Self-Control Food App.

DESIGN IDEA

- People use apps to solve a problem - let's develop an app for people to control the way they eat food.
- Users take picture of food and answer questions about the food they are trying to resist. Users swipe on a subset of foods every time they open the app.
- App contains four parts - take a picture, food gallery containing pictures, monthly review of foods, Tinder like swiping feature to practice resisting foods.

DESIGN GOALS

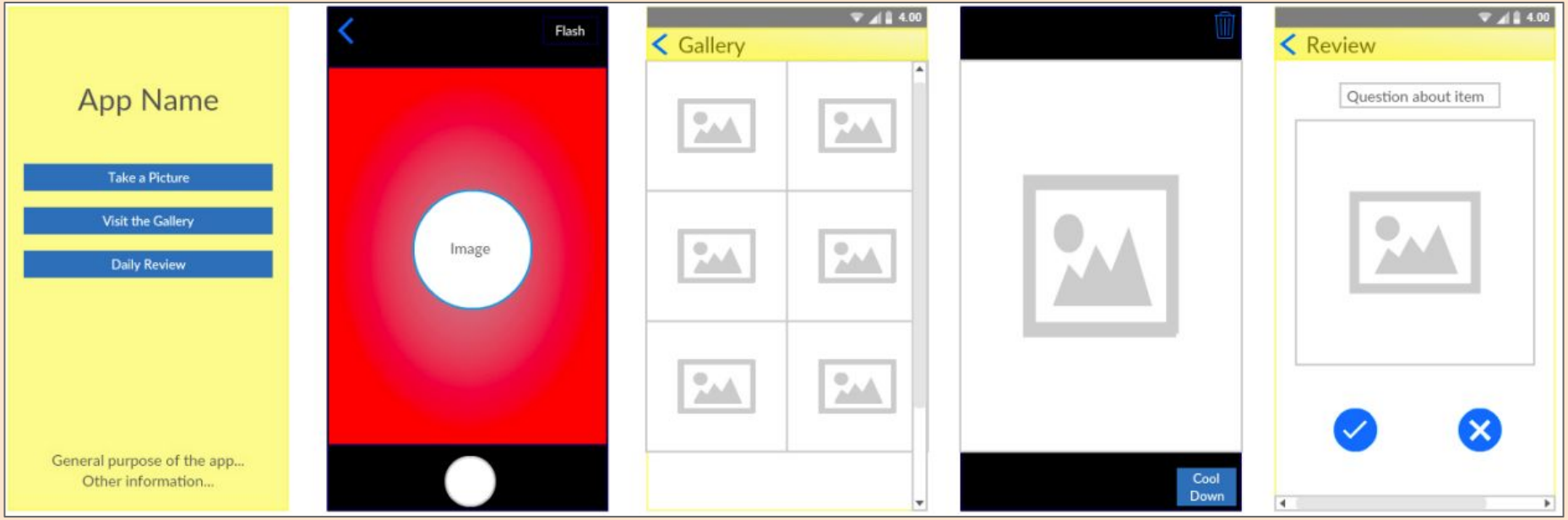
- Phase 1 - Building a food library.
- Phase 2 - Weekly reviews of foods (first iteration contained daily reviews, which have since been removed).

TECH STACK

- Android app dev - Visual Studio (C#)
- Pictures database - SQLite
- Questions/ Responses database - Excel
- Mockups - Invision, Sketch

LAYOUT AND NAVIGATION WIREFRAMES

Iteration 1



Main page - Containing all activities of the app.

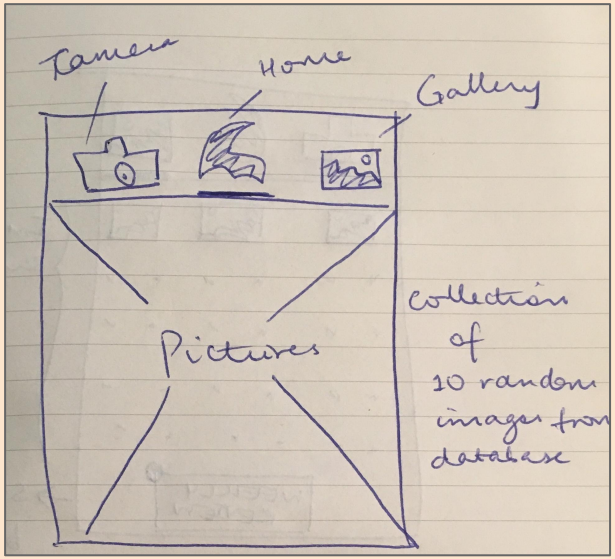
Camera page - Designed with a small circumference to focus on food.

Gallery page - Tile format with two images per row.

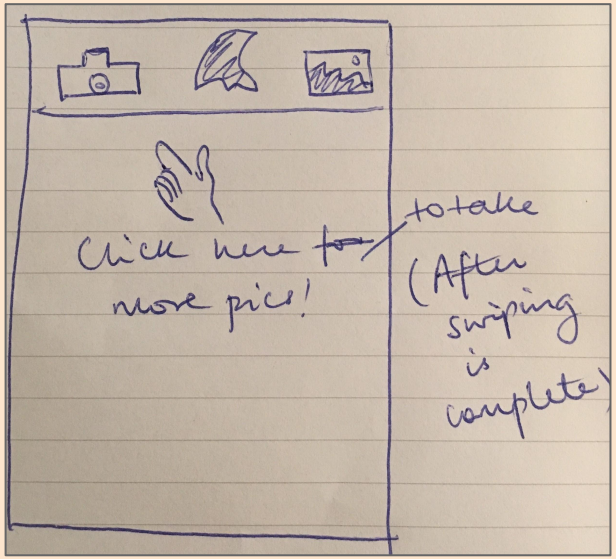
Swiping page - Tinder swiping format with cool down/ heat up buttons.

Swiping page - Tinder swiping format with cool down/ heat up buttons.

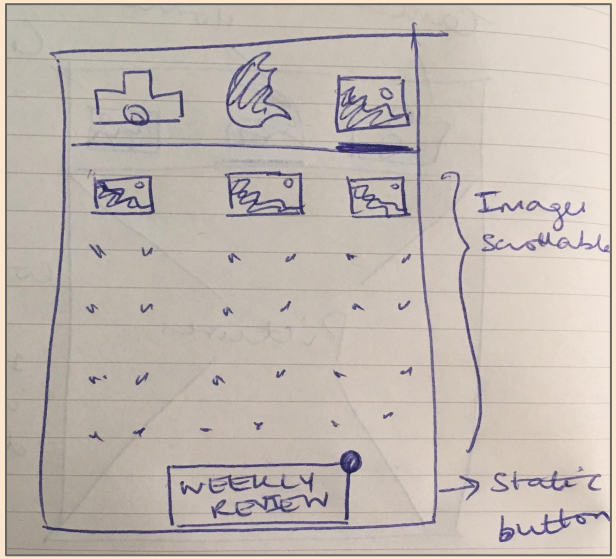
Iteration 2



Main page - App opens directly to swiping pictures (10 random images). Main purpose of the app is accessed immediately. Remove buttons from main page to make app more intuitive.



Main page - Once user swipes all 10 pictures, app displays text notifying the user to take more pictures. Text provides more context to users and guides them to next step.



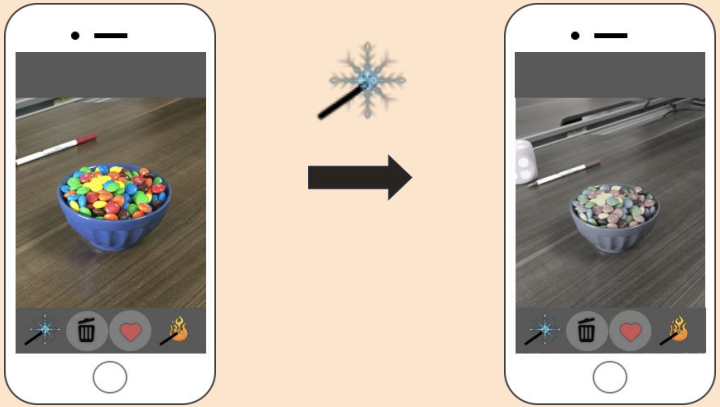
Gallery page - Displays images in tile format, split by 3 images per row. Weekly review button is static on page. Button contains red signal which notifies user to complete weekly review at the end of the week.

PHASE 1 -
BUILD FOOD LIBRARY

1. Practice swiping on foods which a person to practice in a more “controlled” situation on the foods/drinks that they frequently feel a desire and tempted to eat/drink more of.
2. Take pictures of foods they would be eating/drinking during the week (i.e - the foods they are also looking to resist)

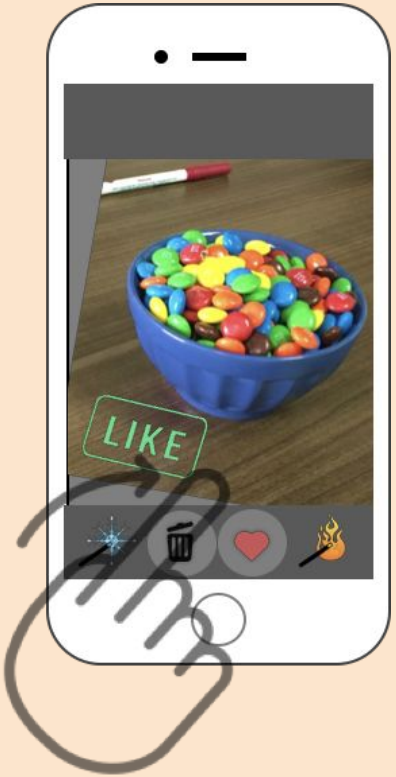
1. Practice swiping - (Cooling/ making hot)

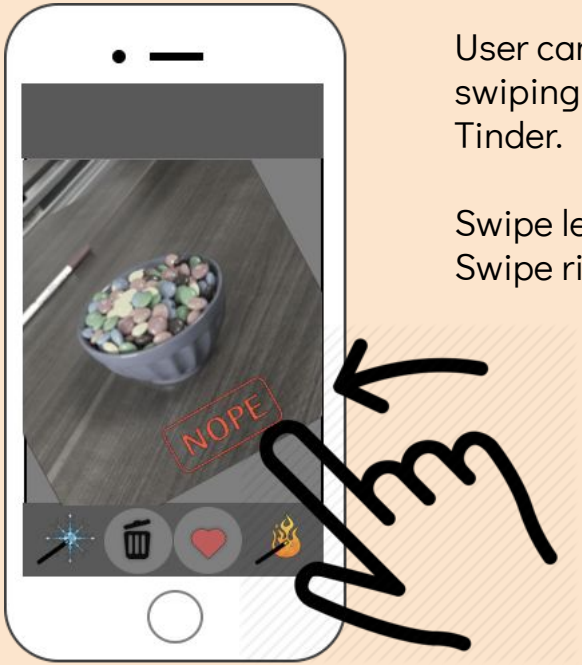
Makes food appear brighter, making food appear *more* enticing



Makes food appear distant, making food appear ***less*** enticing

1. Practice swiping - (Swipe left/right)





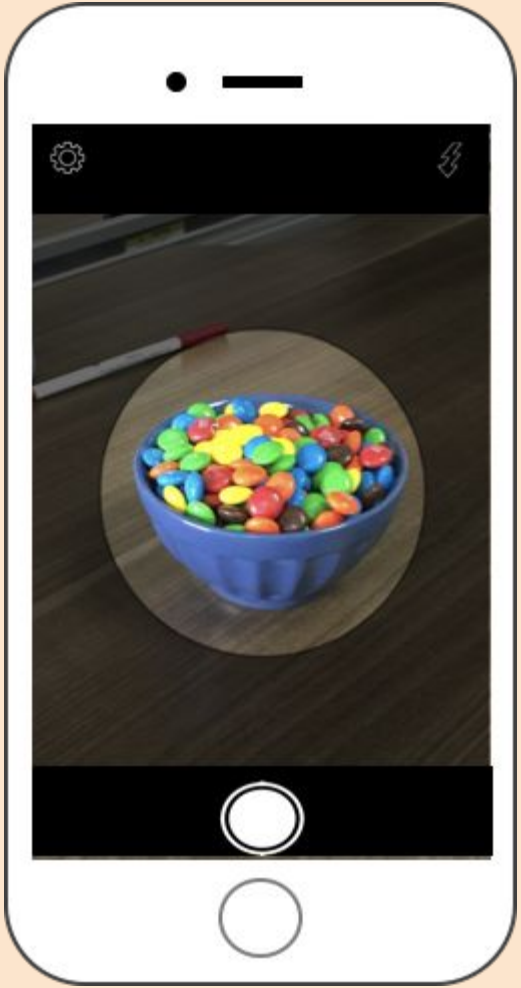
User can also use a swiping gesture similar to Tinder.

Swipe left = Avoid food
Swipe right = Eat more!

2. Take a picture

After taking a picture, a person will answer multiple questions including:

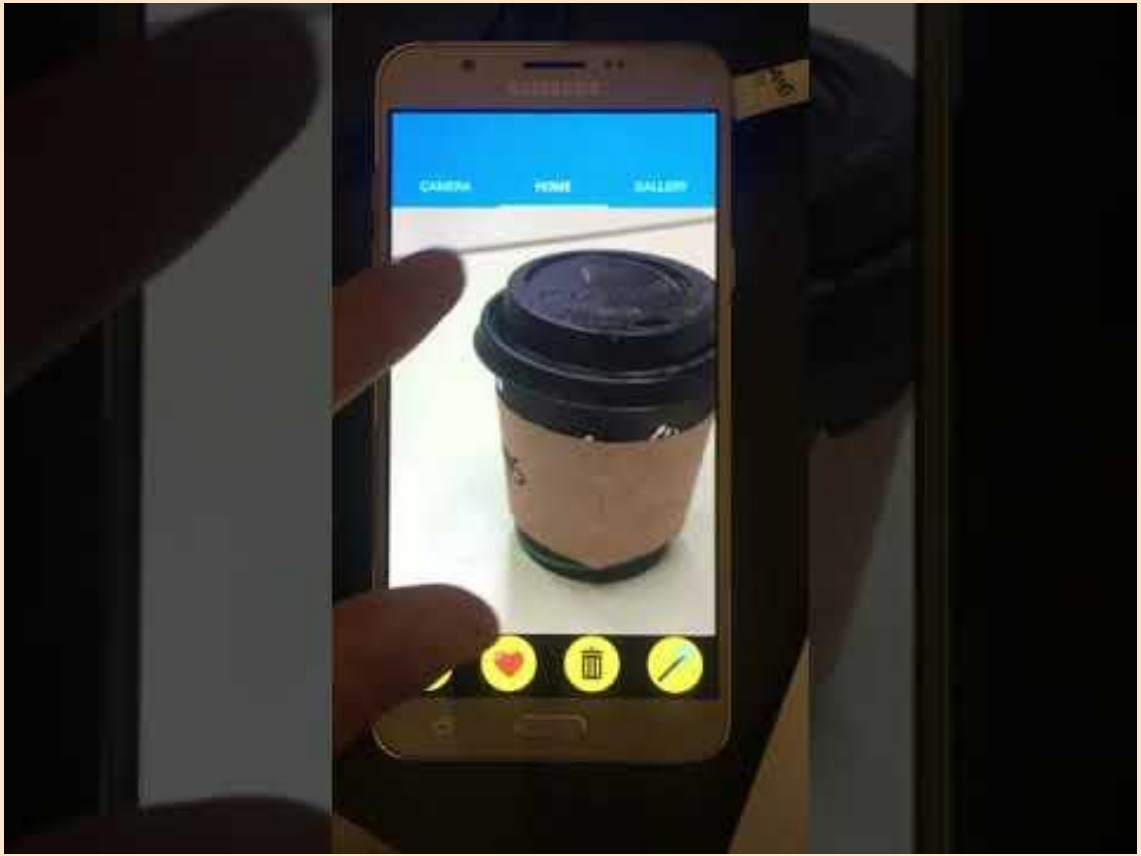
- How much do you like this food/drink?
- How tempting this food/drink is to you?
- How healthy you think this food/drink is?
- How frequently do you eat/drink it?
- How frequently do you want to eat/drink it?



