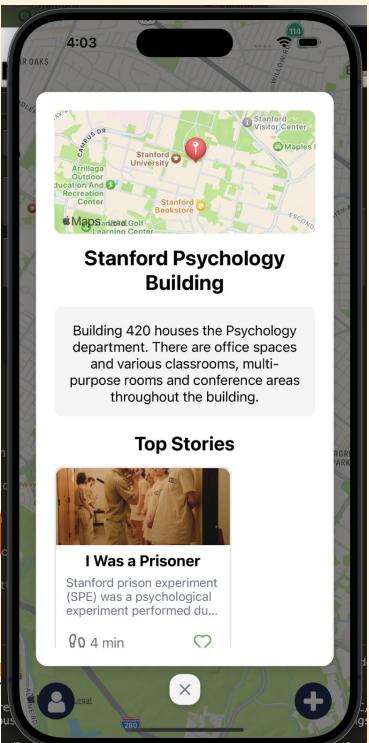
Completed Task: Simple

Simple

Allow users to
search for stories,
and Listen/view
other's stories



Changes to Simple Task

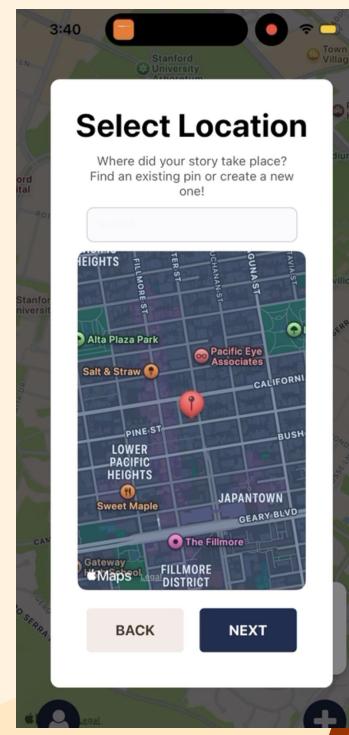
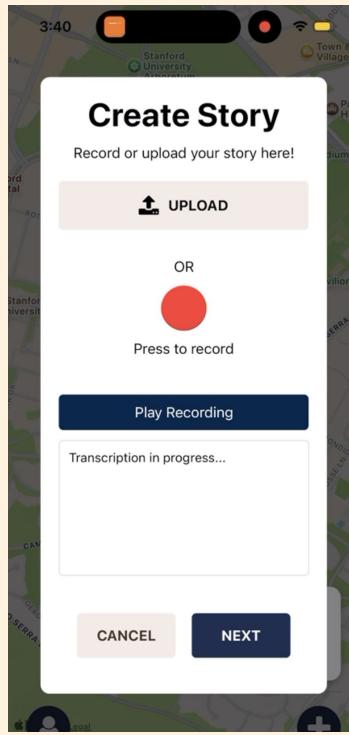
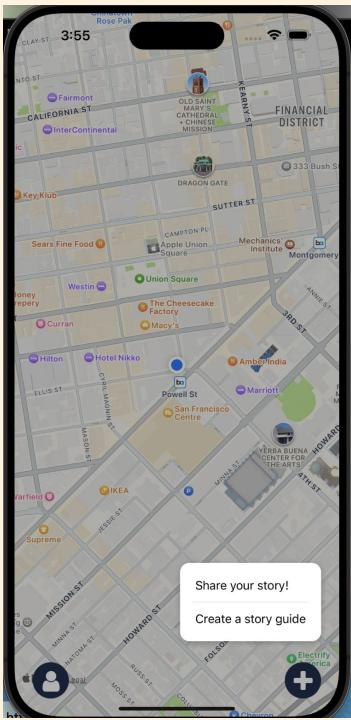


- Back button moved to bottom
- Can click the dark area to exit story
- Enlarged text for better accessibility (value prop)

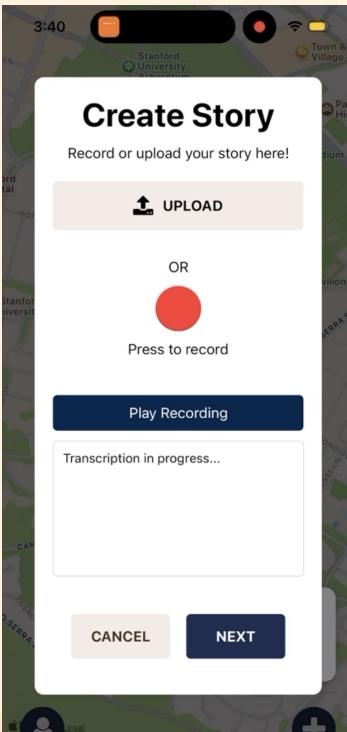
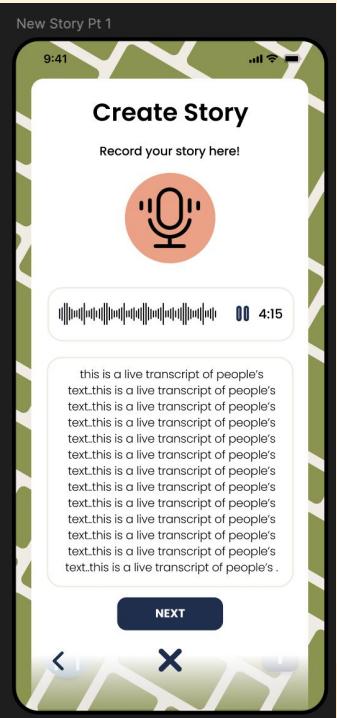
Half-Completed Task: Moderate

Moderate

Users can **share their story** using voice recording



Changes to Moderate Task



- Option to upload a story
- Live Transcript should work
(It was previously unusable in the Mid-Fi Prototype)
- Playback Feature
- Cancel Button
- *We will add a back button*

Issues/Questions

What are the steps we should take to make the audio recording drafts, so users can store their recordings without publishing yet

- How can we incorporate AR/Pokemon-go type interface on our app?
- How should we incorporate AI to generate images that relate to the story as a cover photo for the story



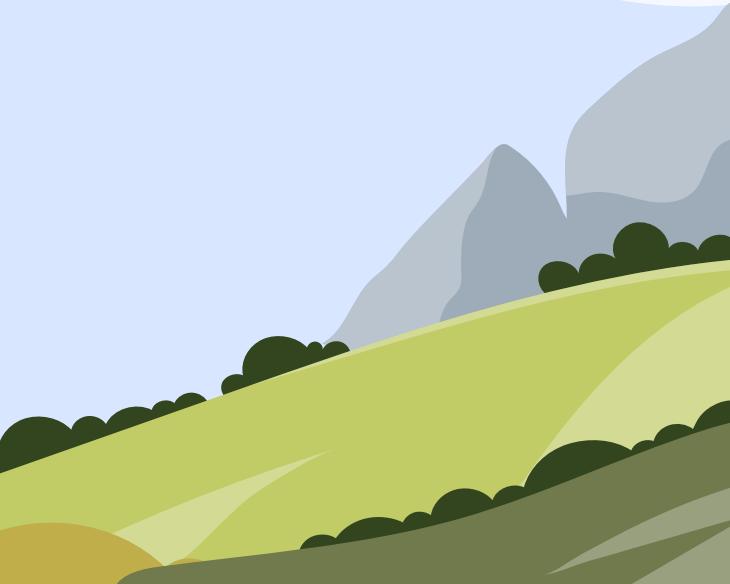
Discussion for Finishing

- Complete our moderate task on the weekend leading to thanksgiving break
- Compete our complex task (story guide) during week 10
- Make final touches in week 10



Demo of Hi-Fi Prototype





Thank You!

