



ARTIFACT ADVENTURE





PROJECT BRIEF

With the objective of making a hybrid physical-digital interactive experience, I developed *Artifact Adventure*, a one of a kind museum experience.

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SYNOPSIS

Artifact Adventure transforms the traditional museum visit into an immersive, story-driven journey of discovery. By blending narrative, interactivity, and exploration, it invites guests to learn through participation rather than observation. This adaptable framework redefines how museums connect with visitors, turning education into adventure.

FEATURES



Role Assignment & Quest

- Guests take a quiz to determine their role within the museum (Archaeologist, Historian, etc.)
- They are then given a Discovery Medallion and a quest to accomplish in the museum based on that role.

Artifact Kiosk Interaction

- Artifacts have a kiosk that enables offers digital learning opportunities.
- Tangible exploration opportunities are also offered, where guests learn by getting their hands on history.

Artifact Collection & Virtual Museum

- When a guest really enjoys an artifact, they can add it to their own collection.
- At the end of their visit, guests can view their own virtual museum that features all the artifacts they collected.



USERS

Children and Teens

Parents

Frequent Visitors



IMPACT

Educational
Reimagined Learning

Experiential
Making Memories

Institutional
Scalable Innovation

Cultural
Redefining Museums

LET'S JUMP IN!

ARTIFACT
ADVENTURE



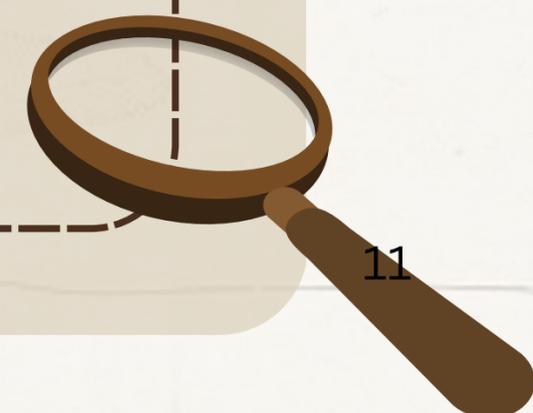


ARTIFACT ADVENTURE



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INTRODUCTION

ABOUT ME

JARED YOST

- B.S. Interdisciplinary Engineering, Texas A&M University
 - Emphases in computer science and game design
- Themed Entertainment Design MFA Student at SCAD
- Interested In:
 - Increasing immersion through combining digital and physical components together
 - Exploring new technologies in entertainment



DIGITAL EXPERIENCES

GEOCACHING

- Combines the physical and digital by using an app to guide users to real world locations to find hidden containers
- Encourages being outdoors and exploring new places by using the digital component as a tool rather than the whole experience



DIGITAL EXPERIENCES

COLLEGE FOOTBALL HALL OF FAME

- Interactive exhibits at the museum bring guests into gameday action
- *Shake the Stadium* invites guests to sing and cheer to earn a score and help the team
- ESPN College Gameday Desk gives guests a chance to step into the role of broadcaster as their performance is recorded and stitched together into a video with famous football personalities

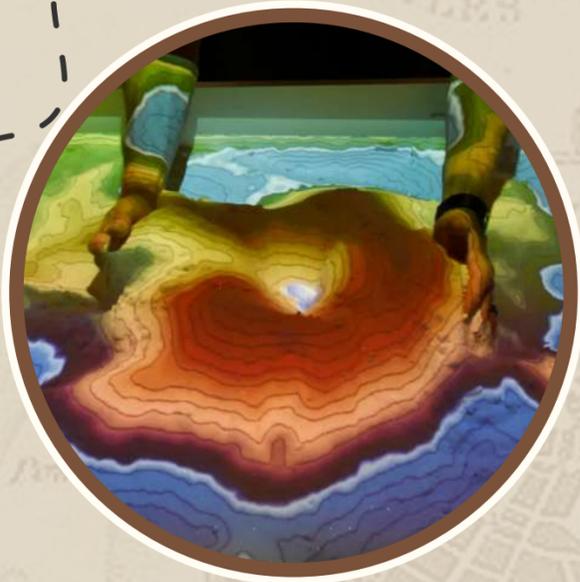




RESEARCH



INSPIRATION



AR Sandbox



Smithsonian Skin and Bones



International Spy Museum



Intelligence Factory



Frost Museum of Science

TECH RESEARCH

Companies:

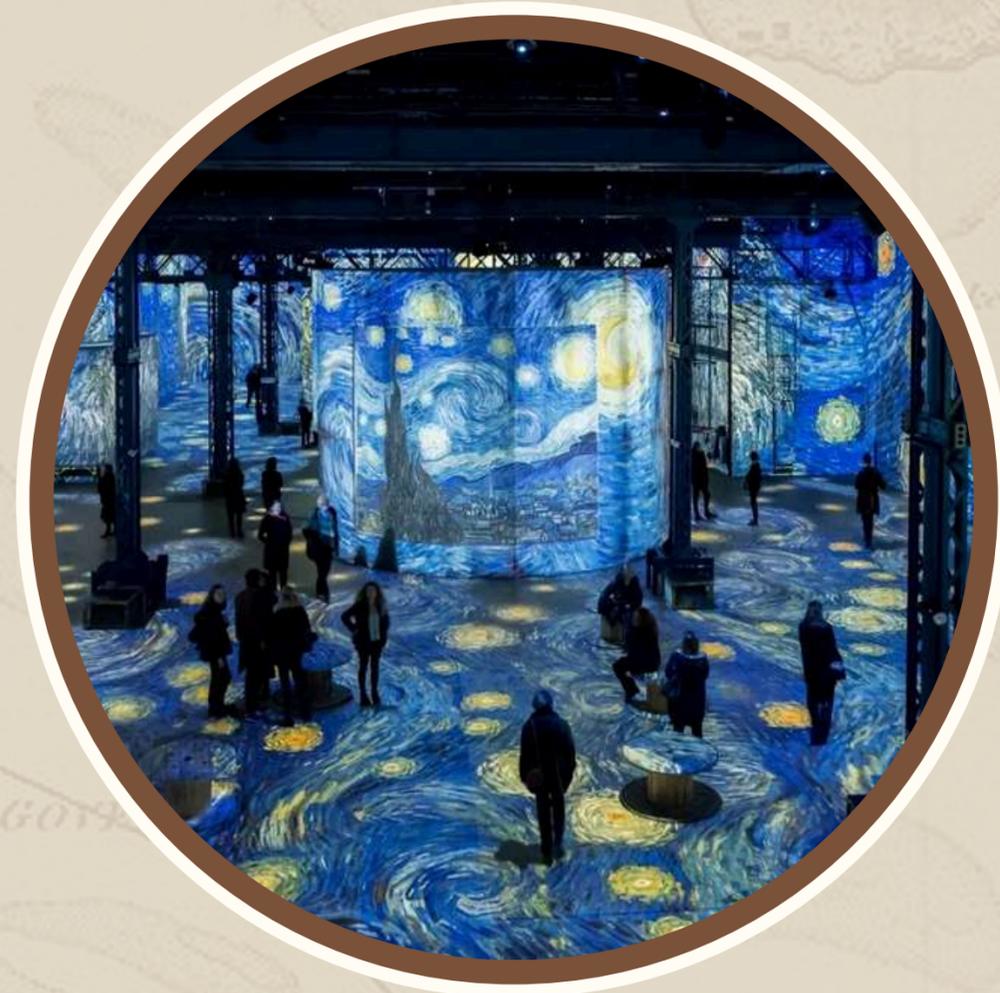
- Moment Factory
- TimeLooper

Experiences:

- Terracotta Warriors AR
- Atelier des Lumieres

Trends:

- Immersive Digital Art Spaces
- Interactive Display Cases



Atelier des Lumieres

COMPETITIVE ANALYSIS

- **Augmented Reality**

- Museums like the National Museum of Natural History utilize apps with object recognition to show what animals would've looked like based on their fossils.
- Museums in London and Paris utilize AR glasses to similarly bring extinct animals to life but in a physical space without being fully VR. This gives flexibility in terms of digital displays and still allows the user to engage with their environment.

- **Virtual Reality**

- Virtual Reality is an immersive technology that is being used more frequently in public spaces, including museums. This technology does not fully remove guests from their physical space though, so even though it is more completely immersive than AR, it does come at the cost of not allowing the user to engage with their surroundings.

COMPETITIVE ANALYSIS

- **Projection Mapping**

- This is another form of augmented reality in that it brings the digital world into the physical in a unique way, this time by projecting images onto physical objects. There are several interesting applications of this, maybe most notably is the Topobox, which combines projection mapping with a more hands-on experience.

- **Hands-On Technology**

- For a while, museums have explored hands-on experiences to engage visitors, especially kids, more. Museums throughout the world, like Technorama Winterthur and Intelligence Factory, lean into hands-on technology to tell stories and to bring guests deeper into their education.

LOCAL RESEARCH

On September 17, I visited the Ralph Mark Gilbert Civil Rights Museum in Savannah. I had never heard of this museum before my class visited, but I was incredibly impressed by the quality of their exhibitions and the ways they are able to draw visitors into the powerful story of the civil rights movement in Savannah. This museum is truly open to all visitors. One might think that a museum like this would be focused on an older audience, but they have programs specifically designed to teach children about civil rights, such as classrooms where children's books about the movement are read to them.

Although the museum is a place that Savannahians should absolutely visit, they do draw in a lot of visitors from outside the city who are eager to learn more about our history. The museum is located at the intersection of MLK Jr Blvd in the west historic district of Savannah.



LOCAL RESEARCH

Obviously, the primary mission of the museum is to educate visitors on the history of Savannah's civil rights movement as well as the men and women who made that movement possible. In my opinion, the museum is very successful in accomplishing that goal through several very immersive exhibits.

The first floor shows the reality of segregation in Savannah in the 1900s, with signage outlining segregation being shown in conjunction with informational plaques about various forms of discrimination experienced by African Americans in Savannah then. One particularly notable experience was stepping into the recreation of the Azalea Room, the location of the first sit in protest in Savannah. There, visitors hear how different it would be to visit the restaurant depending on if they were white or not, confronting all visitors with that uncomfortable reality in an immersive setting.



LOCAL RESEARCH

The museum is celebrating its 30th anniversary next year, and it is showing no signs of its age or of slowing down at all. In fact, the museum's director, Vaughnette Goode-Walker, is continuing to grow the museum with new pieces and exhibits even today.

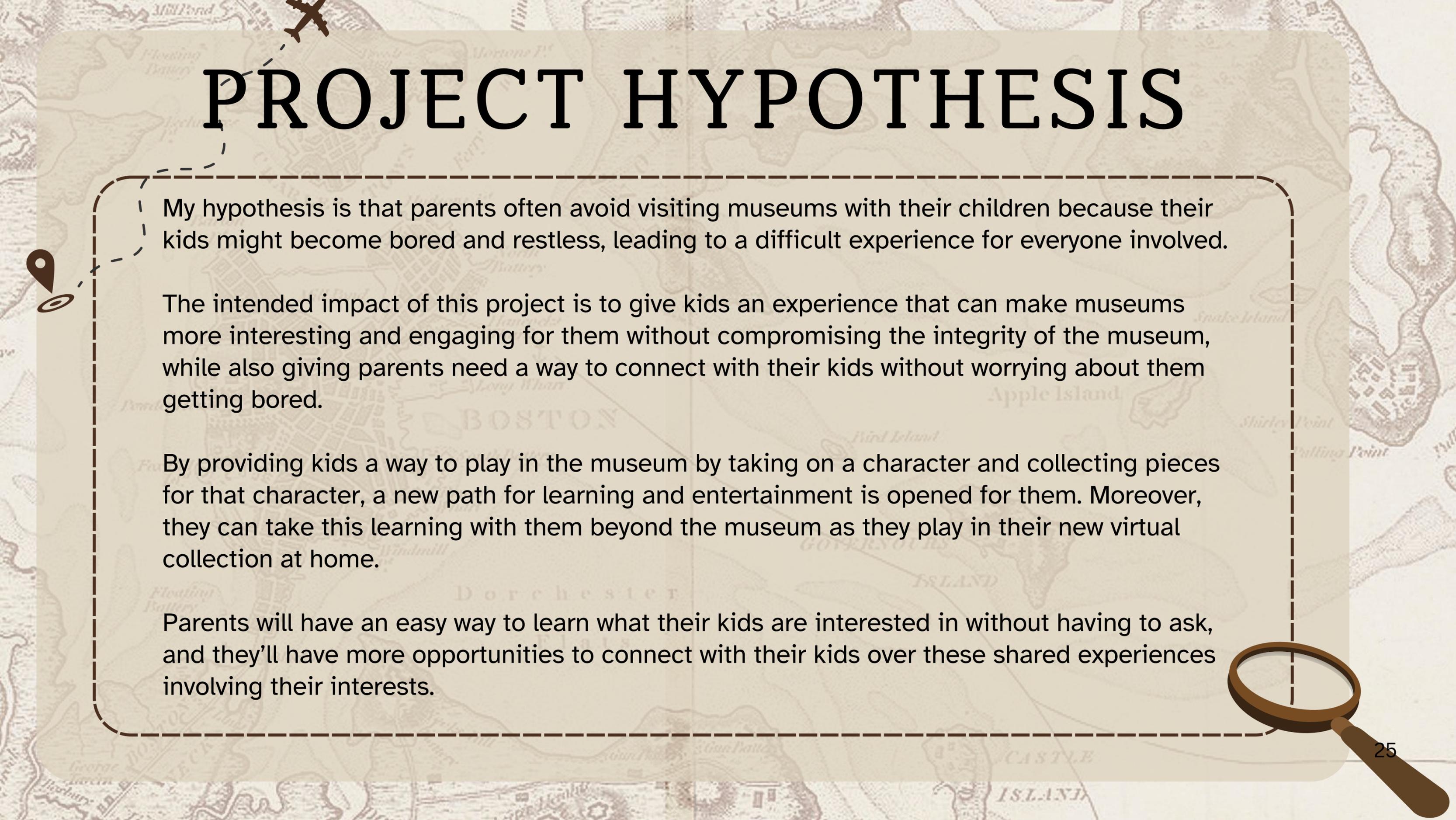
Visiting the museum was an incredibly enjoyable experience for me, and I think it also was very helpful to remind me that immersion can happen in all sorts of spaces beyond just theme parks, where so much of my attention tends to be because of my program. I'm excited to take some of the things I learned and experienced at the Civil Rights Museum and try to incorporate them into my project this quarter!





IDEATION





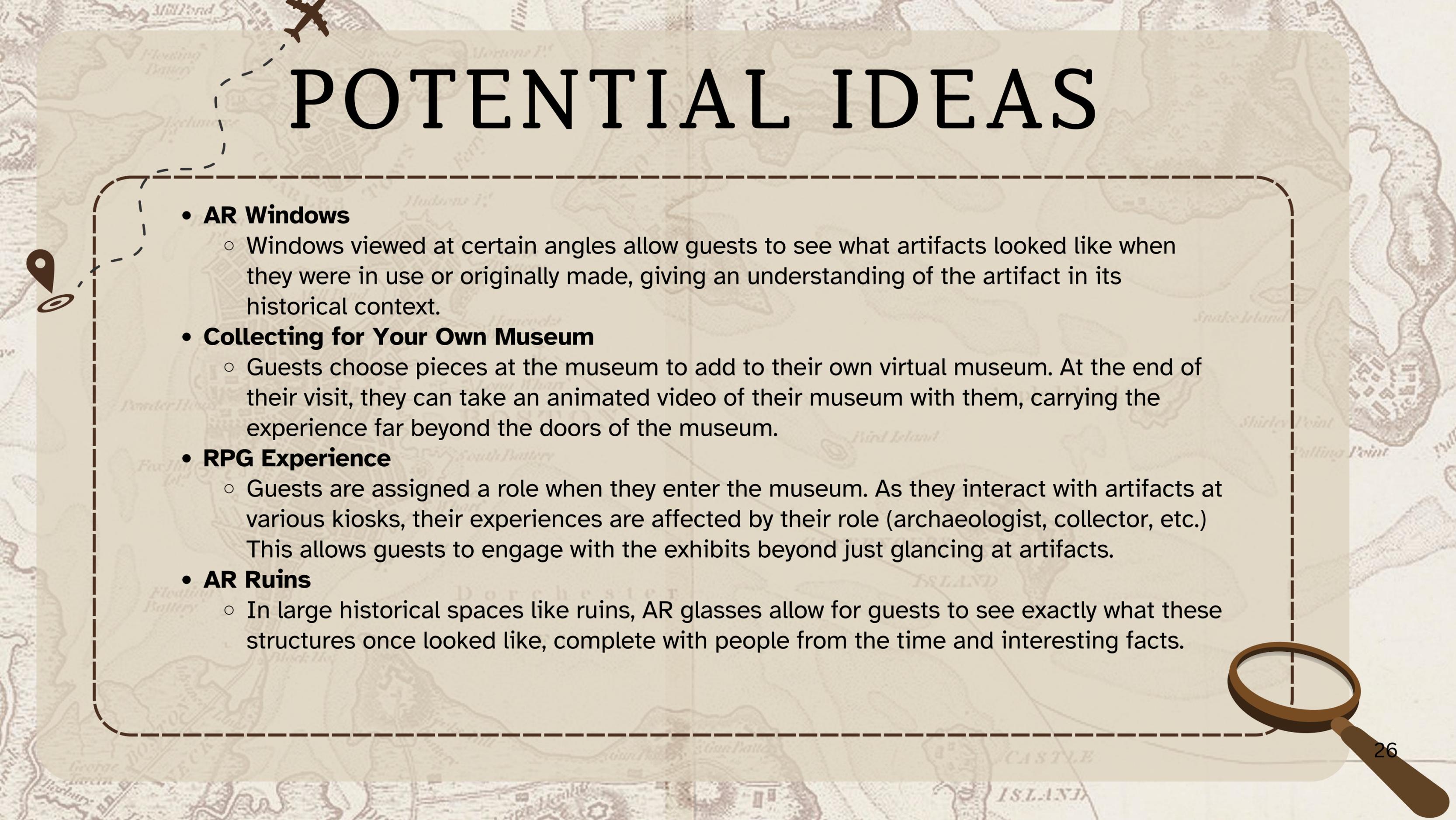
PROJECT HYPOTHESIS

My hypothesis is that parents often avoid visiting museums with their children because their kids might become bored and restless, leading to a difficult experience for everyone involved.

The intended impact of this project is to give kids an experience that can make museums more interesting and engaging for them without compromising the integrity of the museum, while also giving parents need a way to connect with their kids without worrying about them getting bored.

By providing kids a way to play in the museum by taking on a character and collecting pieces for that character, a new path for learning and entertainment is opened for them. Moreover, they can take this learning with them beyond the museum as they play in their new virtual collection at home.

Parents will have an easy way to learn what their kids are interested in without having to ask, and they'll have more opportunities to connect with their kids over these shared experiences involving their interests.



POTENTIAL IDEAS



- **AR Windows**

- Windows viewed at certain angles allow guests to see what artifacts looked like when they were in use or originally made, giving an understanding of the artifact in its historical context.

- **Collecting for Your Own Museum**

- Guests choose pieces at the museum to add to their own virtual museum. At the end of their visit, they can take an animated video of their museum with them, carrying the experience far beyond the doors of the museum.

- **RPG Experience**

- Guests are assigned a role when they enter the museum. As they interact with artifacts at various kiosks, their experiences are affected by their role (archaeologist, collector, etc.) This allows guests to engage with the exhibits beyond just glancing at artifacts.

- **AR Ruins**

- In large historical spaces like ruins, AR glasses allow for guests to see exactly what these structures once looked like, complete with people from the time and interesting facts.





USERS



USER PERSONA 1

Caleb Parker, 10 y/o fifth grader visiting the museum while on vacation with his family.

- Caleb is extremely comfortable for technology, using it to play video games and watch YouTube daily.
- Caleb has been to his local history museum before, but this is his first time getting to see a large scale museum on vacation. He got bored before, but his parents promised that wouldn't happen this time.
- All Caleb knows is that he's going to get to see a big ship at the museum, but beyond that, he has no idea what to expect from the museum.



EMPATHY MAP 1

Says

- “That ship is so cool! Can I collect it?”
- “What other fun stuff can I find?”

Thinks

- I hope they’re right about this being more fun than the last museum
- I want to see everything here

Does

- Runs around museum looking for next cool thing
- Asks lots of questions
- Gets bored of game quickly if not entertained

Feels

- Excited by a museum he can connect to
- Comforted by the integration of technology into the experience
- Proud of what he’s learned

Goals

- Have fun in the museum
- Get a cool story to tell his friends when he gets back home
- Feel like he’s on an adventure in the museum

Pain Points

- Shorter attention span
- Doesn’t want to wait too long for things to work
- Needs the experience to be on his level

USER PERSONA 2

Denise Adams, 42 y/o mom and librarian who brought her family on a day trip to the museum.

- Denise wants her two kids, aged 11 and 15, to actually learn something at the museum.
- Because she works, she doesn't get to spend as much time with her children as she'd like, so she wants the chance to connect with them over what they're learning at the museum.
- She also wants her two sons to have something they can bond over on this trip.
- She uses technology in both her personal and professional life, but she hasn't ever interacted with technology in a mixed reality way before.



EMPATHY MAP 2

Says

- “I want something that will make them excited to learn.”
- “How much does it cost?”
- “Let’s do this as a family!”

Thinks

- I hope this is worth the time and effort
- I don’t want them to get bored
- They could find a lifelong passion here

Does

- Actively engages with the experience and her sons
- Makes sure her sons pay attention to the educational parts
- Takes lots of photos

Feels

- Excited to see her children learning and having fun together
- Concerned about the technology requiring more screentime

Goals

- Bond with her children
- Give her kids the opportunity to learn
- Not waste the time they have together

Pain Points

- Don’t have time to waste on complicated instructions or long waits
- Kids will think it’s lame if it’s only geared towards little kids
- How much can she participate if she’s focused on supervising?

USER PERSONA 3

Tony Greene, 31 y/o who is local and visits the museum regularly

- Tony regularly visits the museum on lunch breaks and with friends on the weekend.
- