

MEMO

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Team



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Class of 2022



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Class of 2022



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Computer Science
Class of 2022

Overview

**Interfaces &
Mission**



Lo-Fi Prototype

Results





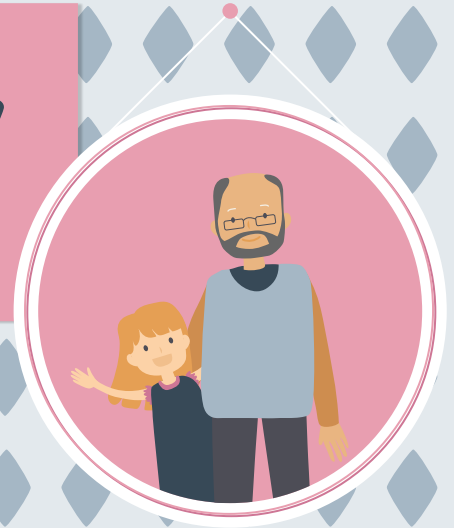
VALUE PROPOSITION

Take a scroll down
memory lane.



01

Brainstorming Modalities



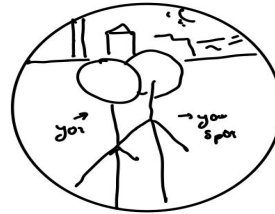
Visual Notifications



Speech Control



Wearables



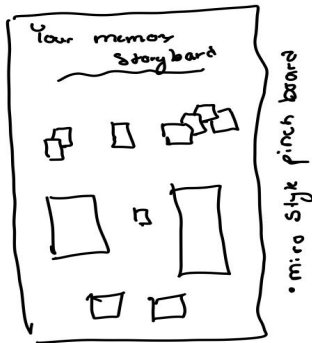
Chat-based

Chat-based UI



- Alexa but a chat box version

Only pinches, swipes or taps



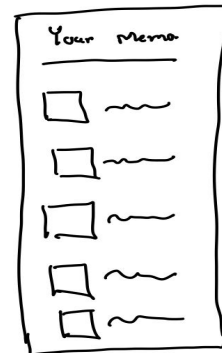
Pinch, Swipe, Tap

AR



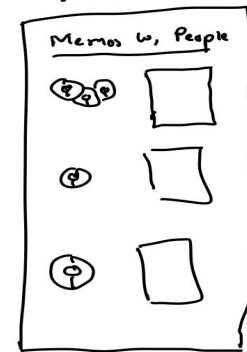
AR/VR

Mobile App 1



Mobile App #1

Mobile App 2



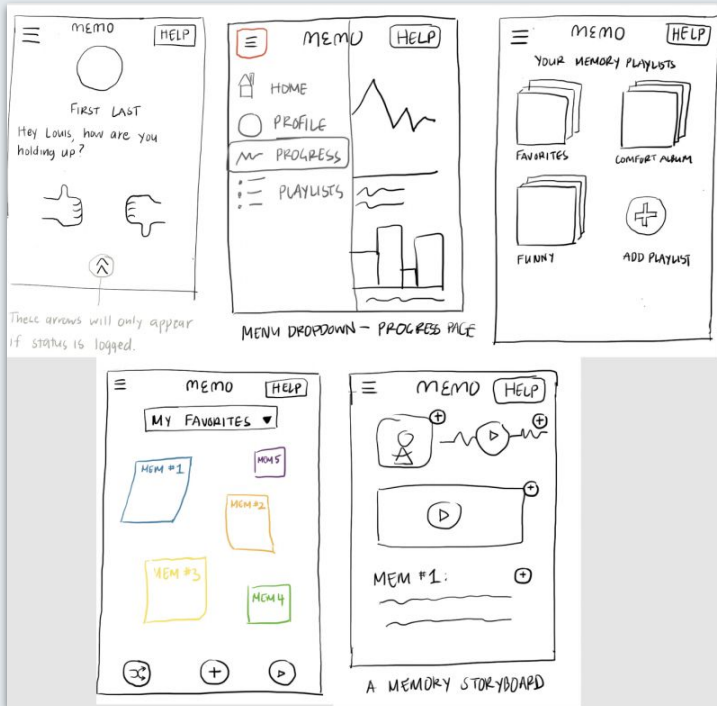
Mobile App #2

02

Interface



Why We Chose an App



- + An app interface is more familiar to our users
- + Accessibility (Alexa doesn't work for deaf people)
- Alexa is always on and can respond promptly

03

Low-fi &
Task Flows



LOW-FI DESIGN

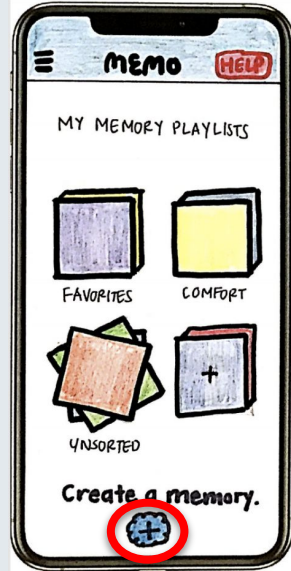
- + Focus on analogous UI (photo albums)
- + Making the process of viewing memories as engaging as possible (clouds!)



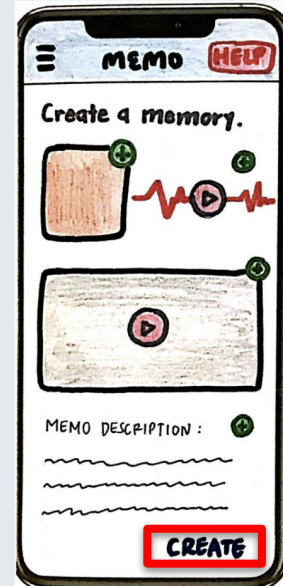
SIMPLE



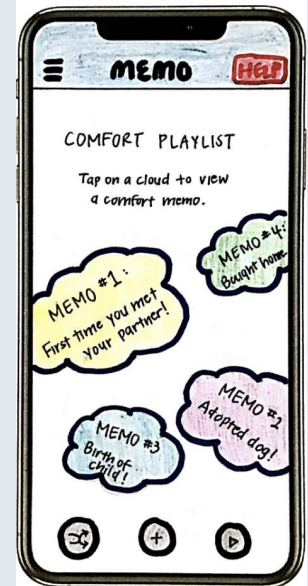
Home "Check-in"
Screen



Create a memory
entry point



Upload sensory
media: photo, audio,
video, description

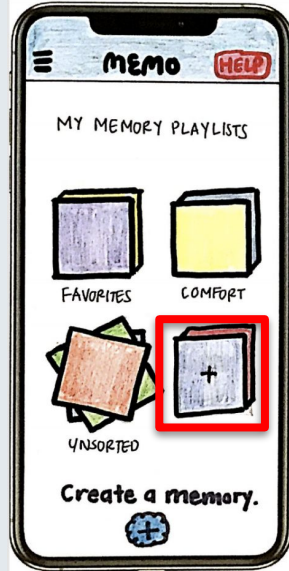


Created memos

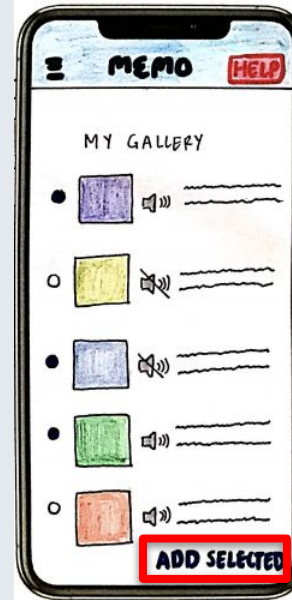
MODERATE



Home "Check-in"
Screen



Create a playlist



Select media that are
associated to each other from
gallery to add to a playlist



Update playlist photo,
description, and tags to
easily search by filters

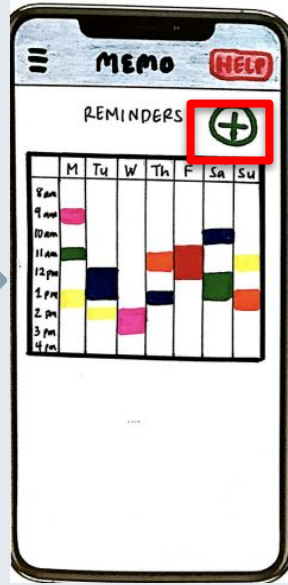
COMPLEX



Home "Check-in"
Screen



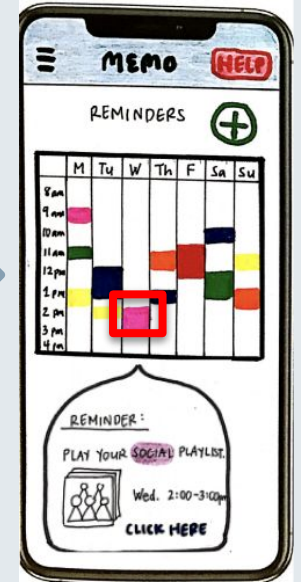
Go to reminders
from navigation bar



Calendar view of
reminders



Create a memo
reminder



Reminder pop-up
notification

04

Experimental Method



Methodology

1

Recruitment

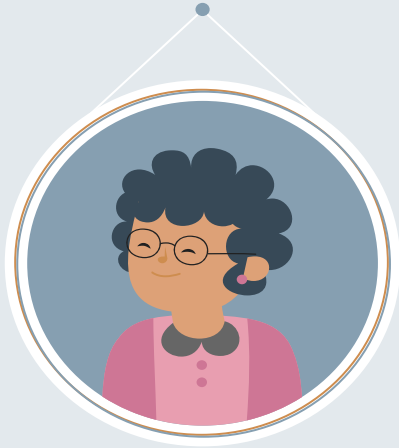
- Eliza & Jeffery via Reddit
- Mary via Arjun's German teacher

2

Setup

- Testing conducted over Zoom
- Recorded prototype interaction
- Took notes of successes, confusions, errors, & comments

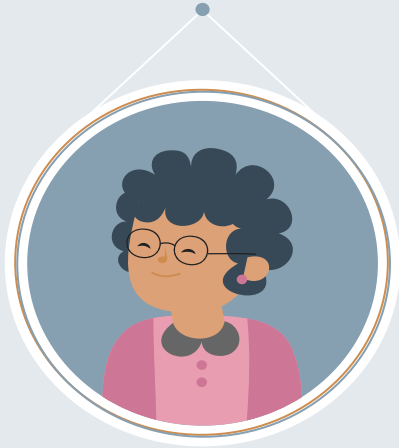
PARTICIPANTS



Eliza

52-year old caretaker for
her elderly father who has
Dementia. NC, USA

PARTICIPANTS



Eliza

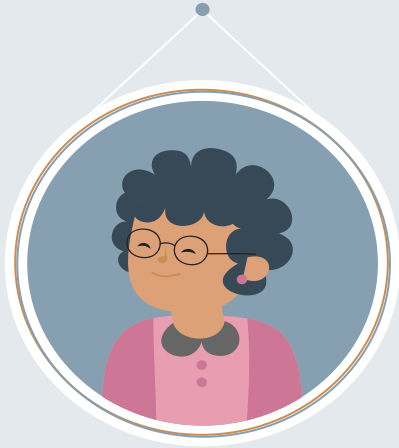
52-year old caretaker for her elderly father who has Dementia. NC, USA



Jeffrey

Eliza's father who has Dementia. Business Executive with a PhD in Chemical Engineering from Yale

PARTICIPANTS



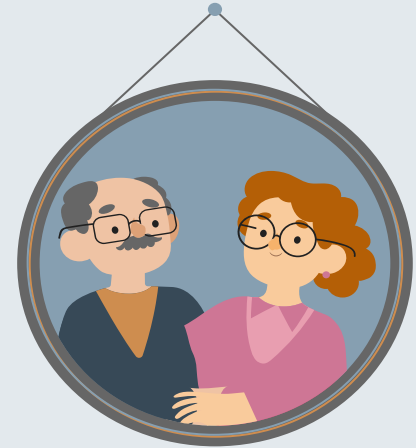
Eliza

52-year old caretaker for her elderly father who has Dementia. NC, USA



Jeffrey

Eliza's father who has Dementia. Business Executive with a PhD in Chemical Engineering from Yale



Mary

Diagnosed with Alzheimer's 1.5 years ago. 58-year old, French teacher. Atlanta, Georgia.

