

memo

Take a scroll down memory lane.

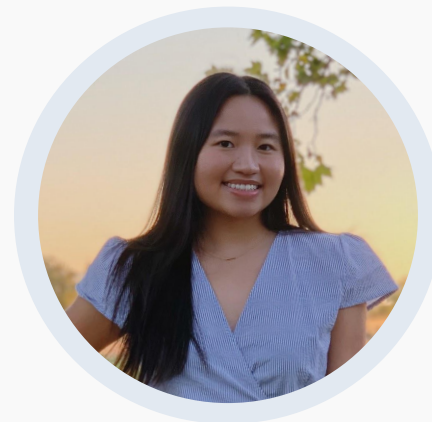
Meet the Memo Team!



Arjun Karanam
Computer Science
Class of 2022



Hana Tadesse
Computer Science
Class of 2022



Hanh Giao
Computer Science
Class of 2022

01 Value Proposition, Problem / Solution Overview

Value Proposition

Take a scroll down memory lane

Problem

Early Onset Dementia patients and their caretakers currently have a difficult time documenting and aggregating their life experiences

Solution

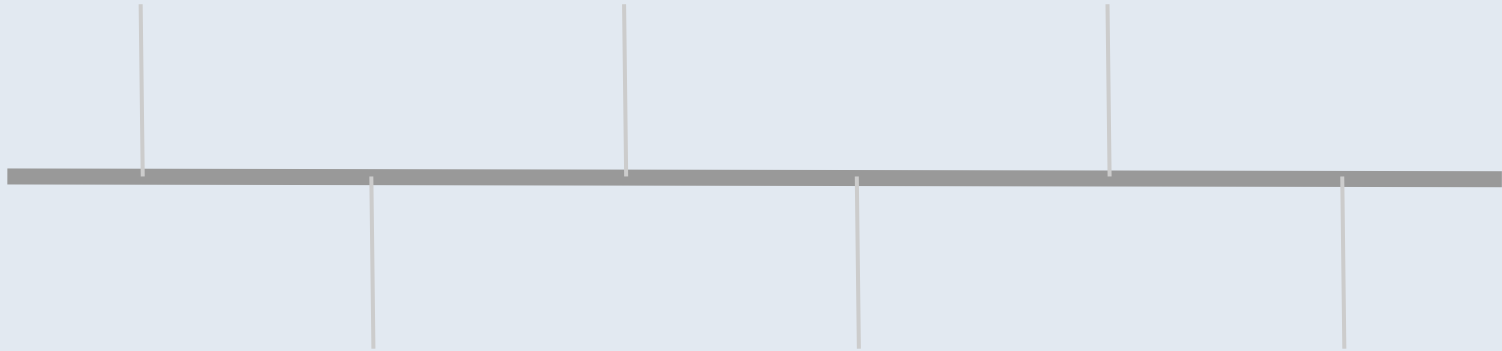
Interactive life storybook that amplifies sensory media to keep memory-impaired individuals and their loved ones engaged and connected

Overview of Talk

Heuristic Evaluation
Results

Prototype Status

Summary



Revised Design

Demo

Questions

Heuristic Eval Results 02

Heuristic Evaluation Overview

Severity 3-4

15 total violations
10 changes

Severity 1-2

43 total violations
16 changes

Most Violated Heuristics

H3: User Control (4)
H2: Match System & World (4)
H4: Consistency (4)

Design Revisions #1

User Control and Freedom

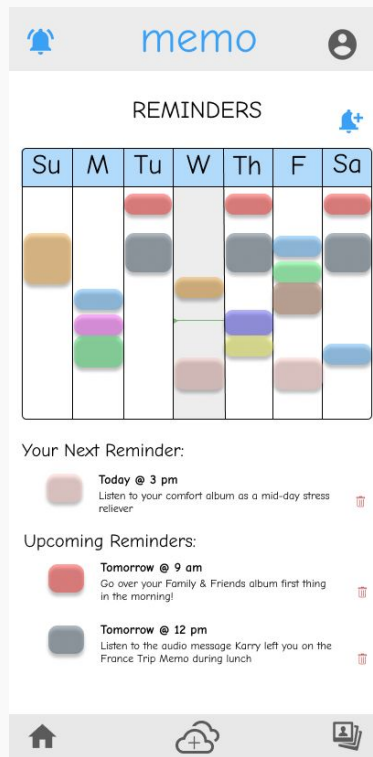
- There is no ability to edit reminders without completely deleting and recreating them.
- Memos and albums not editable/deletable once created

Fix #1

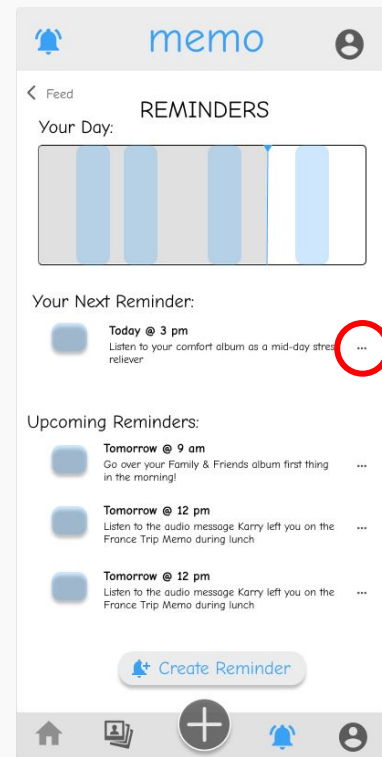
Added delete and edit functions to reminders via the **three dots**

(We also re-designed the calendar view)

Before



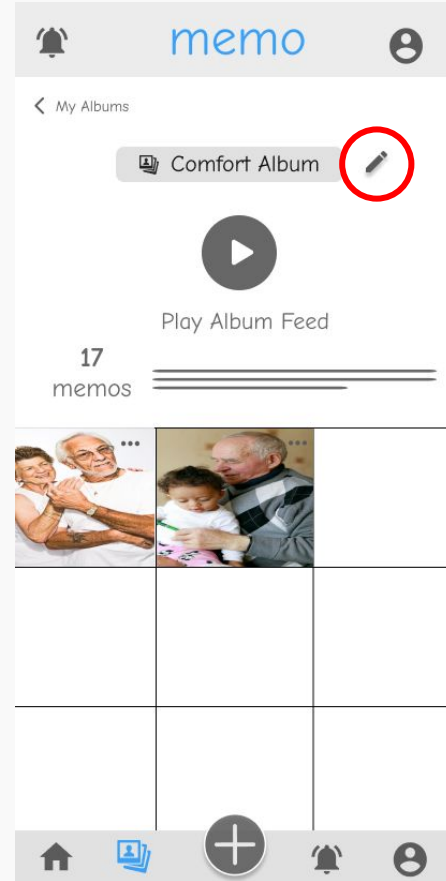
After



Fix #1

Memos are now **editable** and **deletable** by the edit function on the new **Album View** screen

(We also developed a new album view screen)



Design Revisions #2

Flexibility and efficiency of use

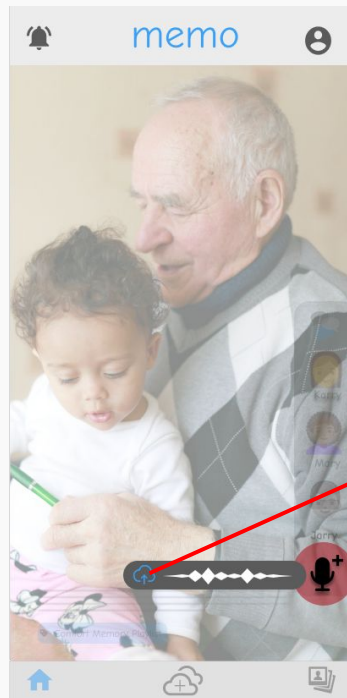
Voice Commenting Features:

- Integration/sync of voice comment with uploaded media is unclear
- Voice commenting and social aspects overcomplicate app for Dementia patients

