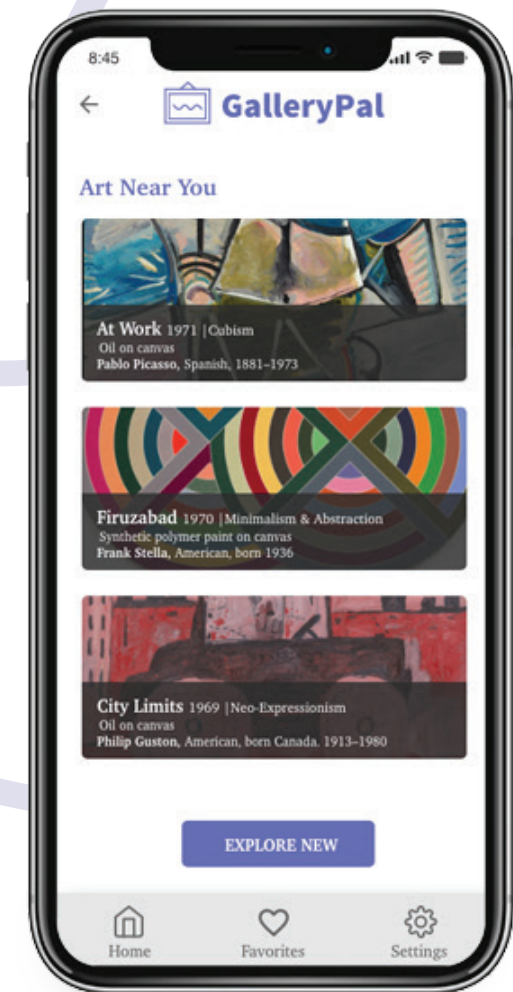
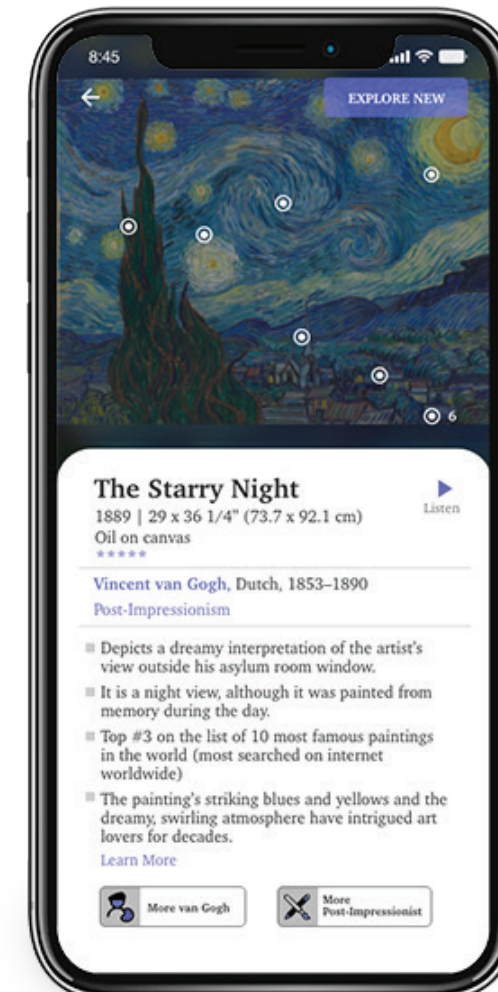


GalleryPal App

*A modified Google Ventures
Design Sprint*



Role: UX/UI Designer

PROJECT: Bitesize UX exercise

TIMELINE: 5 Days

TOOLS: Adobe XD, InVision, Miro, Zoom

TASKS

- Understanding the problem and mapping the solution
- Sketching solutions using lightning demo and crazy-8 technique
- Storyboarding
- Prototyping
- Usability testing and updates

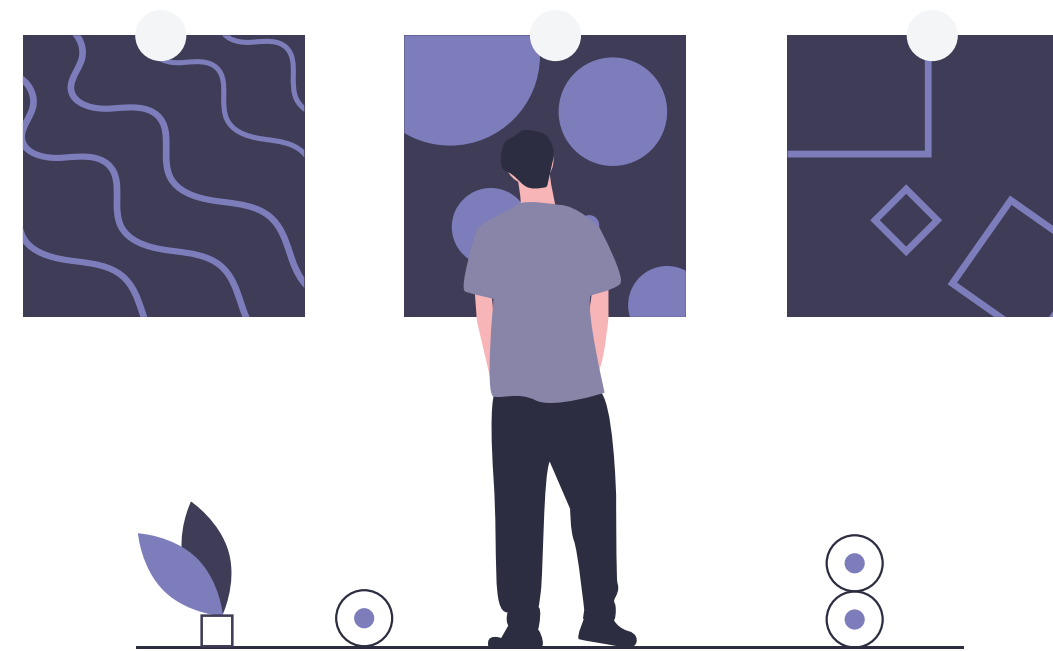
CONSTRAINTS

- Develop a mobile app specific to in-museum use by a visitor
- 5-Day solo Design Sprint

Overview

Background

GalleryPal is a startup that wants to design a way to improve the experience of viewing art in a museum. The design brief was provided by Bitesize UX and consisted of user research in the form of quotes from gallery/museum goers, a persona and a tour guide interview.



Problem

Gallery and museum visitors would like to get a better understanding of the art they are viewing to get the most out of their visit. Oftentimes they are overwhelmed with the information they find or are unable to find insightful information.

Solution

The solution is an app that detects art in front of the museum goer using bluetooth enabled beacon technology to transmit location based information. The app then displays useful, concise, and insightful information about the artwork to help enrich the viewer's museum visit experience. The key features are detecting art in front of the viewer as well as providing succinct and insightful information about the artwork.

