

Museum Alive

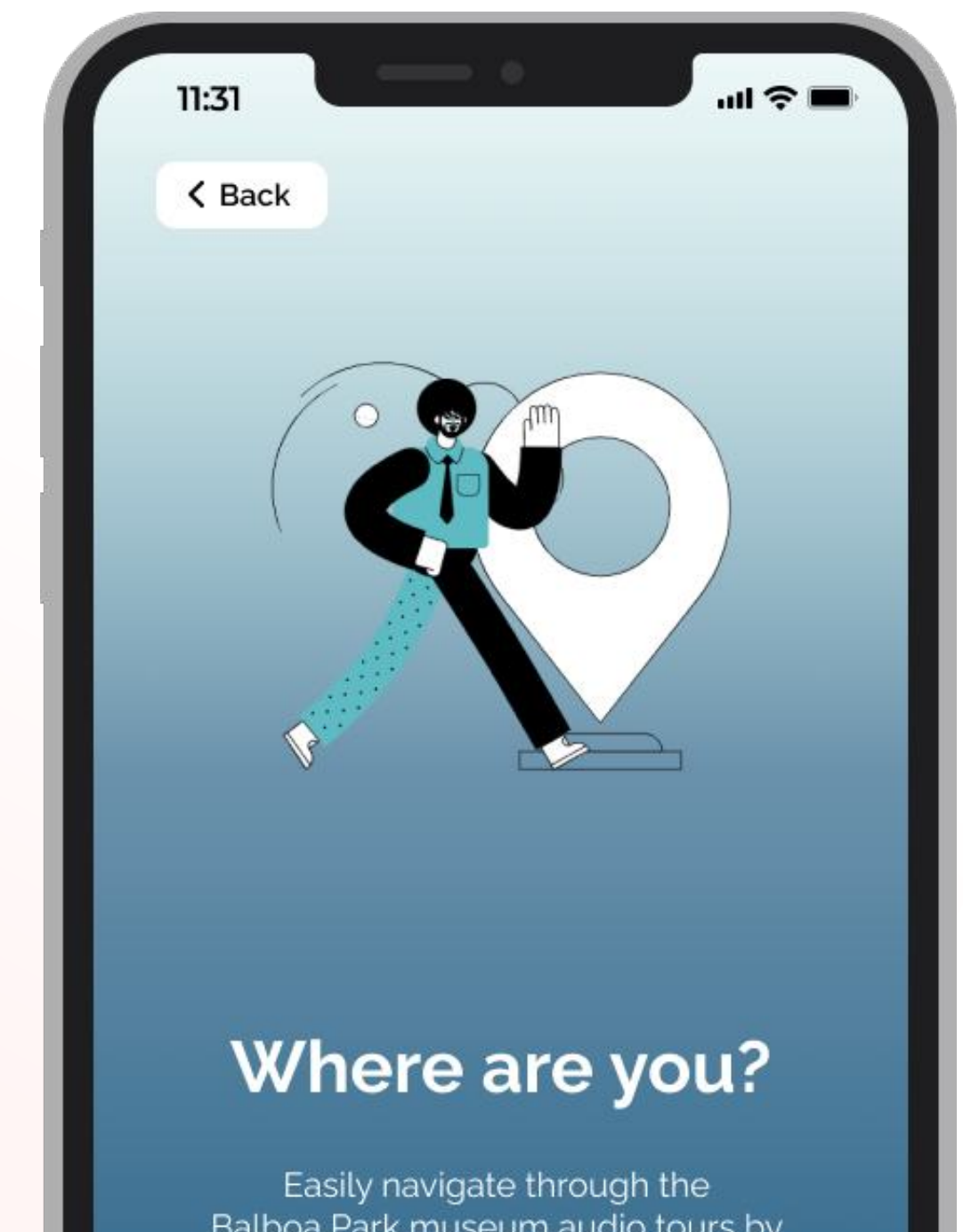
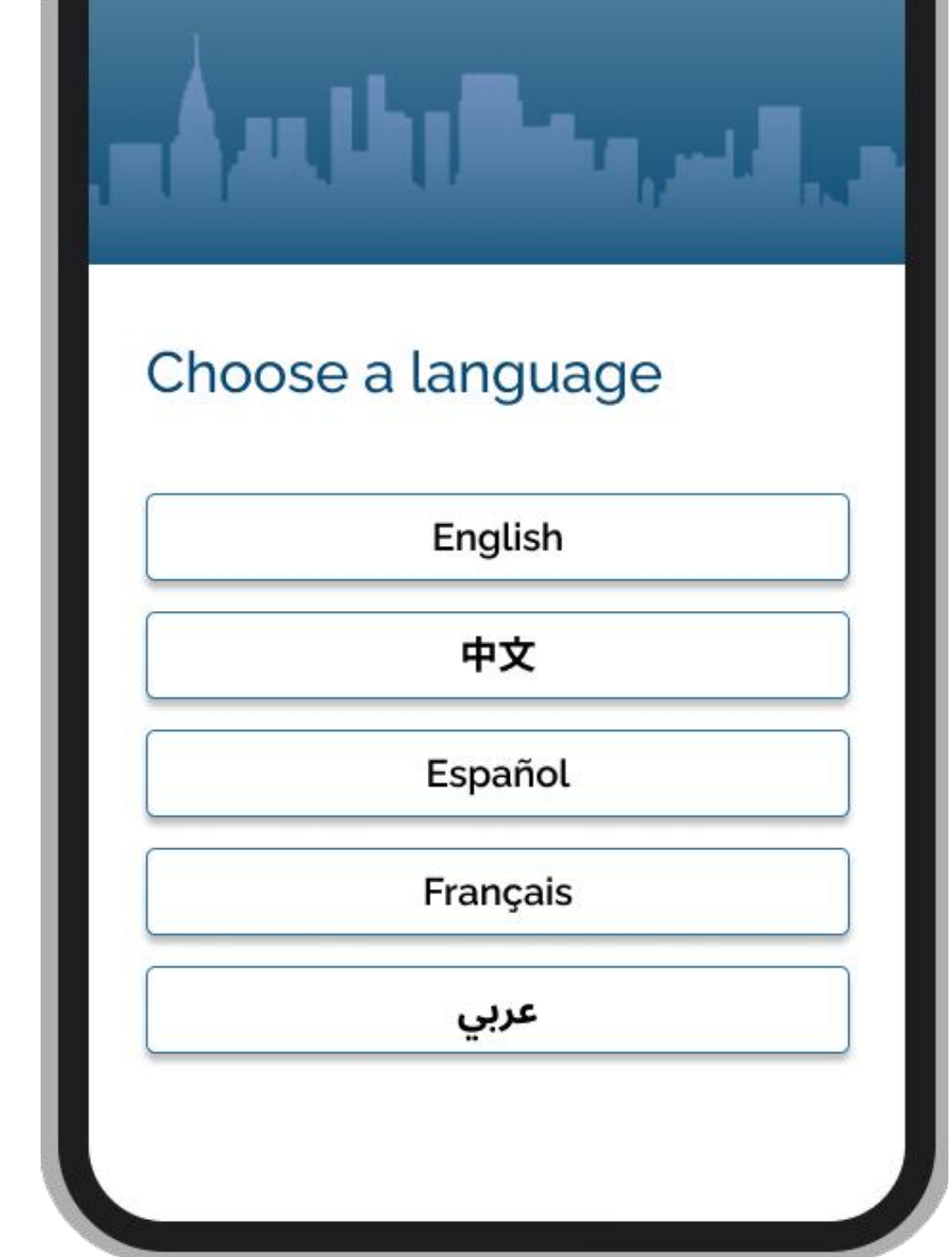
App Design Case Study

Tanya Aubin



Project Duration

September 2022-January 2023



Project Overview

The Museum Alive app exists to create a pleasant user experience for museum visitors in Balboa Park, San Diego. With the 10+ museums that are in Balboa Park, this app is intended to streamline the audio tour experience for each museum. This case study includes user research, wireframes (paper and digital), low and high fidelity prototypes, and usability testings.



My Role

Solo UX/UI Designer –
Student Project



My Responsibilities

- Conducting interviews
- Paper and digital wireframing
- Low and high fidelity prototyping
- Conducting usability testing
- Accounting for accessibility
- Iterating on designs

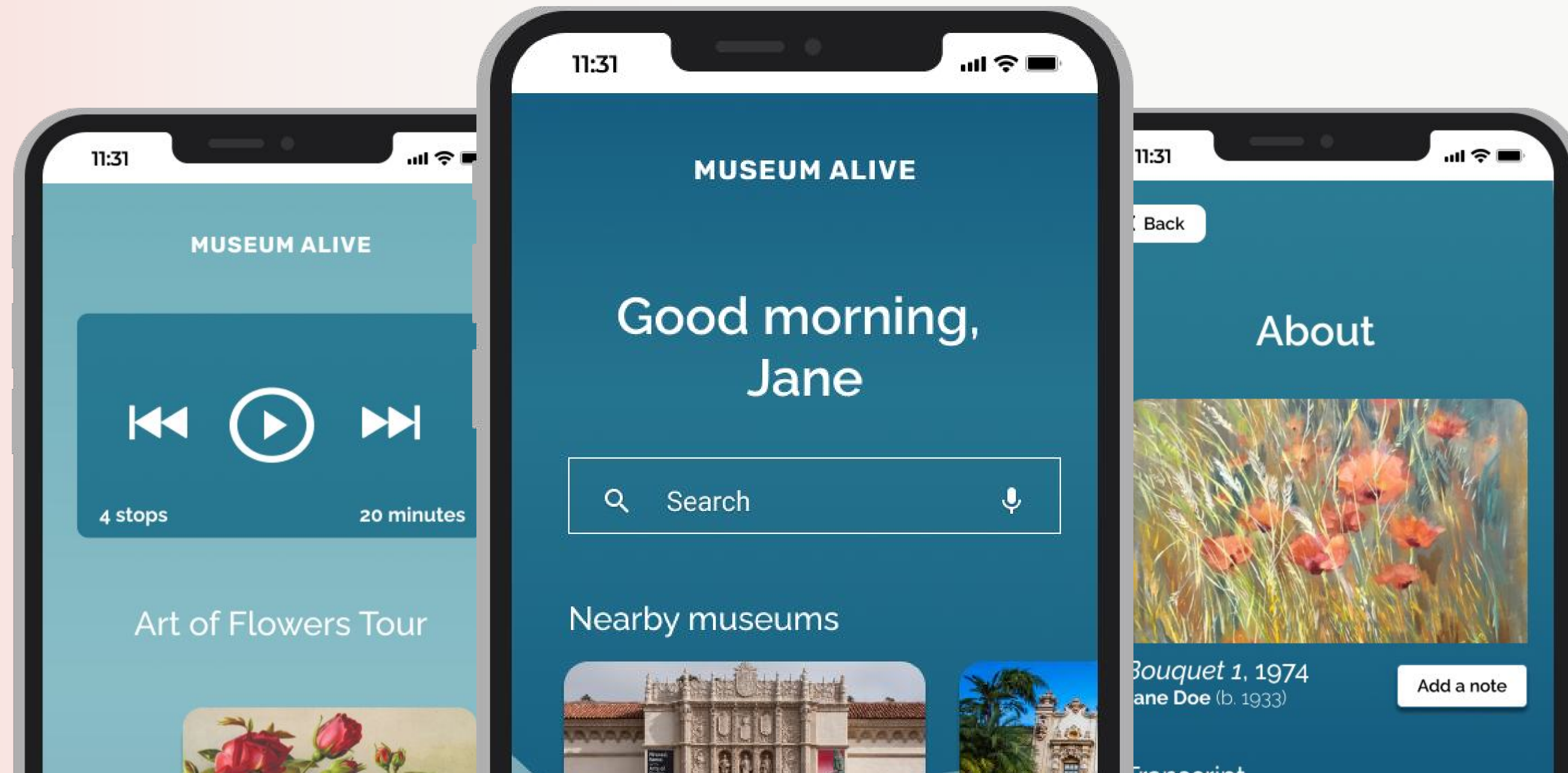


The Problem

Most museum audio tour apps take too long to download, are difficult to navigate, and are not streamlined with other museums.

The Goal

To create a museum audio tour app that is easy to download and navigate while providing a streamlined experience at all Balboa Park museums as well as providing personalized features.



User Research

Summary

I conducted interviews and created empathy maps to understand the users I'm designing for and their needs. A primary user group identified through research included frequent museum visitors who are interested in arts and culture.

This user group confirmed initial assumptions about Museum Alive users, but research also revealed that these museum visitors had more frustrations and needs related to museum audio tours. Some frustrations expressed were the long app download time and navigation difficulty. Some needs and wants conveyed included a more streamlined process (one app for multiple museums), and a way to personalize the process (e.g., being able to take pictures, create notes about an item, learn more, and mark items as "favorites.")

Pain Points

1

Time

It usually takes a long time to download audio tour apps. In turn, this makes museum visitors impatient.

2

Functionality

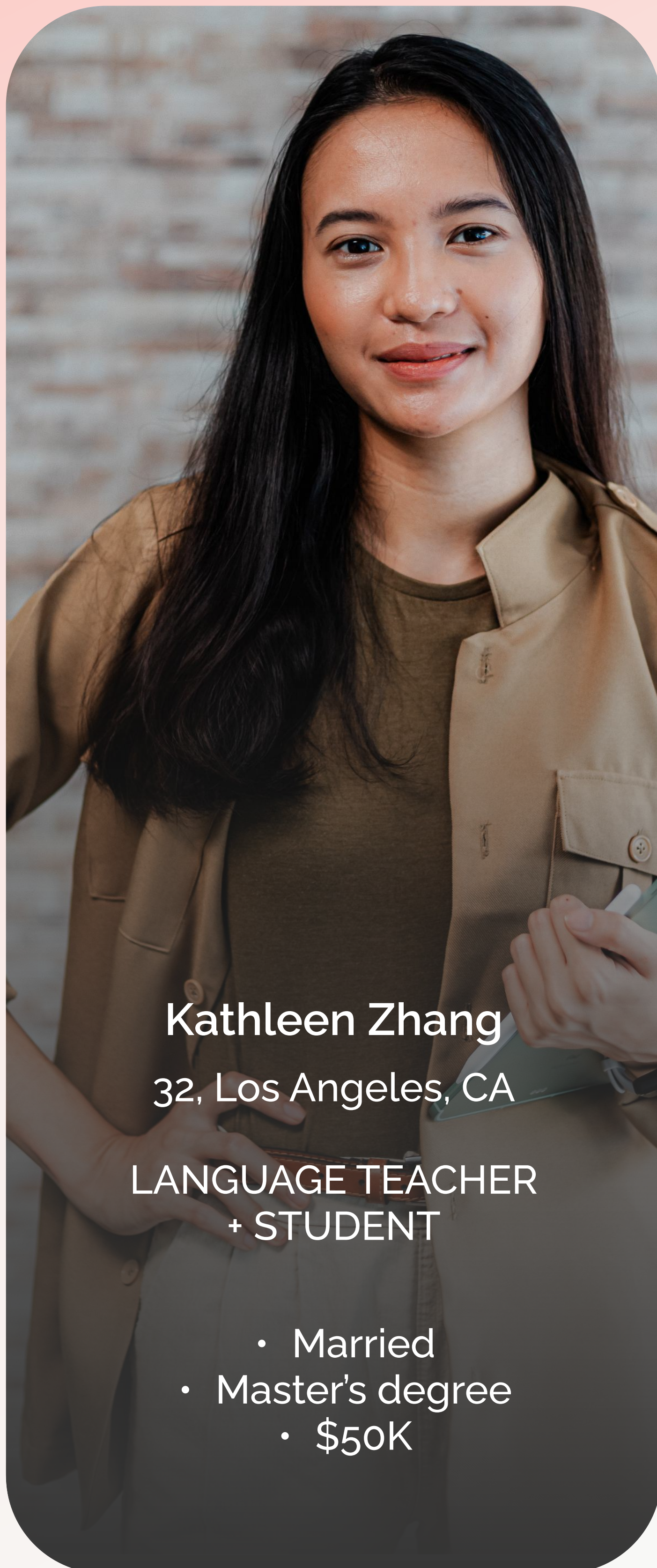
Most audio tour apps are clunky and difficult to navigate. This causes museum visitors to become frustrated.

3

Accessibility

Typical audio tour apps do not provide links to more information and are not compatible with other museum audio tours.

User Personas



Bio

Kathleen has always had a love for history, culture and art. In fact, she even has a Master's degree in history. As a Chinese language teacher, she makes sure to incorporate the history, etymology, art and culture related to the Chinese language.

When Kathleen is not teaching and/or a translating Chinese, she is usually studying and learning new things (like data analytics and UX design). In her free time, she visits museums, gardens, beaches and loves to read books. She also loves to be engaged in art experiences, such as learning how to create a tea ceremony.