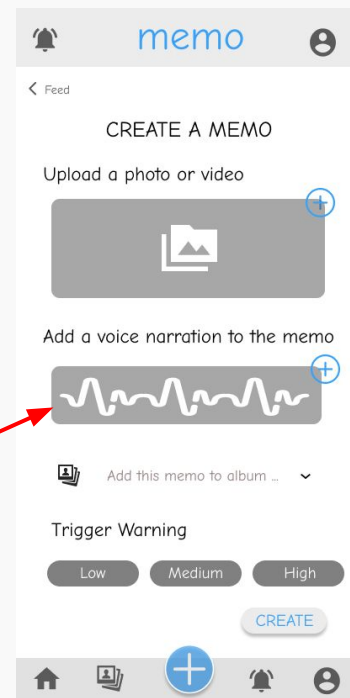
Fix #2

- Removed voice comment feature
 - move away from social aspect and refocus to make app more patient-centric
- Added voice narration feature for the creator of the memo to narrate the memory

Before



After



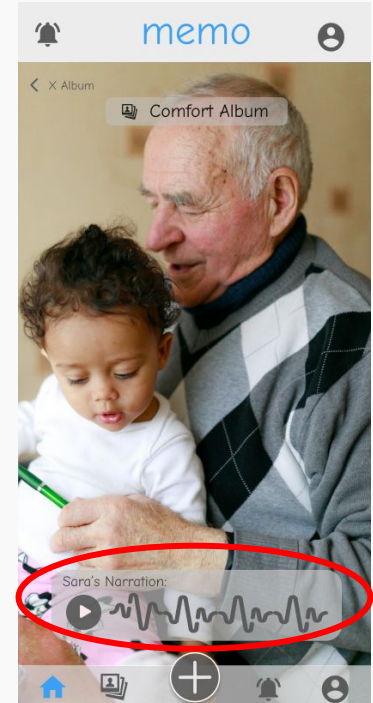
Fix #2

- Removed voice comment feature
 - move away from social aspect and refocus to make app more patient-centric
- Added voice narration feature for the creator of the memo to narrate the memory

Before



After



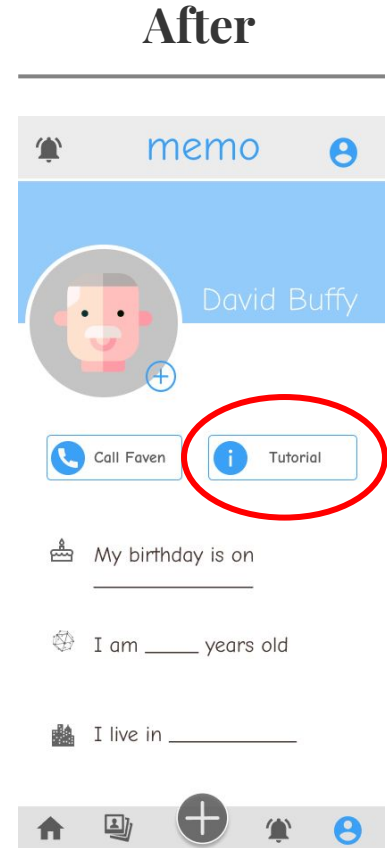
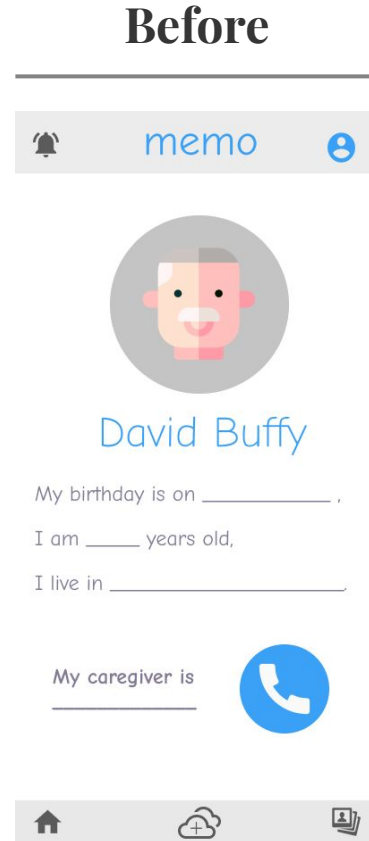
Design Revisions #3

Help and Documentation

- After the initial onboarding, users are unable to access the walkthrough again for reference

Fix #3

Included access to onboarding screens and additional app resources on the users profile page