Day 1

Understand/Map

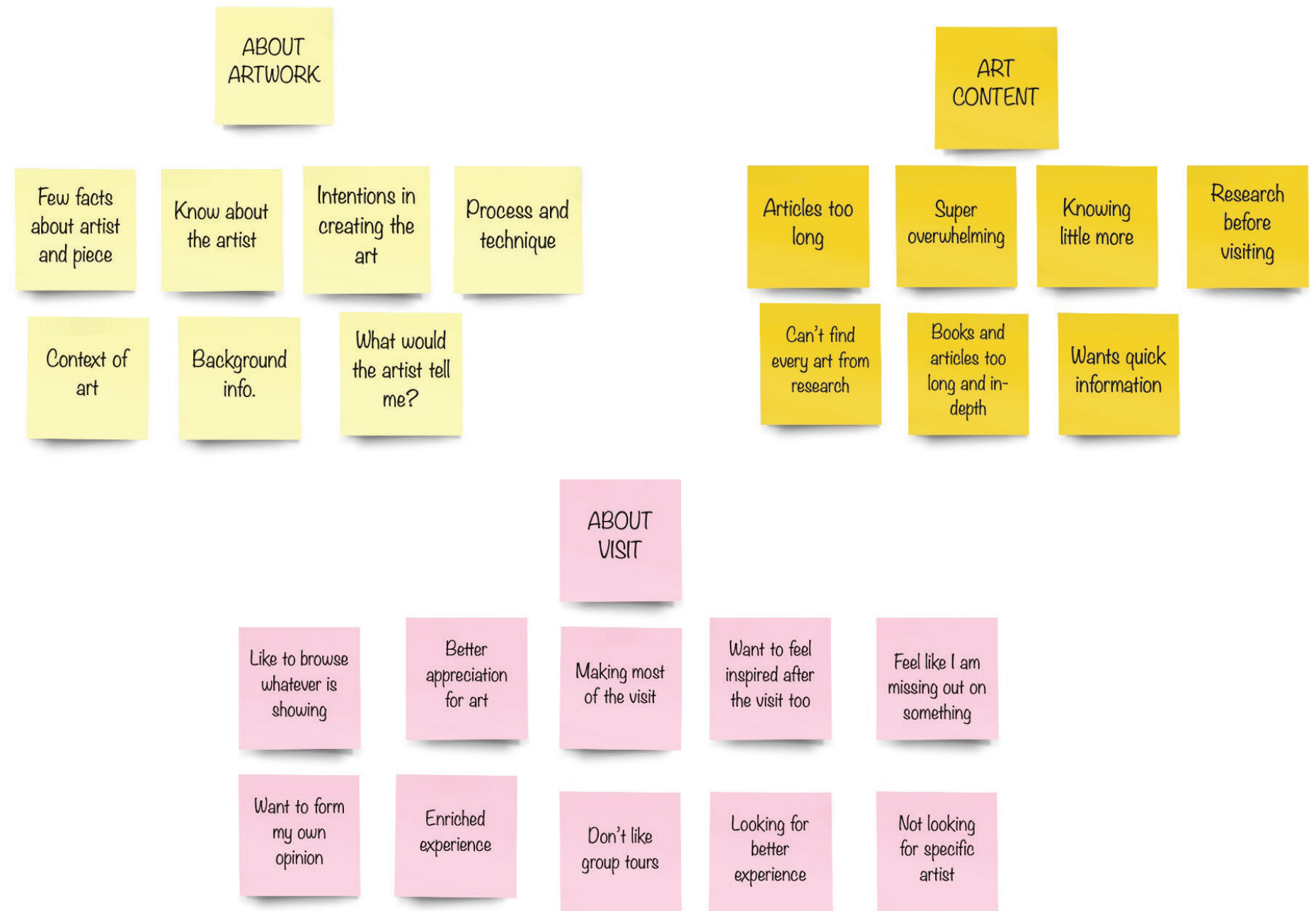
Day 1 is about understanding the problem and mapping out the end-to-end experience the users will have to achieve their goal.

User Research Analysis

Affinity map helped to synthesize all the user research that was provided. Common themes emerged from this exercise.

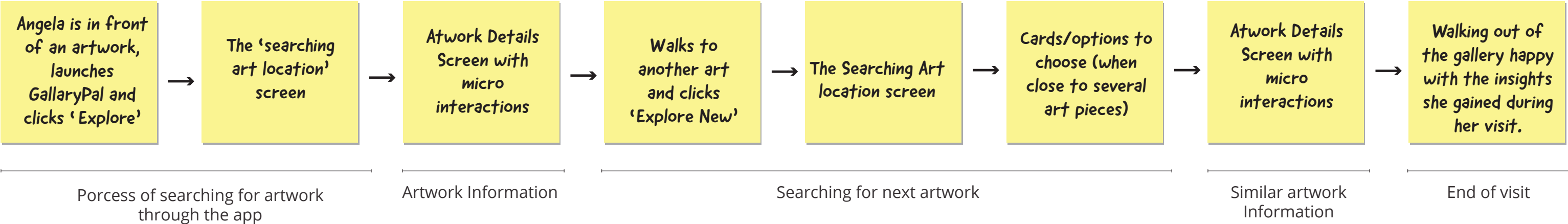
Pain Points

- Too much or too little information
- Missing out on a full experience
- Unable to appreciate the art to its full potential



Mapping the Main User Flow

I created the main user flow based on the insights I gained from user research analysis. The user flow considered that Angela (my persona that was provided) has signed into the app and opted to give access to her location.



Day 1 Learnings

What the tour guide wanted for the visitors was similar to what the visitors wanted: Provide some insightful information about art and artists; and be inspired from what they learned so they carry the experience beyond their visit.



Day 2

Sketch Your Solution

Day 2 is dedicated to finding inspirations and sketching solutions.

Lightning Demo

I completed a solo version of the lightning demo that involves looking for inspiration to get creative solutions. Two key aspects of my solution were:

- to **detect the artwork** using location
- to **provide insightful information** about the artwork.

Detect artwork

I looked into location detection or scanning technologies that could help detect an artwork in front of a museum visitor. **Bluetooth Beacon technology and Near Field Communication (NFC)** are two such options that could be used. NFC requires tapping the phone against a chip/sticker and might be a cause for concern during times when touching surfaces is not encouraged. **I based my solution on bluetooth technology as it can detect and transmit information when in close proximity.**



Bluetooth Beacon Technology

A beacon is a small Bluetooth transmitter that transmits a specific signal. A smartphone with the right app can identify the beacon signal when it's in range.



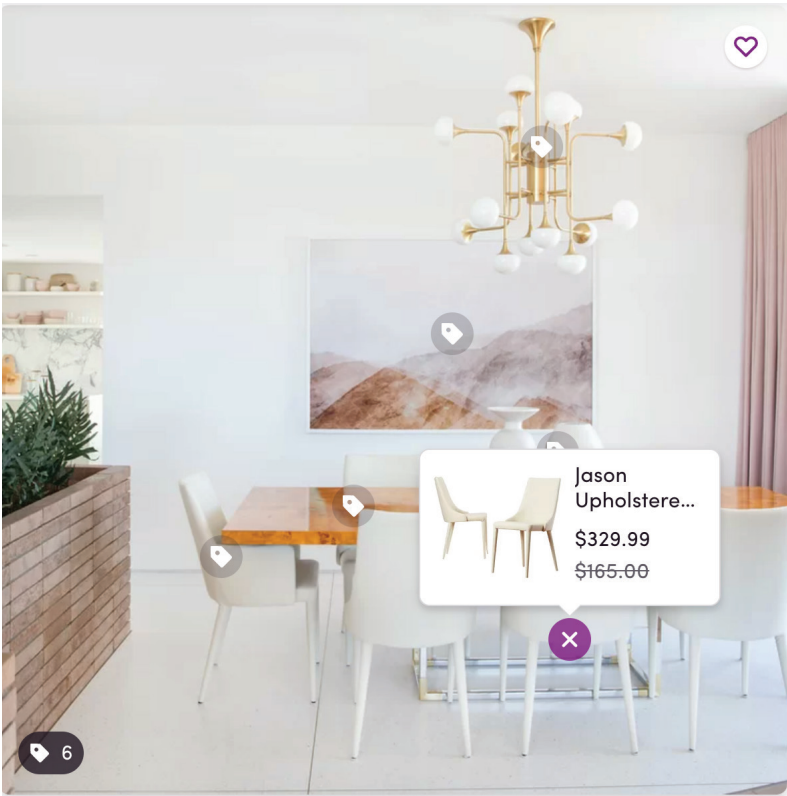
Near Field Communication (NFC)

More widely known as "tap and go", NFC is a set of communication protocols for communication between two electronic devices over a distance of 4 cm or less.