Goals

- Would like obtain financial independence
- Hopes to see more relevant and updated art and museum exhibitions
- Likes to teach others about history, culture and art

Personality

- Leans introverted
- Friendly
- Curious
- Passionate
- Patient

Motivations

Finances	
Health	
Independence	
Well-being	

Frustrations

- Apps with a lot of text, video, etc. take an extremely long time to download
- Limited time while visiting museums and/or sightseeing in a different city
- Irritated when museums use different systems (especially if the museums are in close proximity)

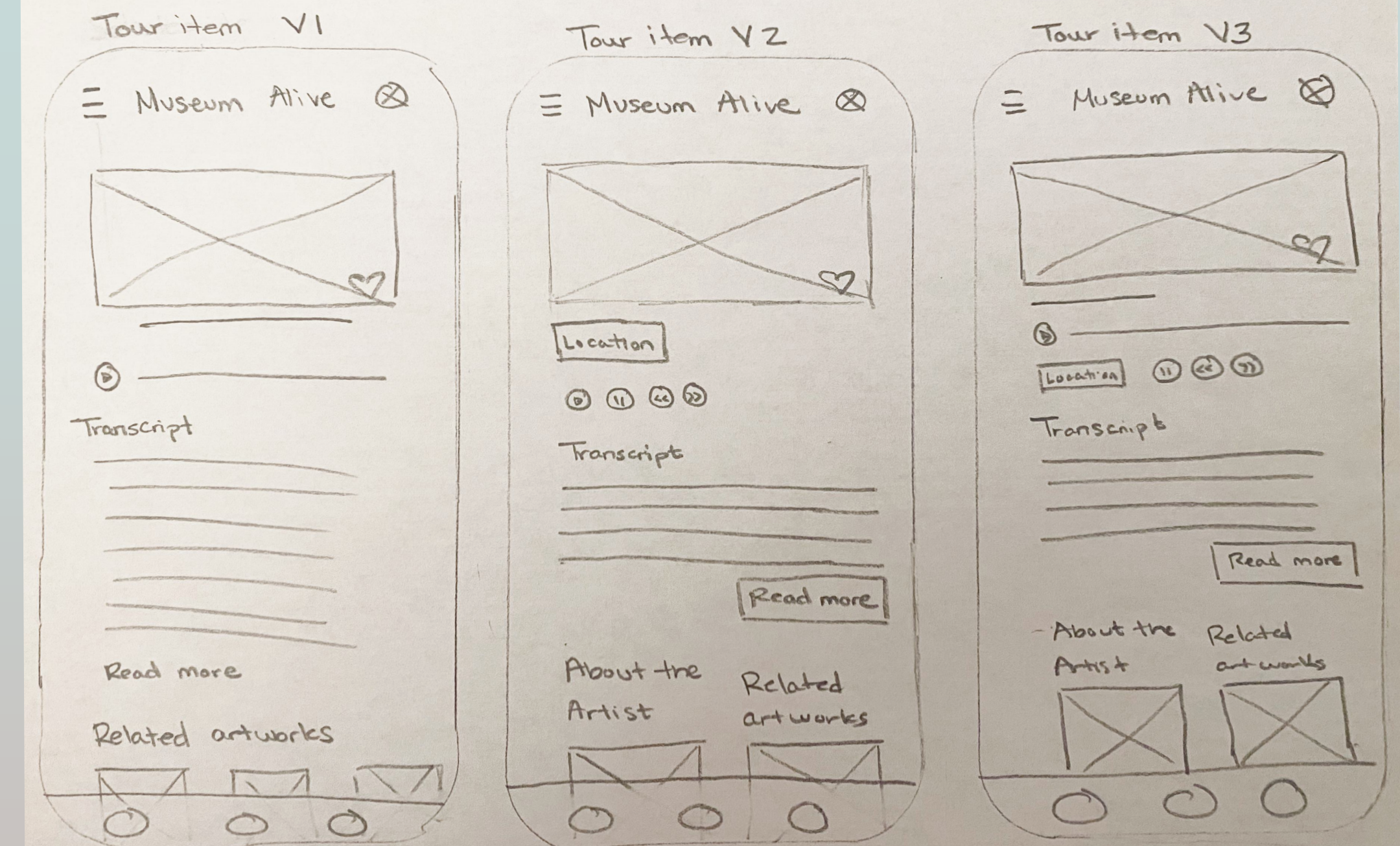
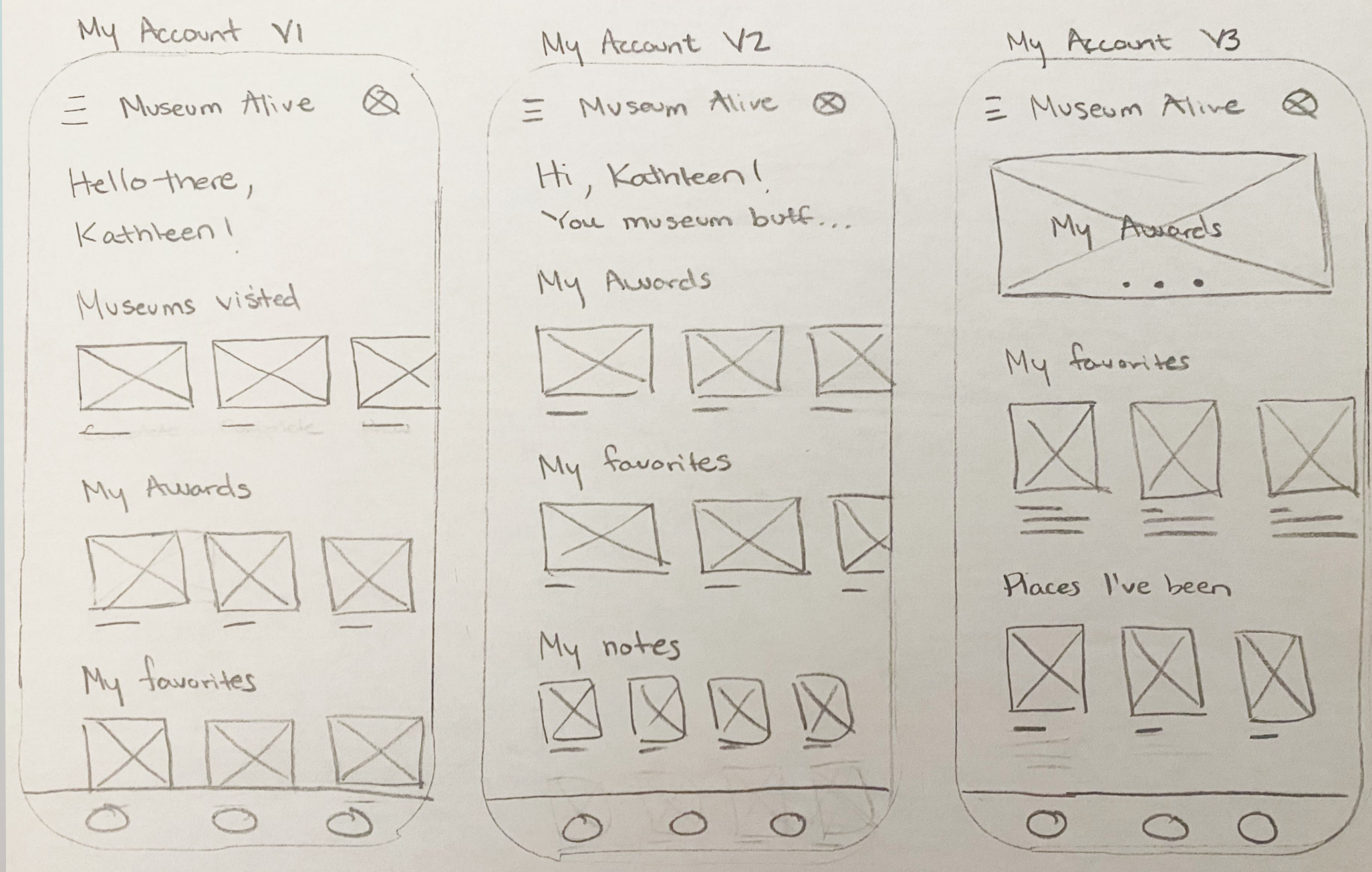
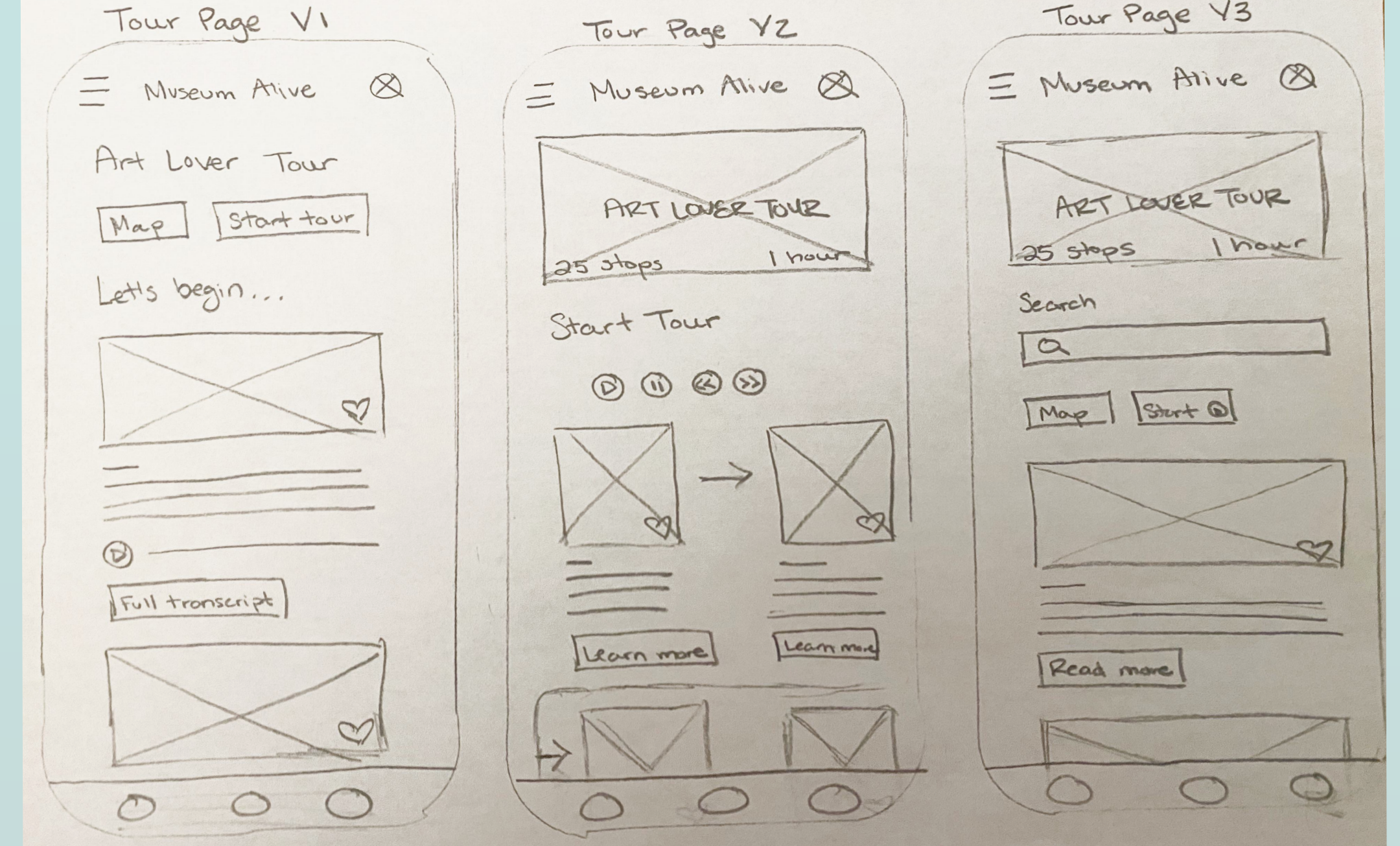
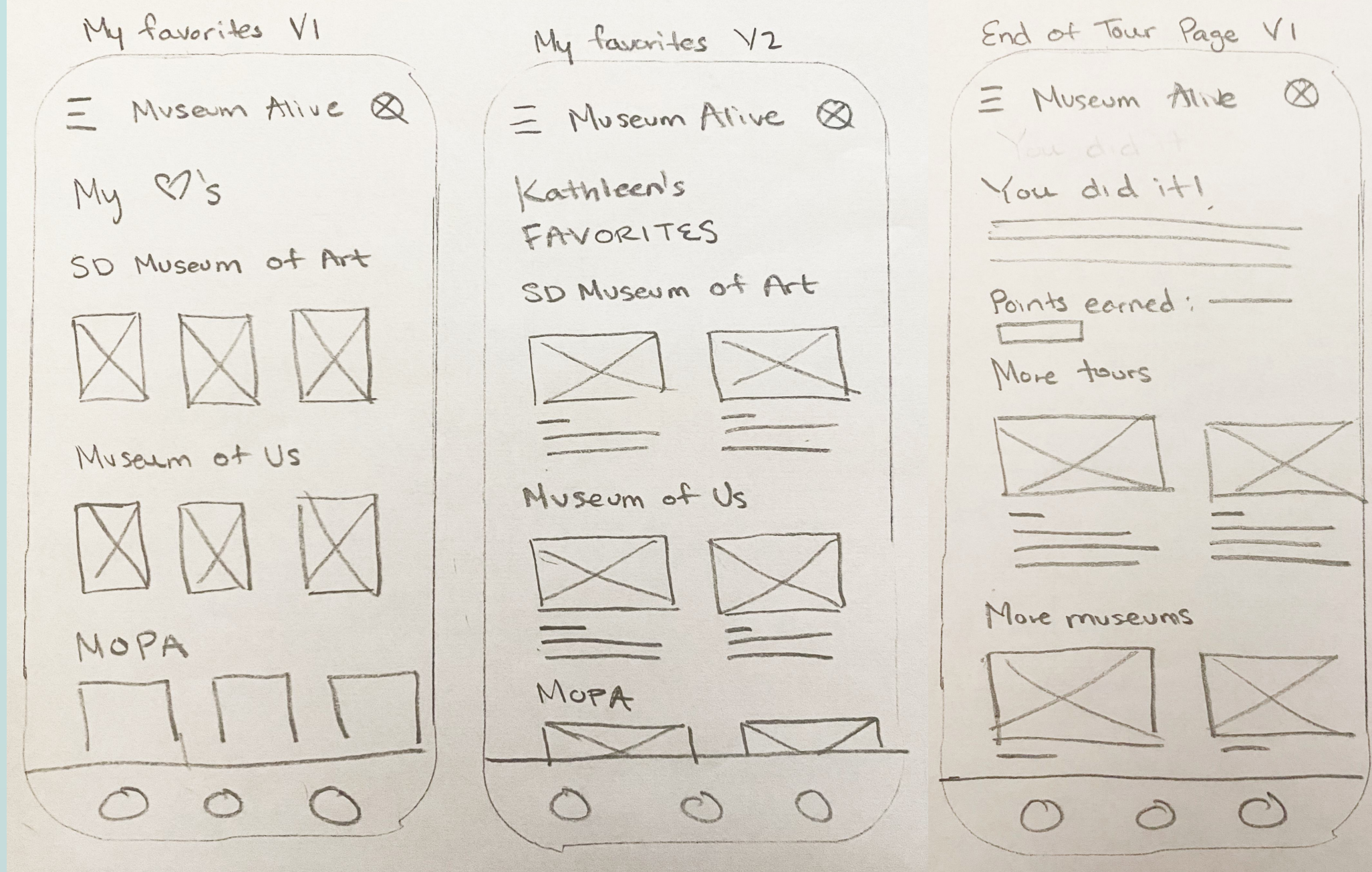
Problem Statement

Kathleen is frustrated with museum audio tour apps that take too long to download and are not easy to navigate. She's also annoyed at the thought of needing to download another app for each museum she visits.