PHASE 2 -
WEEKLY REVIEWS

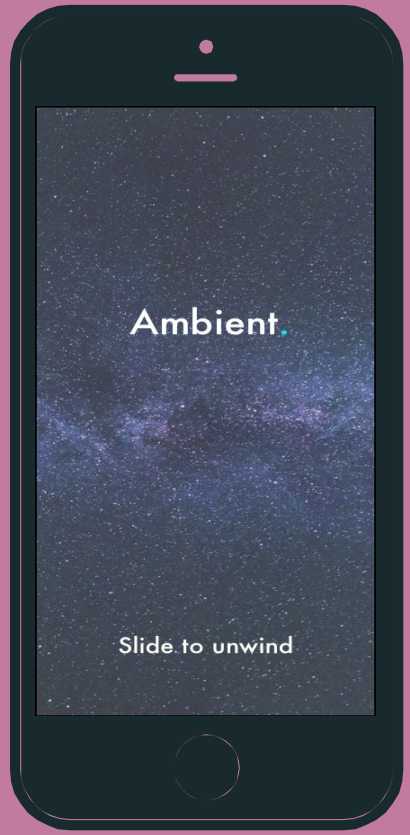
1. The weekly review questions resembles the questions each person answers in phase 1 (Building a library activity) about each specific food/drink.
2. We want to see if there were any changes in the attitude and experience of desire toward a food/drink, the frequency of eating a food (as one measure of self-regulation success).

DEMO
(ANDROID PROTOTYPE)


CAMERA
HOME
GALLERY

Ambient.

Art Therapy App



DESIGN IDEA

- App that provides art therapy aims to ALL people regardless of age, gender, race
- Art will be in the form of music playlists, books, art posters.

DESIGN GOALS

- Introduce users to new forms of art through a simple, easy-to-use interface
- Enable users to track their mood over a period of time
- Match users with each other based on mood/art recommendation
- Foster inspiration and creativity in users.

TECH STACK

- iOS app dev - React
- Mockups - Invision

GATHERING USER REQUIREMENTS

Method #1 - Interviews

Method #2 - Use cases

METHOD #1
INTERVIEWS

Goal

- Understand the users and their familiarity their technology
- Identify features based on their needs
- Establish mental models through questions

Strategy

- Interview five people from diverse backgrounds (age, gender, profession)

Results

- Participants have all interacted with mobile apps
- Most users found the idea of art therapy novel
- All users have interacted with some form of art

METHOD #1
SUMMARY (USER NEEDS)

- Easy and intuitive way to input mood
- Write notes about their current mood
- Short amount of time to input their mood
- Reminders to input mood or get art therapy
- The ability to save certain art to the app
- Visual representation of inputted mood

METHOD #2
USE CASES

Goal

- Gather user requirements based on type of user

Strategy

- Define use cases based on type of user and usage of app to define functional requirements

Results

- Provided insights on must have functional requirements in design
- Three types of navigations considered - Initial course, alternative course A, alternative course B

METHOD #2
SUMMARY (REQUIREMENTS)

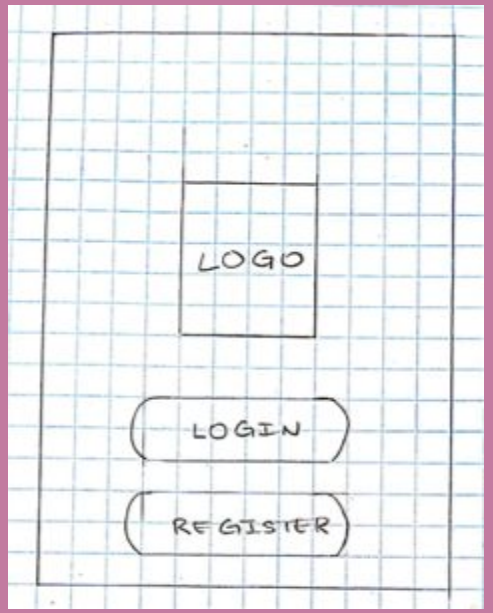
Register and onboard
Users can register and receive a confirmation when successfully registered

Track mood
Users can input their mood and visually track their mood over time

Discover art
Different forms of art will be provided to the user based on their inputted mood

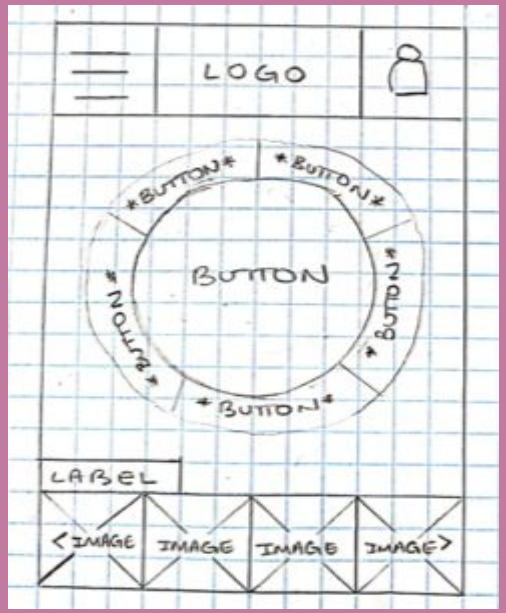
Connect users
Users will be matched with other users based on recommended art

LAYOUT AND NAVIGATION WIREFRAMES



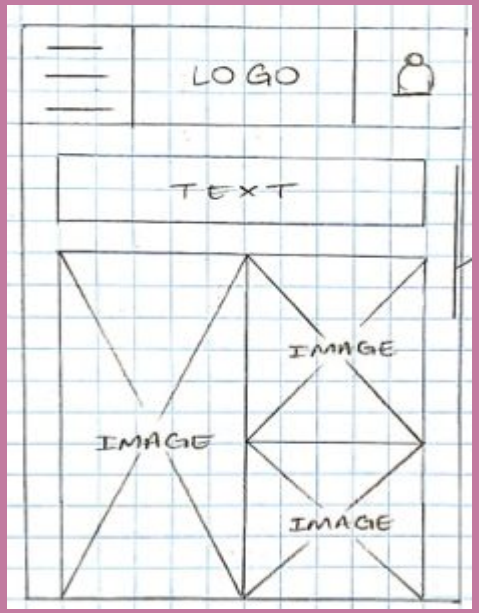
Onboarding Page

- Application of “Rule of Thirds” with branding on top 2/3 of screen and registration buttons on 1/3 of screen
- Considered pill shape for button sizes



Mood Input Page

- Header: Hamburger menu for navigation, app logo and user profile
- Workspace: Buttons to input mood in centre of page to afford clickability.
- Footer: Provide visual view of user moods over time by using emojis

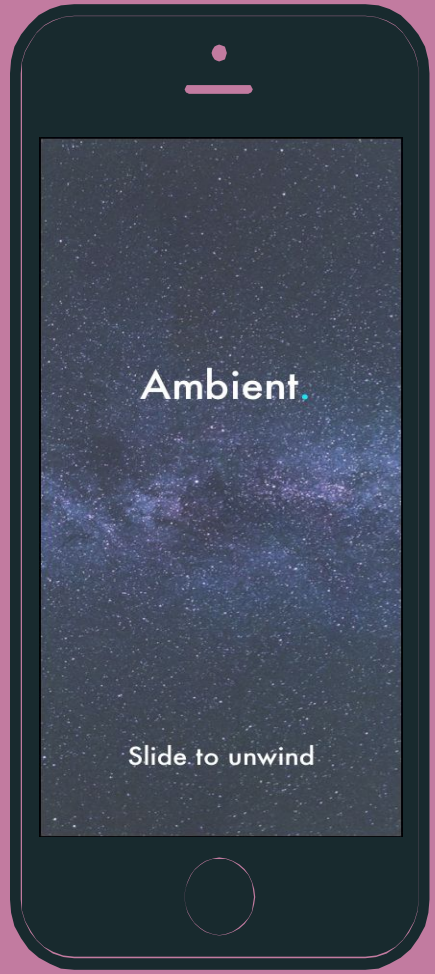


Art Recommendation Page

- Header: Hamburger menu for navigation, app logo and user profile
- Workspace: Text label to reiterate current view of app
- User can view recommended art moodboards in grid layout by scrolling

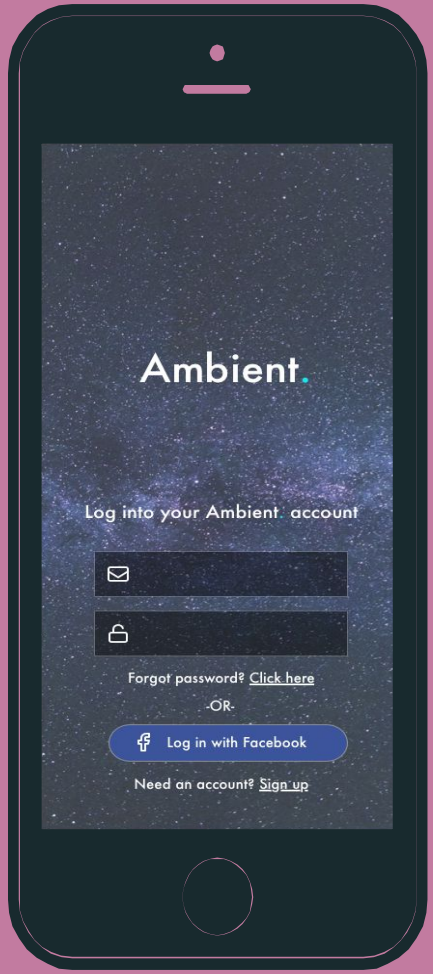
MOCKUPS

- App title
  - “Rule of thirds”
  - Provides main focus for page
- Native slide control for footer text
  - Text margin affords slide control
  - Slide control moves left, providing recall for iOS platforms
- Font: Futura
  - Provides “modern” feel
- Galactic background
  - Provides an immersive experience for the user



