

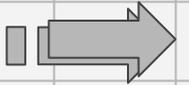


MemReprise

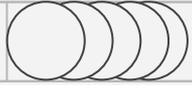
Low-Fi Prototype



Casey, Caroline, Kayla, Sophie



Team



01



Casey Nguyen
BSCS '24, MSCS '24
California

Kayla Patterson
MSCS '24
New Jersey



02

03



Caroline Tran
BSCS '23, MSCS '25
Washington

Sophie Wu
BSCS '24, MSCS '25
Minnesota



04

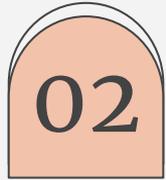


Outline



Value Proposition

Interface & Rationale



Problem/Solution

Low-Fi Prototype



Sketching explorations

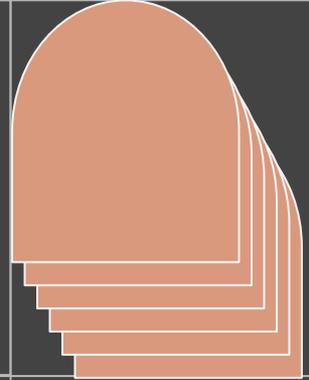
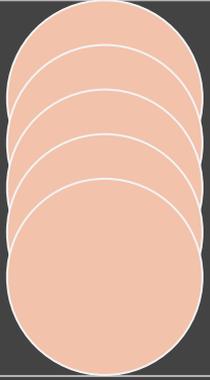
Tests, Results & Analysis



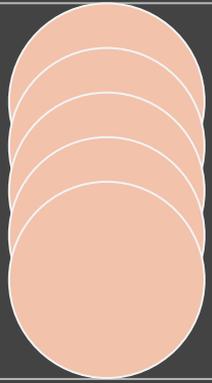
01

Value Proposition

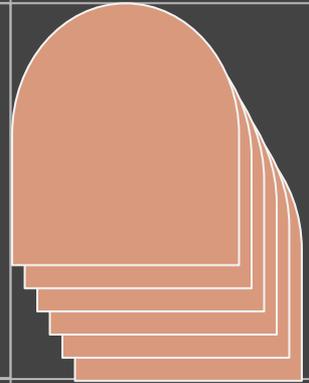
**Where Music and
Memories Meet**

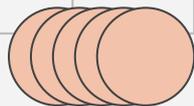


02



Problem +
Solution





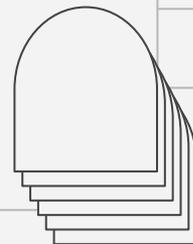
The Problem

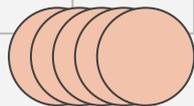
People often have **deep, yet hard-to-quantify associations** with their favorite music.

These associations go **undocumented and unshared.**



The Solution





The Problem

People often have **deep, yet hard-to-quantify associations** with their favorite music.

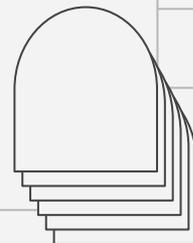
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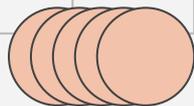


The Solution

An app that prompts you daily to:

- Log the song you're currently listening to





The Problem

People often have **deep, yet hard-to-quantify associations** with their favorite music.

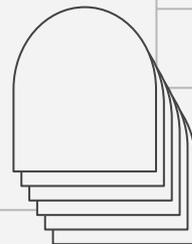
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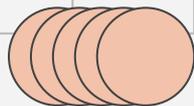


The Solution

An app that prompts you daily to:

- Log the song you're currently listening to
- Associate it with a themed question





The Problem

People often have **deep, yet hard-to-quantify associations** with their favorite music.

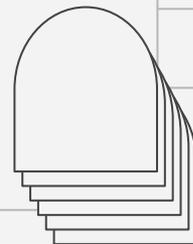
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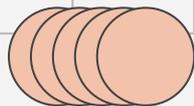


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An app that prompts you daily to:

- Log the song you're currently listening to
- Associate it with a themed question
- Tag current mood and activity





The Problem

People often have **deep, yet hard-to-quantify associations** with their favorite music.

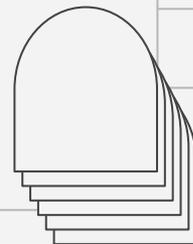
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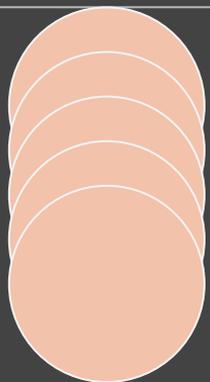
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An app that prompts you daily to:

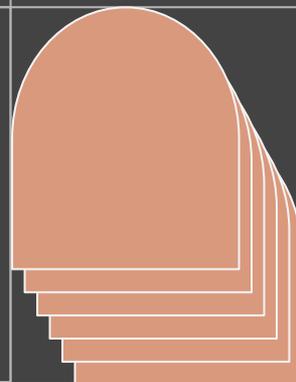
- Log the song you're currently listening to
- Associate it with a themed question
- Tag current mood and activity
- Discover new music by seeing how other users answered and tagged *their* music

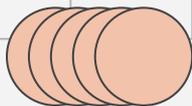


03

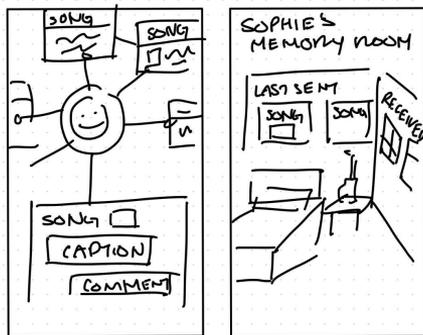
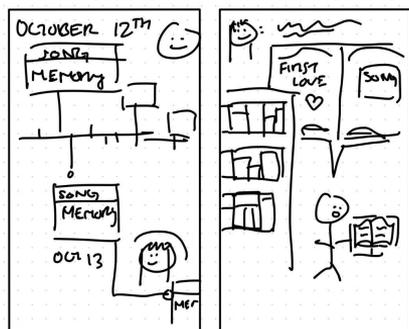


Sketching Explorations



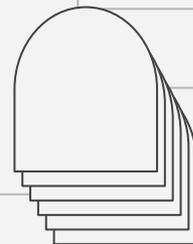


Realizations

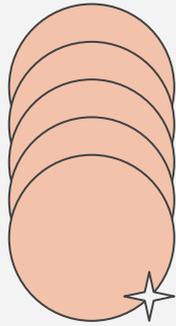


Memory Pages

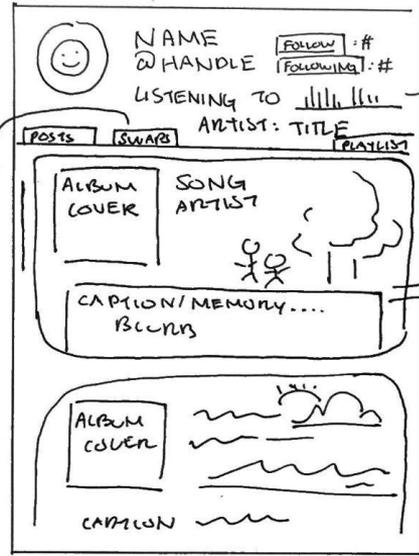
A **digital journal-like space** where users make “memory posts” with the associated **song**, relevant **images** and **videos**, a **written entry**, and other connected memories.



Memory Pages



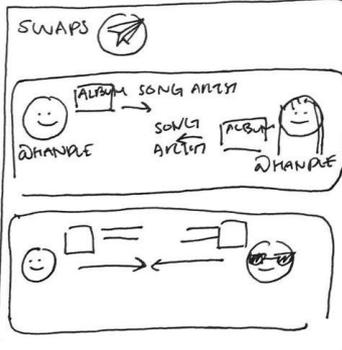
MEMORY MAP



MOST RECENT

SCROLL

OLDEST



SHOW MOST RECENT SWAPS RECEIVED?