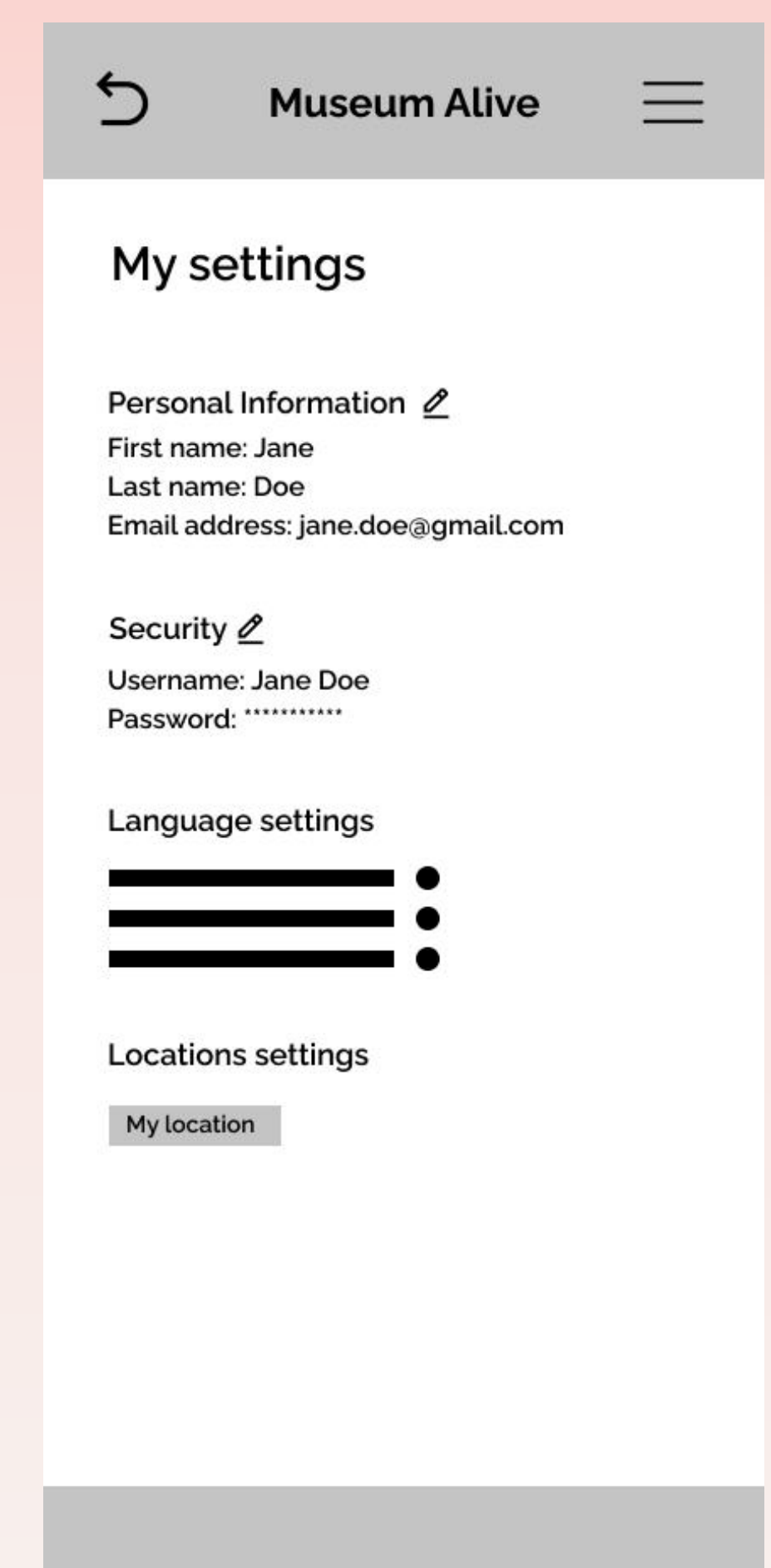
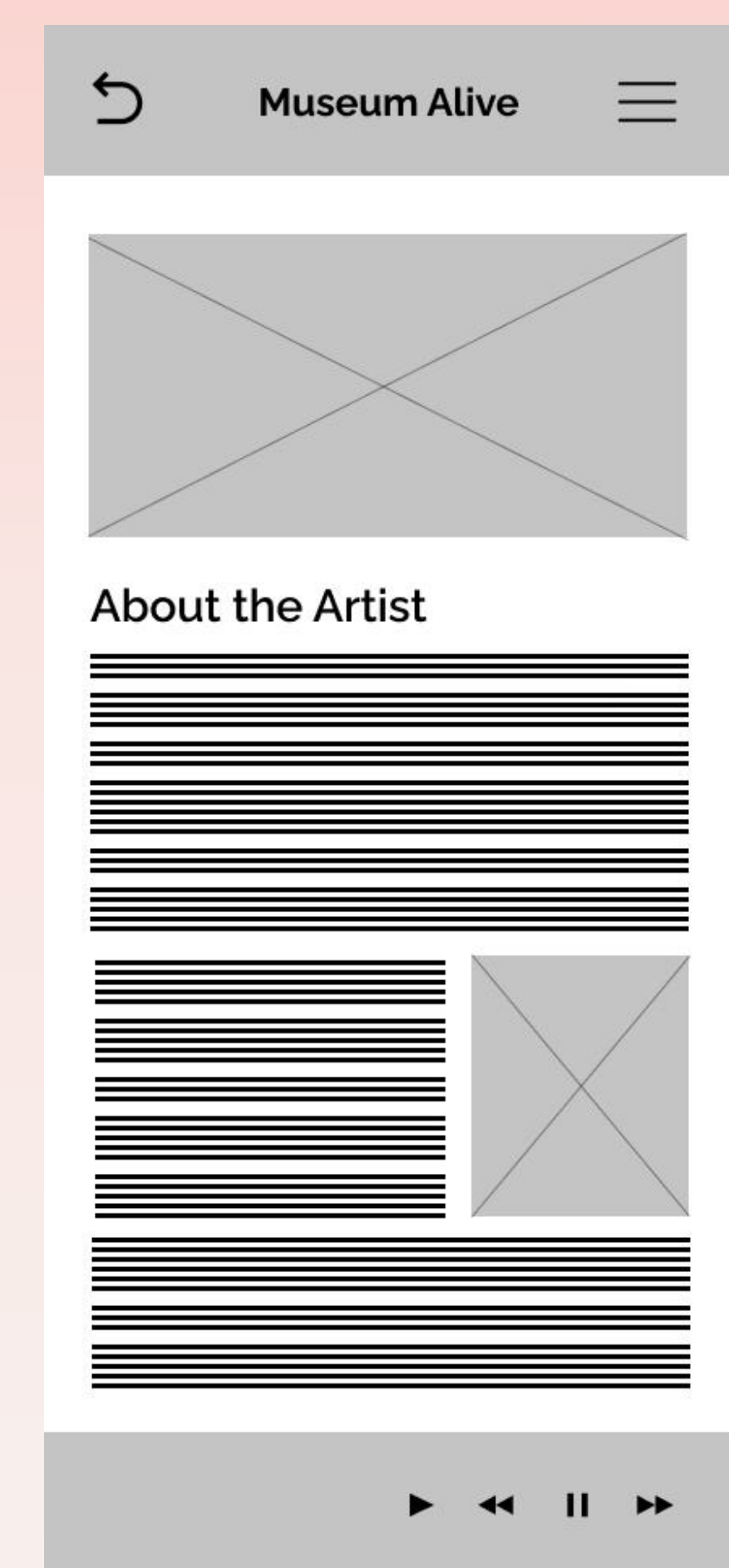
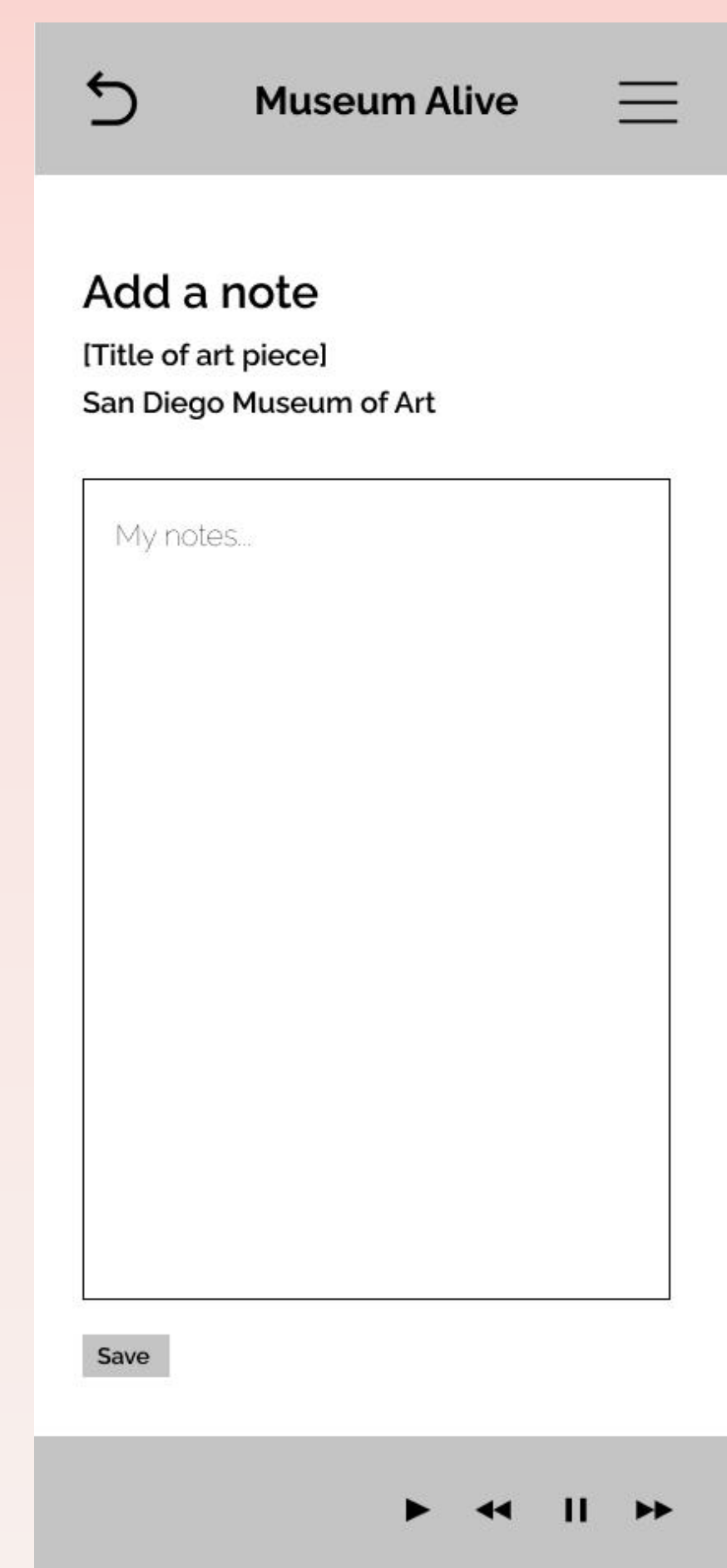
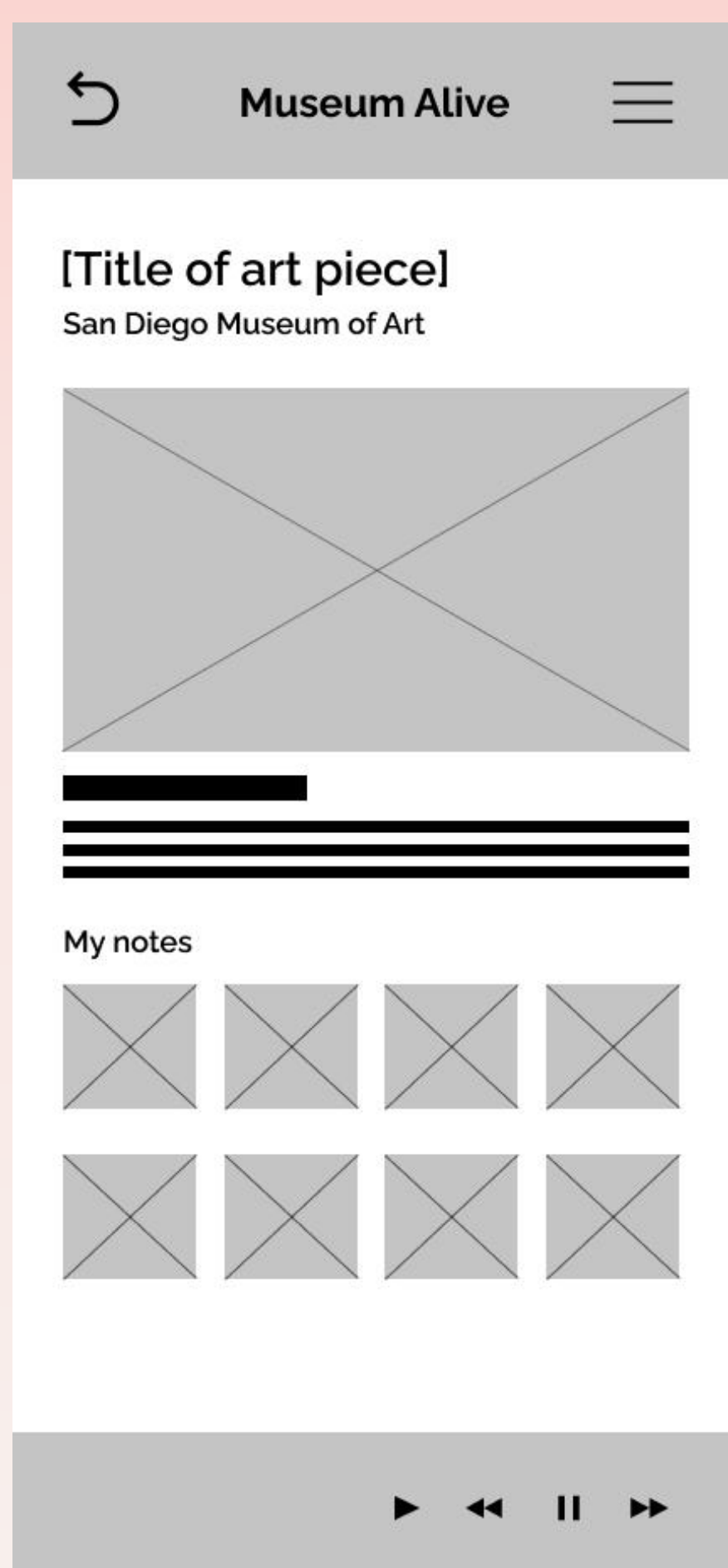
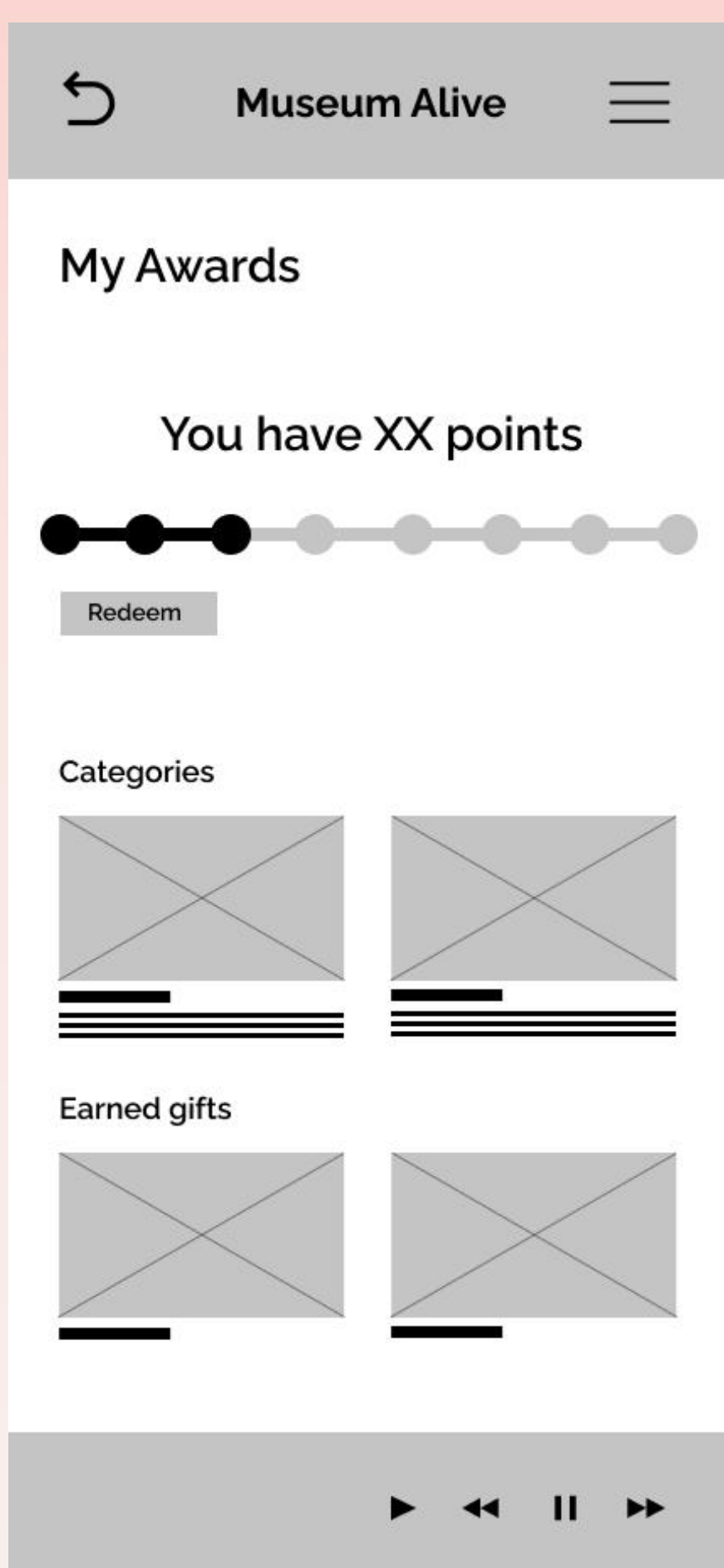
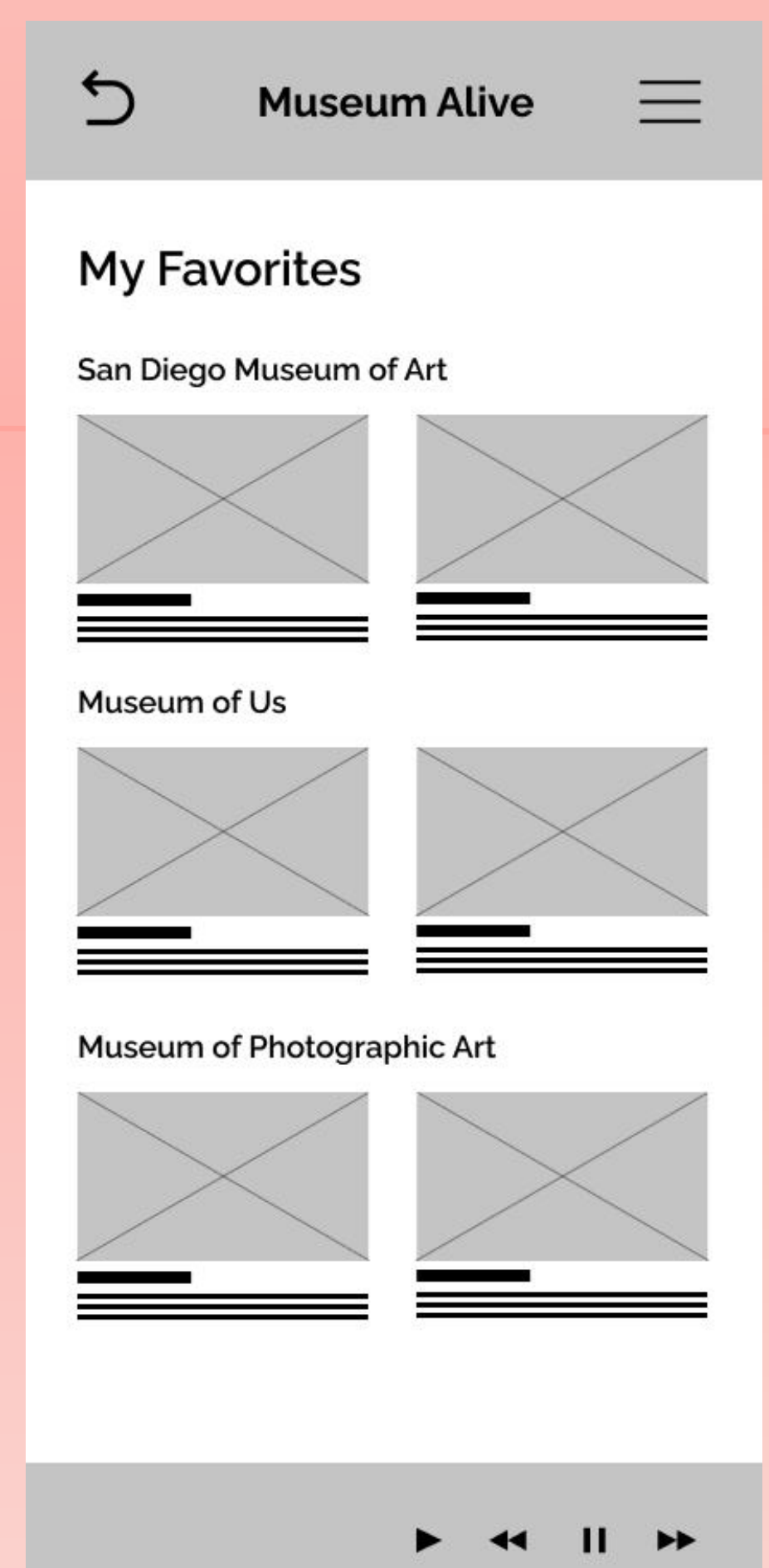
