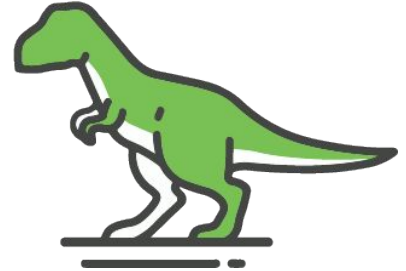


MSU Museum

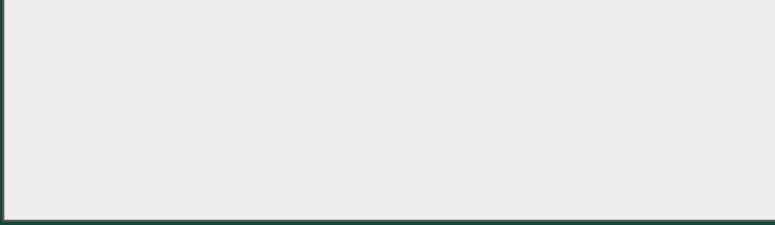


Brittnay Stahl, Cole Spence, Jared Joseph, Tanvi Prabhakar, Aman Dhruva
Thamminana, Vik Vedapudi, Chelsea Drouillard, Allyssa Harris

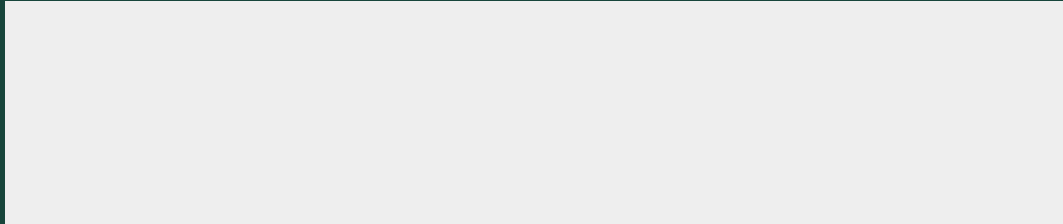
Introduction

- Founded in 1857
- Manages nearly one million projects in areas such as Anthropology, Natural Science, and History
- 9 exhibits with 3 rotating spaces





Defining the Problem



Survey and Interview Feedback

What is the most commonly asked question from visitors?

2 responses

It usually depends on the age of the visitor and the topic. A lot of visitors will ask if things in the museum "are real" ("Is that dinosaur real?" "Is that mask real?"). This usually means they're wondering if something is an "authentic" artifact, or if it is a modern reproduction. I also get a lot of questions about how taxidermy works and where our taxidermed animals come from.

Where is the bathroom?

What do you believe visitors should take away from leaving the museum and why?

2 responses

Our mission statement says: "As the science and culture museum at Michigan State University, the MSU Museum "is committed to understanding, interpreting, and respecting natural and cultural diversity through education, exhibitions, research, and the building and stewardship of collections that focus on Michigan and its relationship to the Great Lakes, and the world beyond." " So following that mission statement, the museum's goal is for visitors to leave the museum with a greater respect for natural and cultural diversity.

My personal (and more specific) mission is for visitors to leave with a "new lens" - through our exhibits, programs, and hands-on education experiences, visitors learn to look at objects and think about topics in new ways. These experiences are added to their personal "toolkit of life", and they can apply those new ways of looking to the broader outside world.

I would like visitors to see the big picture of life-from fossils to habitats to man 's intervention with the general store, to the future of the earth-climate change, precipitation, and representation of earth in a sphere. All these parts of a big picture are here in the museum.

What would you think a staff member or visitor would want most out of whatever we design?

2 responses

As a staff member, I would want:

- all information shared in the app to be factually accurate
- the app to offer things beyond the physical constraints of the building, so it can be used as advertising and outreach to draw people in
- easy access to data about how people are using the app
- exciting, fun, and beautiful educational experiences!

As a visitor to another museum, I would want an app to have:

- a map
- small download size/quick download time
- opportunities to expand my experience (self-guided tours, scanning things in the galleries to unlock new content, etc)
- accessibility (able to be used by people of all abilities, clear instructions when needed, user-friendly design)

Whatever we design should make an impression on the visitor. It should cause a learning experience and a new understanding about the earth and life within the earth.

If you were a staff member when the Guide by Cell App was in use, what was the biggest challenge with the application? (Feel free to write N/A if you were not at the MSU Museum during this time.)

2 responses

People didn't know that the app existed, the information shared was NOT accessible for all ages (big words, complicated themes), the audio wasn't clear, and it didn't expand a user's experience (without offering any sort of extra activity for visitors or a call to action, it was essentially just an extra label that visitors listened to instead of reading).

N/A

**How might we make the MSU Museum experience
more engaging for visitors?**

Persona



Ms. Banks

Age 31 • 3rd Grade Teacher

Technical • Uses iPad In Class Settings

BIO

Ms. Banks is a teacher at Cornell Elementary School who enjoys museums just as much as the students. Seeing the kids learn and engage outside of the classroom makes her feel accomplished and inspired. She seeks out kid-friendly museums that will make them go "ahhhh" "so cool!", but they will also be eager to learn as well. It is important for her to have some direction and amenities accessible to her.

Drive

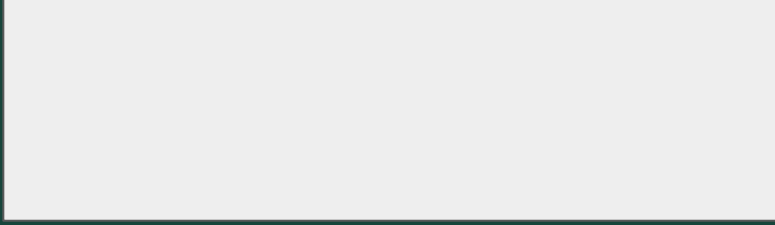
- Learning, teaching, and helping students grow
- Having a strong relationship with her students
- Likes creativity, and try use creativity to solve issues

Goals & Needs

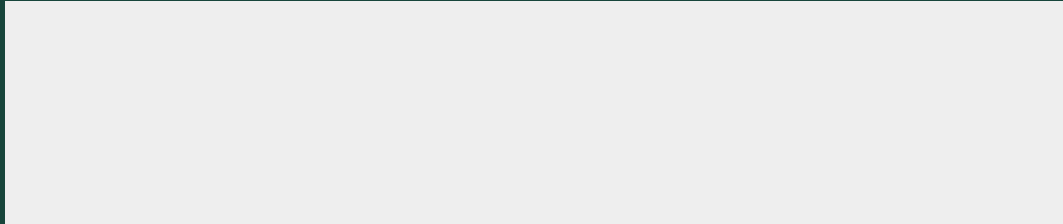
- To keep kids engaged
- Wants a guide but to also explore
- Doesn't want to be overloaded with information (enough for kids to understand and learn)

Hesitations & Pain Points

- Unfriendly kid museums
- Too complex exhibits / engagement with tech
- Disruptions of learning / inconveniences