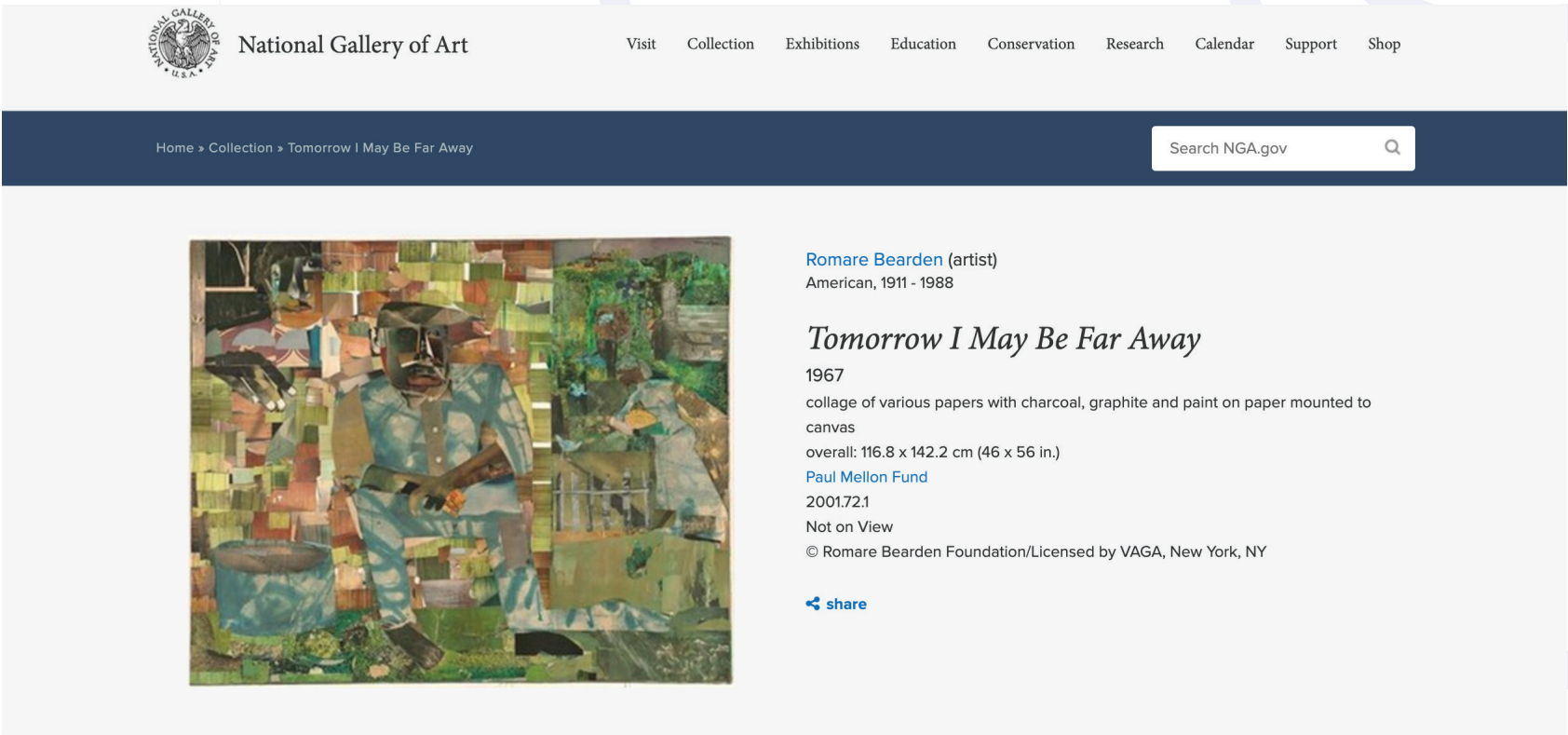
Provide insightful information

I wanted to provide points of interest on the artwork. With this in mind, I looked for solutions where tags are used on an image to provide details on that part of the image.

I also looked at museum sites to see how and what kind of information is provided about a given piece of art.



Wayfair has these tags on an image and when clicked provides details about the product.



Basic information of an artwork includes title, year, size, medium, and artist.

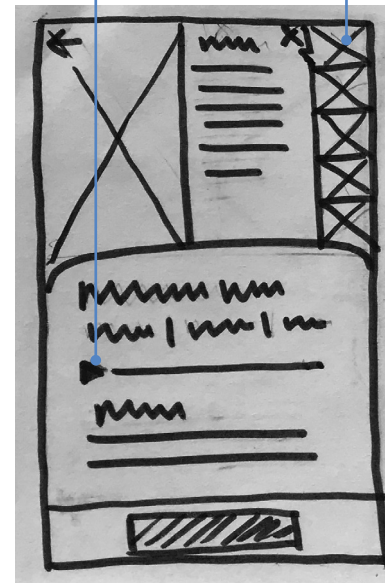
Crazy 8's Sketch Exercise

Crazy 8's is a core Design Sprint method. It is a fast sketching exercise (of a critical screen) that challenges people to sketch **eight distinct ideas in eight minutes**.

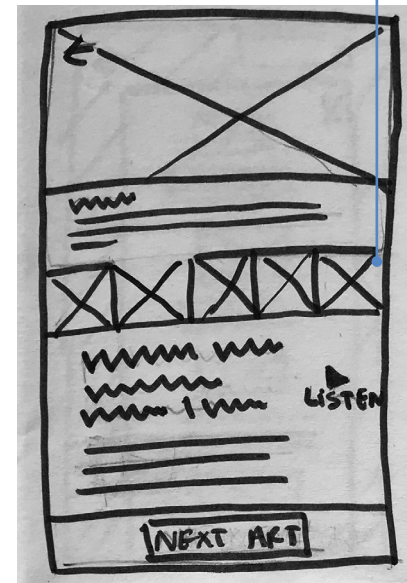
I choose the screen that shows the **artwork and all its details as the most critical screen** as this is the screen that provides all the crucial information the user is interested in. Equipped with the lighting demo inspirations I came up with these 8 solutions.

Thumbnails show small sections of interest and provide info. on tap.

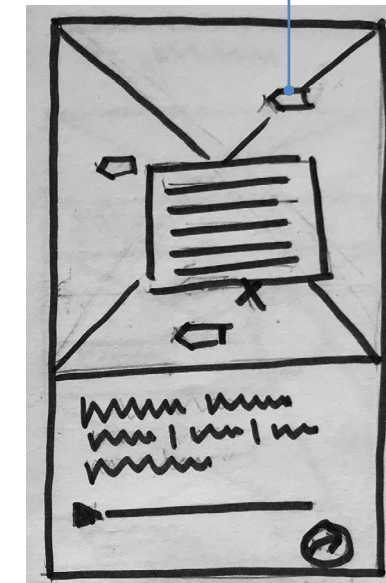
Audio of artist/curator



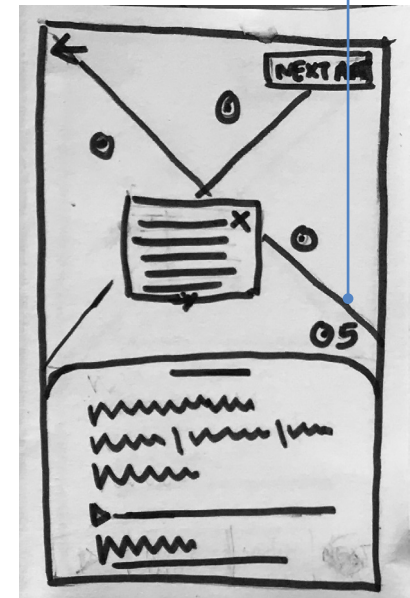
Variation of sketch 1 with thumbnails at the bottom of the art



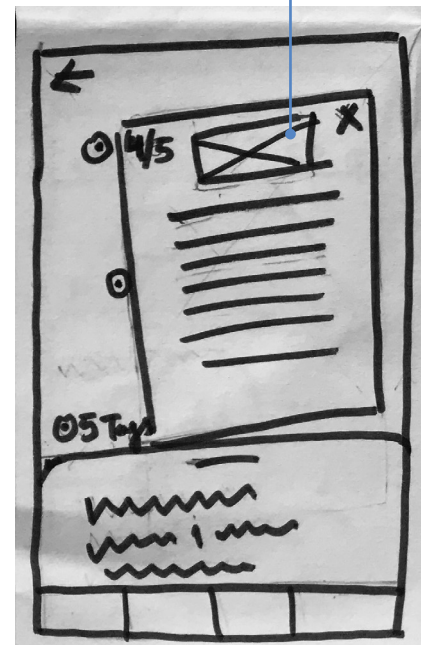
Markers on picture indicate points of interest and open info. box on tap



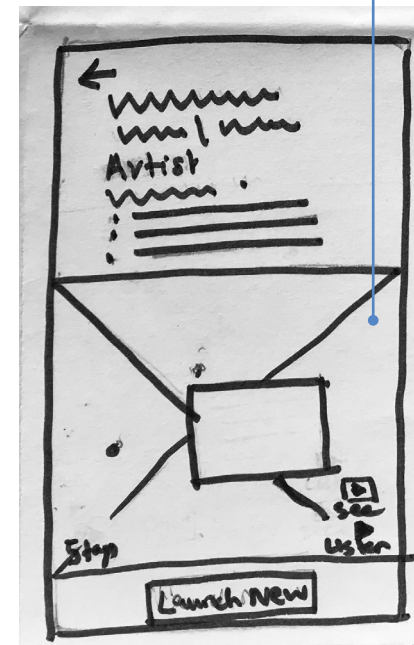
Number of info. points to read



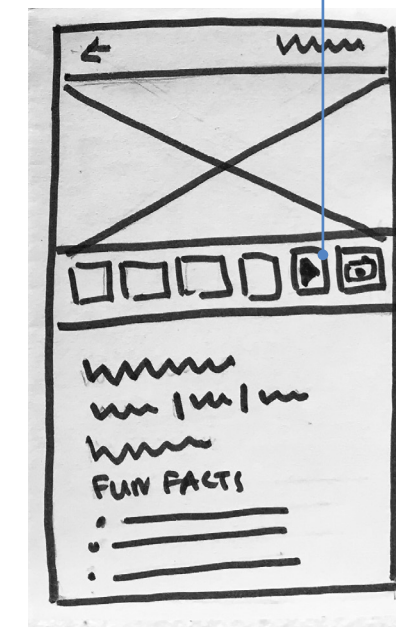
Points of interest open a screen with thumbnail and info.