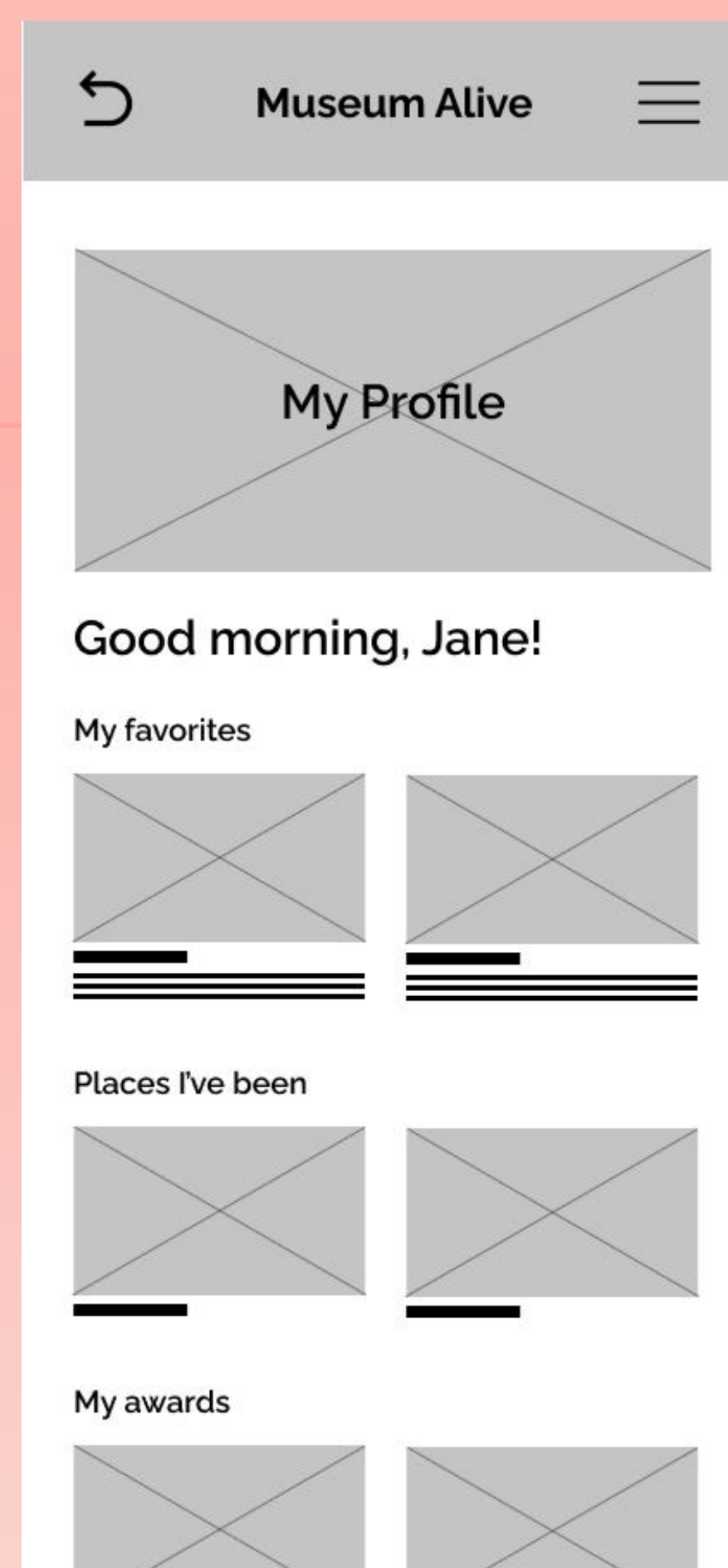
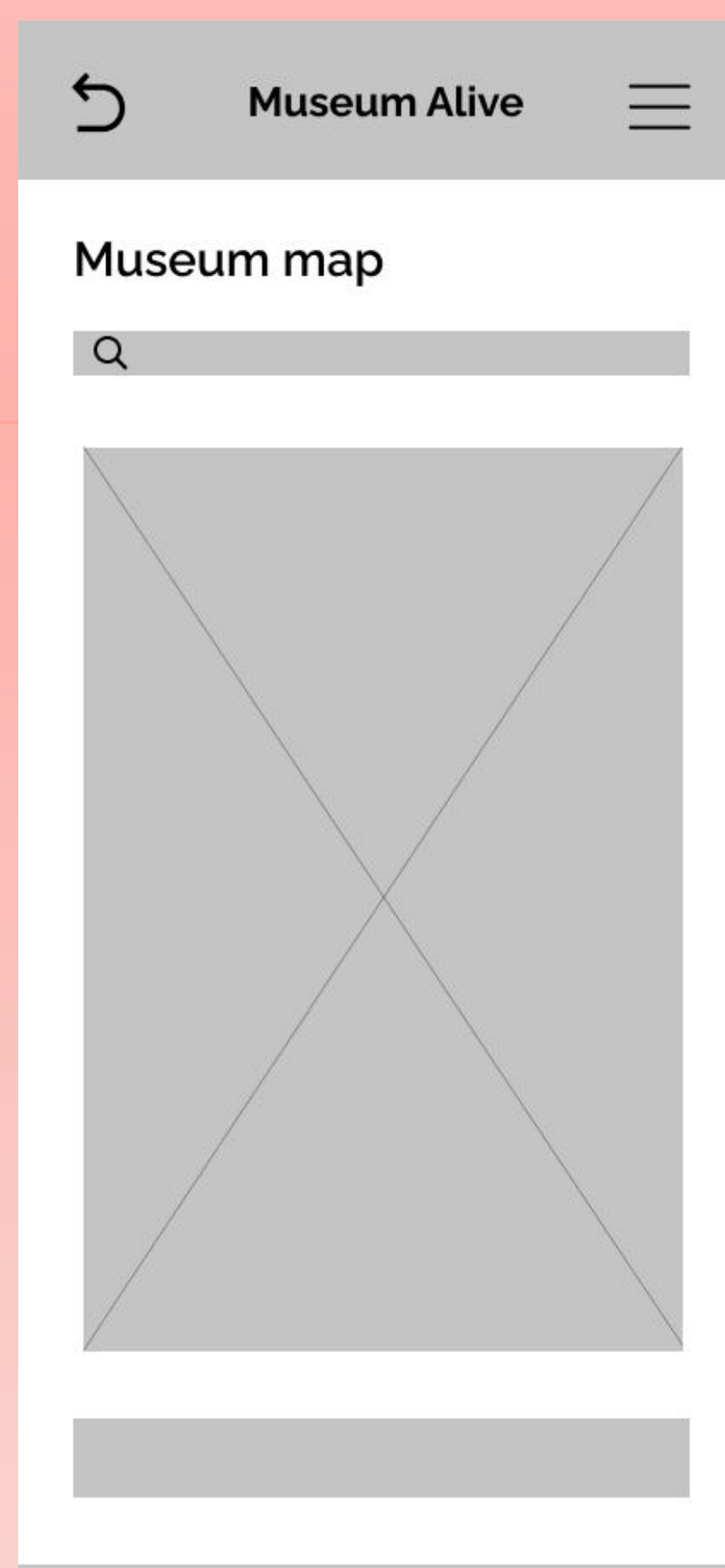
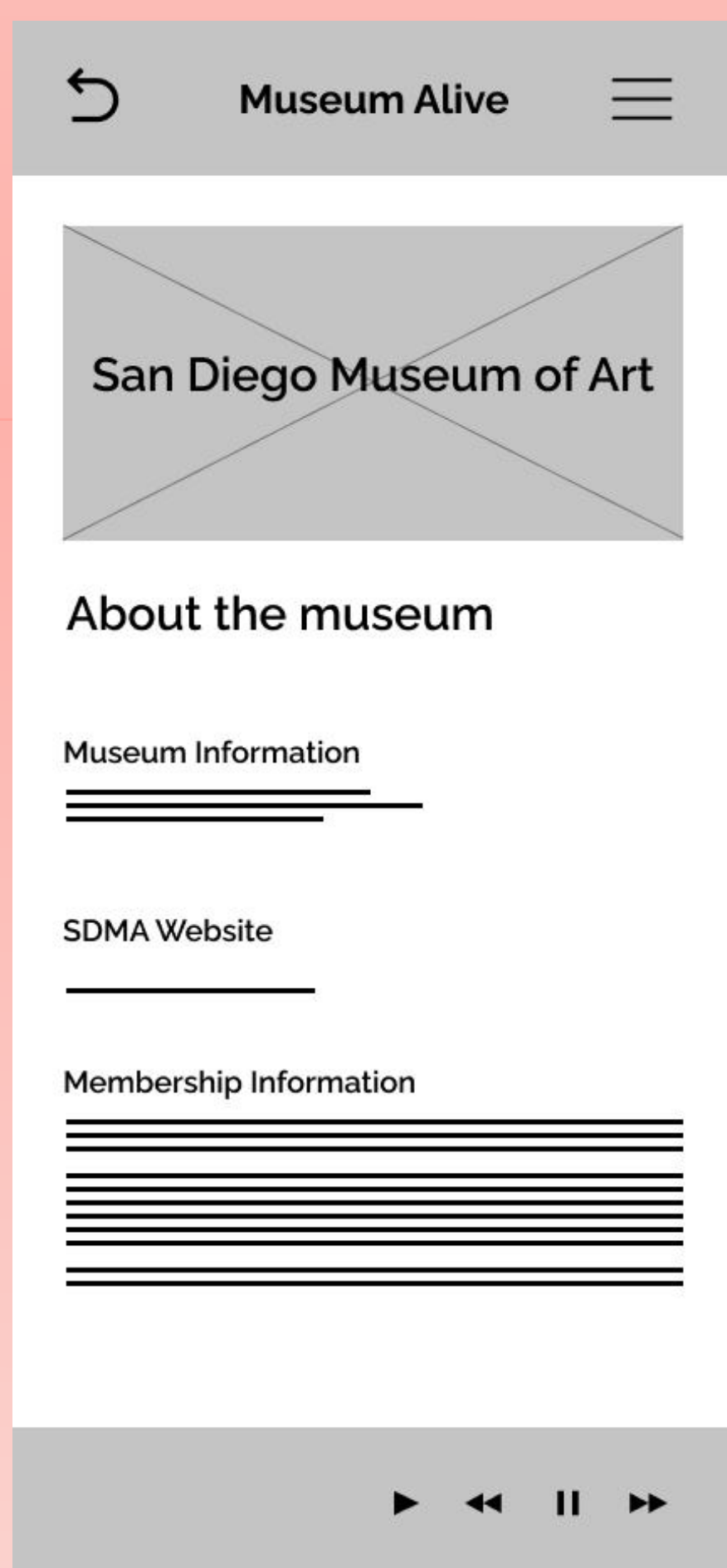
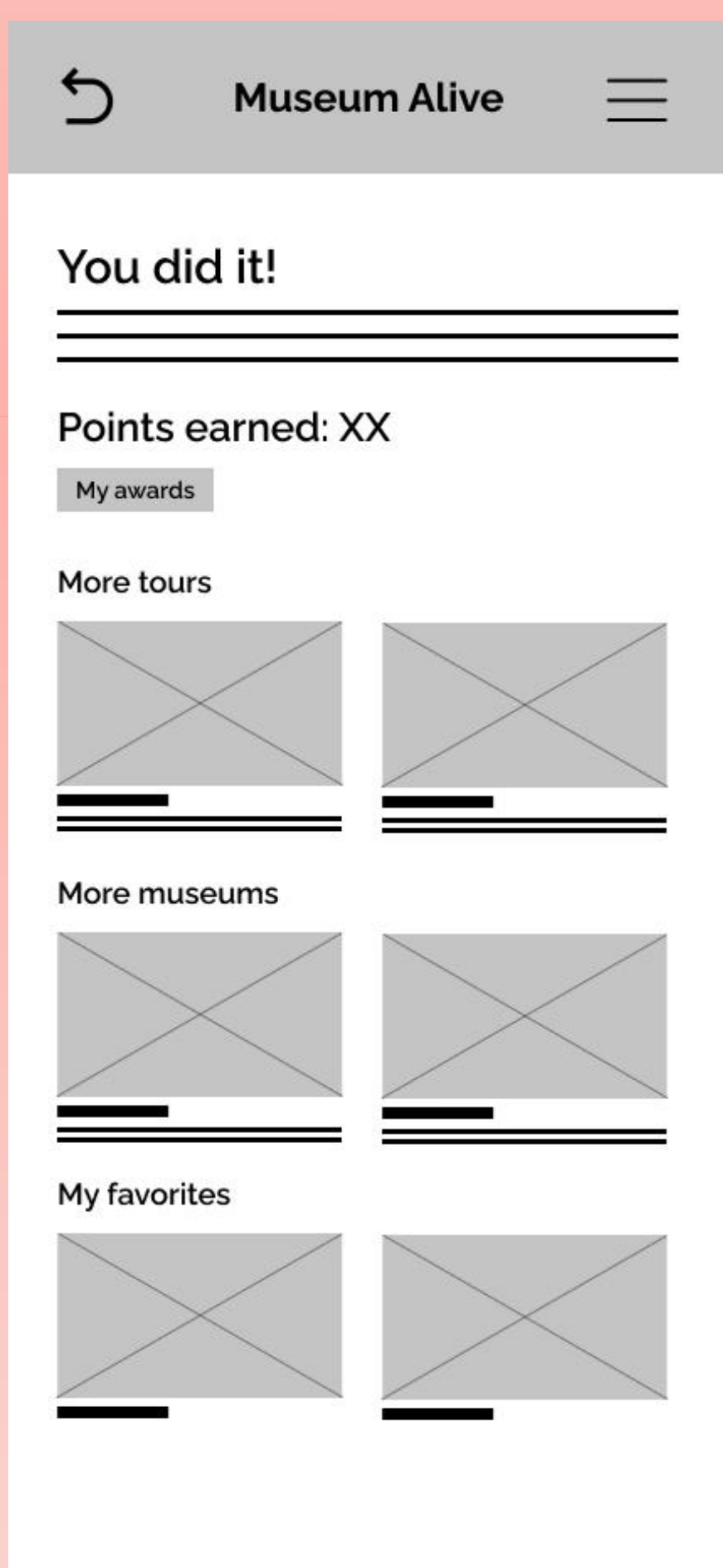
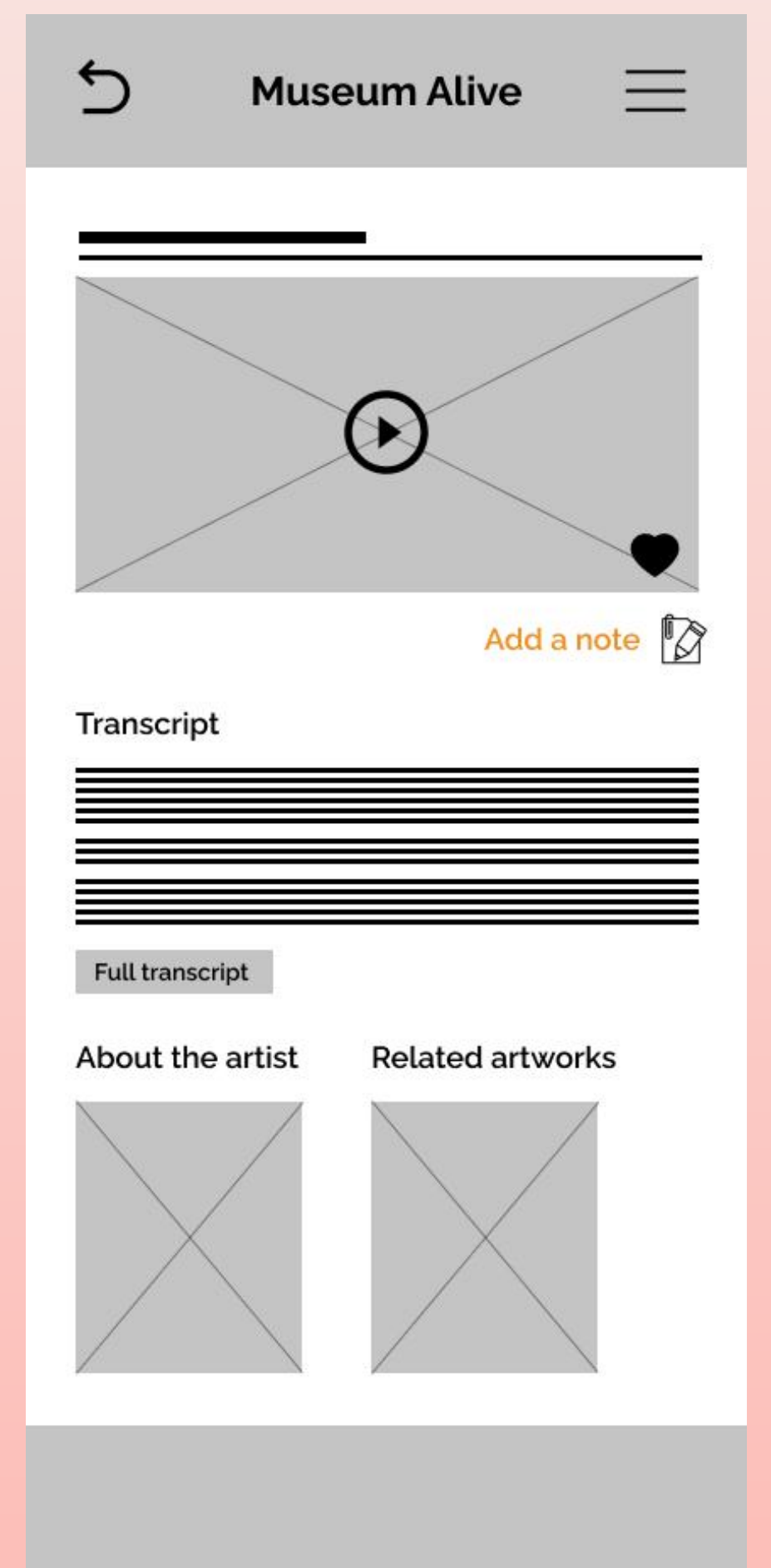
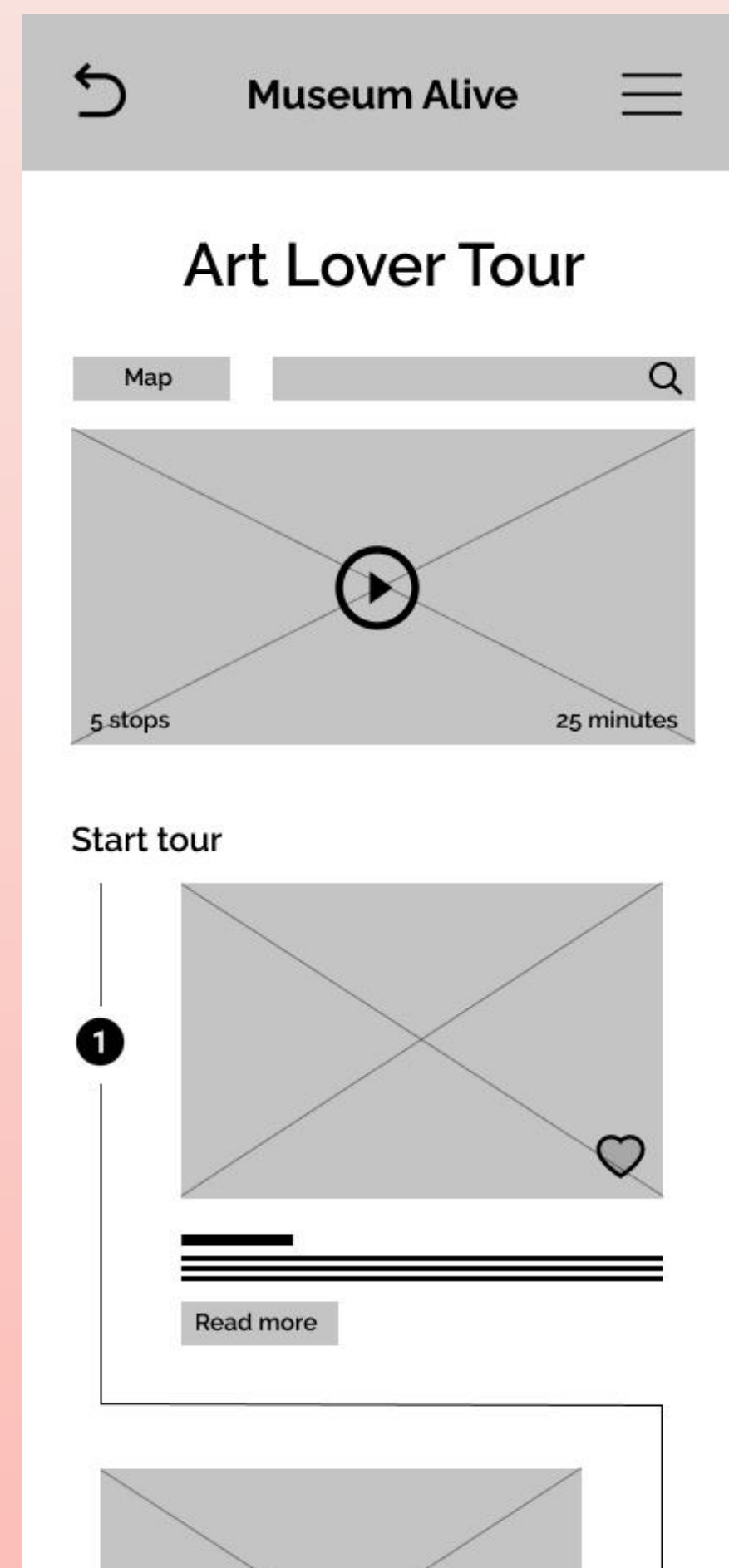
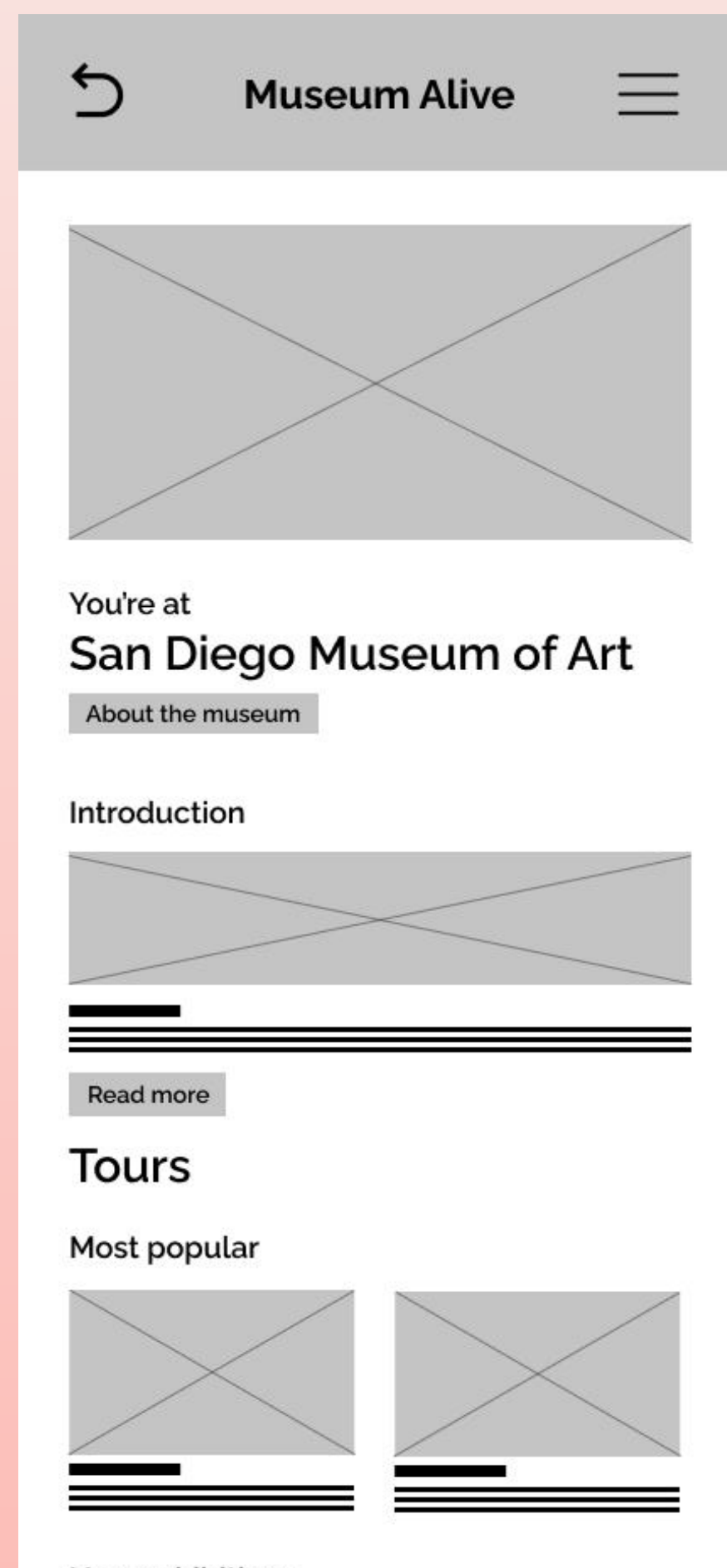
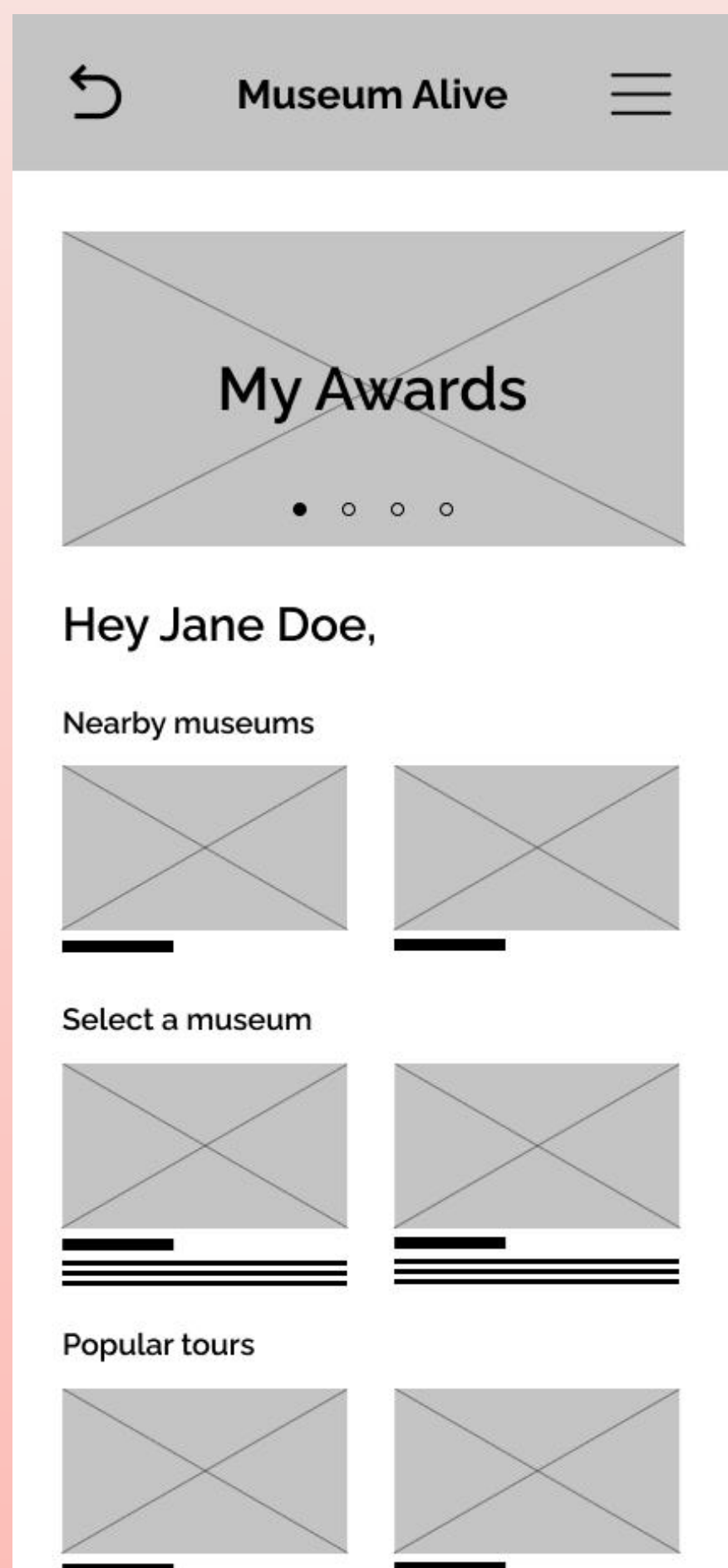
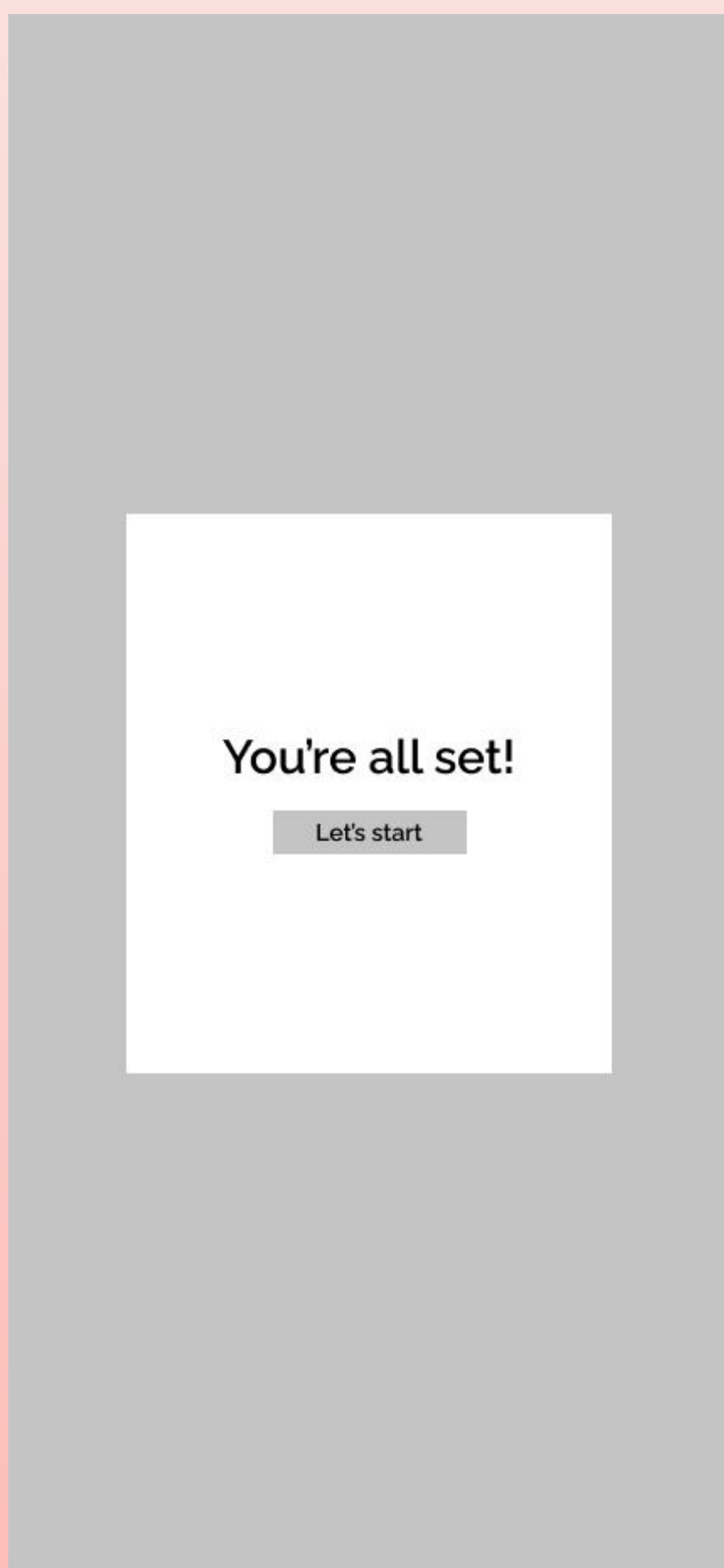
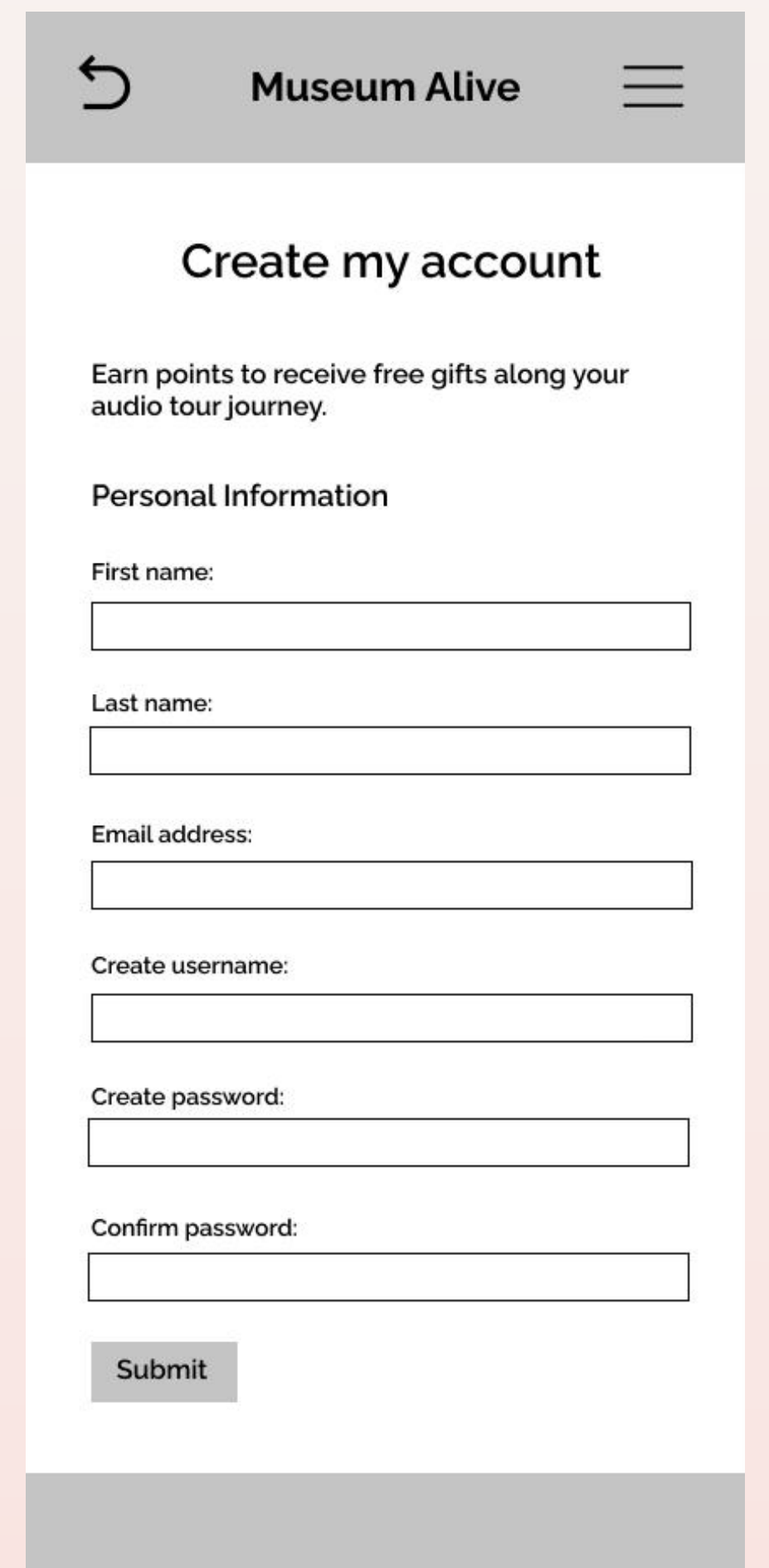
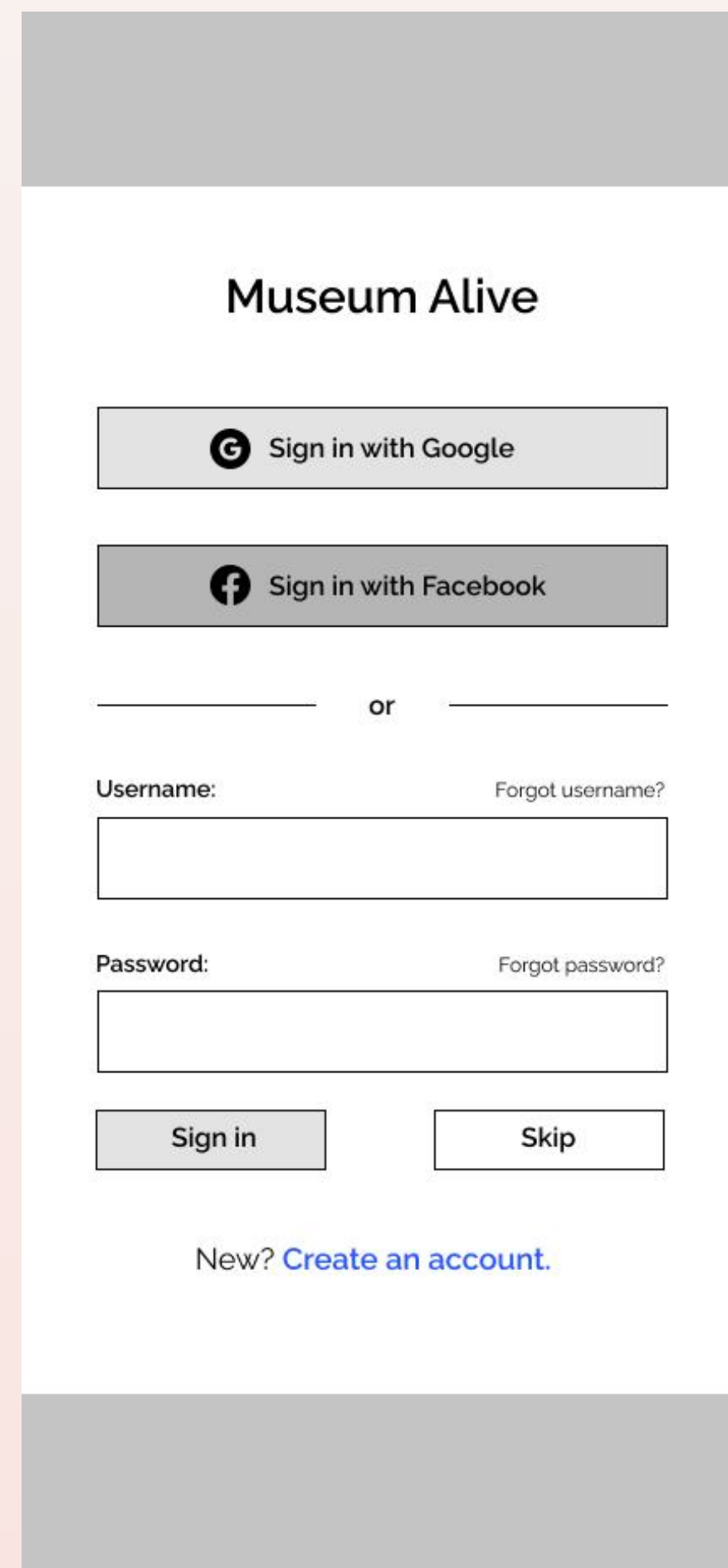
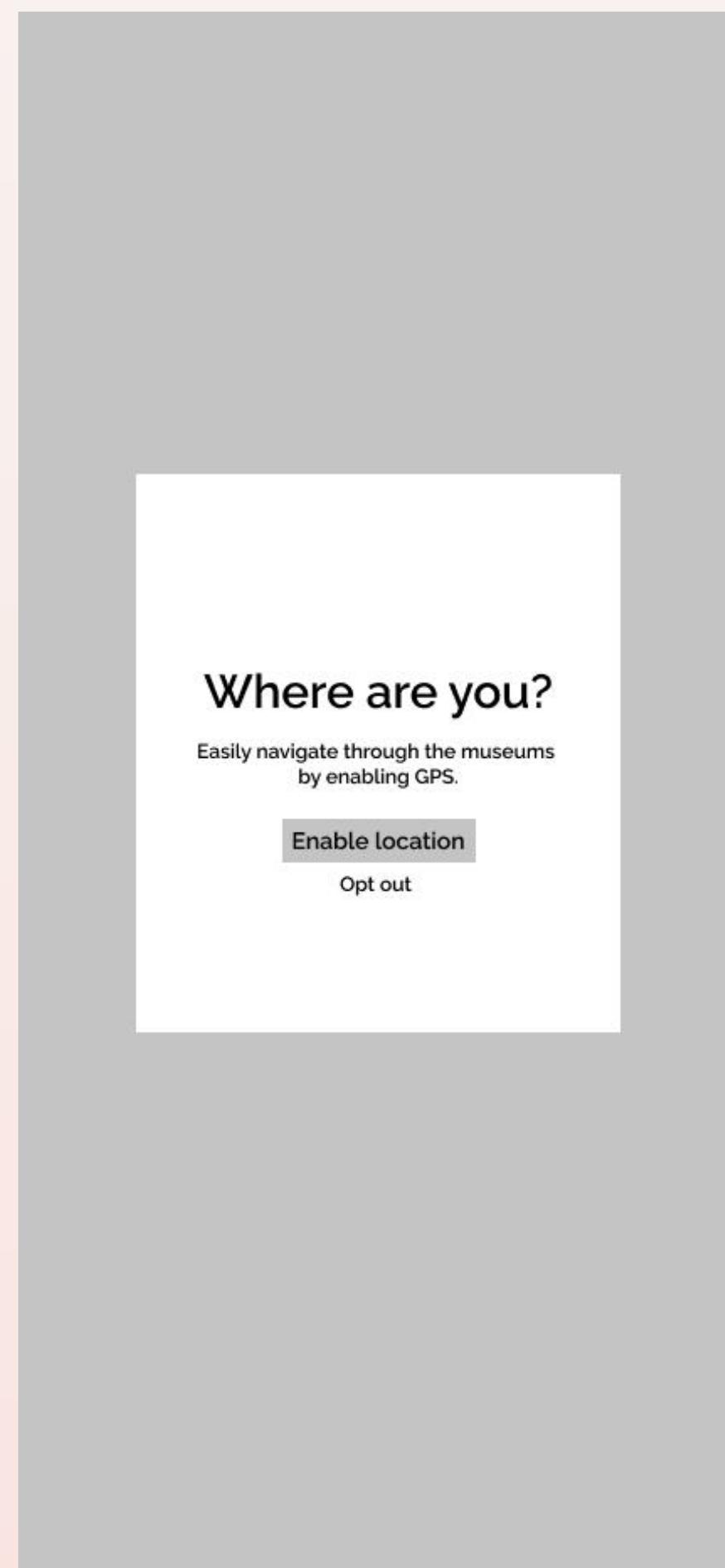
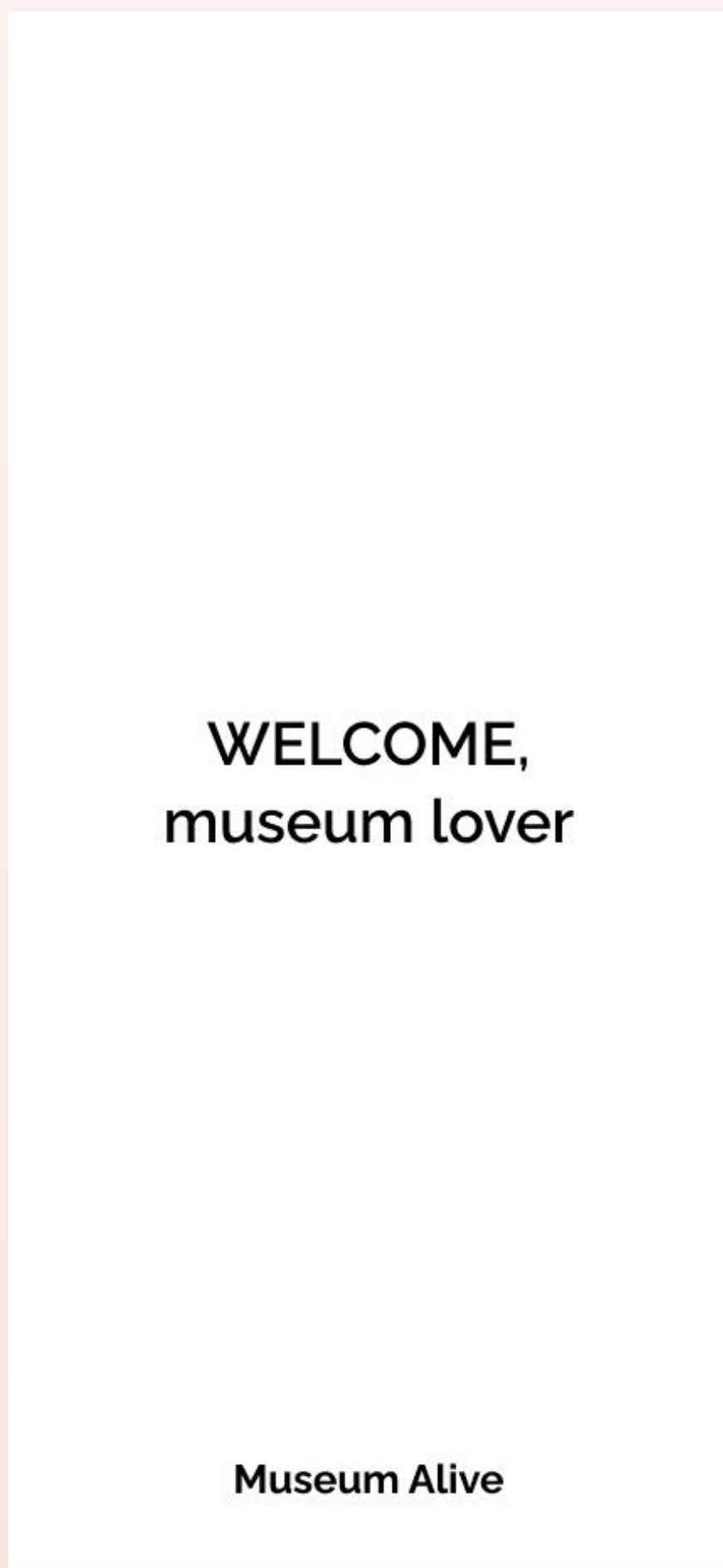
User Journey

Action	Decides to go to a museum	Goes to museum of choice	Downloads audio tour app	Listens to audio tour app in museum	Leaves the museum
Tasks Lists	<ul style="list-style-type: none"> • Searches for museums in the area. • Views the website of a few museums. • Determines which museum she would like to visit based on current exhibitions. 	<ul style="list-style-type: none"> • Drives or walks to the museum that she decided to visit. • Parks in the visitor parking lot (if driving). • Continues to walk to the museum (if parking) and gets in line to purchase museum tickets (if charged). 	<ul style="list-style-type: none"> • Needs to search and download museum audio tour app. • Waits for audio tour app to download • Quickly looks at instructions on how to use the app before starting the tour. • Gets a set of headphones from the museum (if she doesn't have her own set). 	<ul style="list-style-type: none"> • Walks through the museum and listens to the audio tour app. 	<ul style="list-style-type: none"> • Stops audio tour. • Potentially deletes audio tour app. • Return headphones (if borrowed).
Feelings Adjective	<ul style="list-style-type: none"> • Excited • Curious 	<ul style="list-style-type: none"> • Adventurous • Anxious • Tired • Anticipatory 	<ul style="list-style-type: none"> • Annoyed • Impatient • Anxious • Curious 	<ul style="list-style-type: none"> • Overwhelmed • Confused • Interested 	<ul style="list-style-type: none"> • Exhausted • Overwhelmed • Happy • Tired
Improvement Opportunities	<ul style="list-style-type: none"> • Promote audio tour on the museum website • Encourage future visitors to download app ahead of time • Give app users an idea of what to expect when using the app 	<ul style="list-style-type: none"> • More signage between the parking lot and the museum to excite visitors • Reminder signs to download the audio tour app 	<ul style="list-style-type: none"> • Create an app that does not take too long to download • Have staff members present to help visitors with downloading the app (if needed) • Have all or part of the tour on their website (that complements the app) 	<ul style="list-style-type: none"> • Make app simple and easy to navigate • Create main points that help visitors retain information • Include a map of the museum 	<ul style="list-style-type: none"> • Create a way that visitors can continue to talk about and/or research favorite artifacts and/or art pieces.