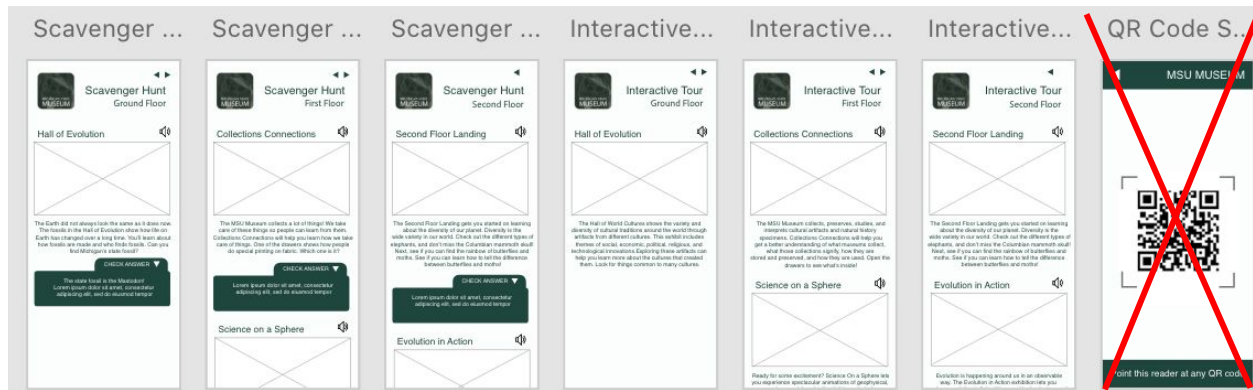
Mockups

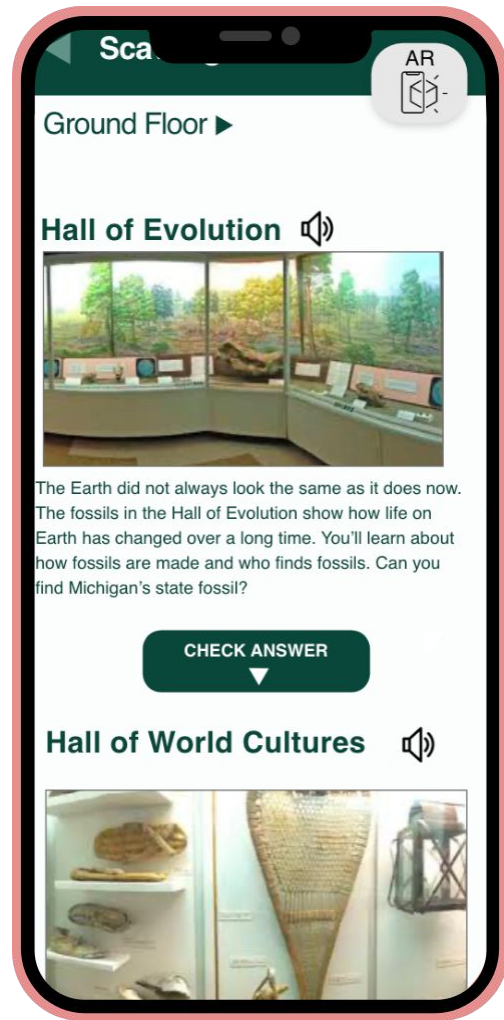
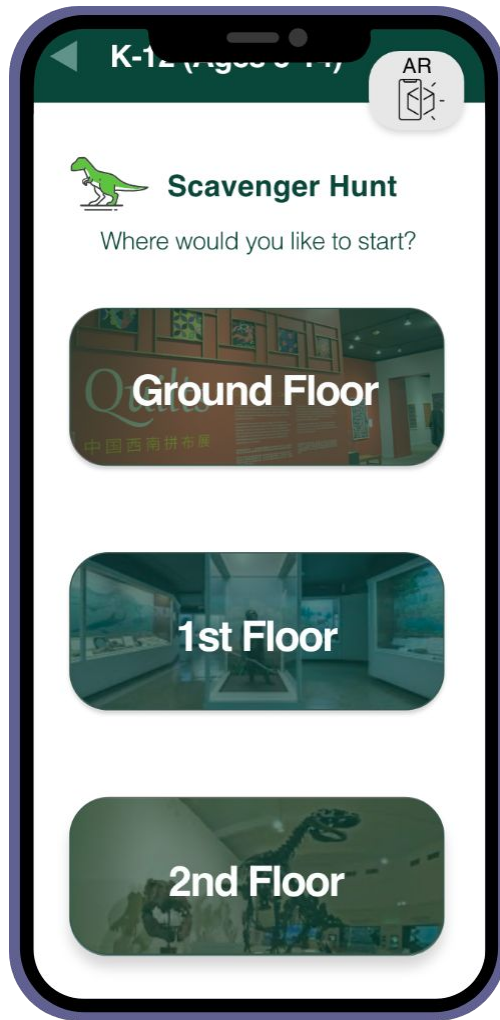
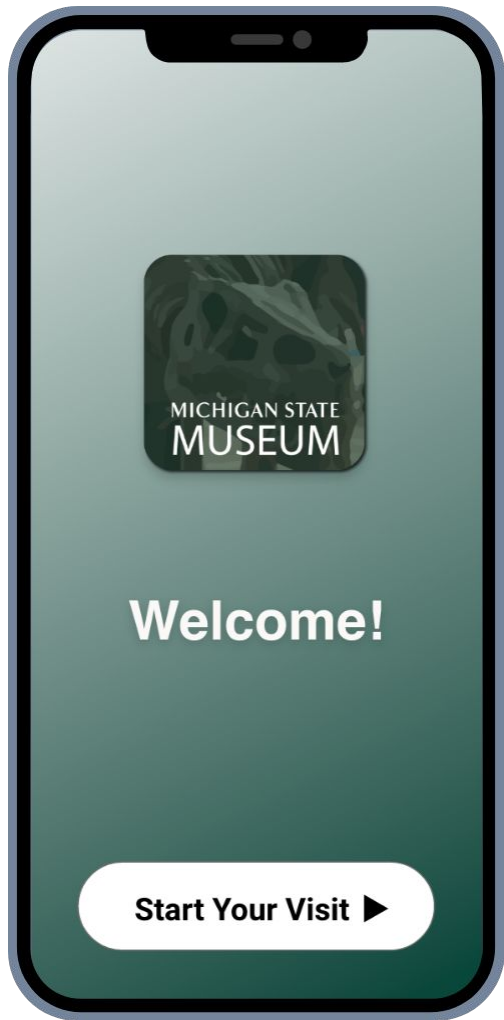