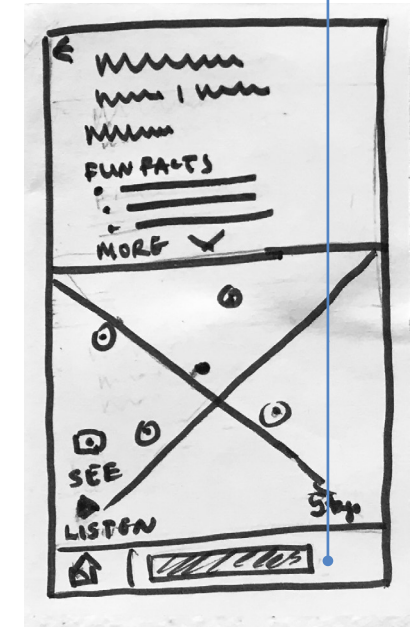
Picture is on the bottom and art details are on the top of the screen.



All audio and visuals are below the main picture.



Button to search the location of the next artwork



Solution Sketch

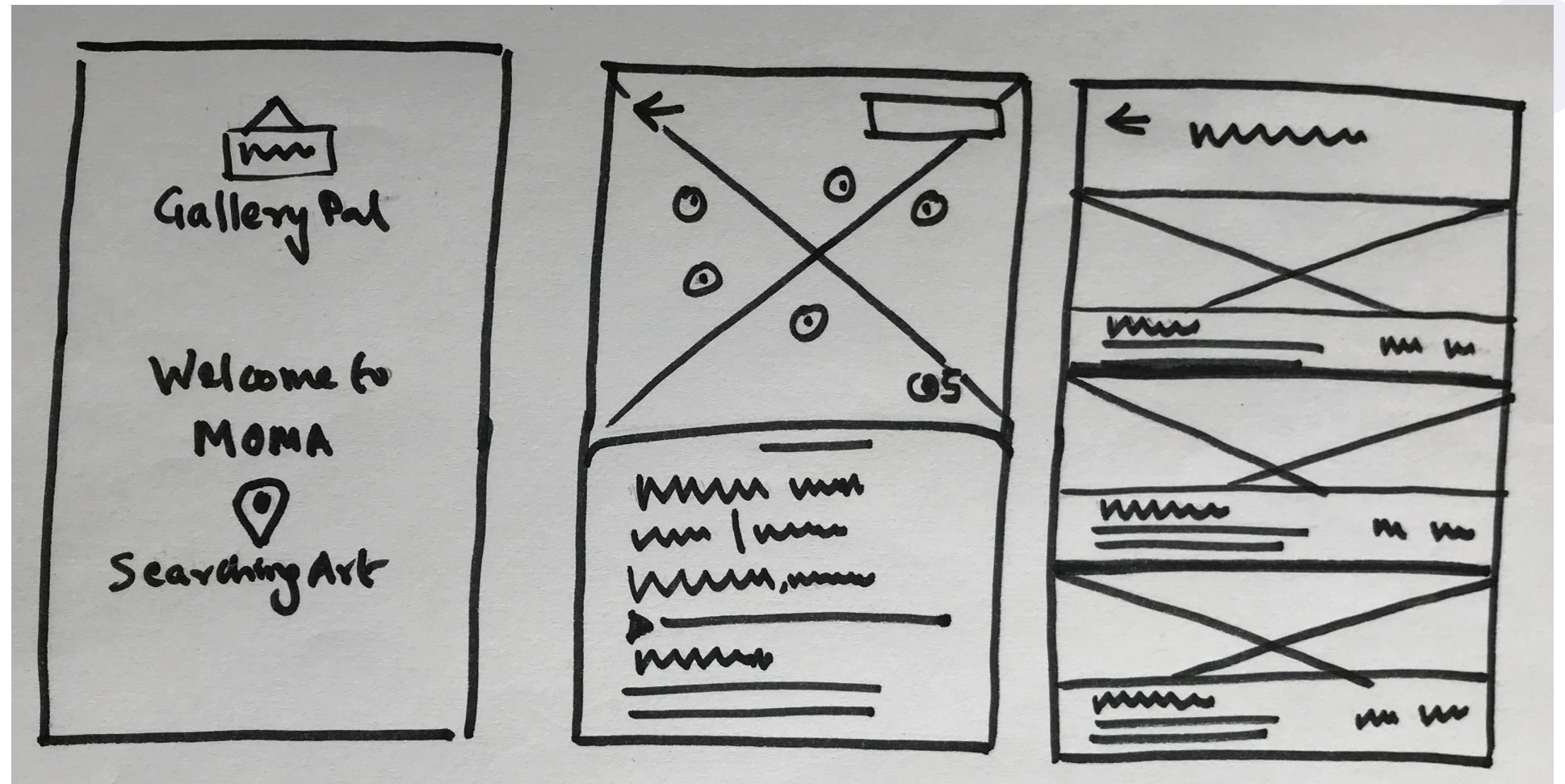
It was time to pick a solution from the Crazy 8's sketches. The deciding factor was the way the artwork provides details on the image. When thumbnails are used, it might be difficult to understand which part of the artwork is being shown.

*The best solution seemed to be **tags/points on the image that open modals to provide details.***

Day 2 Learnings

Today my schedule was packed with activities and it seemed daunting at first. As I started following the process, I was amazed at how several solutions emerged so quickly using the Crazy 8's method. I felt like I accomplished a lot especially seeing the solution that was starting to take shape.

Three-panel sketch



Screen before the critical screen searching for the artwork.

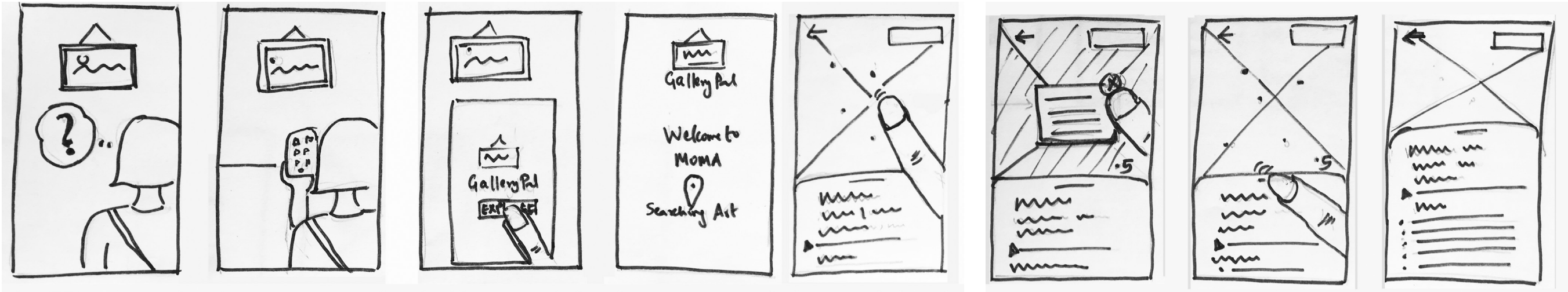
Critical Screen with points on image giving details about brush strokes, colors, technique, paint application and/or artist's style that makes the artwork special. It will show the viewers exactly where to look on the original piece in front of them.

Screen after the critical screen showing the artworks closest to the visitor's location.

Day 3

Decide and Create a Storyboard

In a normal design sprint, Day 3 is for sharing your ideas with your team and selecting the idea that your team wants to focus on. As this was a solo design sprint, I continued with my solution sketch from day 2 to create a storyboard.



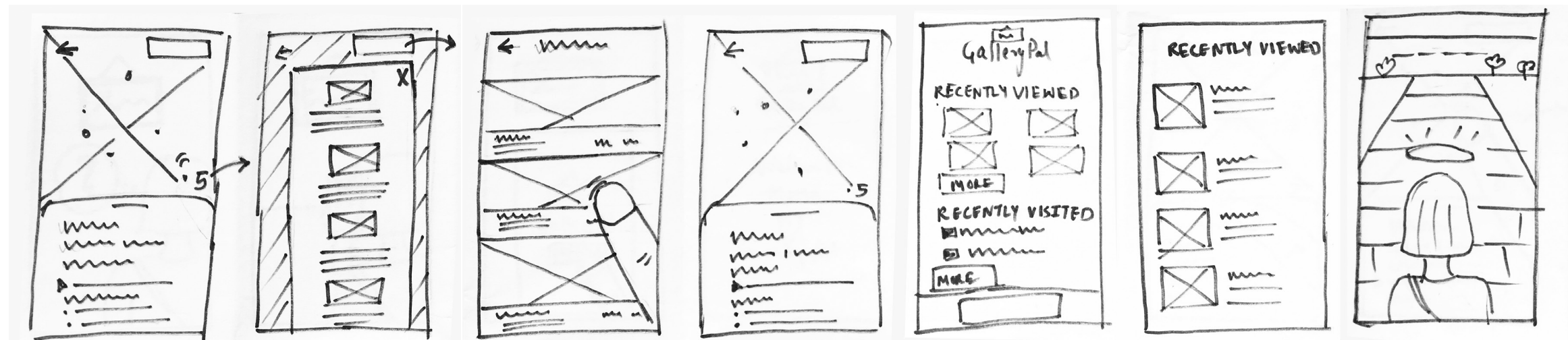
Angela is looking at a painting and wants to know more.