Early Concepts

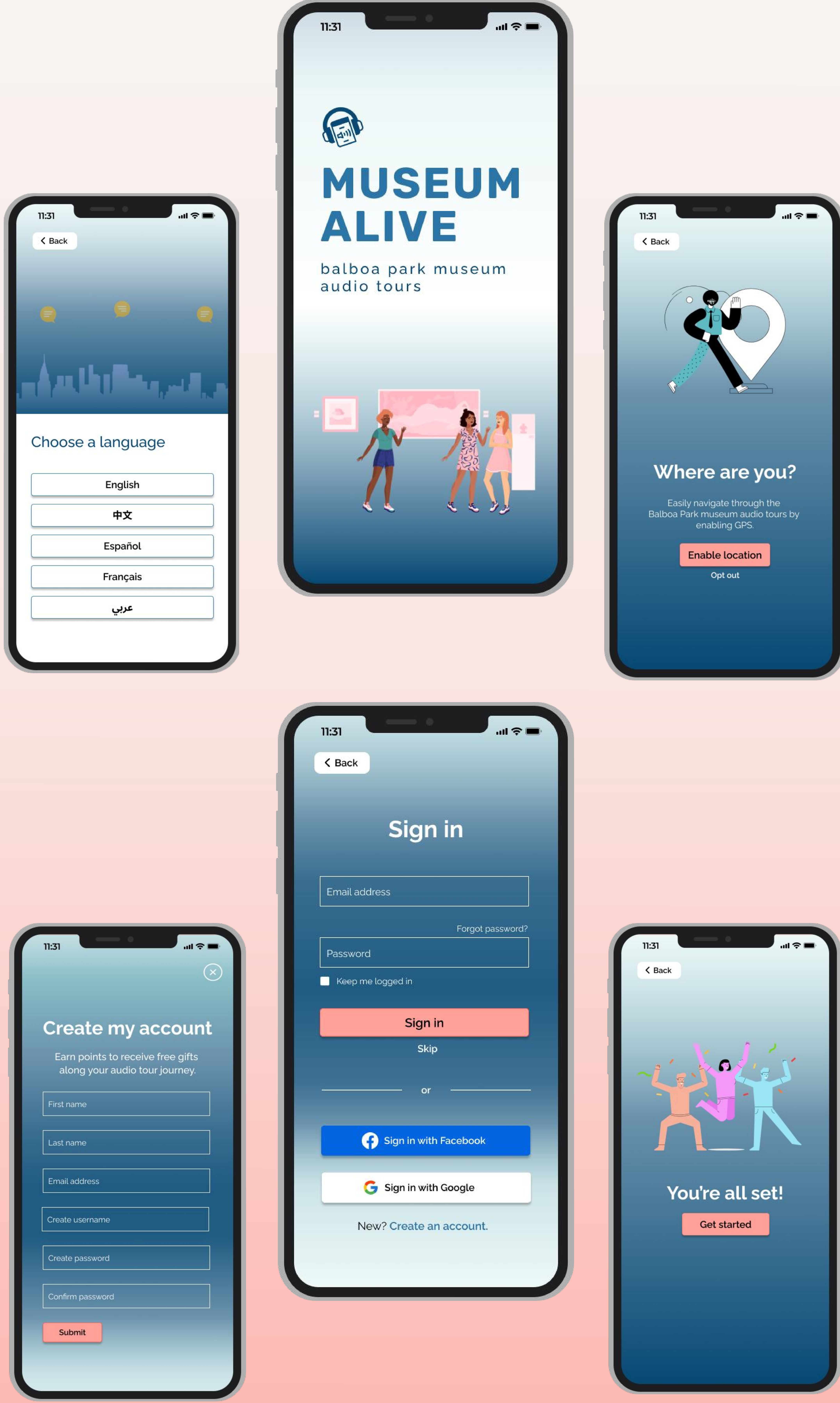


Lofi Wireframes and Prototype

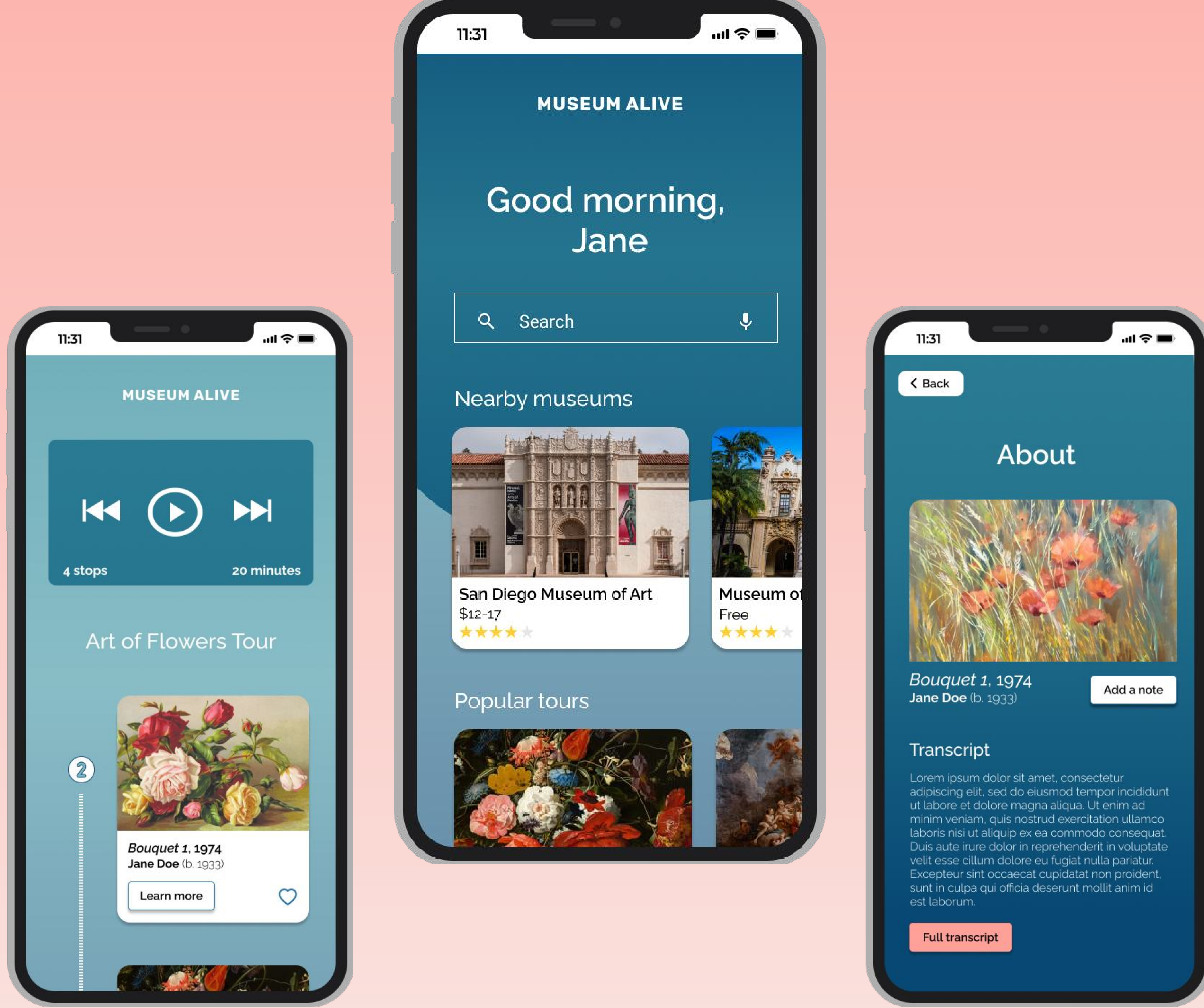


Hifi Mockups and Prototype

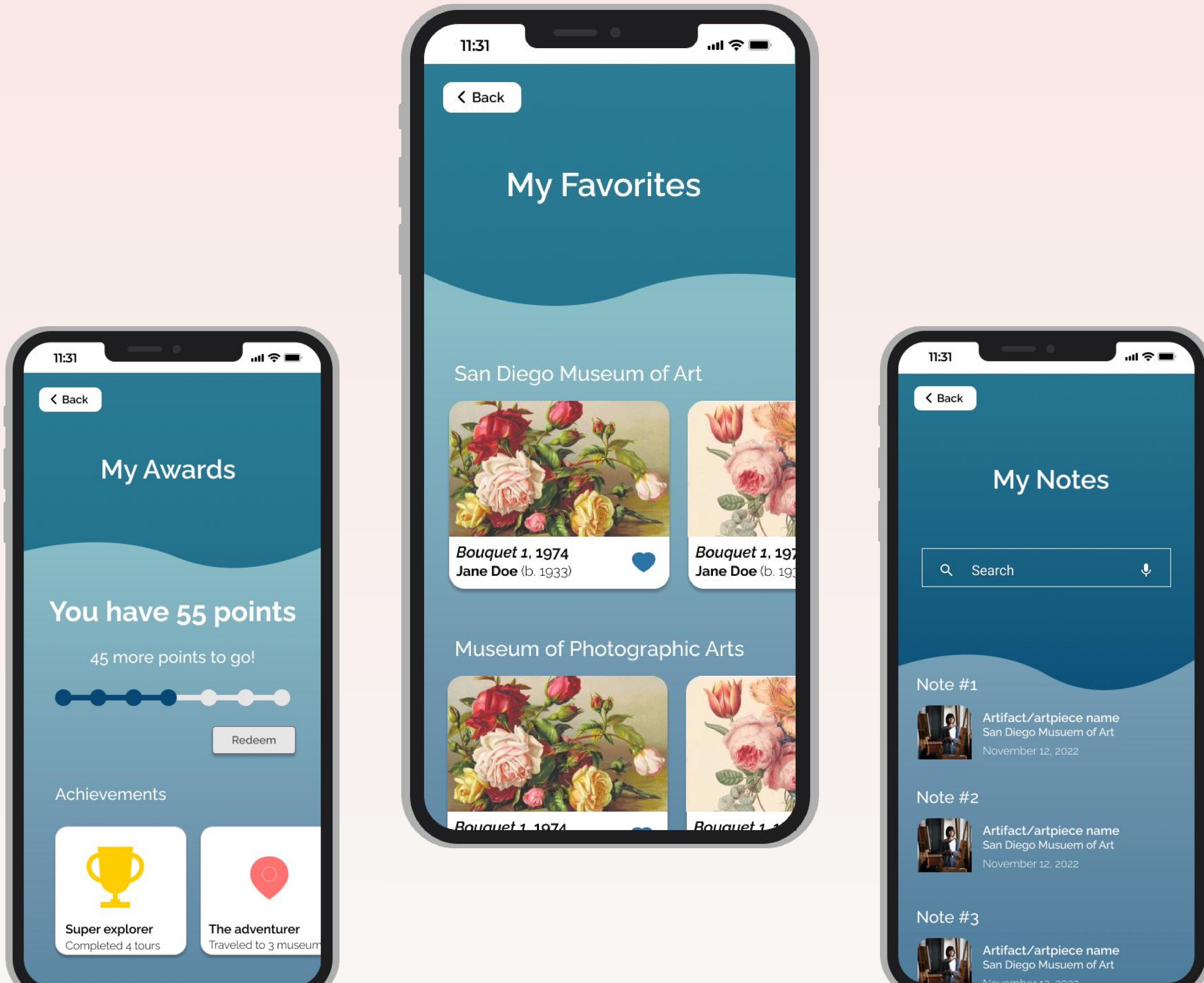
Onboarding Screens



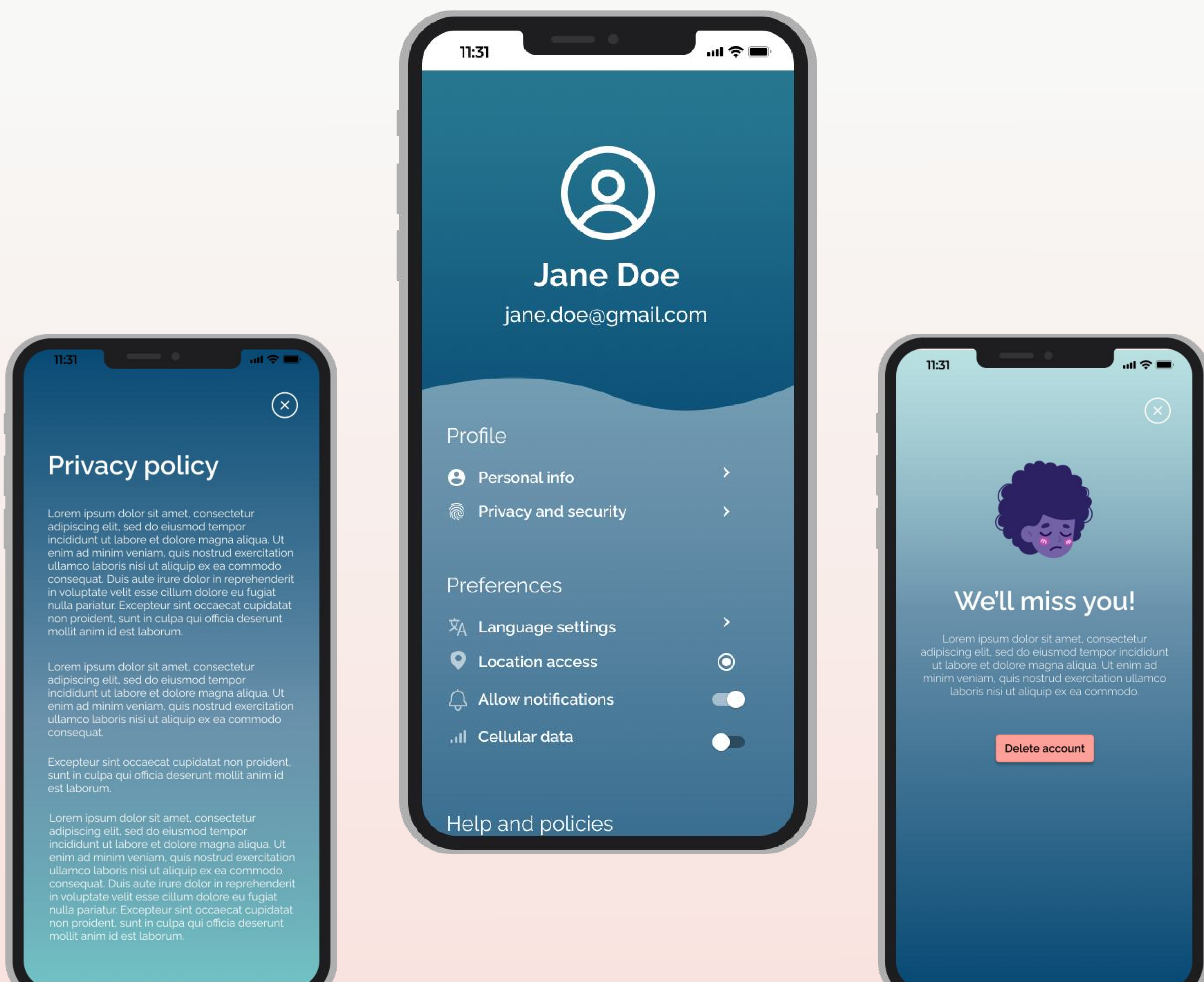
Tour Screens



Personalized Features



Account Settings

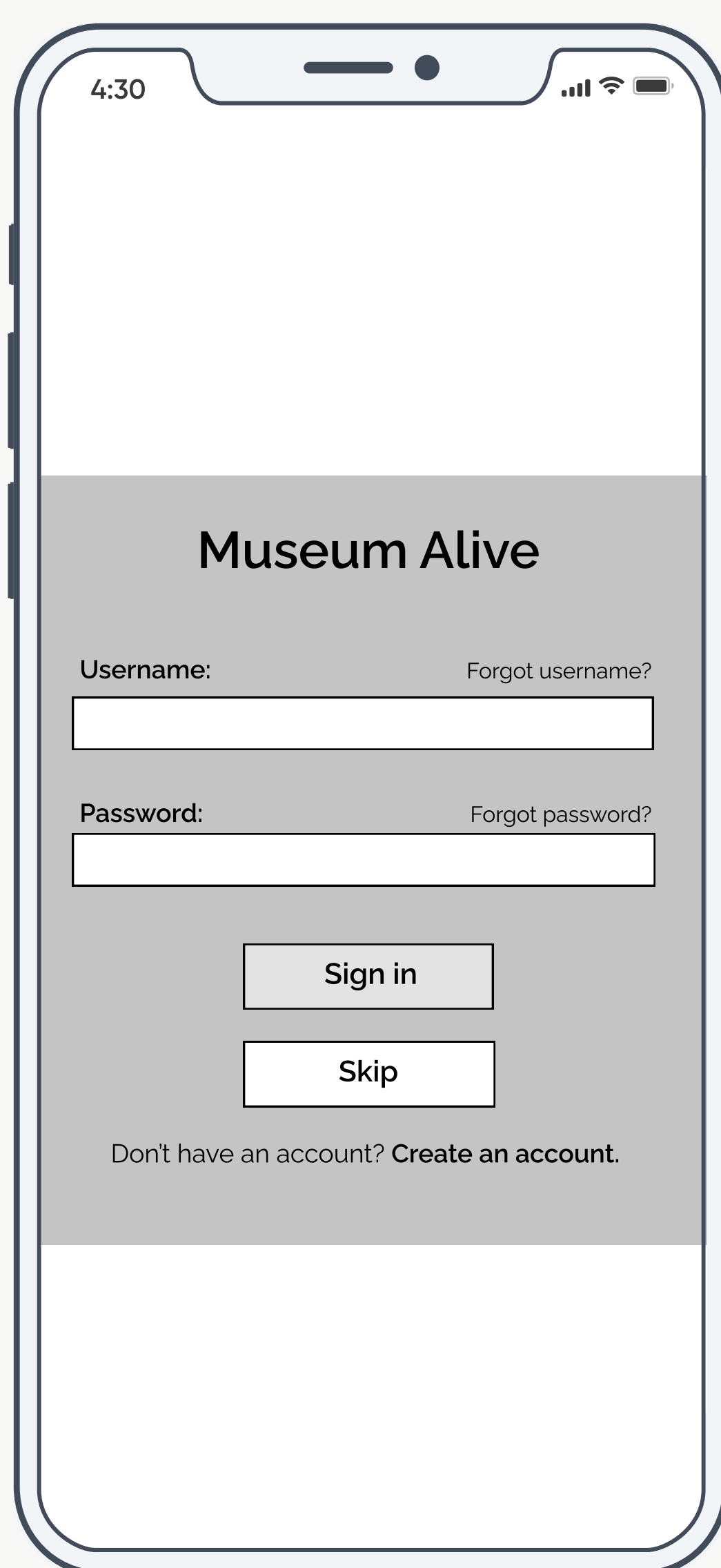


Usability Testings

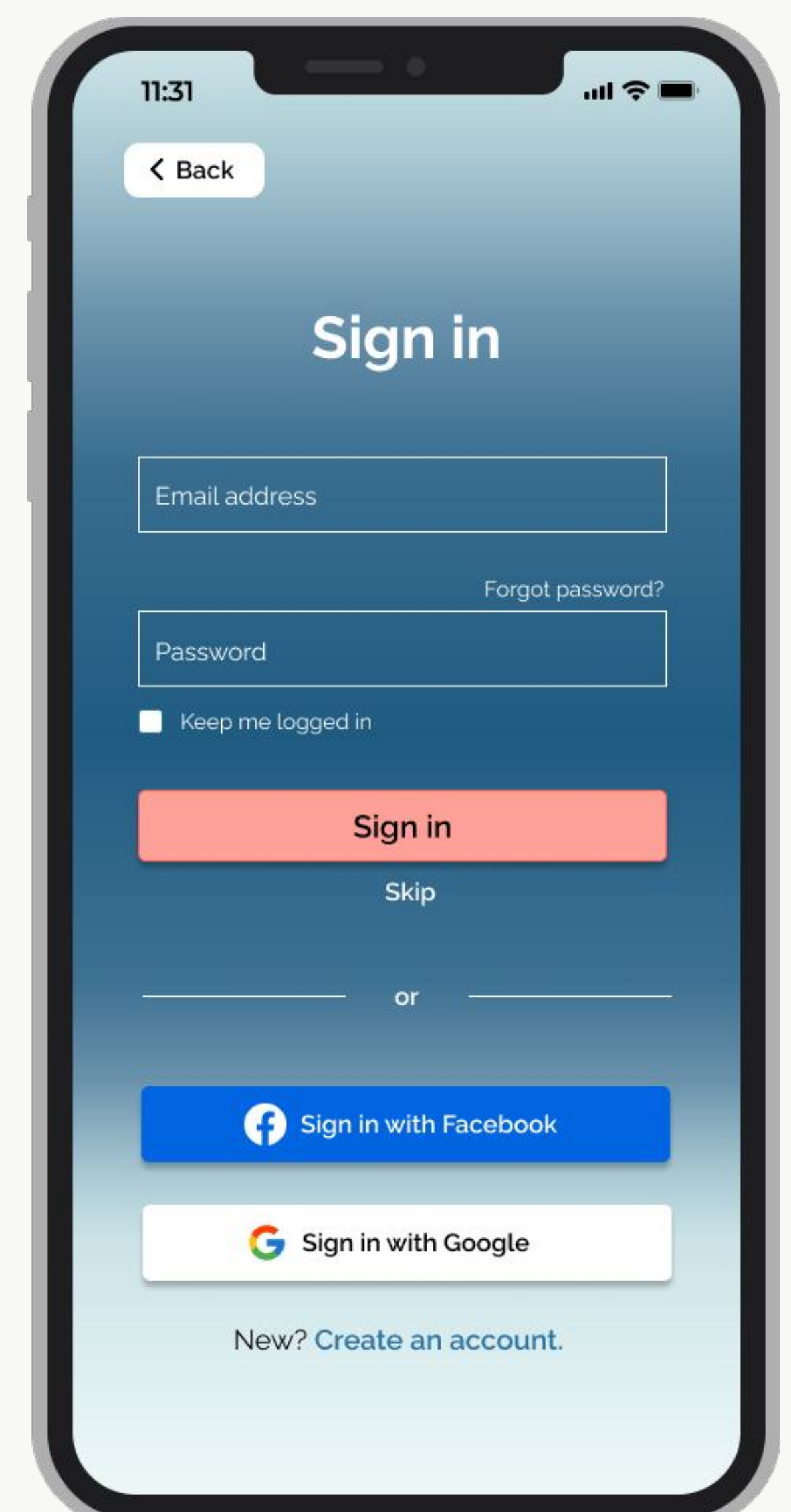
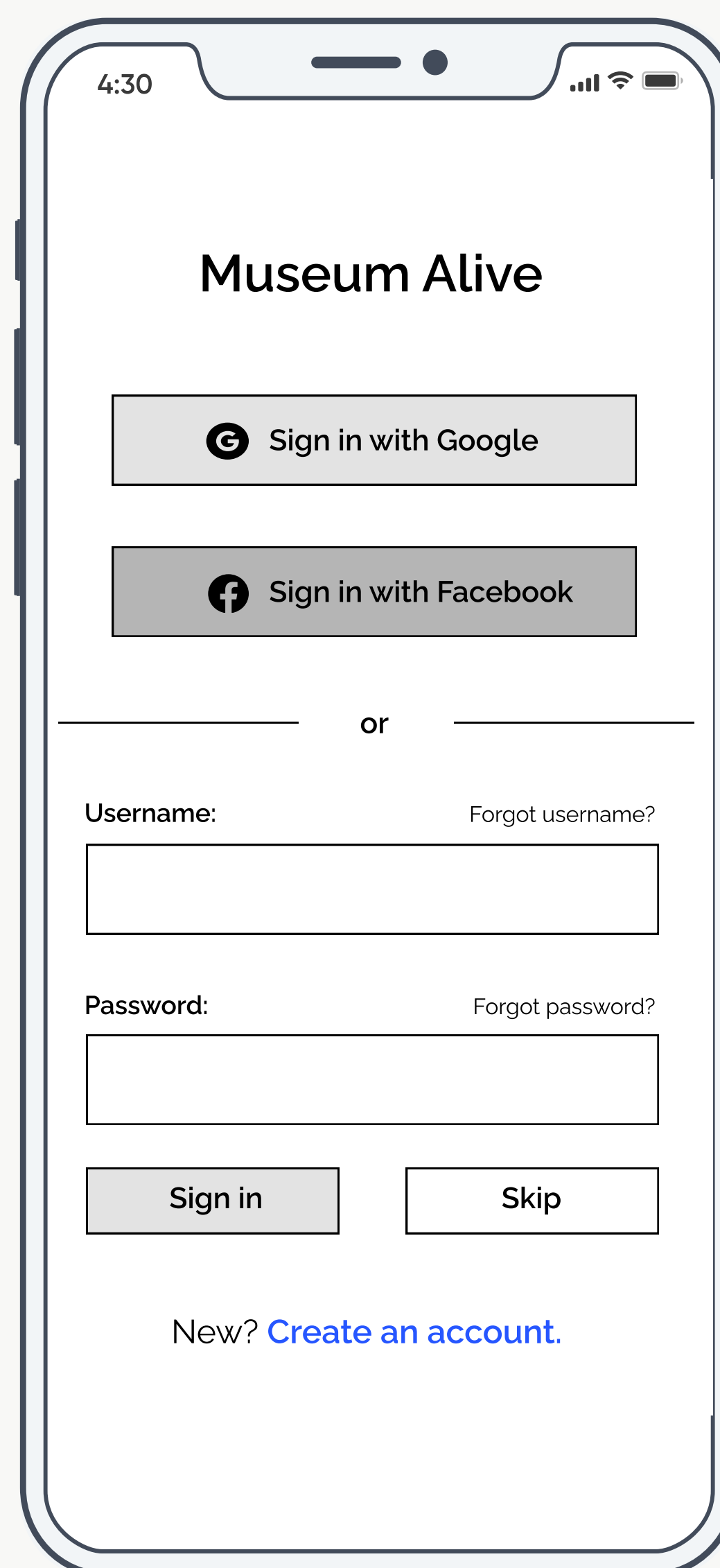
Key Insights

- The users who selected “no thanks” may have not known the benefits of enabling their location.
- Although the sign in navigation was easy for most users, the “create account” text location may have to be more clear/easier to find.
- The “add a note” feature may have to have to be more visible or moved to a different location so that more users are able to find it.
- Even though most participants were able to easily find the “end tour” button, perhaps there should be multiple ways to the end the tour and/or the button should be easier to find.

