



Encouraging Engagement with Public Art through Participation

Project Overview

Over the course of the Fall 2019 semester, my team was tasked with gaining an understanding of how everyday people interact with public art as a way to gauge how public art adds value to a city. Our major takeaways from this process included:

- People are more likely to engage with art when they feel a personal connection to it.
- Many people want to learn more about public art, but don't know where to start.
- "Public Art" can mean have a different meaning for different people.

We designed and tested a new system that incorporates these findings to improve the current user experience as they interact with the art. This system is AR based, and places information "hotspots" on the public art when a user points their phone at it. By clicking on the hotspot, the user can learn more about the piece, and save and share the information to further promote the art to others.

Our testing received positive feedback from users, and gave us many additional insights to inform designs moving forward. These include a "You May Also Like" feature that can recommend new art pieces to users based on what they've already looked at, and push notifications alerting a user if they are near a piece of art that they could explore.

Project Details

My team members (from left to right):
Danielle Shoshani, Laura Fulton, Fon Euchukanonchai, Corey Emery, and Payal Bhujwala

Role: Overall, my work contributed most in the ideation and content synthesis area of our project. I was originally the one to propose the framework for our final prototype, and worked to construct a strong narrative around our idea using the information we collected through our research.

Methods: Observe & Intercept Interviews, Affinity Diagramming, Think-Aloud Protocol, Storyboarding, Bodystorming.

Location: Downtown Pittsburgh, East Liberty and Oakland Neighborhoods.



The High-Level Problem

Public art is a key fixture of any city you might visit. The various murals, sculptures, and increasingly more interactive exhibits all demonstrate the city's history, culture, and future. However, the cost of maintaining these various pieces is significant for municipal governments, begging the question "Is this cost worth it?"

One way to justify this cost, used in previous work by Dr. Brett Crawford from Carnegie Mellon's Arts Management Program, is to show **how art adds to the livability of a city.**

In order to measure this, we were interested specifically in how we could **measure and increase public engagement with art.** We originally did not know how exactly we wanted to accomplish this, so we let our research and the users guide us.



Going to the Source

With our broad question in mind, we each went out into the field to talk to potential users in the context of public art in Pittsburgh. **Our main goal at this stage was understanding the space, users, and current experience better.** We also hoped to gain some insights into what would be most effective for us to focus on moving forward.

I was able to talk to someone who had **actually contributed to a piece of public art.** He helped paint a mural of Mac Miller in East Liberty spontaneously one day as he passed by because the artist was inviting anyone to contribute. This was one of his favorite art pieces in Pittsburgh, and the fact that **he could point out the pieces he worked on** played a part in that.

"I skated over here by chance and saw other people working on this so I decided to stop and check it out. [...] I ended up staying for about half an hour."

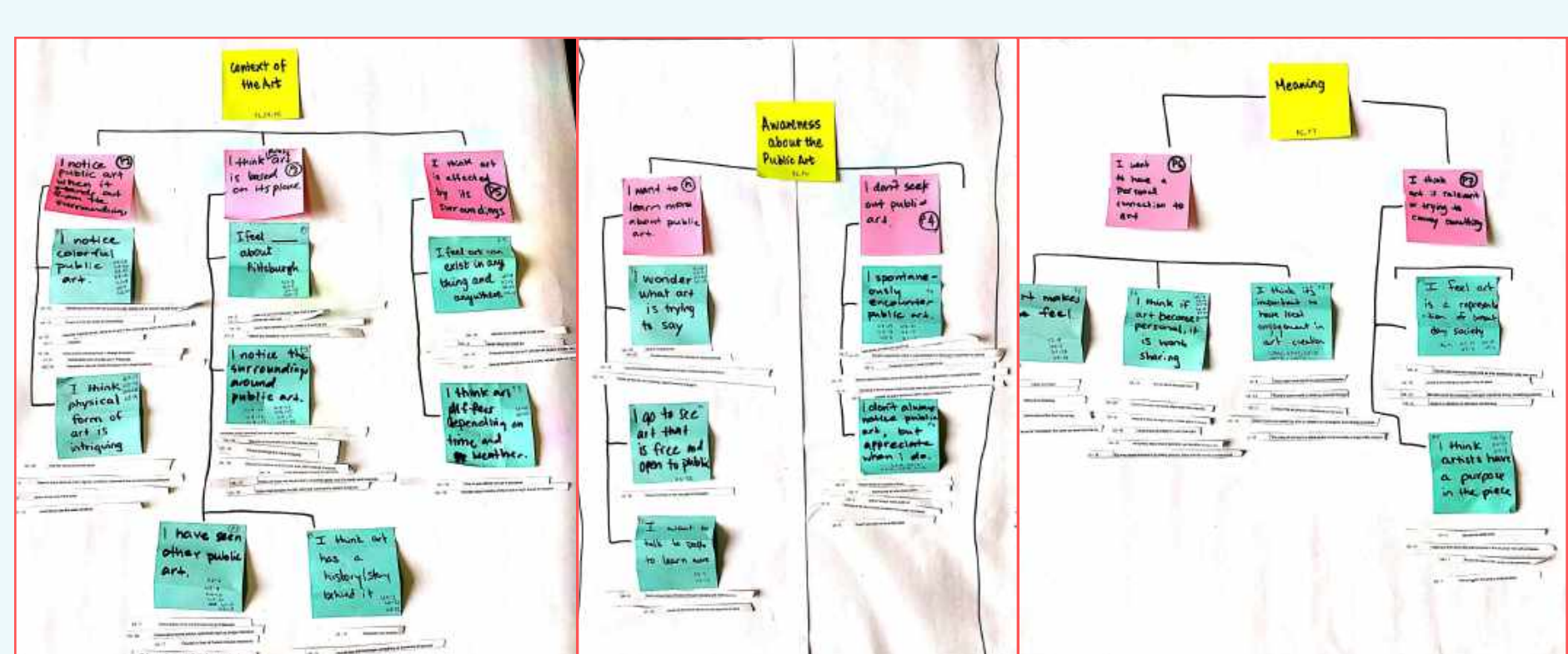
"I guess he didn't come with a crew because it's a way of coming to a place you're not from and still having mural locally or organically created."

"We were all encouraged to write down a personal memory about Mac Miller, so here I wrote 'Dang' which is the name of my favorite album by him."

Isolating Meaning

This insight proved to be critical to our ideation moving forward. In addition to wanting to learn more about the **context** of the art and be more **aware** about existing pieces, our interviews showed that users have a desire for **meaning** in public art: they expect the art to **convey something**, and they want to develop a **personal connection** with the art.

We decided to focus our problem more on how to **increase personalization in engagements with public art, and how to include participation to create an active experience.**