SHOW CURATED PLAYLIST
↳ LIVE SPOTIFY



WILL AUTO-POPULATE W/ MOST RECENT SONGS
CLICK TO OPEN POST

BACKGROUND IS IMAGE/VIDEO PREVIEW
IF ONE ATTACHED TO THE POST

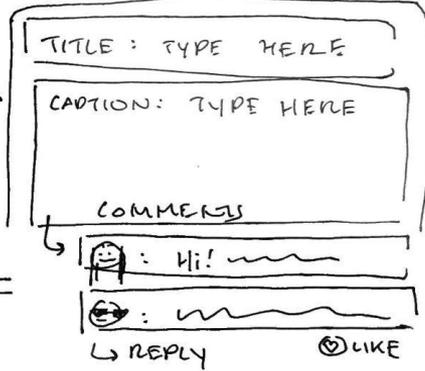
↳ IF VIDEO, WILL START PLAYING

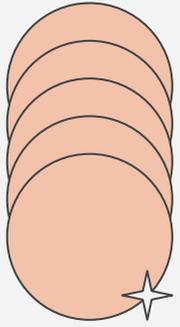
OPEN/CLICK

REDDIT-ESQUE COMMENT CHAINS

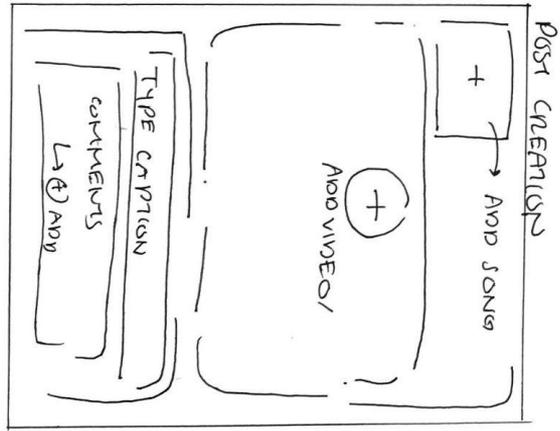
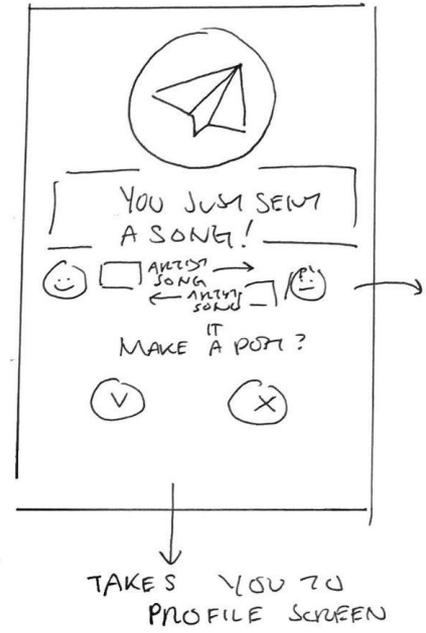
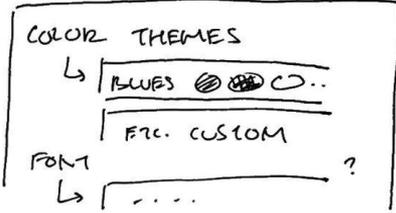
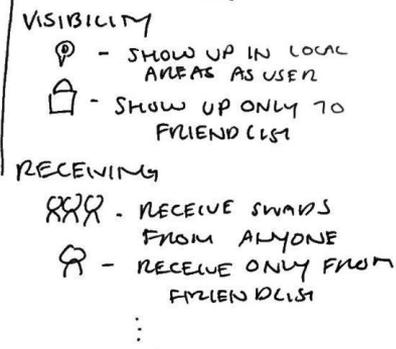
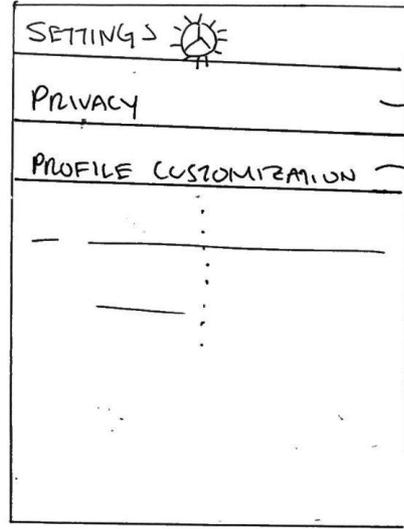


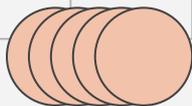
PLAYS WHEN YOU OPEN IT



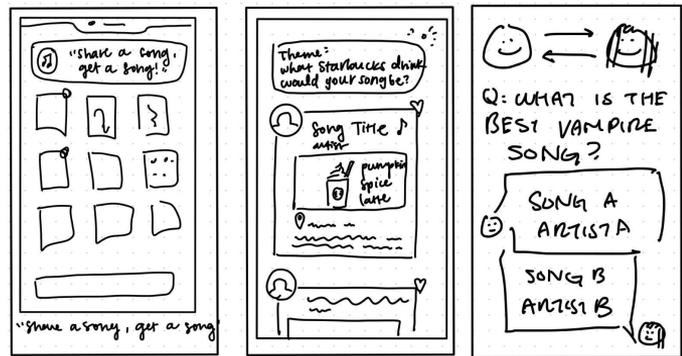


Memory Pages





Realizations

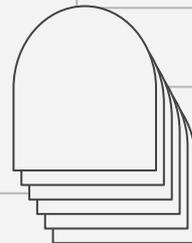


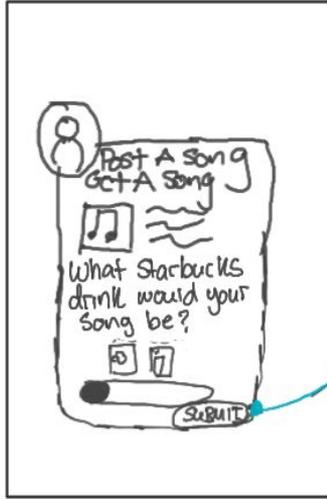
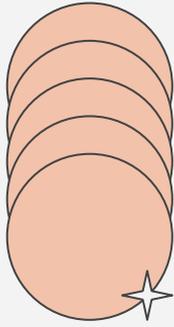
Posting Prompts

Users get notified with random
“question of the day.”

User selects from **themed options**
that best **represent their songs**.

Users **explore songs** other users
associated with various options.



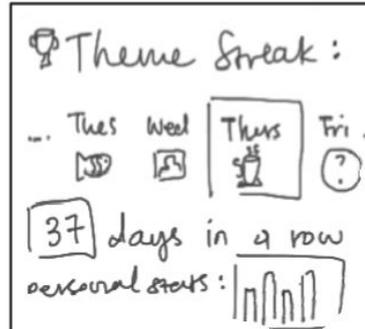


Notification pops up on users phone asking them to share what they are listening to.

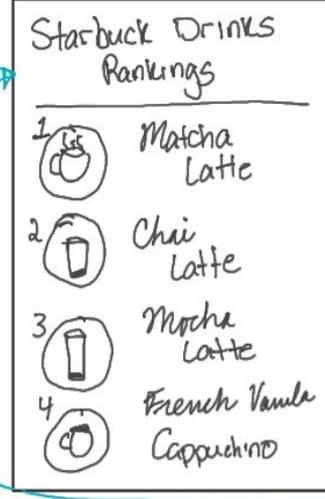
There's another question below that asks them a Theme Streaks question, which is where they can select a picture to answer this question



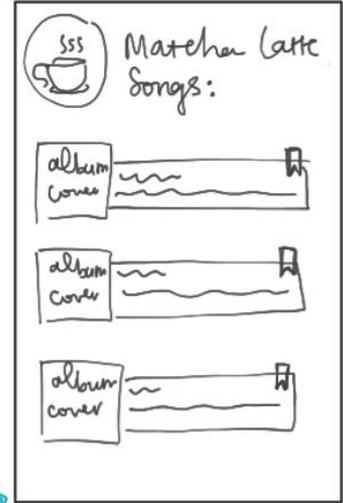
Home page with posts of other users. User can scroll through each post and click on theme photo (drink) or theme/personal stats for more information.



user can view their own stats on their posting history. This page keeps track of their posting streak as well as other stats like # of new songs discovered... etc.



theme streaks ranking, which shows which Starbucks drink has been selected the most. This will change based on the theme of the day



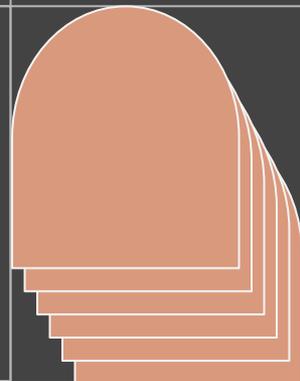
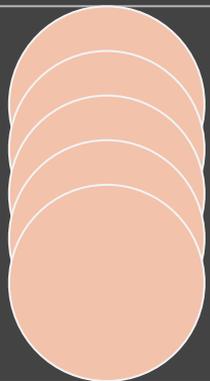
User can view all songs associated with matcha latte drink and bookmark those songs in play lists.

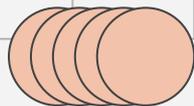
realization:
posting prompts/theme of the day for users to participate in sharing songs

Posting Prompts

04

Interface +
Rationale





Memory Pages

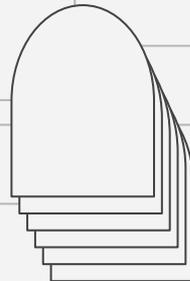


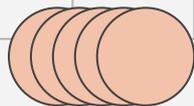
Pros

- **Central archive** for important music and memories
- **Direct user interaction**

Cons

- Feels **like a chore** to post
- Potentially **not novel** enough





Posting Prompts

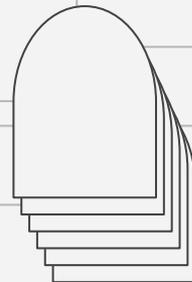


Pros

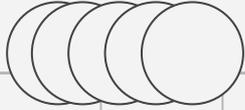
- Communicating **abstract music associations**
- **Quick, fun, and simple**

Cons

- Themed questions **may not be relatable** or **repetitive**
- **Strays from archiving** and sharing memories

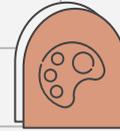


Considerations



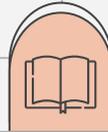
Relevant Data

Music is intrinsically linked to **emotion** and **memory**—all three should be present



Findings

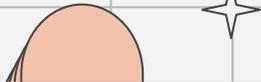
People **want to share**, but not always in words or in depth



Constraints

Our ability to **represent associations** is limited by technology





The Design (+ Why It's Superior)

We want the best of both worlds:

- The **everyday memory archival** and **emotional aspect** from the “Memory Pages” Realization
- The **quick, fun,** and **symbolic** representation of associations from the “Posting Prompts” Realization

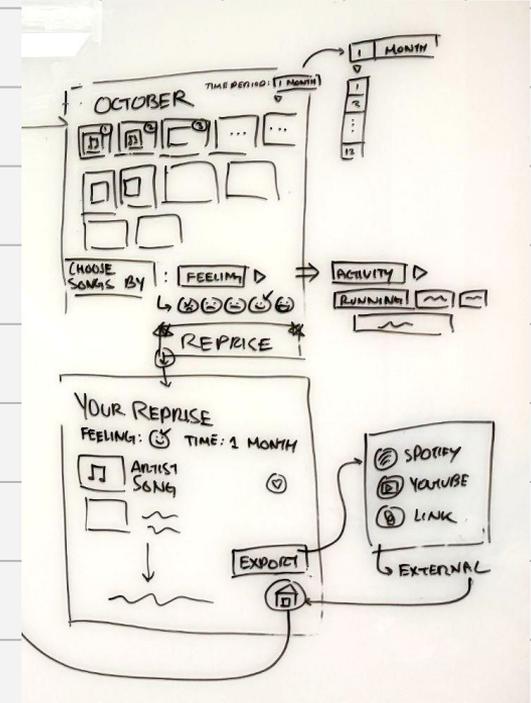
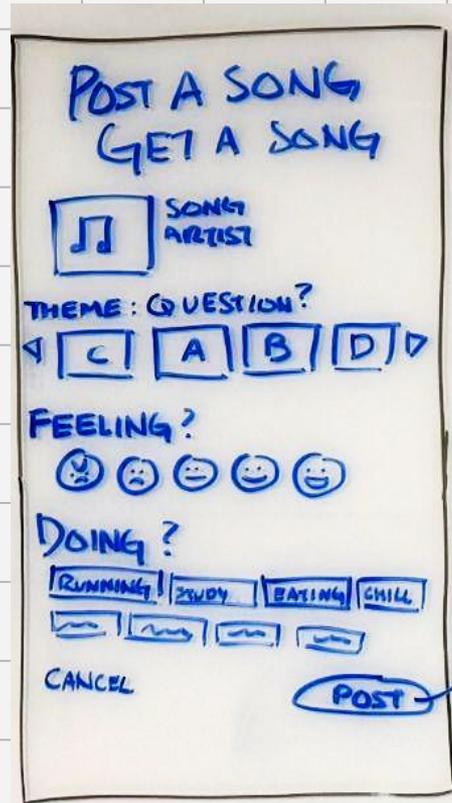


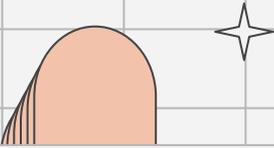
The Design (+ Why It's Superior)

We want the best of both worlds:

- **Everyday memory archival** and **emotional aspect**
- **Quick, fun**, and **symbolic**

Instead of asking only the **theme question** in relation to their song, ask users to **log** what **they're feeling and doing from a selection**, then let them **look back on all the songs** they associated with a certain feeling or activity.

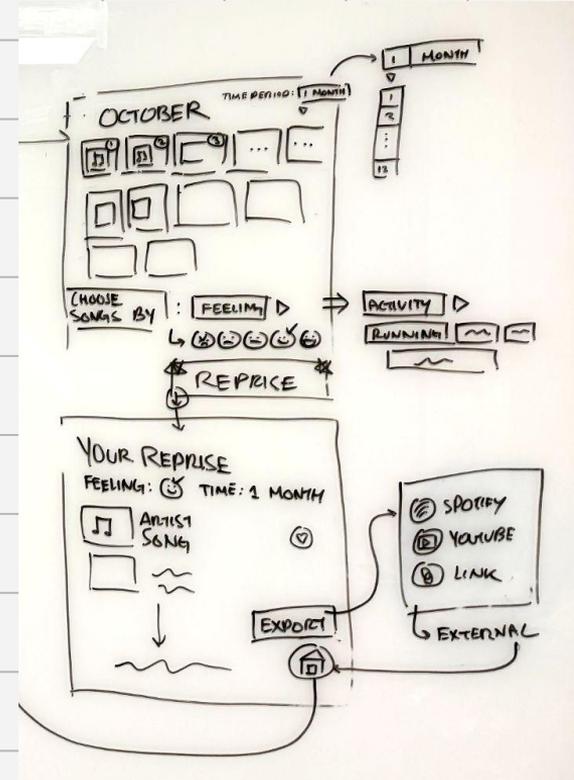
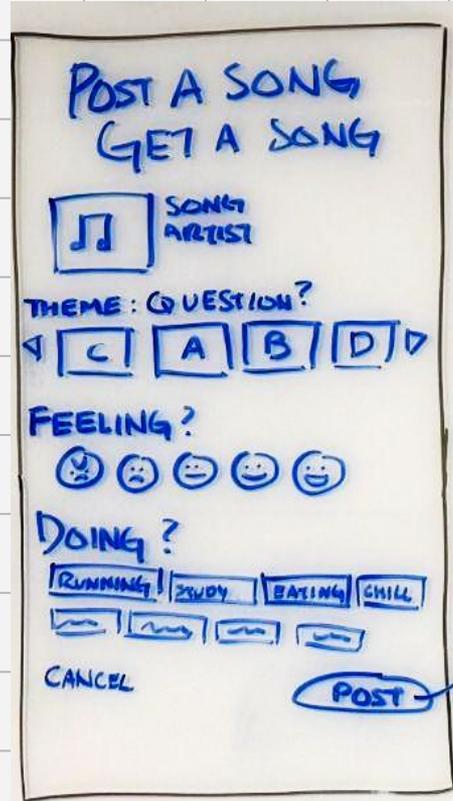




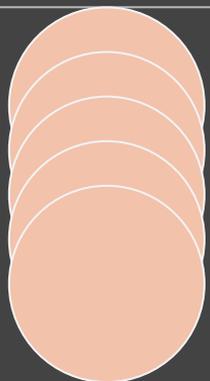
The Design (+ Why It's Superior)

We want the best of both worlds:

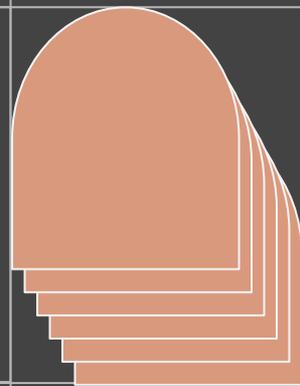
- **Everyday memory archival** and **emotional aspect**
 - Log current feeling and activity
 - Calendar History
- **Quick, fun, and symbolic**
 - Themed Question
 - Answer Selection



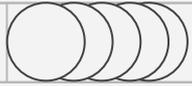
05 ✨



Low-fi
Prototype



Low-fi prototype construction



Sketching

Rough sketches
on whiteboard

Cutouts

Printed and cut
designs

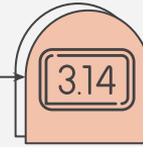
01



Brainstorming

Proposed ideas
and voted

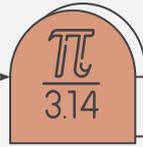
03



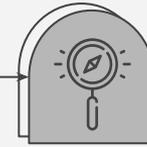
Revisions

Cleaned
sketches on
Goodnotes

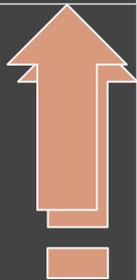
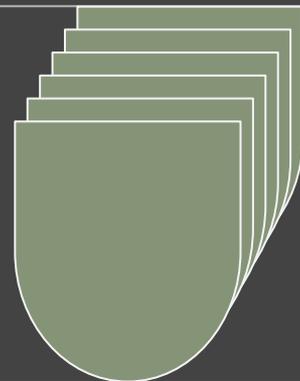
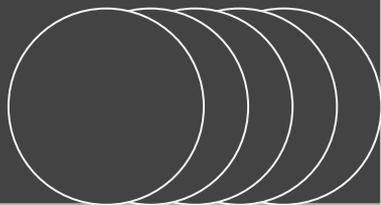
02



04

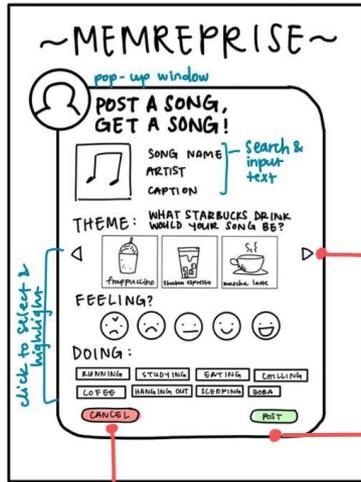


Tasks + Features

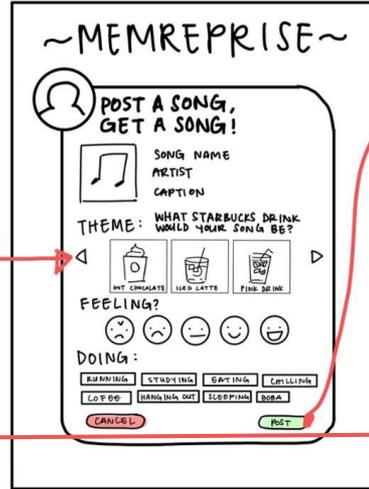


Simple: Share a song on MemReprise

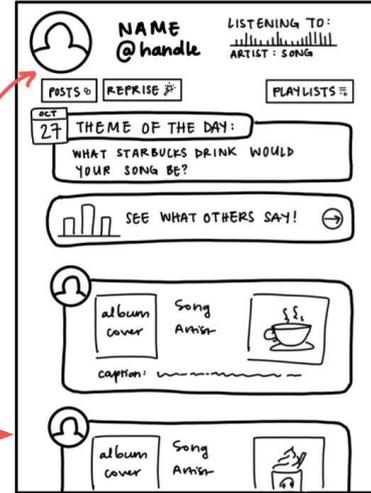
Screen 1 :



Screen 1 :



Screen 2 :



Features:

Scroll arrows for the theme question options.

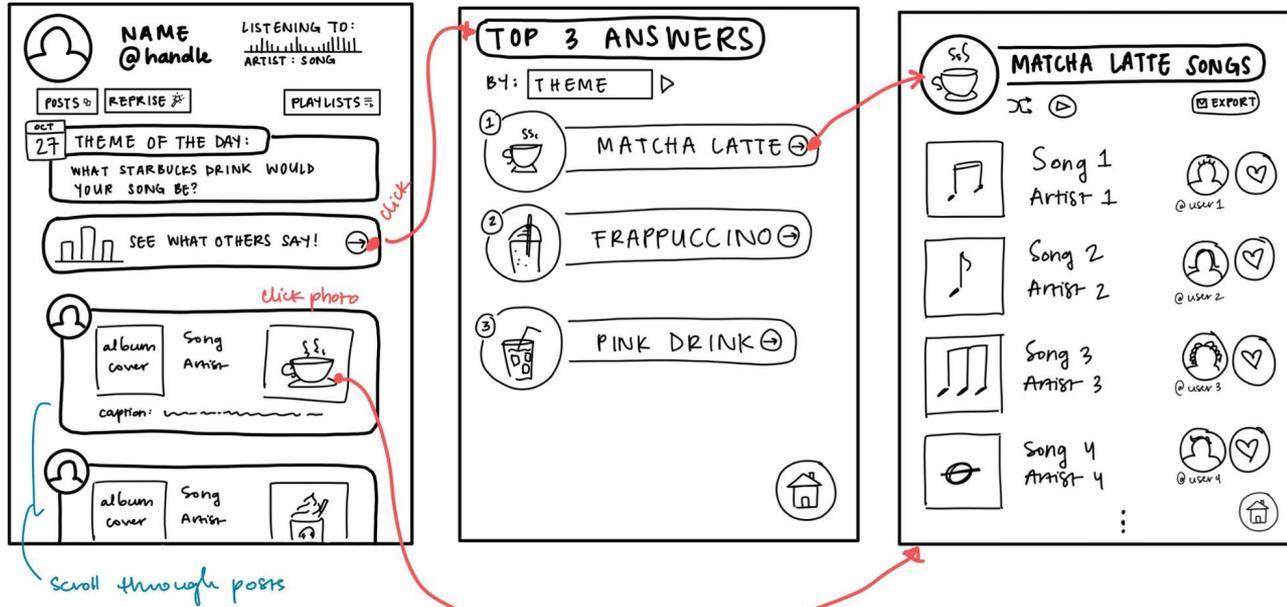
Select & highlight feature to show user's choice.

Post button leads to home page feed.

Cancel button closes the post draft.

shows message requiring user to post a song to get a song.

Moderate: Discover music from other users who have similar music associations.



Features:

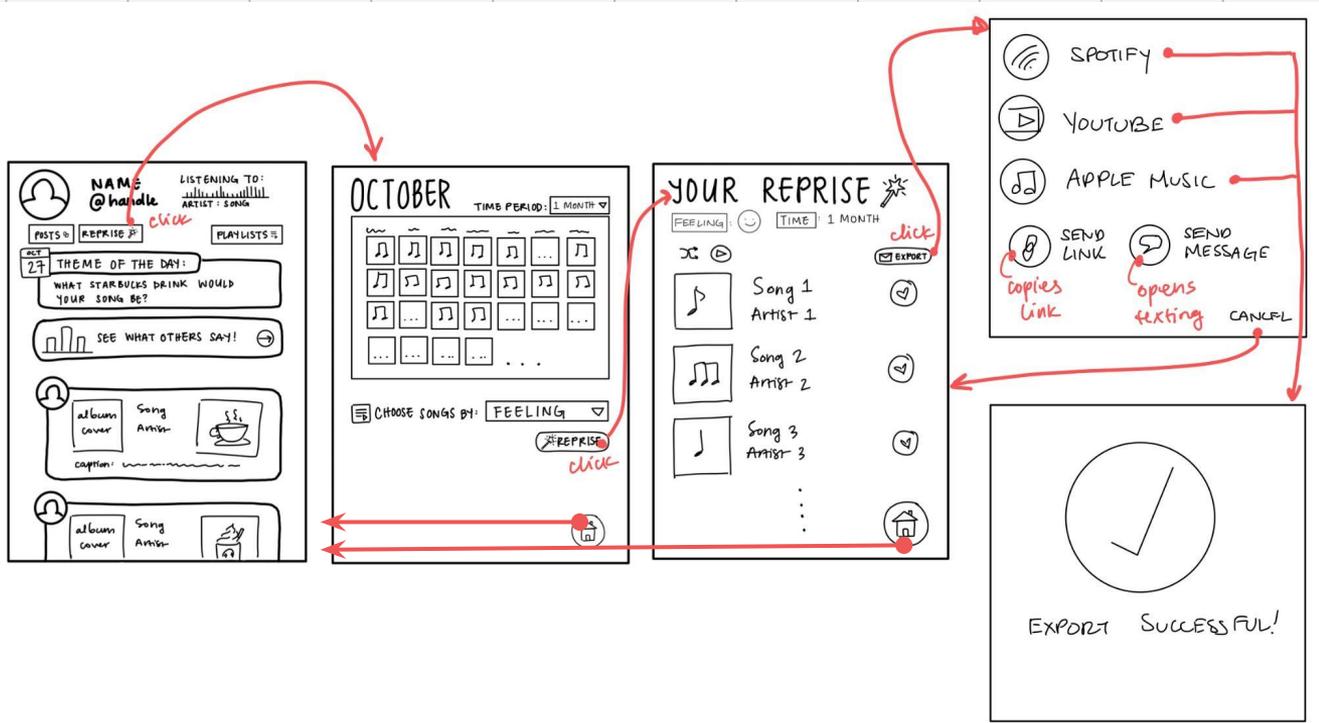
Arrow button opens Top 3 Answers per category.

Button on theme photo links to themed playlists.

Category Swipes helps users view Top 3 Lists for different categories.

Scroll through songs posted by other users.

Complex: Create a personalized playlist from songs you recently shared.



Features:

Reprise button in home page opens post history.

Dropdown allows user to filter post history.

Reprise button on history page generates playlist.

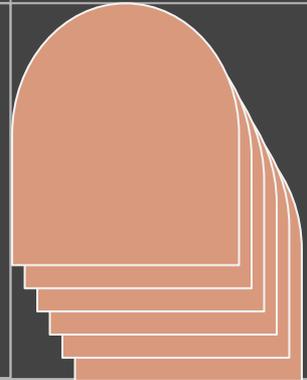
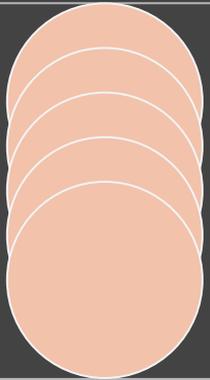
Export button opens links to save playlists on other streaming apps.

Home button to return to the home page.

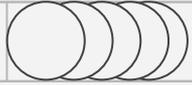
Cancel button stops export.

06

Testing Methodology



Participants



01

Natalia

High School Student
Infrequent social media user



Benedict

Network Engineer
Experienced research
participant



02

03



Adrian

Software Engineer
Degree in Information Systems

Clare

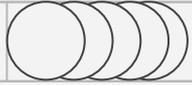
Stanford Student
Orchestra experience



04



Participants



01



Benedict

Network Engineer

Recruitment: Friend's brother

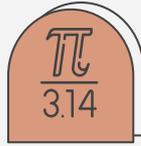
Compensated: No

Natalia

High School Student

Recruitment: Student of Friend

Compensated: No



02

03



Adrian

Software Engineer

Recruitment: Friend

Compensated: Boba

Clare

Stanford Student

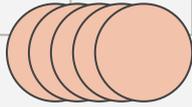
Recruitment: Friend

Compensated: Boba



04





Environment + Apparatus

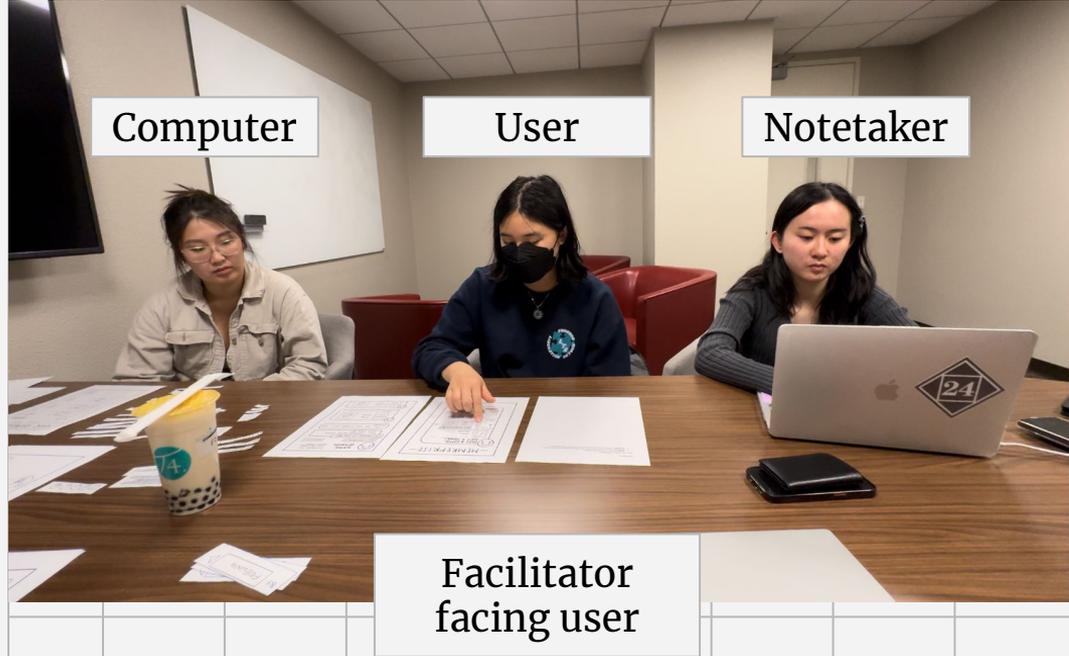
- Locations
 - Tressider
 - Coupa Cafe (GSB)
 - EVGR-A Huddle



Apparatus notes: Low-fi paper prototype to simulate real app usage. Recorded with consent for analysis.

Process + Team Roles

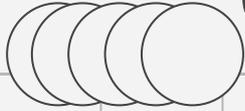
- ~30 minute sessions
 - 3 tasks of varying complexity
- **Team roles:**
 - Greeter + Facilitator
 - Notetaker
 - Computer
- Encouraged participants to **think aloud**
 - Real-time feedback



Process + Team Roles

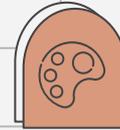
- Sessions lasted ~30 min
 - 3 tasks of varying complexity
- **Team roles:**
 - Greeter/Facilitator, Notetaker, and Computer
- Encouraged participants to think aloud
 - Real-time feedback on their experience

Usability Goals + Measurements



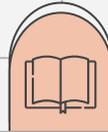
App Efficiency

KPI: monitored **time** to complete each assigned task



User Satisfaction

KPI: collected user satisfaction **ratings** + verbal feedback



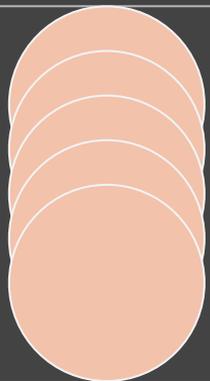
Robustness

KPI: tracked **error rates** with points of failure or confusion

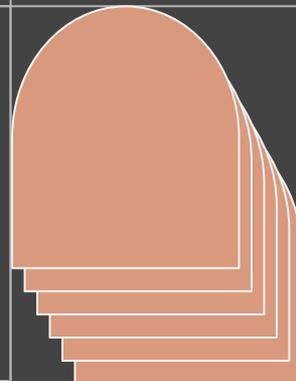


KPI = Key Performance Indicator

07



Testing Results



Results



Big Picture

- Participants **completed all tasks**, though **time and ease varied**
- Diverse navigation paths:
 - showcasing **adaptability**.