Design Revisions #4

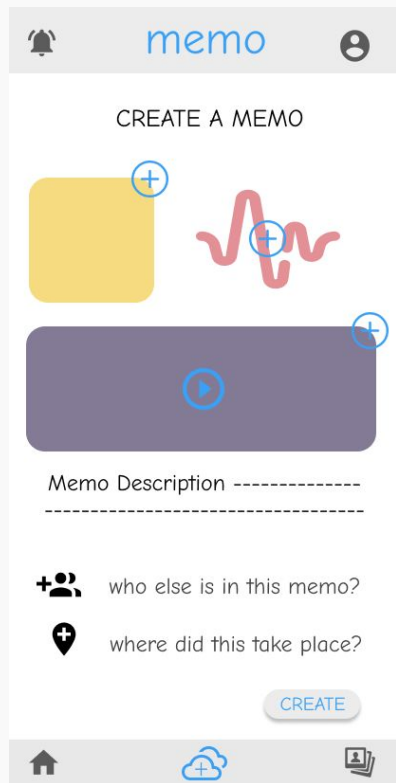
Error Prevention

- Create memo button wasn't greyed out while user was uploading media
- User could accidentally have clicked the "call caregiver" button

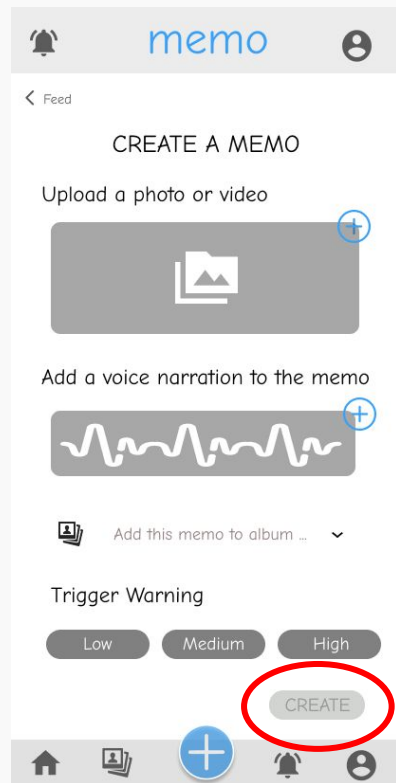
Fix #4

We have now greyed out the “Create” button if user hasn’t uploaded anything yet and activate it when user is ready

Before

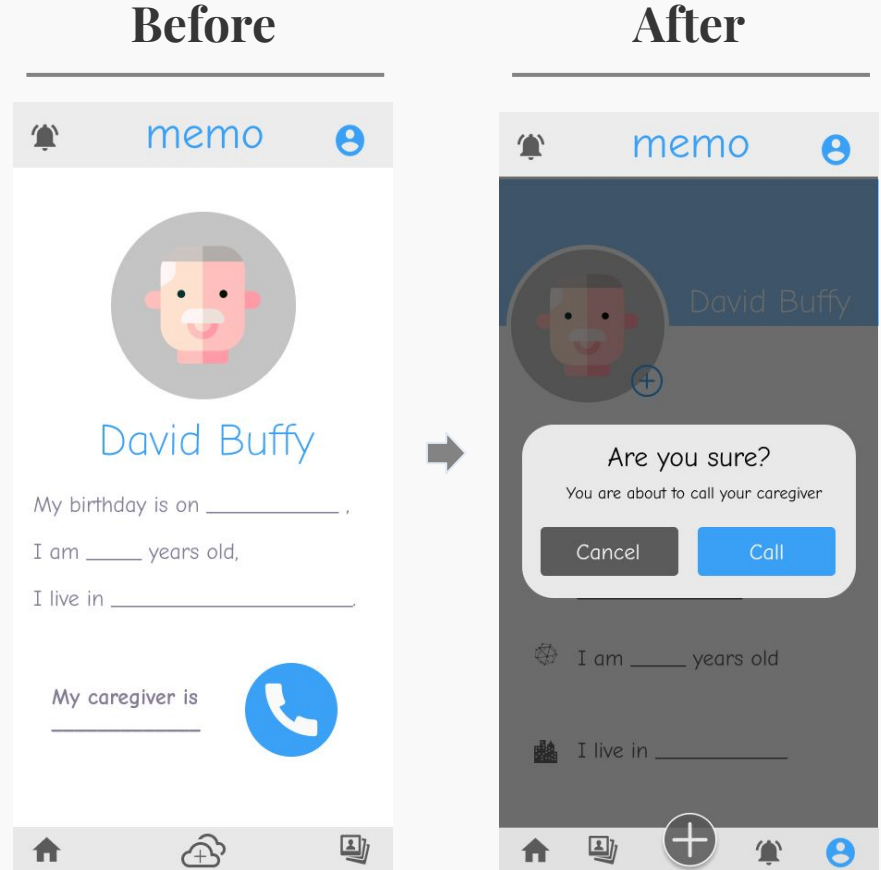


After



Fix #4

We included an error prevention step that confirmed that the user was indeed intended to call caregiver

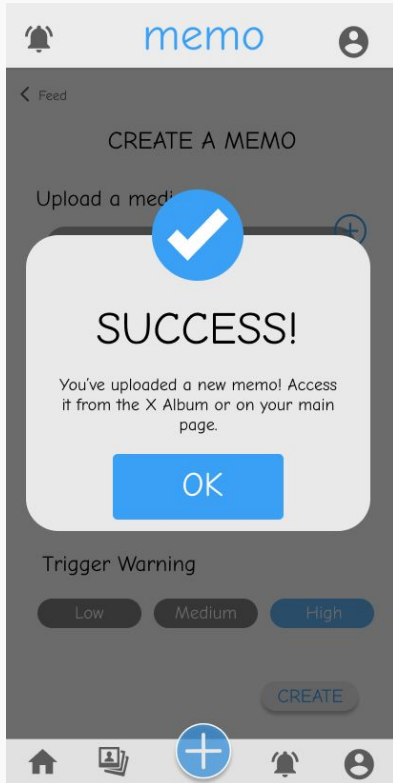


Design Revisions #5

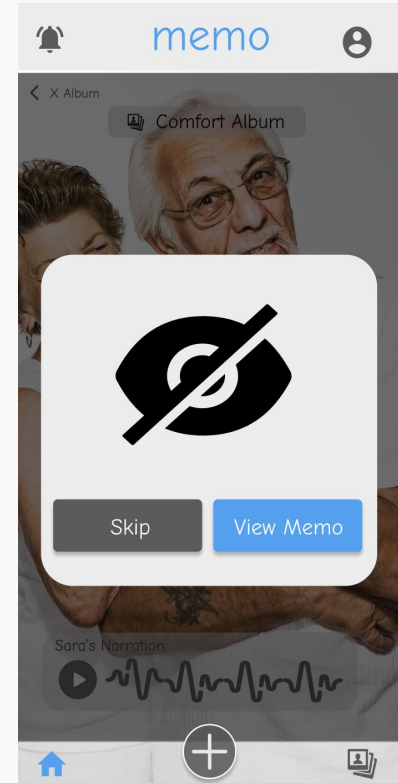
Visibility of System Status

- The “create” action on the Create A Memo page lacks indication of the user’s state of success
- Trigger warning isn’t displayed anywhere on the memo

Fix #5



Success notification pop-up



Trigger warning that allows patients to skip or watch memo

Design Revisions: Severity 1-2

- Removal of Tags (people, location, album tags, etc .)
- App-wide back button
- Moved profile and reminder icons to bottom navigation bar
- Added album title on feed to remind viewers what album they're in
- Added play button to hear voice narration of memo creator