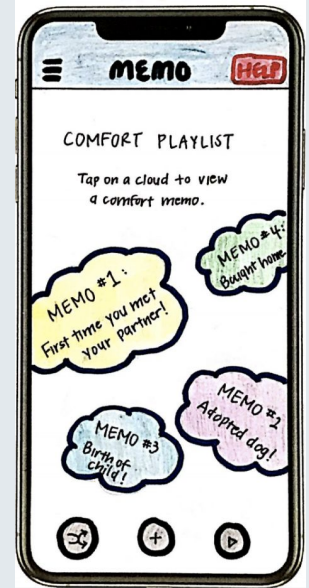
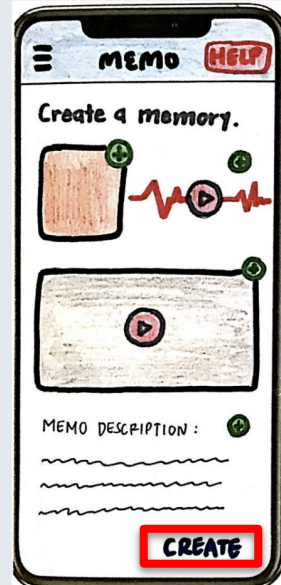
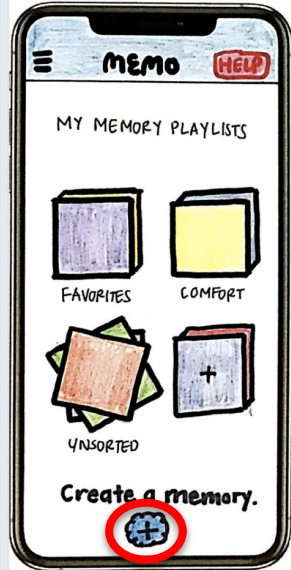


05

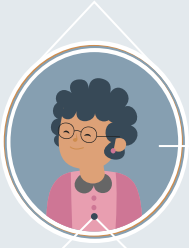
Experimental Results



SIMPLE



TASK 1



Eliza

- Would like **“trigger warning”** on memories (some are too **emotionally charged**)



Jeffrey

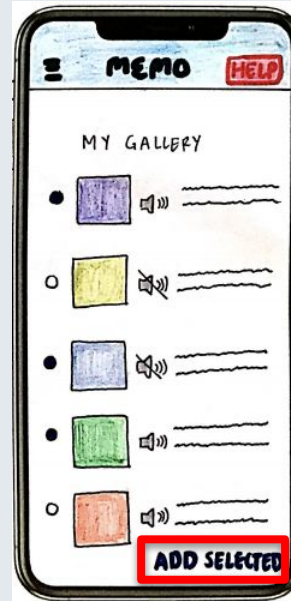
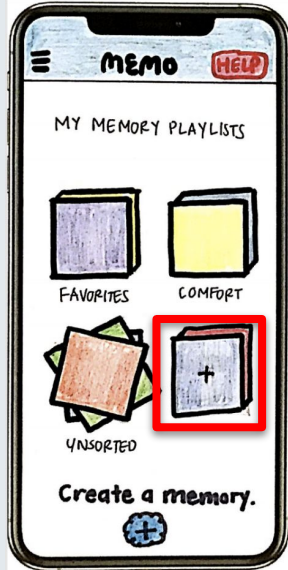
- Confused at the **“thumbs up”** and **“thumbs down”**
- Cloud memories could get **overwhelming**



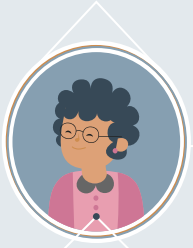
Mary

- “Why are there **two plus buttons** on the playlist screen?”
- “I wish there were more **language options”**
- Help button feels very **intimidating**

MODERATE



TASK 2



Eliza

- Playlist = music? Prefers "album"
- Probably won't use tags
- Confused about the album cover



Jeffrey

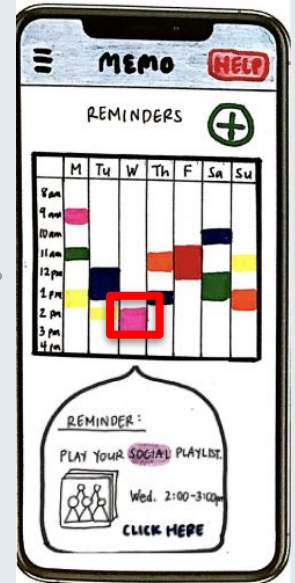
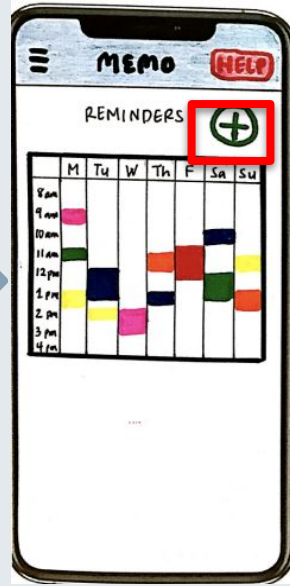
- Clicked "create memory" instead of "playlist"
- Didn't know what playlist meant
- Wanted album cover to be auto selected