She opens up GalleryPal on her phone and taps 'Explore'.

The app detects her location and identifies the art closest to her (one in front of her).

Angela taps on the image dots to get details of specific regions on the painting.

She can read more and even listen to an audio by the curator or artist.



All the points of interest on the painting can be opened all at once too instead of one at a time. Top right button is to 'Explore Next'.

Angela is close to more than one artwork so she can choose the one in front of her from the list the app detected.

Angela can see all the art viewed by her. She can also see all the museums/galleries she visited.

Angela is leaving, happy with all the insightful information she got.

Day 3 Learnings

- *I looked into several artworks to decide which one to show on the prototype screen. I noticed that the artwork displayed in a museum/gallery could be a painting, a 3D form, an installation or even an outdoor piece. **The solution needed to accommodate these varied kinds of art.** I picked a painting for my prototype but made a note that the UI needs to be flexible to give insightful information about a wide range of artworks.*
- *The process of drawing out the scenario in which the app is being used helped to further **connect with the user's pain points.***



Paintings



Sculptures



Installations



Outdoor art

Day 4

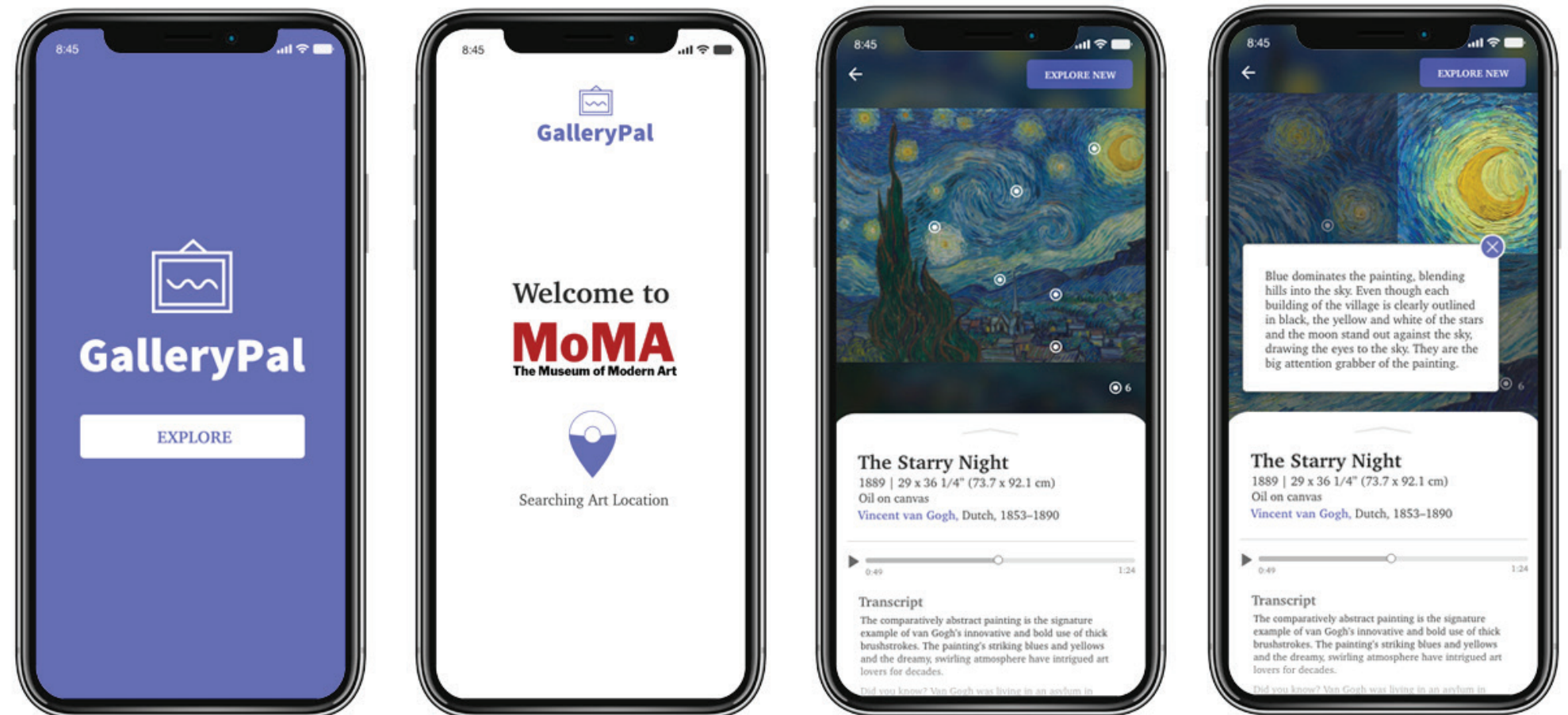
Prototype Your Solution

Design Spring prototypes involving creating screens that are absolutely necessary, for a user to interact with, to complete the crucial task.

I gathered some content about the painting I was showing and then started creating the screens and building the prototype.

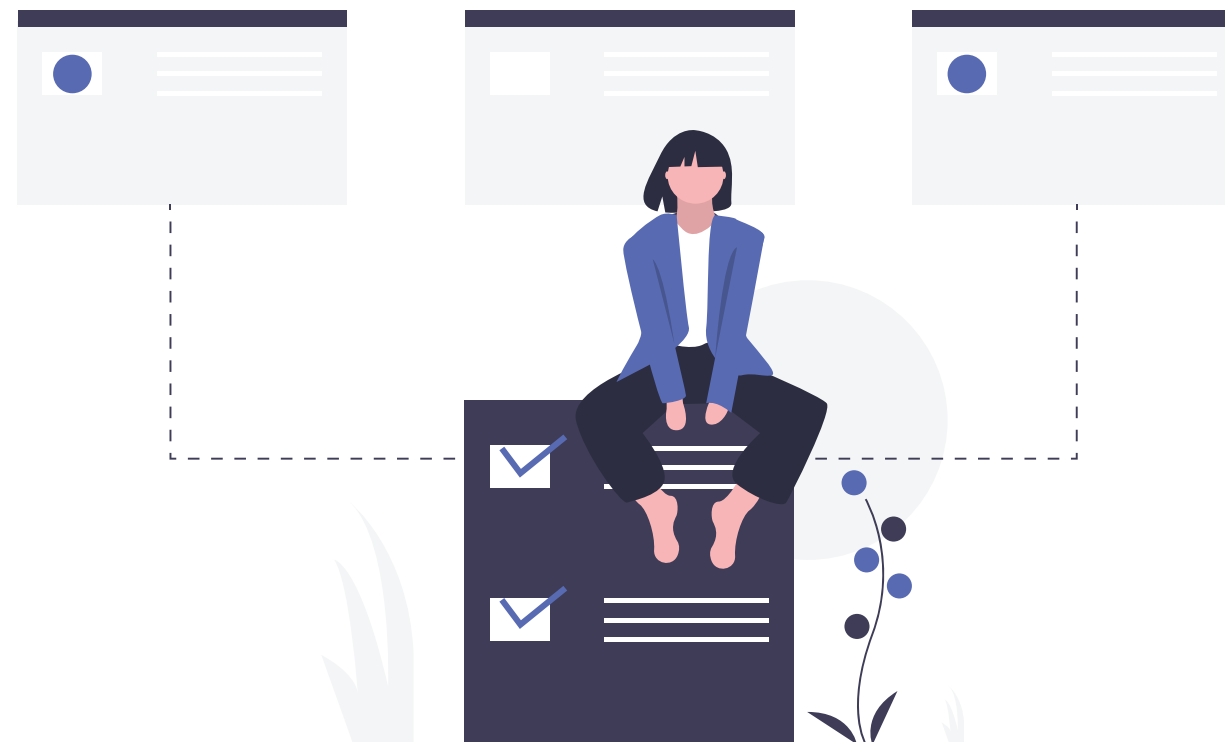
TOOLS

- **Illustrator** to tweak icons
- **Photoshop** to edit the image
- **Adobe XD** to create the screens
- **InVision** to build the clickable prototype to share for testing



Day 4 Learnings

- *Today's process taught me how and what to prioritize to complete the day's tasks given hi-fidelity screens take a lot of time. I tweaked icons from a UI kit, stuck with using the logo color that was provided as the primary color, and did not try too many font options.*
- *As I was building the prototype, I started thinking about the tasks I want the users to test and the questions I would ask during usability testing. It was important to make sure users understood the scenario so they are aware how this app is different from the ones that provide general art information.*



Day 5

Usability Test/Validate

The last day of a design sprint is dedicated to getting feedback from users.