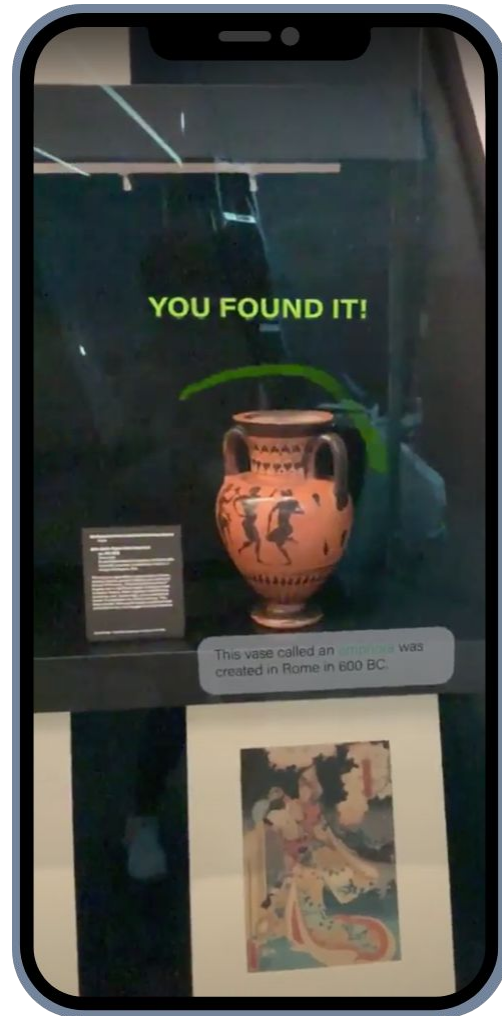
Design Solution

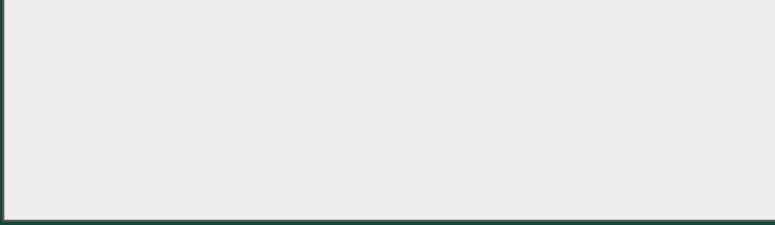
After testing our initial solution, the following changes were made.