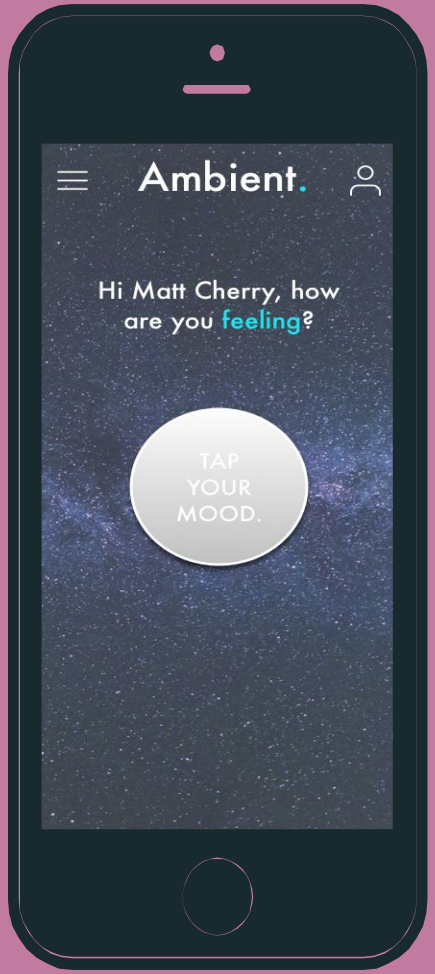
Home

- Consistent application of “Rule of thirds”
- Consistent colors and font
- Use of icons to afford recognition of login fields
  - Remove redundant text
  - Input fields sized based on iOS design guidelines
- User can log into app with Facebook credentials
  - Follow modern app design guidelines



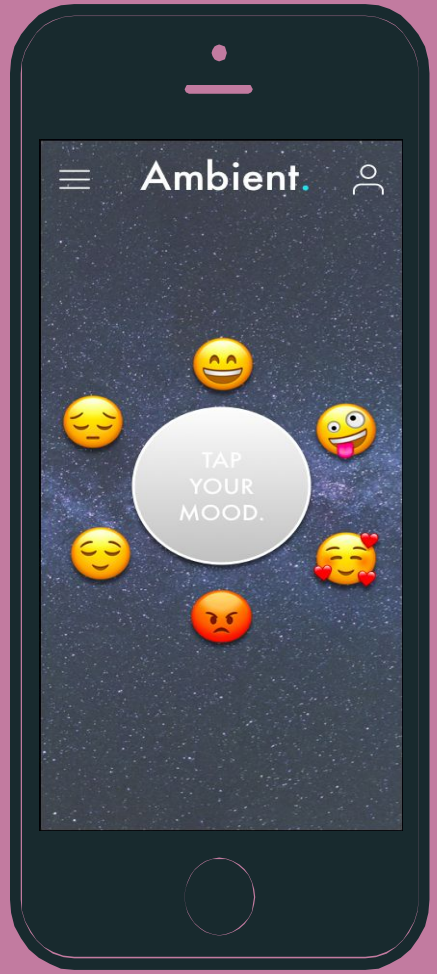
Onboarding

- Header
  - Contains hamburger menu, app title and user icon
  - Minimalist design considered to eliminate information overload
- Body
  - Contains button, big enough to afford clicking for user
  - Shadow effect on the button to make it intuitive for tapping
  - Consideration of text to provide a more inviting and warm user experience



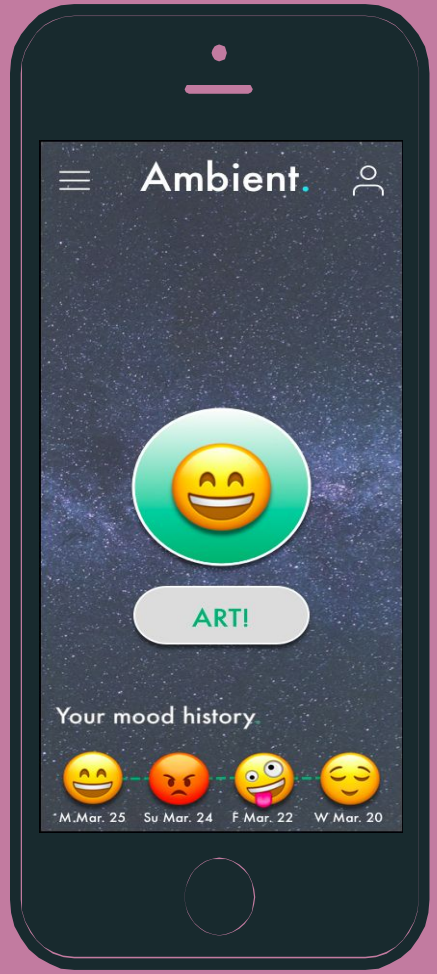
Mood Input

- Header
  - Consistent design
- Body
  - Emojis reflecting moods (preset), fly out from once the user taps the button
  - Emoji size considered to afford clicking
  - User taps on an emoji (based on user's mood)