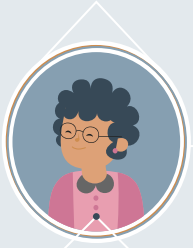
Mary

- Confused about "my gallery"; are they precious memories or photo albums
- Unsure why help button is in "create playlist"

COMPLEX



TASK 3



Eliza

- This screen **would probably be overwhelming** for my father
- I would prefer timers (do X in 30 mins) rather than dates



Jeffrey

- Was very **confused at the create reminder** screen
- Would tap on the calendar itself to add a task rather than the plus button



Mary

- **Liked** the ability to get a **reminder playlists** - she's doing that already on advice from her Doc
- Found it **fairly intuitive to use**



06

Suggested UI
Changes

INTEGRATION OF FEEDBACK

1

Symbols and words that are universal to us might not be universal to dementia patients.

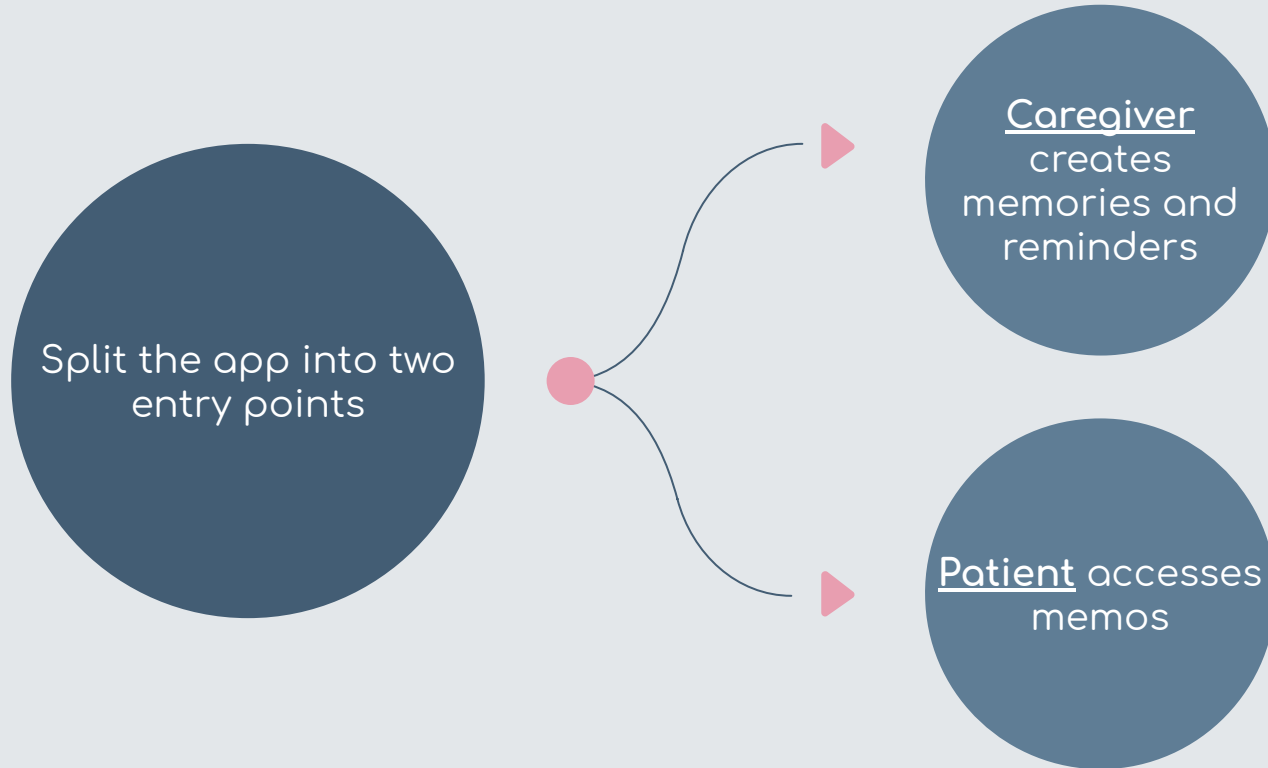
2

'HELP' button needs to be more user-friendly
(bold red is too intimidating)

3

Incorporate various language options as dementia patients react more positively to their native tongue when they experience an episode.

ADDITIONAL CONSIDERATIONS



SUMMARY

01

Chose modality
& UI Interface



02

Low-fi prototype
& user testing



03

Next steps:
Med-fi prototype given
feedback



THANKS !
Questions?