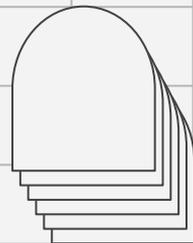
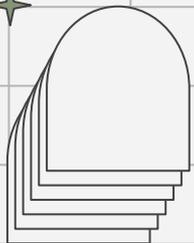
Bottom-Line

- **Minimal errors recorded.**
- **Positive rating** for average user satisfaction (~4/5)



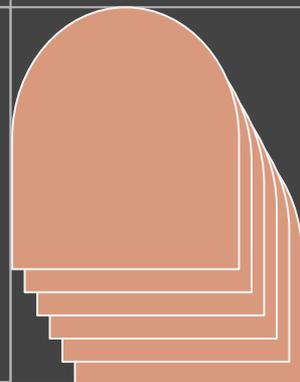
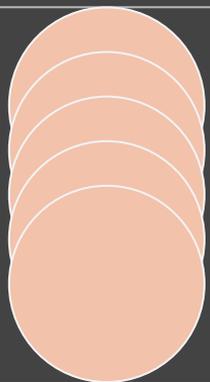
Other relevant observations

- Areas of potential confusion were noted, such as the **need for clearer navigation cues**.

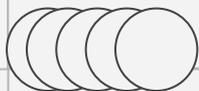
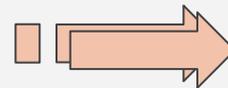


08

Discussion



Implications



01

The word “Reprise”

Not **common** vocabulary which made the button ambiguous.

03

Discover Songs

Discovering songs was easy for our participants. Everyone found what others’ post.

02

Posting A Song

Users were **confused** how to post their songs; **text-heavy**

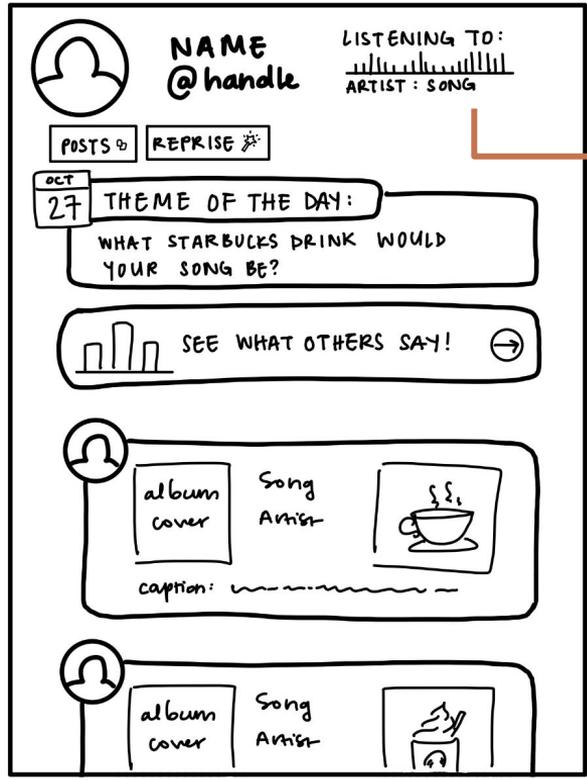
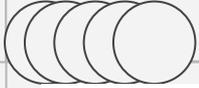
04

Profile

Users wanted to click their **personal profiles and profiles of other users.**



Changes to Design



1) Tutorial

Create a tutorial for new users to learn how to use the app



2) Remove Playlist

Saving personal playlists in user's profile. Playlists on the homepage was confusing.



Testing Couldn't Reveal

Usage

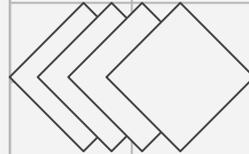
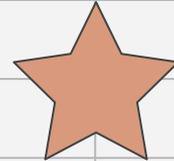
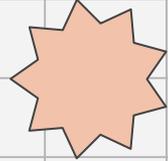
- Are users willing to use our **platform every day** to **share** their songs?

Discovering / Liking New Songs

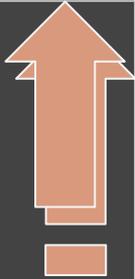
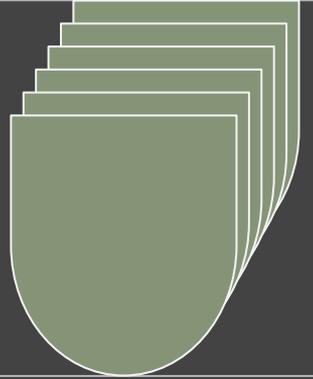
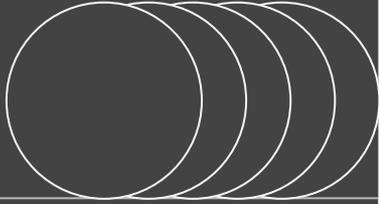
- There were no real songs shown in our prototype so we don't know if users would **discover new songs they like**

Ignore Notifications

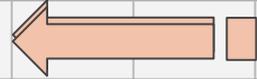
- Couldn't test if users would **ignore the notification** and not share their song



Thank
You!

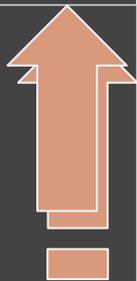
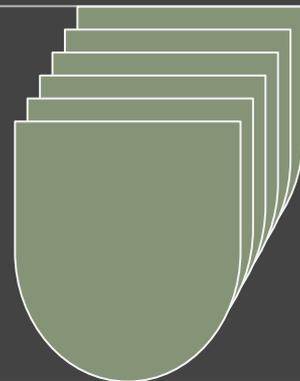
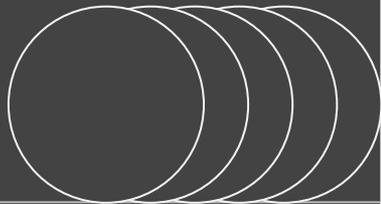


Appendix



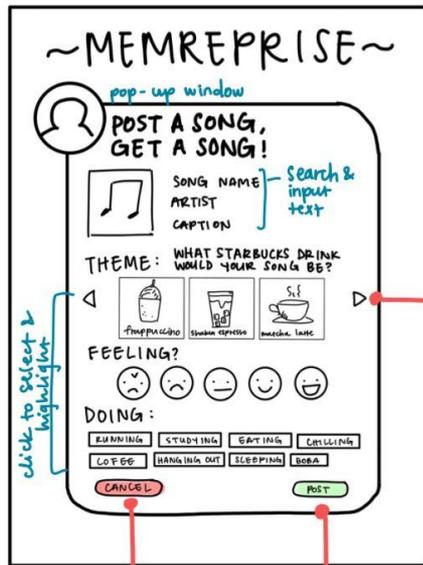
- **Full list of pros and cons for selected interface rationale**
 - Slide 8 and 10
- **Link to the low-fi prototype on Marvel POP, etc.**
 - Low-fi prototype
- **Any preparation you did for the testing (e.g., script)**
 - Prototype Script
- **Organized log of critical incidents from testing**
 - Critical Incidents Log
- **See the details features and interaction details in the next slides.**

Features & Interactions

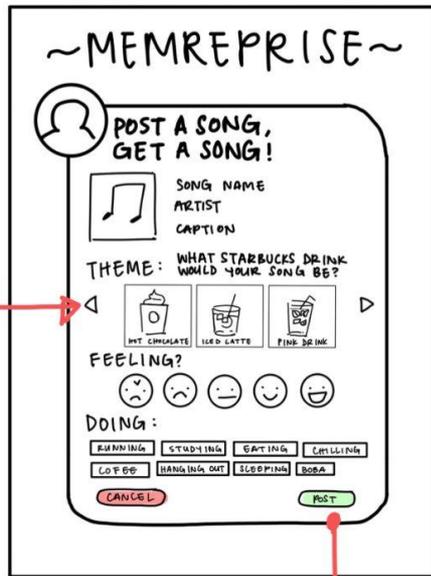


Screen 1: Post Draft

Screen 1:



Screen 1:



Screen 2:



shows message
requiring user
to post a song
to get a song.