Now that I was ready with a prototype, it was time to do some user testing to validate my design decisions.

Before Testing

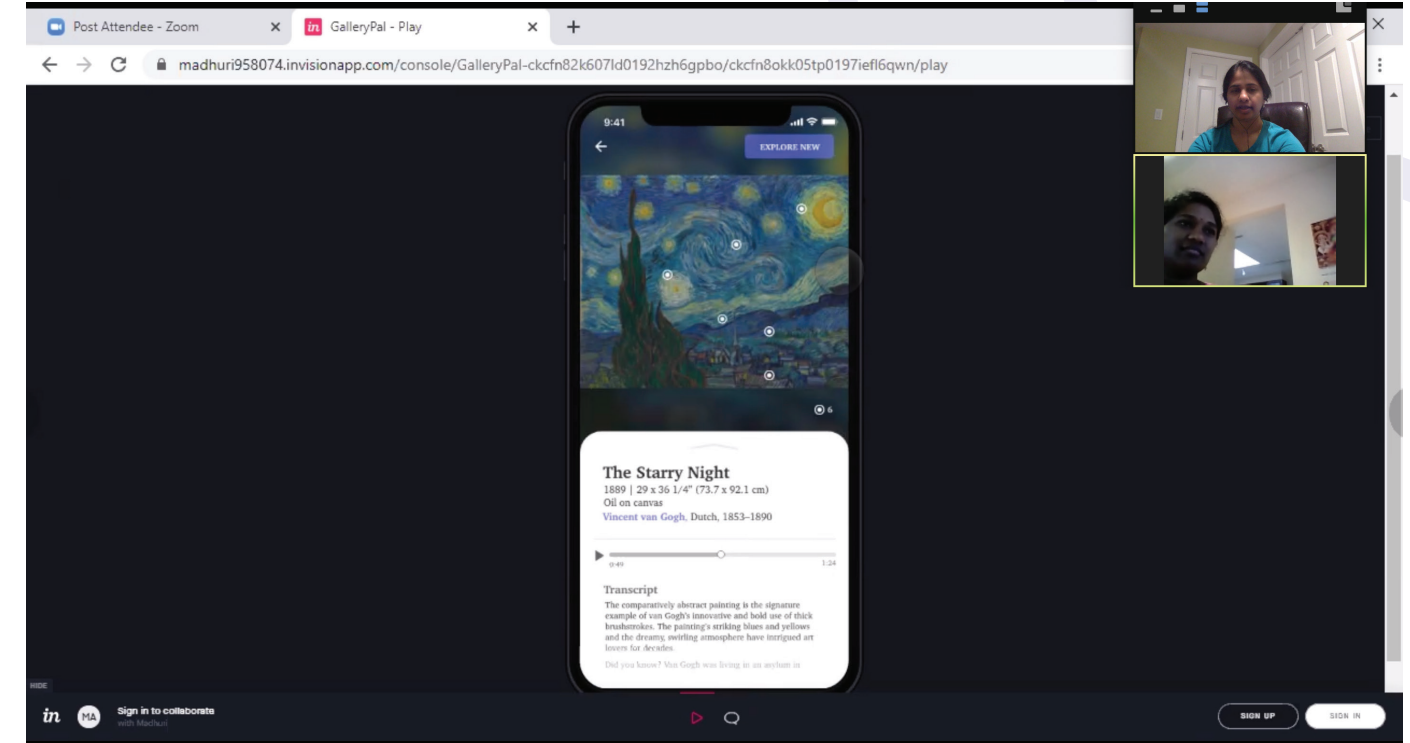
I scheduled **5 participants** and wrote down a script for introduction, the tasks, wrap up and a thank you note. All my testing was going to be performed **remotely on Zoom** where participants share their screen while going through the tasks.

During Testing

After a friendly chat that included asking them about their last museum/gallery visit experience, I explained the context of the app — that it's being used at the museum when they want information on the artwork that's in front of them.

After Testing

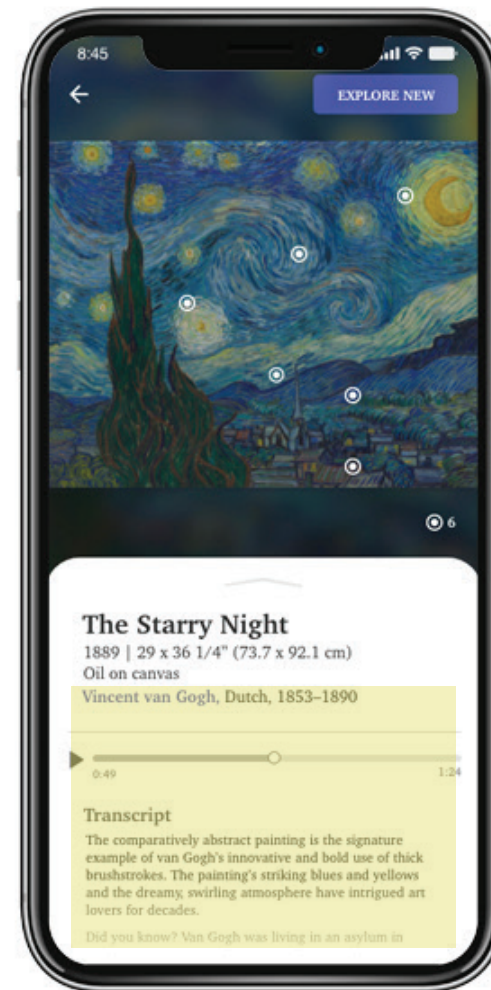
I **analysed my notes** to find themes and documented the information by preparing a **usability test report**. It listed out the issues, recommendations/solutions and priority level of each issue. I also **made updates to my design** based on this report.



Key Findings:

The interviews went well with feedback ranging from participants being excited about the app to pointing out additional content they would like to see.

- There were **no issues with the flow** but users were interested in knowing how the app will detect the location of the artwork.
- Users wanted to see **some additional information** about the artwork like period, popularity, other works from the same artist as well as the same period.
- Users also wanted to see their **recently viewed art**.



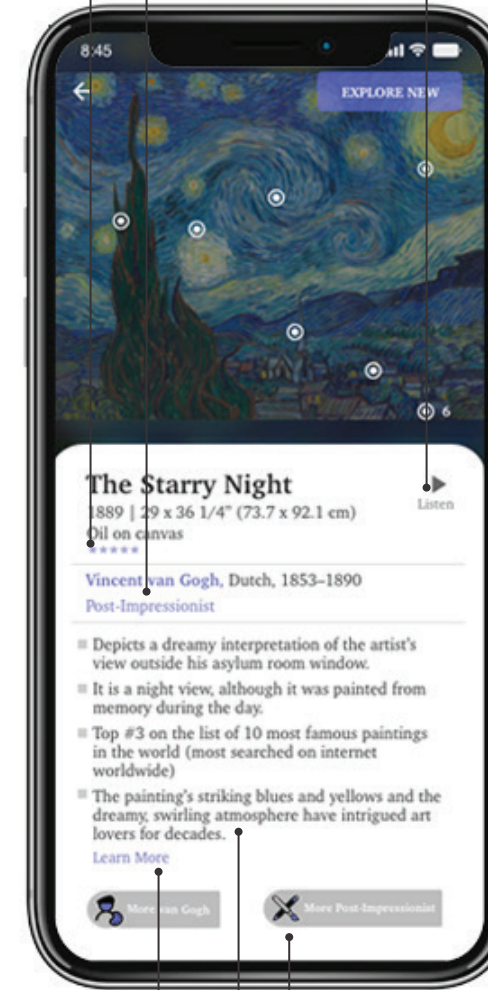
BEFORE



Rating shows popularity of the painting

Audio when available

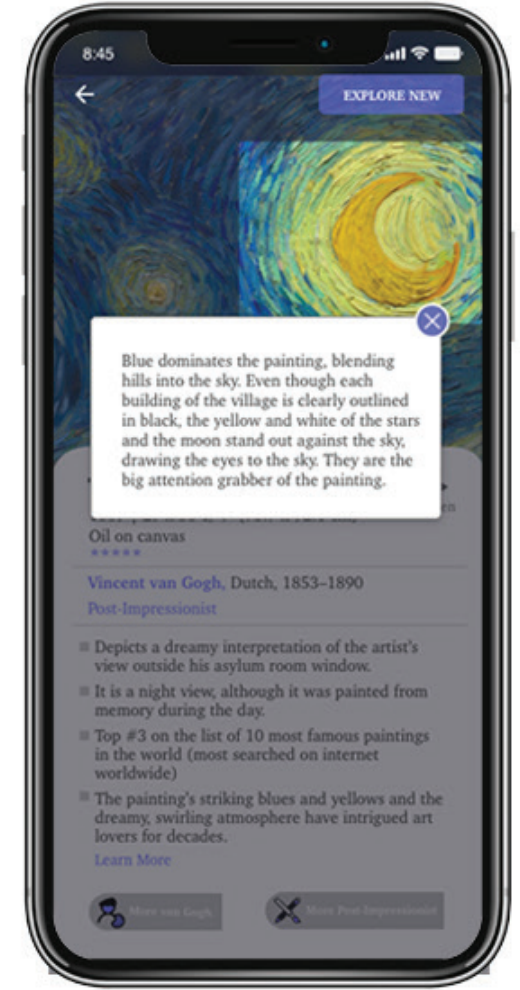
Art period info.