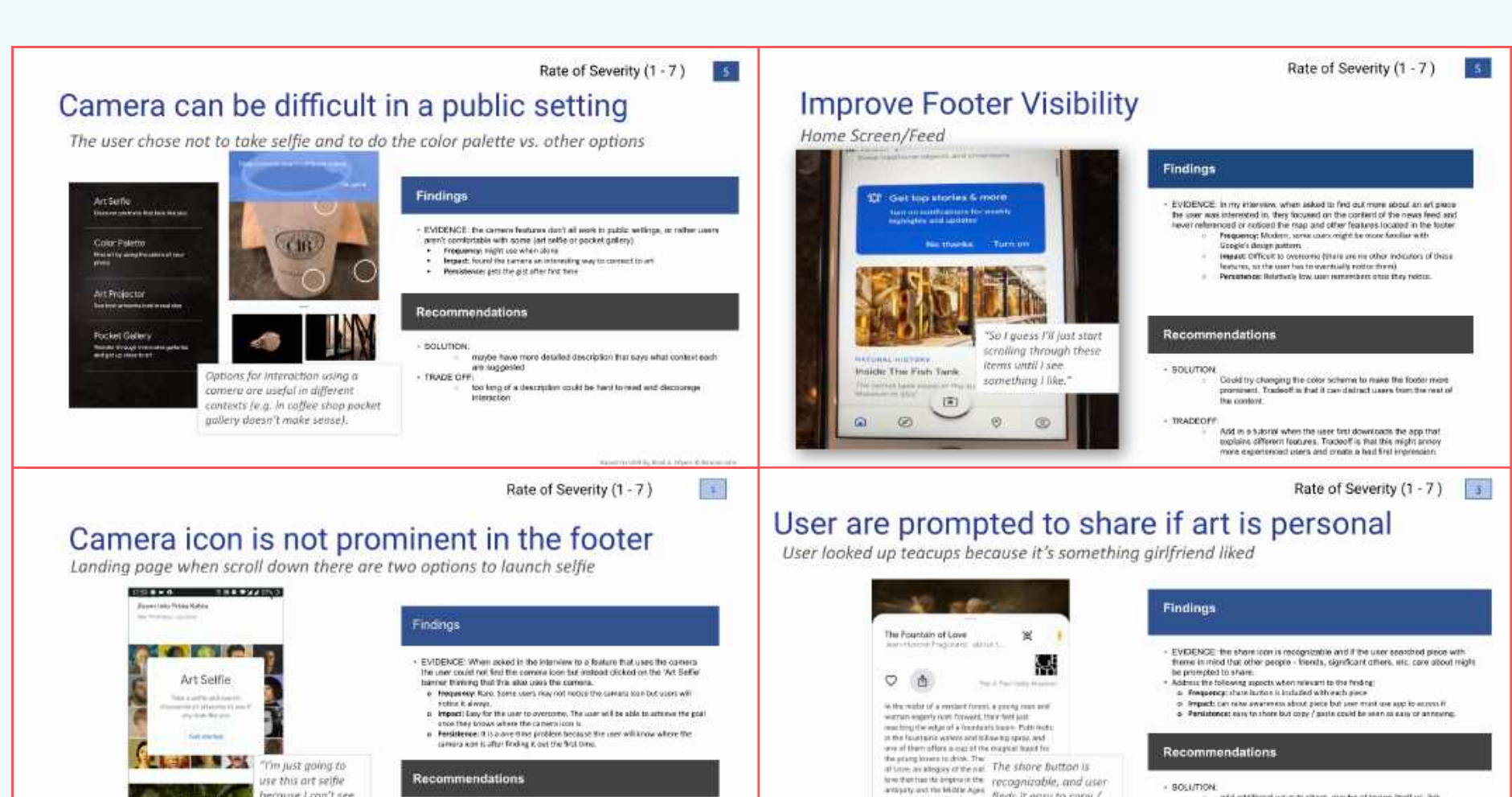


Comparing Alternatives

We also spent some time testing the usability and experience of the **Google Arts and Culture** app, which has **camera-based features that can create a more personal experience** with the art.

Our main insights involved **privacy and content organization.** While users want a personal connection with art, **they may not feel comfortable doing this in a public setting** (in this case, taking a picture of themselves).

We also learned that it is important to **prioritize content so that the user does not get distracted** by extraneous or abundant information at any step of the experience.