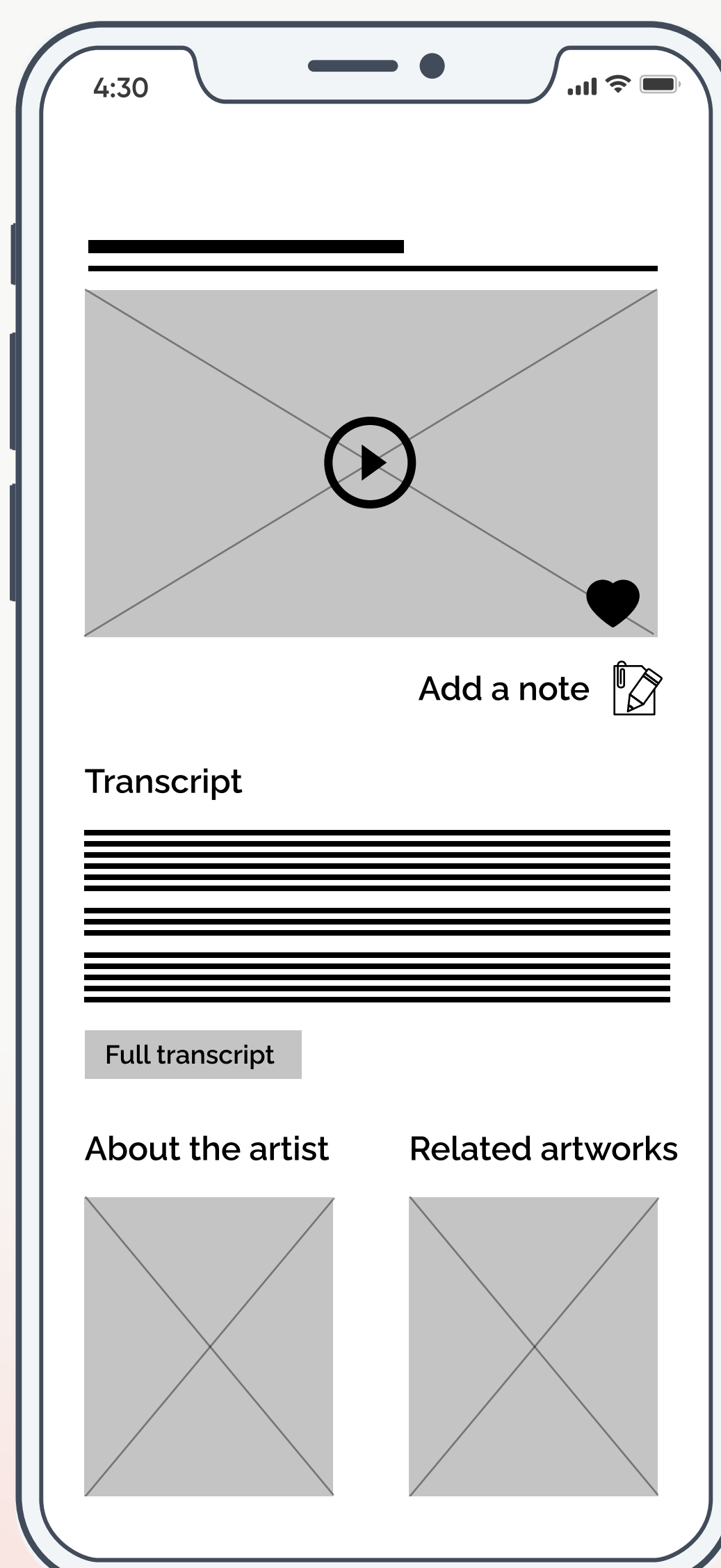
Before usability study



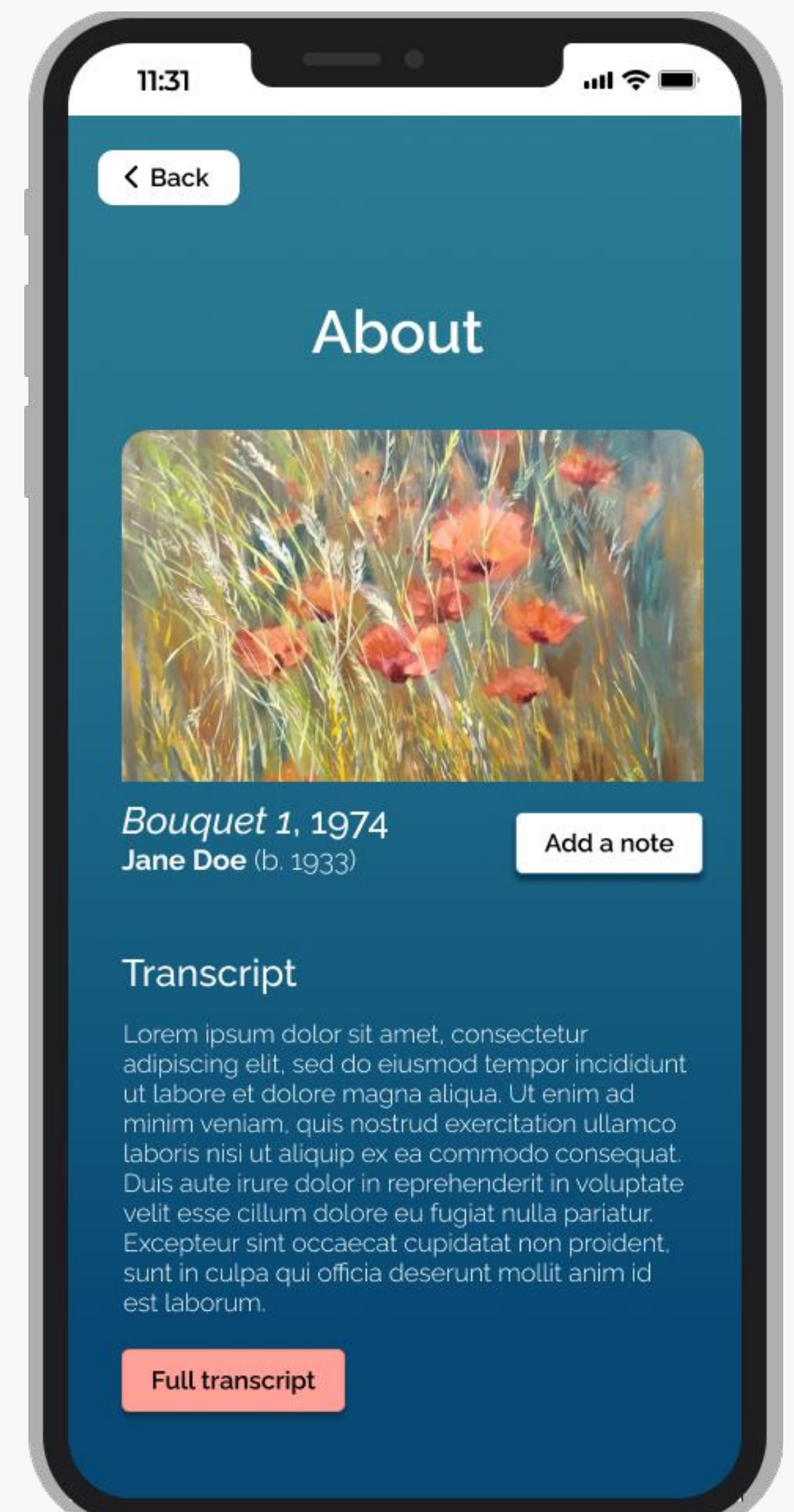
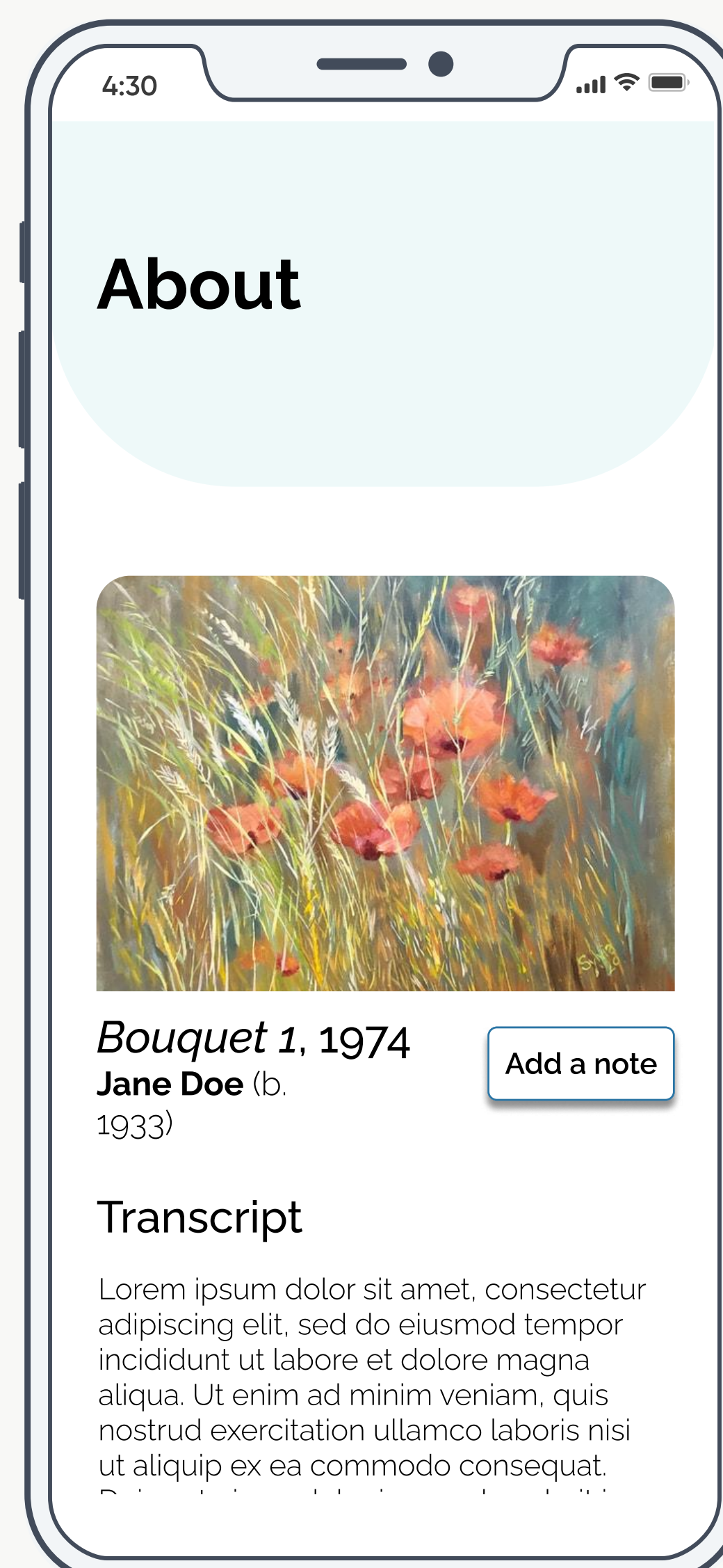
After usability study



Before usability study


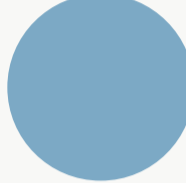
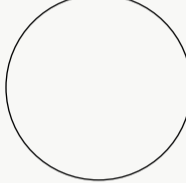







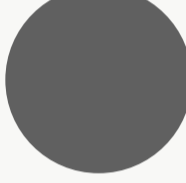
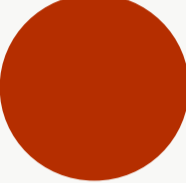
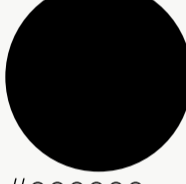


After usability study



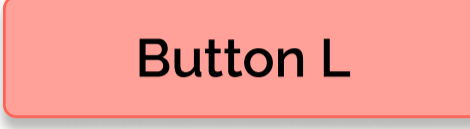













Style Guide

Colour Palette

Primary	Secondary	Neutral	Accent
 #2A75A5 100% opacity	 #2A75A5 60% opacity	 #FAFAFA 100% opacity	 #FFA199 100% opacity
 #074974 100% opacity	 #2A75A5 20% opacity	 #E6E6E6 100% opacity	 #FF6255 100% opacity
 #51B3B6 100% opacity	 #51B3B6 10% opacity	 #606060 100% opacity	
		 #000000 100% opacity	

Button Styles

	Primary	Secondary	Accent
default			
pressed			
pressed w/ icon			
default			
pressed			
pressed w/ icon			

Typefaces

Typeface: Raleway

Title, Bold, 38 px

Heading 1, Medium, 30 px

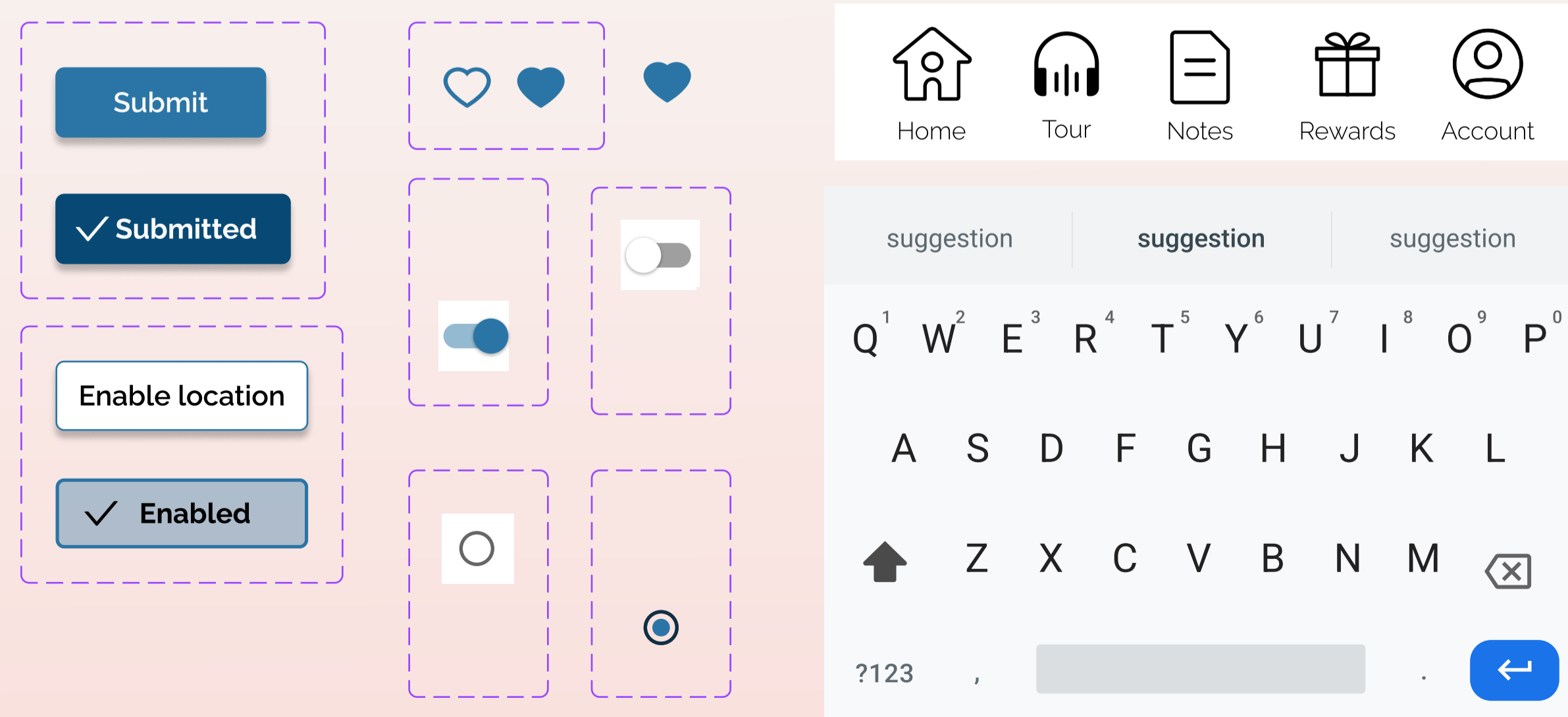
Heading 2, Medium, 24 px

Heading 3, SemiBold, 18 px

Heading 4, Regular, 16 px

Body text, Light, 16 px

Key Components



The Key Components section displays various UI elements:

- Buttons: 'Submit' (blue), 'Submitted' (dark blue with checkmark), 'Enable location' (white with blue border), and 'Enabled' (light blue with checkmark).
- Toggle Switches: Two examples, one in blue and one in grey.
- Icons: Three heart icons in blue.
- Navigation Bar: A horizontal bar with icons for Home, Tour, Notes, Rewards, and Account.
- Keyboard: A screenshot of a keyboard with a 'suggestion' bar at the top and a blue back arrow key at the bottom right.

Accessibility Considerations

1

Provided access to users who are vision impaired by adding alt text to images for screen readers.

2

Used icons to help make the navigation easier.

3

Provided access to users who are hearing impaired by including captions and full transcripts of the tour.

Takeaways and Next Steps



Takeaways

While designing the Museum Alive app, I learned that the first ideas for the app are only the beginning of the process. Usability studies and peer feedback influenced each iteration of the app's designs.

Impact

The app makes museum visitors really feel like they are engaged in the audio tour app and are able to continue researching even after their tour(s).



Next Steps

Conduct another round of usability studies to validate whether the pain points users experienced have been effectively addressed.

Conduct more user research to determine any new areas of need.

Let's Connect

Thank you for your time reviewing my work on the Museum Alive app! If you'd like to see more or get in touch, my contact information is provided below.