- Out with the QR codes, in with the AR
- Digitizing existing scavenger hunt

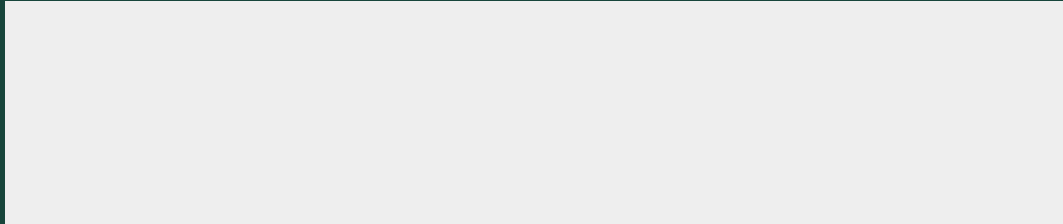


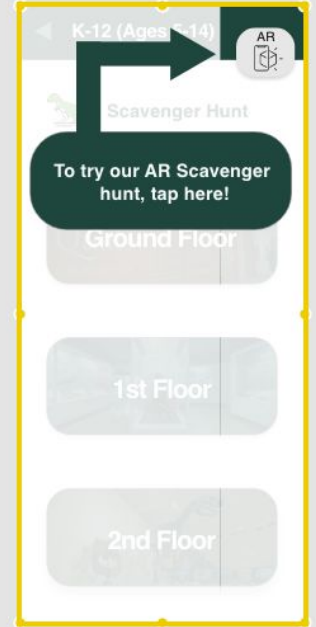
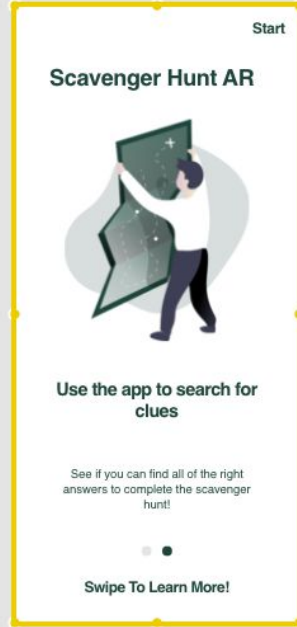
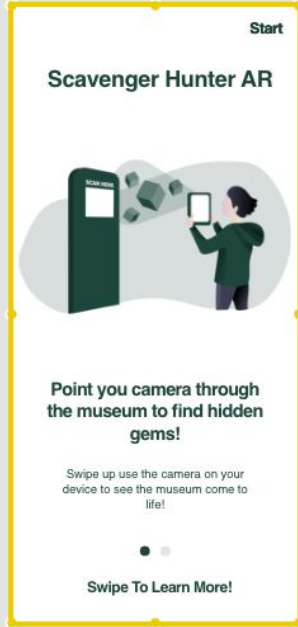
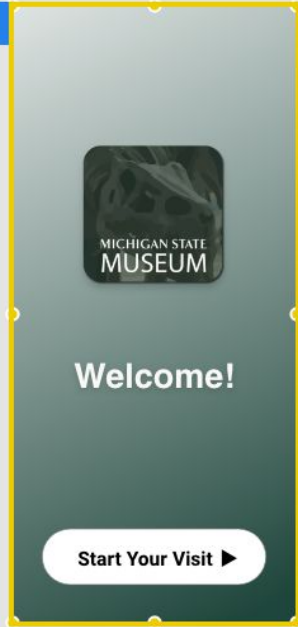






Prototype

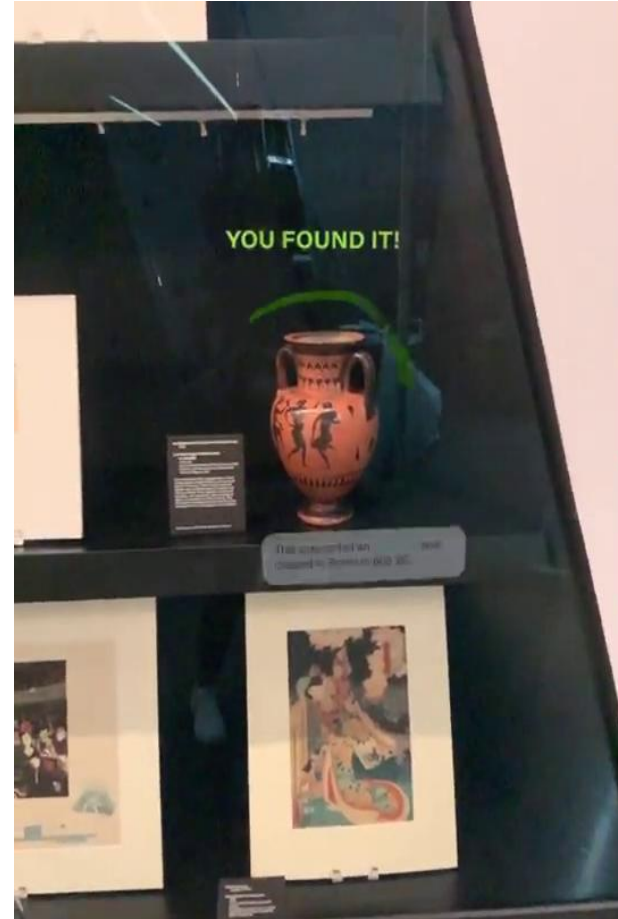




XD Museum Prototype

AR Functionality

- Future developments
- AR scavenger hunt
- AR assets to aid with museum navigation



Conclusion

- Going beyond the QR codes, the AR will produce greater efficiency for the users to navigate the museum.
- We have a great opportunity here to go even further by creating an amazing, learning experience for middle school students and their teachers.

Acknowledgements

Dr. Denise Blair -- Director of Education of the MSU Museum

Nicholas Vanacker -- MSU Museum Education Team

The MSU Museum Team