Screen 2: Home Page

Screen 2: Home page

NAME @handle LISTENING TO: ARTIST: SONG

POSTS REPRISE *click* PLAYLISTS

OCT 27 THEME OF THE DAY: WHAT STARBUCKS DRINK WOULD YOUR SONG BE?

SEE WHAT OTHERS SAY! *click*

album cover Song Artist caption: *click photo*

album cover Song Artist

scroll through posts

screen 3:

TOP 3 ANSWERS

BY: THEME

1 MATCHA LATTE

2 FRAPPUCCINO

3 PINK DRINK

Home icon

Screen 4:

OCTOBER TIME PERIOD: 1 MONTH

CHOOSE SONGS BY: FEELING REPRISE

Home icon

screen 5:

MATCHA LATTE SONGS EXPORT

Song 1 Artist 1 @user1

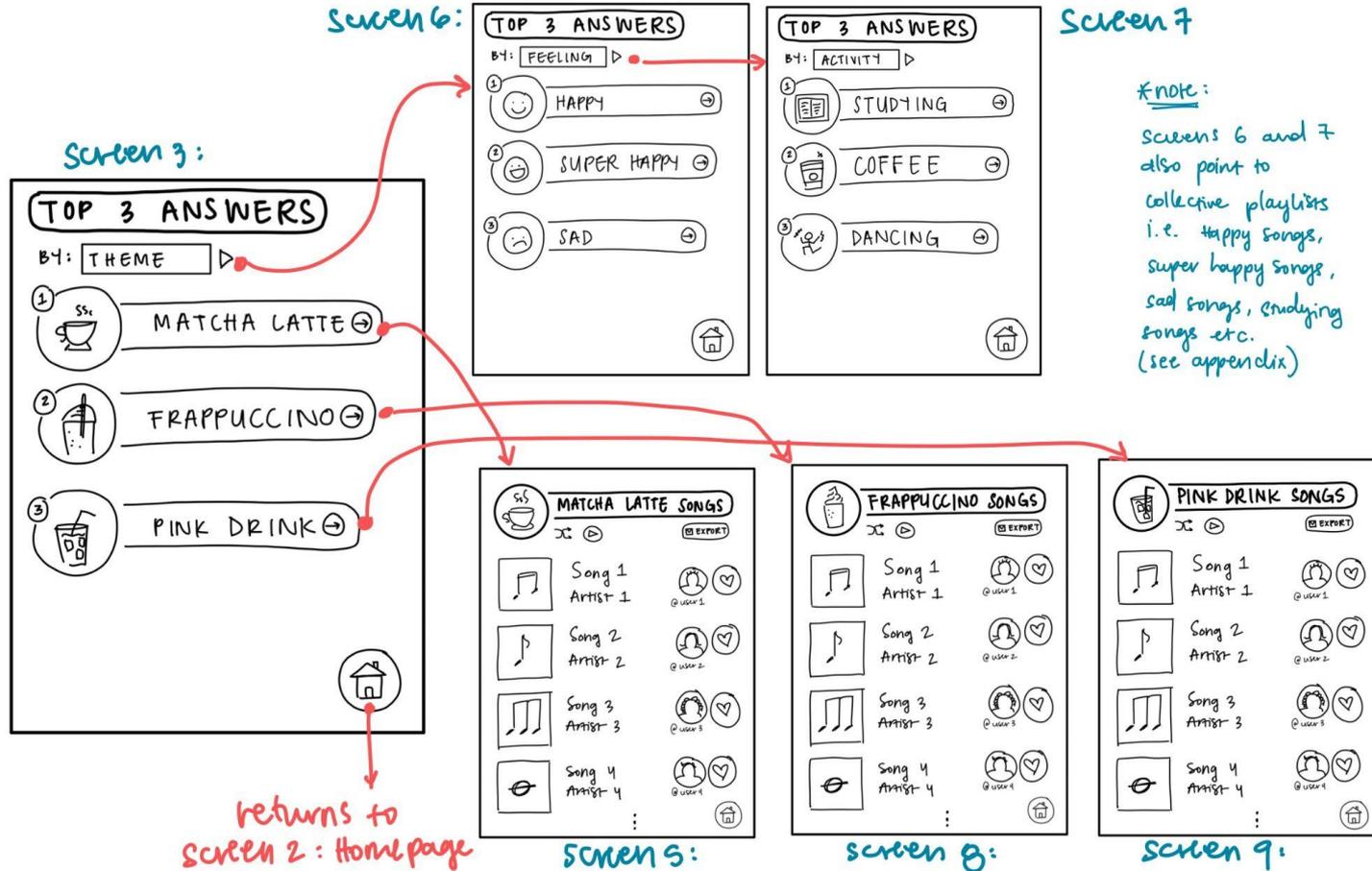
Song 2 Artist 2 @user2

Song 3 Artist 3 @user3

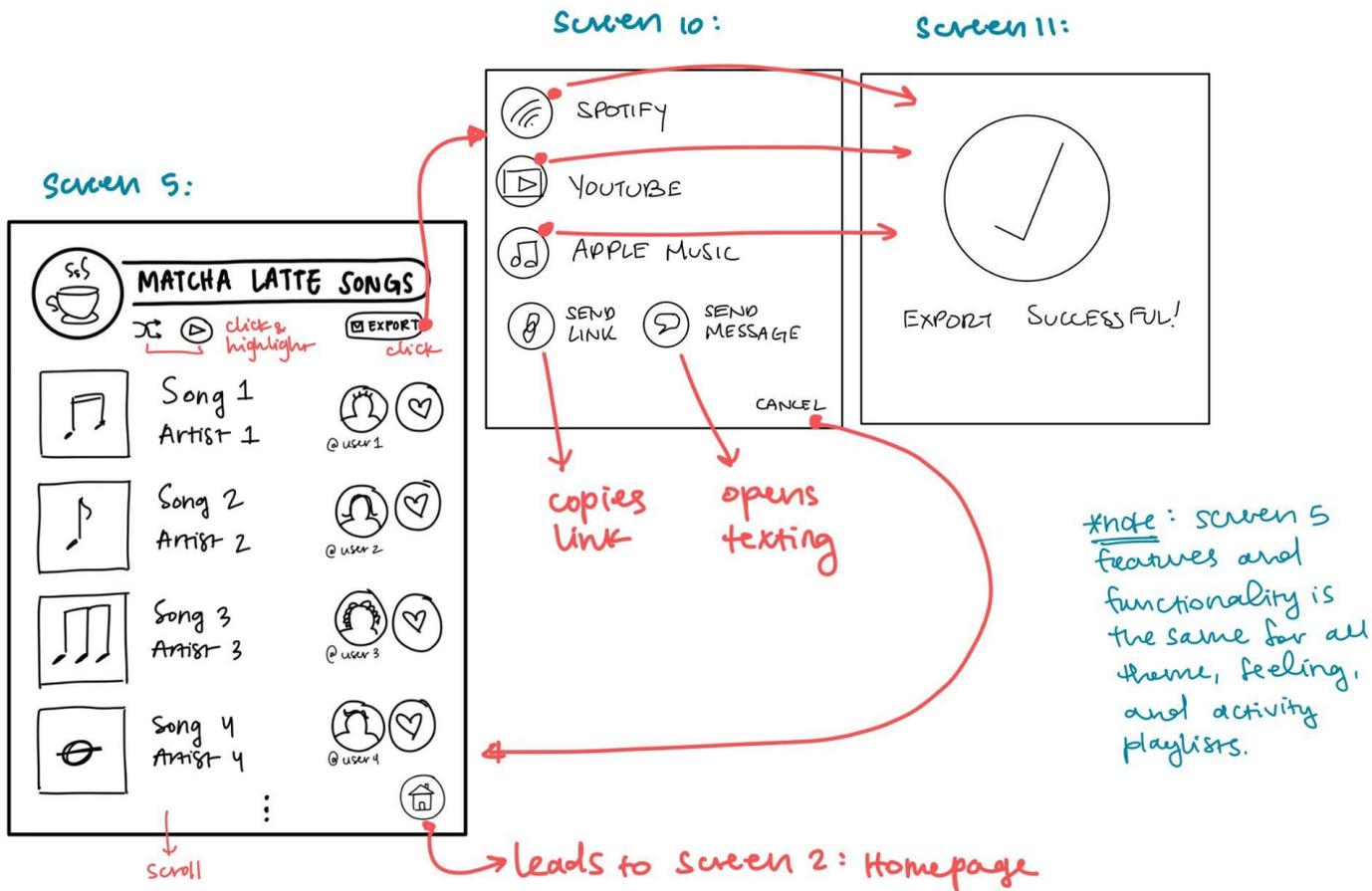
Song 4 Artist 4 @user4

Home icon

Screen 3: Top 3 Playlists per Category



Screen 5: Top 3 Playlist



Screen 6: Your Reprise

YOUR REPRISE ✨

FEELING: 😊 TIME: 1 MONTH

⌂ ▶

EXPORT

- Song 1
Artist 1
- Song 2
Artist 2
- Song 3
Artist 3
- ⋮

🏠

Screen 10:

- 📶 SPOTIFY
- ▶ YOUTUBE
- 🎵 APPLE MUSIC
- 🔗 SEND LINK
- 💬 SEND MESSAGE
- CANCEL

Screen 11:

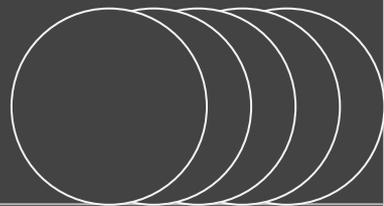
⊙

EXPORT SUCCESSFUL!

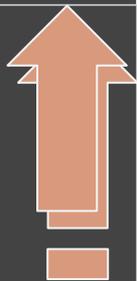
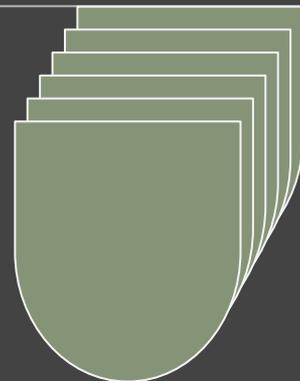
copies link

opens texting

goes back to screen 2



Crazy 8's Sketches



Look Around!



Popular Songs in your Area!



Friend 1



Friend 2



Friend 3



Friend 4



Share Your Song!

Memorise
Share your last song!



Listening....



Pair a device

Name

You up?



upload photo/video

caption

Add a voice memo



Recording...

Most-listened songs
this month!



Songs you received
this week!

From Friend 1

From Friend 2

From Friend 3

Mystery Song



Pop



R&B



Rock



Pop



Post on time
to post more!

Friend Name

Point:

Feeling:

Connect to Spotify

Connect to Apple Music

YOU'VE GOT A SONG!

MEMBER PLEASE SHARE A SONG?

MEMBER USE

NOT DREAM HELLO FUTURE

SONG DETECTED

SEND?

WOULD YOU LIKE TO SHARE THIS SONG?

TAP ONCE YES NO

TAP 2X ~~YES~~ YES

YOU TWO SWAPPED

~~SHARED~~ X SHARED

SONG

YOU SWAPPED SONG

PHOTO

CHAT MORE?

SOPHIES

NEED FOR SPEED

INTERVIEW

SCOTT

YOUNG

LAST JEM

LAST REWIND

NOTION

SEA

CUSTOM ←

SWAP PHYSICALLY TAP

TAP

TOP 100 PANTS

THEIR SWAPPED SETLIST

Vote?

STREET

FILTER

MUSIC

SONG

PHOTO

PODCASTS

PODCAST

TRY A RANDOM LOCATION SWAP?

YES NO

SONG MEM

SONG

SONG

FAPION

COMMENT?

LEADER BOARD

TOP SWAPPHOBIA

IN YOUR AREA

10 SWAPS

8 SWAPS

0

SENT A SONG

SONG

SAVE TO YOUR PLAYLIST? FIND SONGS

SONG

SONG

1 ORIGINAL

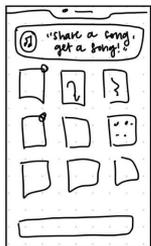
CREATOR SPACE

REMIX SONGS

EDIT

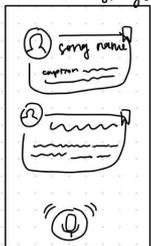
SEND

1 visual notification:



"share a song, get a song"

2 Speech Control: search songs by sound



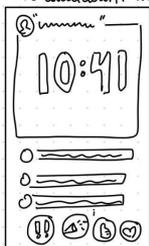
bookmark song w/ voice

3 wearables: vibrating headphones



headphone vibrations

4 chat-based systems: live countdown to music drops

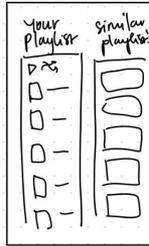


live chat countdown

5 Smart Home: 8D audio



6 Song recommendations



Pre-Save artist drops

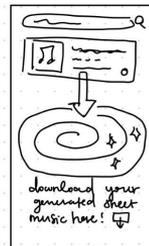
7 artist lyric analysis



8 post-prompts



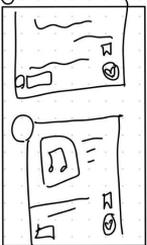
9 convert song to sheet music



10 user radio host sessions



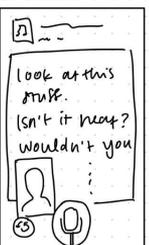
11 Auto Scroll:



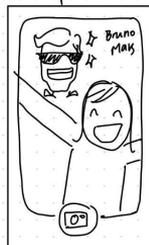
12 live-streaming MVs/drops



13 Karaoke



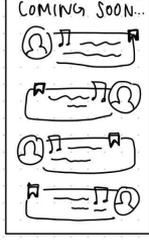
14 AR: picture filters

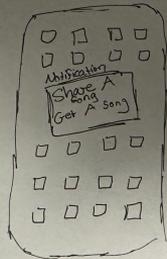
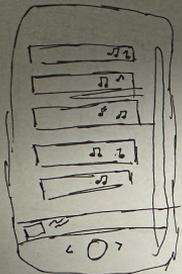


15 VR: dancing world

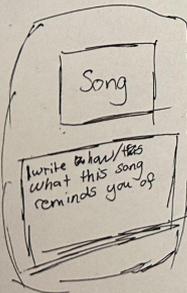
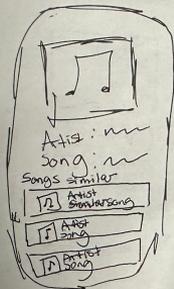
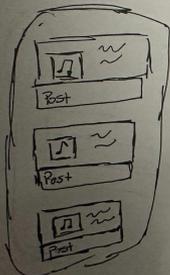
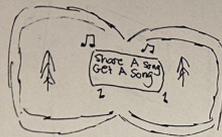


16 COMING SOON...

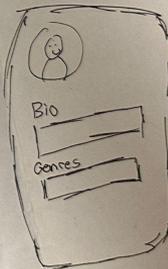
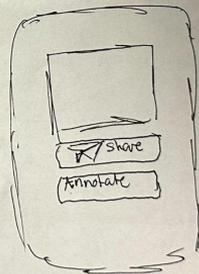


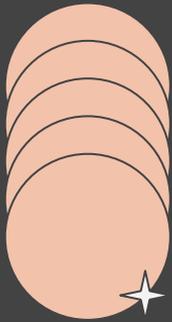


- Share button
- Pops up



#Discover feature
Similar to Spotify





STABLE TASK

POST A SONG
GET A SONG

SONG
ARTIST

THEME: QUESTION?
◀ [C] [A] [B] [D] ▶

FEELING?
😞 😐 😊 😄 😁

DOING?
 RUNNING! SWOY BEATING CHILL

CANCEL

😊 NAME
@HANDLE LISTENING TO:
🎵 🎵 🎵
ARTIST: SONG

POSTS PREMISE PLUMBY!

THEME OF THE DAY:
WHAT STARBUCKS DRINK WOULD
YOUR SONG BE?

SEE WHAT OTHERS SAY? →

🗣️ SAME

Empty screen for user interaction.

MODERATE TASK

TOP 5 ANSWERS
BY: THEME ID

① MATCHA LATTE
②

↓
SAME

🗣️ MATCHA LATTE SONG

① SONG
ARTIST? USER

↓

FEELING? ▾
DOING? ▾
↓
MOVE OVER
TO DIFFERENT
FILTER

Initial Storyboard