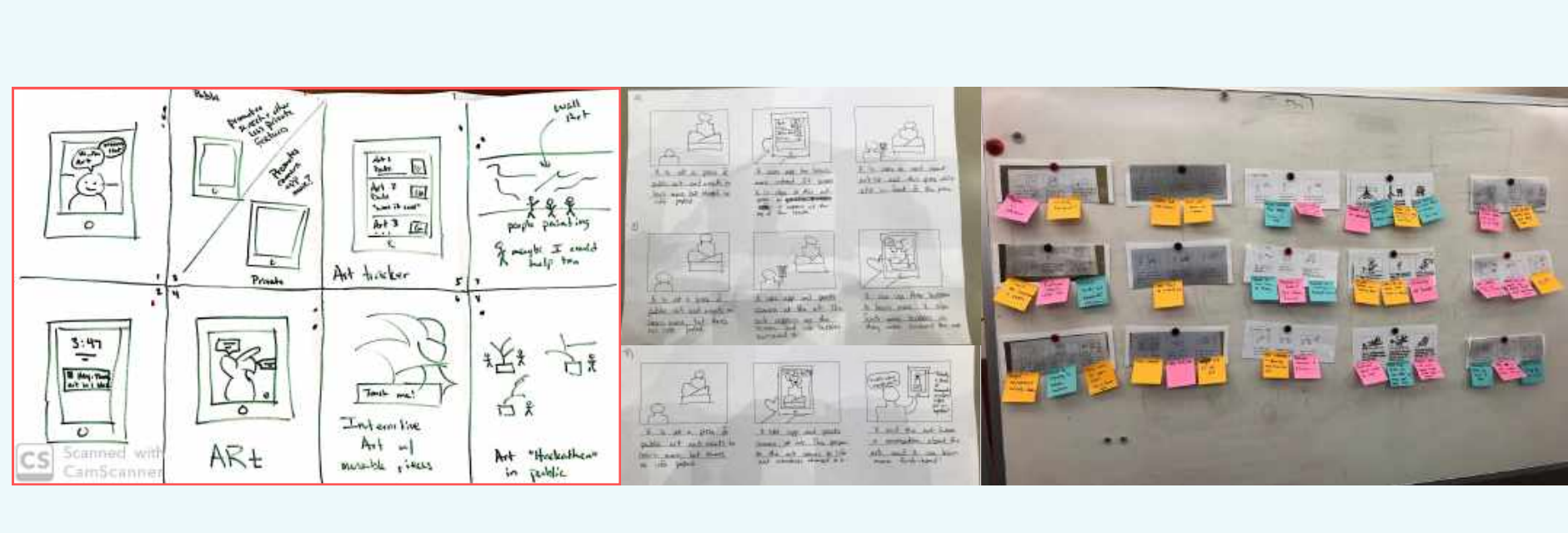


Rapid Experience Designing

As we moved into the ideation and design phase, we isolated five main needs based off our previous research and testing and created 15 storyboards of possible solutions. My three focused on **users finding more information about the art.**

The experiences I designed included **online articles so you could learn about a piece, an AR app that could map information to specific points of the piece, and an app where you could have a conversation with a piece of art.**

Our user feedback on these designs ranged from generally understanding for the online articles to scared and amused by the talking art. The AR app received a more mixed set of responses due to the nature of the technology, but also showed a good amount of potential (see right).



"This could be really interactive and a cool way to learn without there be a huge amount of info all at once."

"I've seen this before on a Diego Rivera mural. It was great to be able to look at different parts of the art specifically and definitely felt like a more engaging way to learn."

Prototyping Our Solution

We decided to move forward with the AR app based on the feedback we received.

Our prototype involved a phone outline with the screen cut out to replicate the use of the camera. At first, I acted as our "art piece" and taped clickable hotspots on myself, but we later moved to a real art piece and had to hold the hotspots between the user and the art. The user could click on this via the screen, and a modal with a piece of information would open on a screen (a team member held it to the screen with a chopstick).

Our main takeaways from this stage were that it would be helpful to **add a landing screen and tutorial to explain the interactions** to the user. We also got feedback to **improve the content we selected to more directly map with where the hotspots were located on the art.**



Reconsidering what is "Public Art"

In our last round of user testing, we received one bit of feedback (see right) that didn't affect our design but really made us reconsider what the scope of our app could be.

This one quote revealed a blind spot we had throughout our process, and luckily one that our app could easily account for: **that people will consider different things "public art" depending on their background and preferences.**

"So this app works for this art piece, but what if I want to learn more about that building across the street? Will it work for that as well?"

Final Solution: AR+

We titled our final product **AR+**, representing the fact that it utilizes augmented reality, **but also that it can work on more than art (substituting the t for a +).** We modified our content modals to be more relevant to the location of the hotspots as well as a greater variety of facts to cater to a diverse set of users.

We also **enhanced our landing screen and onboarding process** to clarify how the app works, that use of a camera is required, and how to interact with the hotspots in order to make the process easier and more comfortable for first-time users.

We finally incorporated a **save and a share feature in order to make the interaction with art more social as well as more personal.** By saving the info, the user could refer back to it later as a way to reinforce the experience. By sharing it, it increases awareness and hopefully engagement among other users.



Future Steps

Moving forward, our main focus is on **how to encourage initial engagement with AR+.** We recognize that there is a barrier to entry with this being an app, but we believe that by advertising with QR codes near existing installations we can streamline the download process and encourage use.

We also feel a benefit is that **this app does not have to be limited to one area or city.** If a user goes to an entirely different city, they can still use this system. This can create a loyalty to our app and give users more confidence in their ability to navigate new art landscapes.

Takeaways

- Throughout this process, we were constantly learning new information about what the users want and how they interact both with art and with our designs. **There is never a point where the research ends.**
- Our team had a very tight time schedule to complete this project in. **Flexibility in terms of scheduling meetings and user testing was critical to our success.**
- Each member of our team really took the reins at a certain part of the project, **stepping up and taking the lead, and trusting my team members to do the same, can create a healthy and productive group dynamic.**