03

Prototype
Implementation Status

Tools Used

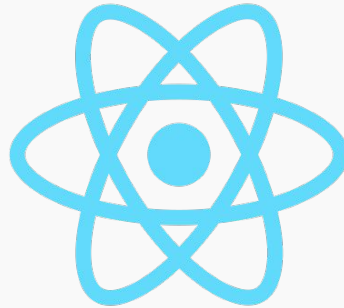
Figma

User Interface Designs



React Native

Application Framework



Expo

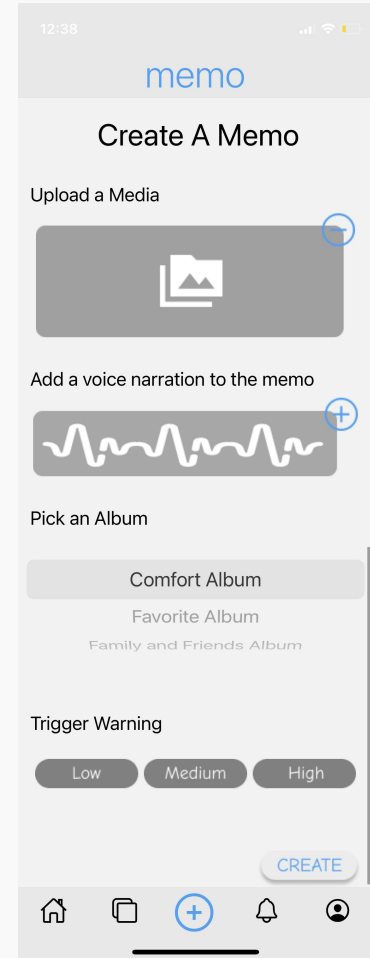
Building & Simulation



Implemented Feature #1

Create a memo.

- Implemented memo creation
- Design
 - Completed UI
- Functionality
 - User can upload photo or video
 - Select album to add memo to
 - Select trigger warning status
 - Uploaded medias show up on memo feed



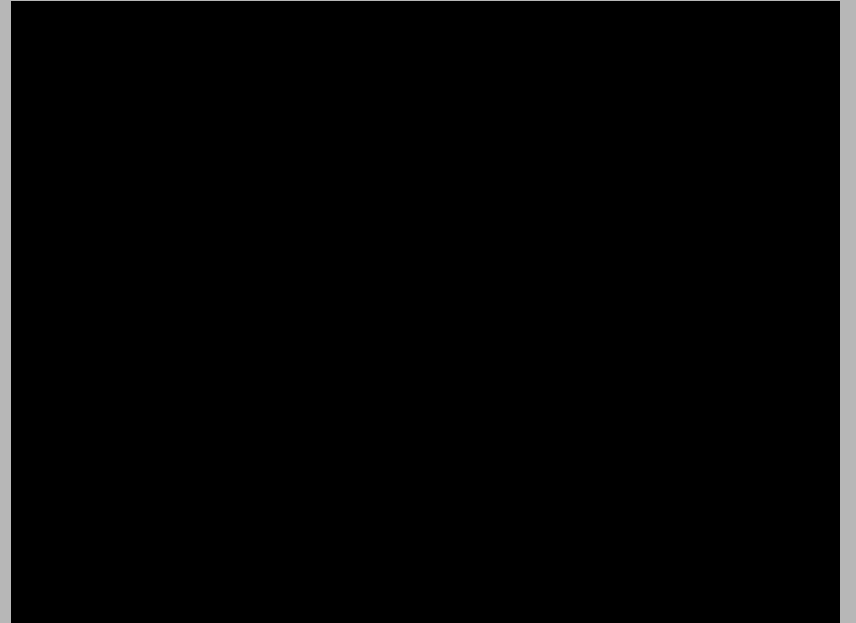
Implemented Feature #2

View memos.

- Implemented memo feed
- Design
 - Completed UI
- Functionality
 - User can scroll through and view memos!
 - Both visuals and audio components are functional



Demo!



Un-implemented Feature #2

ALBUM

Plan of Action:

01

Create an album



02

Add existing memos
to an album



03

View an album

Un-implemented Feature #3

REMINDERS

Plan of Action:

01

Create a new
reminder



02

Notifications of
reminders



03

Calendar view of all
reminders

Un-implemented Feature #3

Profile

Plan of Action:

01

User profile page



02

Call caretaker



03

Documentation /
onboarding feature

Wizard of Oz Techniques

1. While our final app will have a personalized feed of Memos based on when a Memo was posted, how engaging it was to the patient, etc, our current iteration just plays Memos in chronological order
2. We also skip the onboarding process by assuming the caregiver/patient has already inputted their information into the app

Hard-Coded Data

- Audio component
- In memo creation: selection of album to add memo to is hard-coded

(because we have not implemented album feature yet)

We'd love to hear your
feedback!

Question: Voice Component

Feedback on design of voice narration feature?

- novel feature -> intuitive?
- placement
- play button
- etc.



Questions for us?

Thank you.