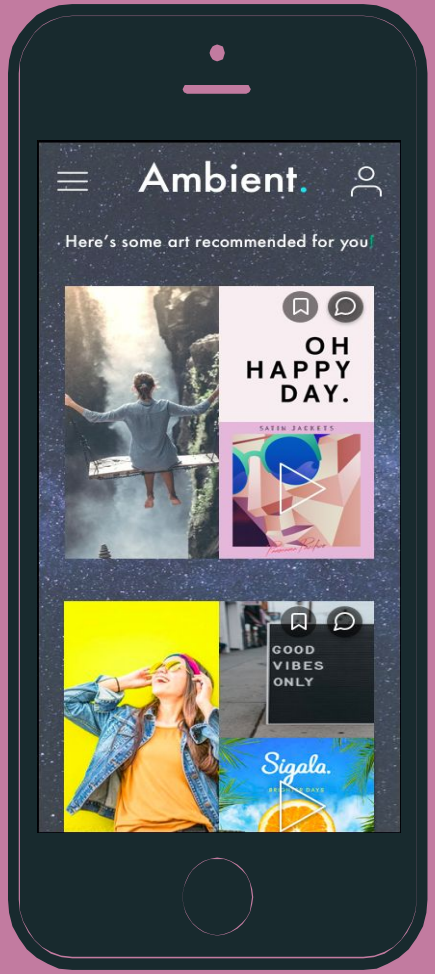
Choose mood

- Header
  - Consistent design
- Body
  - Accent colour of the application changes to reflect mood selected by user
  - ‘Art’ button displayed to provide art recommendations to user
- Footer
  - Mood history displayed for last four days to allow user to track mood variations over time (system feedback)



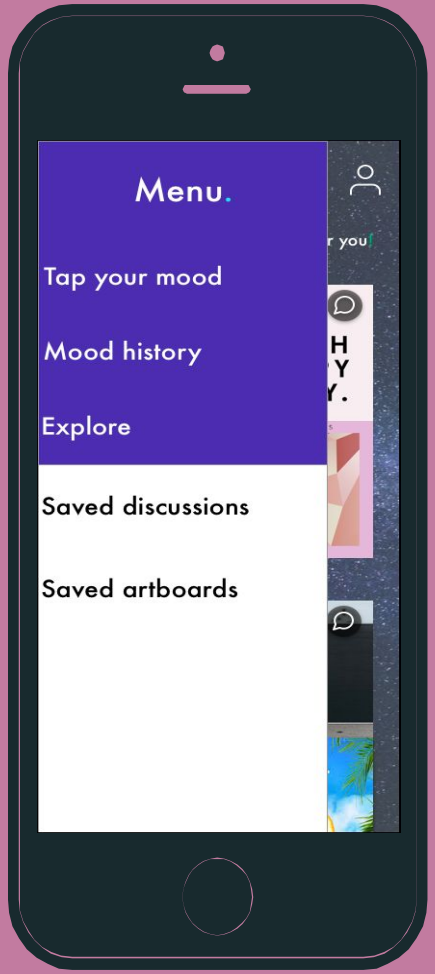
Mood selection

- Header
  - Consistent design
- Body
  - Scrollable view containing artboards
  - Each artboard consists of three different forms of art (i.e - Poster, quote, song)
  - Artboard cutoff on the bottom off the screen, to recall scrolling
  - Use of icons to ‘bookmark’ and ‘join conversation’ on artboards



Art curation

- Collapsible menu saves screen space
- Accessible from all pages
- Intuitive swipe controls to close menu



Hamburger menu

USER TESTING OVERVIEW

- Defined usability methods, goals and scripts for user tests
- Applied cognitive walkthrough and heuristic evaluation tests
- Completed user testing with five users, including young adults (20-23) and mature adults (45-50)
- User testing completed with high-fidelity mockups on Sketch
- Recorded data on user feedback during testing
- Summarized results and iterated app design using feedback

USER TESTING GOALS

Ease of learning

- ≥ 80% of users must easily and accurately identify the emoji reflecting their mood
- ≥ 80% of users must easily describe their historical mood variation

Efficiency of use

- ≥ 80% of users must be able to navigate to certain pages in the app without vocal instruction ≥ 1 minute
- ≥ 80% of users must encounter less than two errors per task

User satisfaction

- Users must score ≥ 6 on a 7-point likert scale for satisfaction
- Users must score ≥ 6 on a 7-point likert scale for confidence

Discoverability

- Users must score ≥ 3 on a five-point likert scale for satisfaction
- Users must score ≥ 3 on a five-point likert scale for confidence

USER TESTING METHODOLOGIES

Method #1 - Cognitive Walkthrough

Method #2 - Heuristic Evaluation

METHOD #1

COGNITIVE WALKTHROUGHS

- User tries stepping through interface pretending the interface is fully built, with help from facilitator
- Aim to find major problems within design based on areas of confusion or circuitous paths

METHOD #2

HEURISTIC EVALUATION

Inspection done by several experts in usability, each evaluating against a set of usability principles to uncover problems in design

USER TESTING
TASK SCENARIOS

Task #1 - Log in using Facebook credentials
Task #2 - Choose a mood (happy) and describe historical mood variation given system feedback
Task #3 - Choose a mood (sad) and bookmark a recommended artboard of your choice
Task #4 - Join a conversation for a recommended artboard of your choice
Task #5 - Log out of the application

USER TESTING

PERFORMANCE MEASURES

Speed

- Users must take ≤ 1 minute to complete a task

Accuracy

- Users must make ≤ 3 errors per task on average

Experience

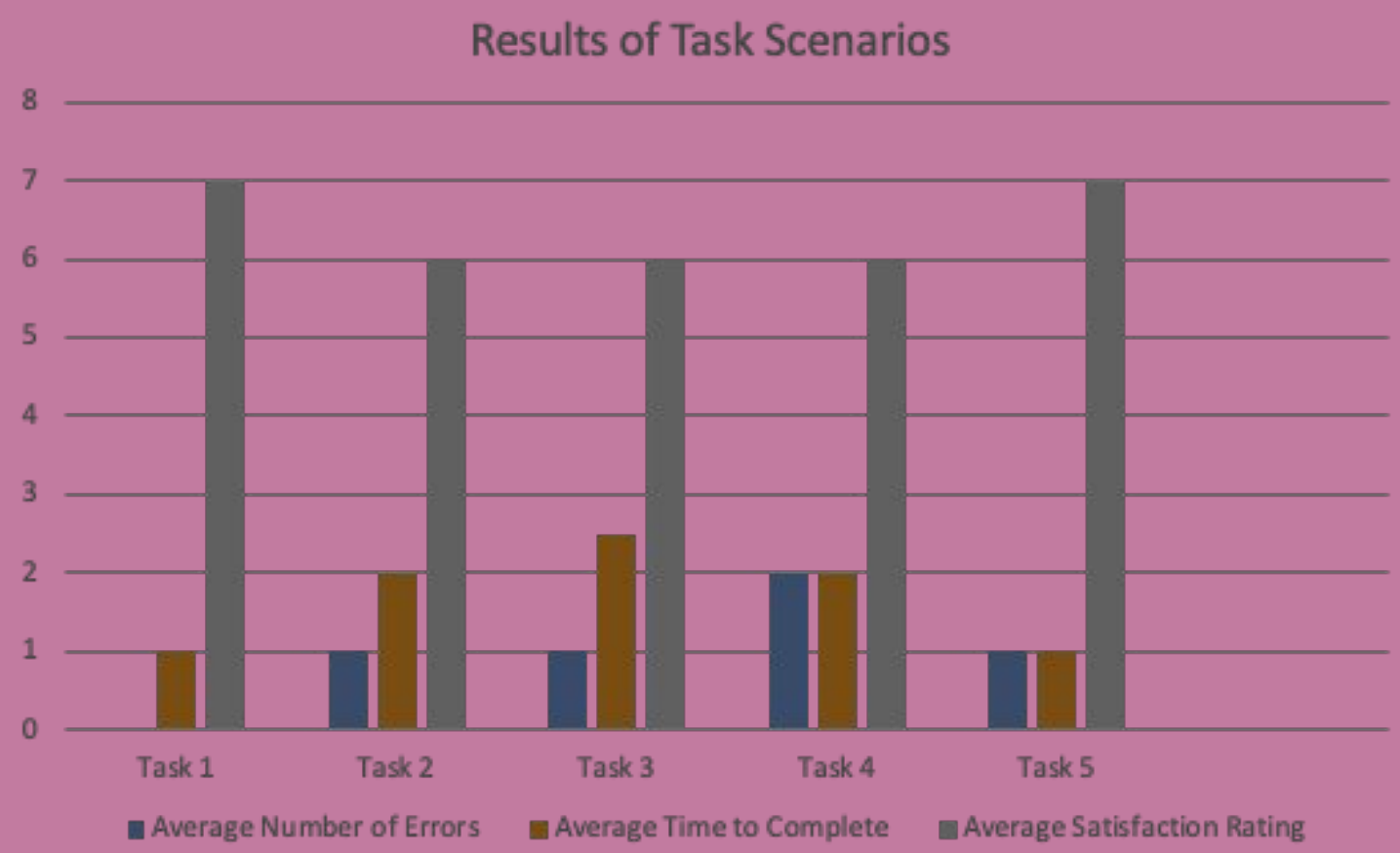
- Users must have a rating of ≥ 6 regarding their experience with the app (7 point scale)

Feedback

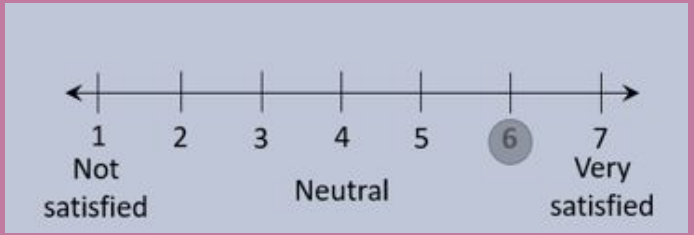
- Users feedback must contain positive sentiment regarding the system feedback (i.e - recommended artboards, discussions etc)

USER TESTING RESULTS

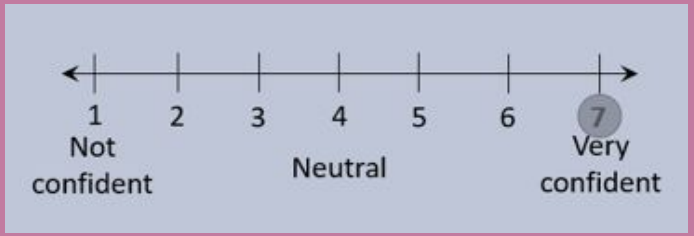
- Low error rate (1 error/per task/per user on average)
- Users take approximately 1.7 minutes to complete a task (on average)
- High satisfaction rate (satisfaction rating of 6 on average)
- High confidence rate(confidence rating of 7 on average)


Results of Task Scenarios
8
7
6
5
4
3
2
1
0
Task 1
Task 2
Task 3
Task 4
Task 5
Average Number of Errors
Average Time to Complete
Average Satisfaction Rating

How satisfied are you to accurately input your mood and receive suggested art?
(Average rating - 6)



How confident are you to accurately input your mood and receive suggested art?
(Average rating - 7)



“It would be really nice if the app can show art events taking place around the area!”

“The app is very easy and fun to use”

“I wish there were more icons to represent the moods”

“I find the icons that represent the mood to be fun. It’s a good way to capture how I’m feeling”