A link for more information if viewer wants to learn more.

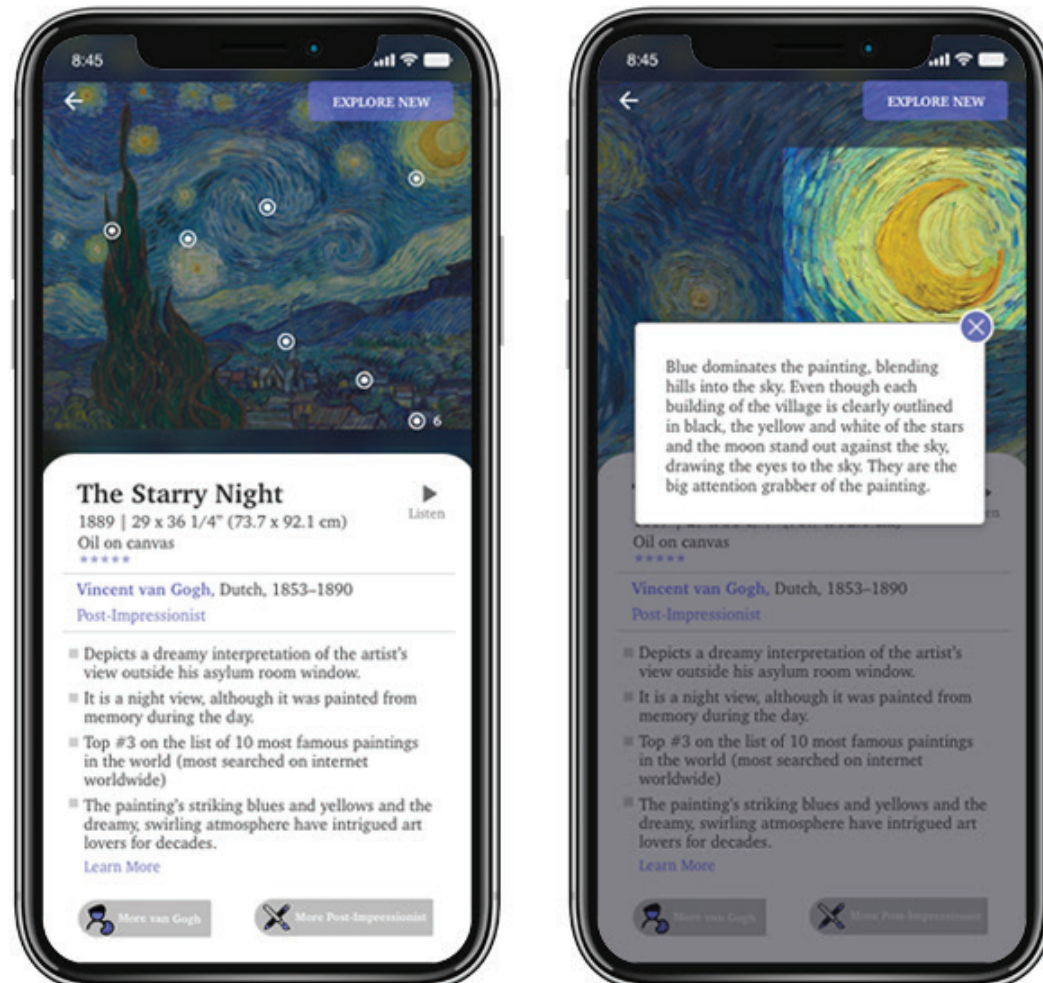
More about the artist and similar art form.

Interesting facts in a list format.



AFTER

A/B test recommended for display of details on the artwork



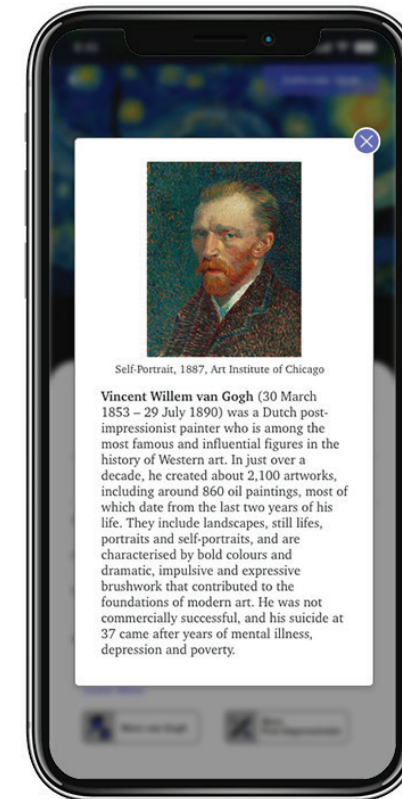
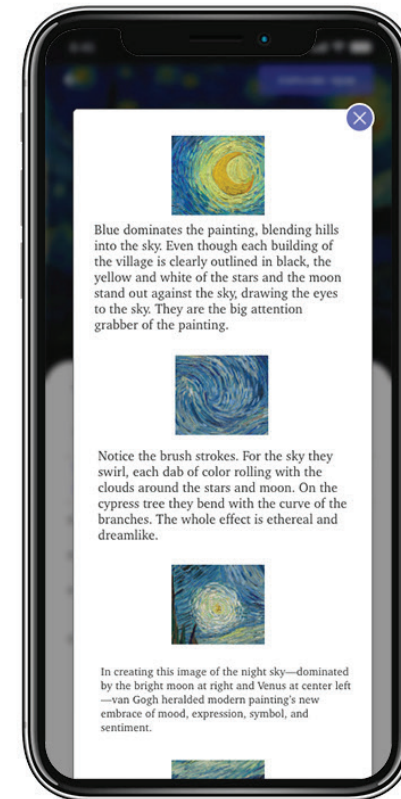
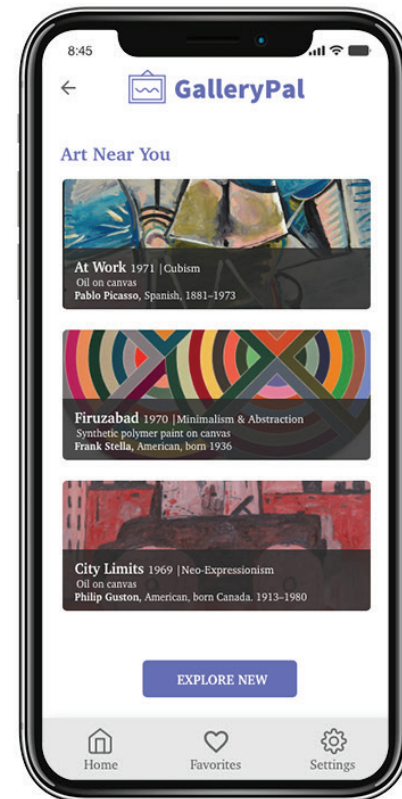
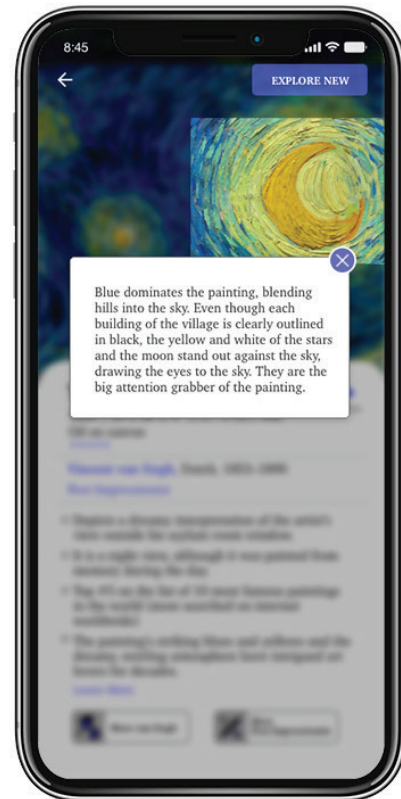
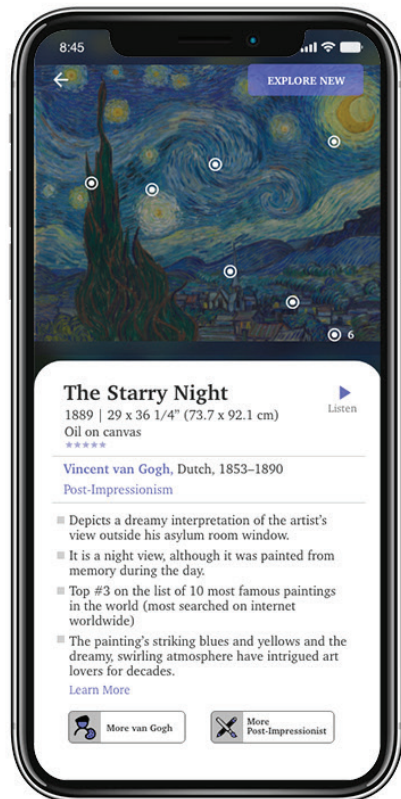
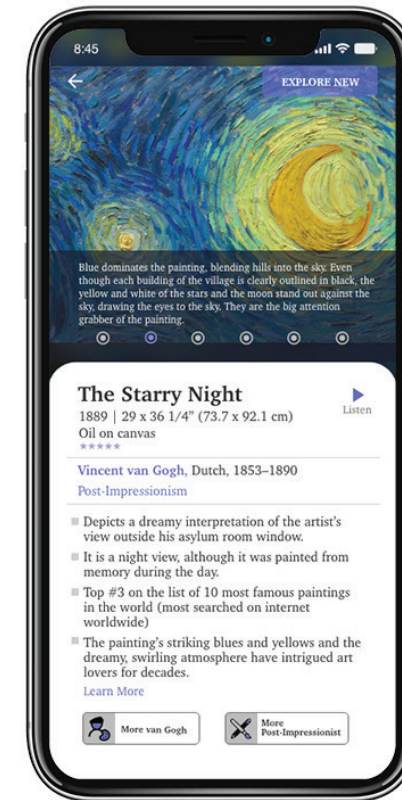
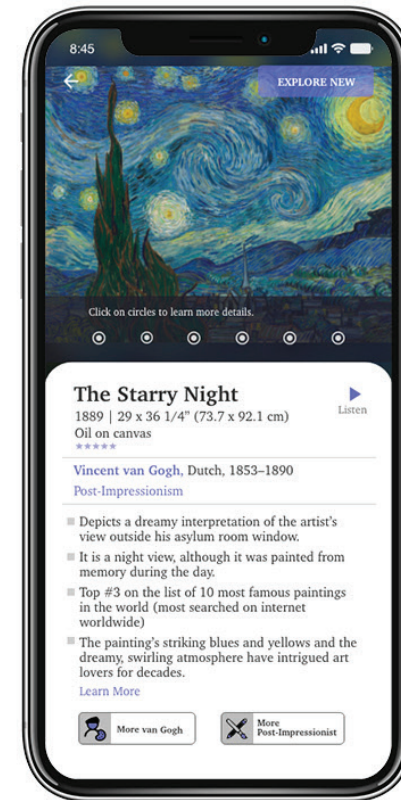
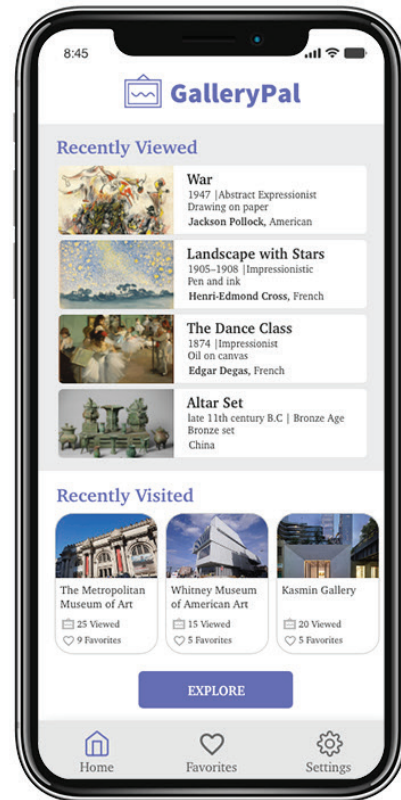
Version A

Add a pulsing animation to the dots on the tested version to show that they are clickable. The dots/interest points are on the artwork and when clicked, zoom into the area and open a modal window to show information.



Version B

The dots/interest points are at the base of the artwork. When clicked, information is displayed and the image zooms into that section.



“Amount of information is just right for me. I lose interest if it is 2-pages long. I also want to view other art and not just read about a few pieces.”

“I like the points of interest on the painting giving me details.”

“I want to be able to see other art from this artist and period.”

Final Thoughts

About the App

*The app needs content about a piece to display all the information. I got thinking about how this content can be collected. **Artists can add information in a set format** when they submit their pieces. It will add to their process of preparing for a show but knowing that **viewers will be able to connect to their art better** will be a good incentive.*

*Participants testing the app were not new to museum apps that provide tours and audio. Bigger museums have well organized tours and curated content. On the other hand **smaller museums and galleries that do not have a lot of resources** could benefit from an app like GalleryPal to provide more **value to their visitors**.*

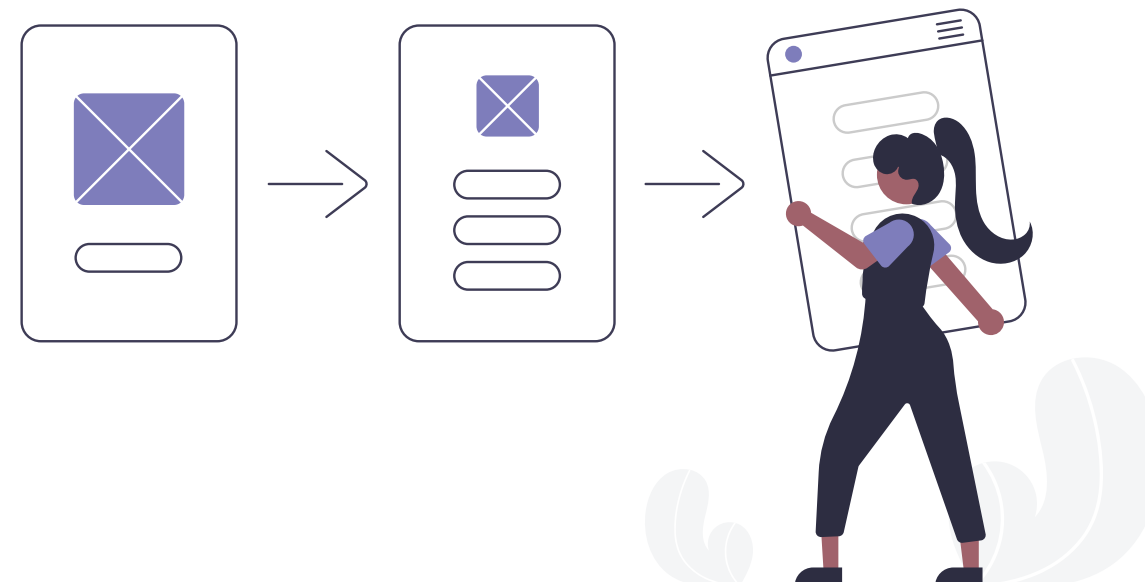


Design Learnings

*It was interesting to learn about the design sprint process and I enjoyed exercises like the Crazy 8's sketches to get ideas to flow quickly. I liked the overall structure it provided that lets you **design a prototype and test in just a week**.*

*As the prototype was built in a single day, I focused on the crucial flow that I wanted to test. **I anticipated some of the findings from the usability testing** like users wanting to see the additional flow of looking for other artwork and list of recently viewed items for future reference.*

***Being flexible is necessary to keep making progress** when things do not happen as planned. Two of my participants could not make it on day 5 for the usability testing and had to reschedule. I scheduled them for the next day and used my time to synthesize the notes from the three tests. It already covered a lot of my findings and made it easy to make updates the next day after the additional tests. In a regular project I would make arrangements for backup participants.*



Thank You!

Email: madhuri.ag@gmail.com

Web: mag-designs.net

LinkedIn: [madhuri-govindaraju](https://www.linkedin.com/in/madhuri-govindaraju)

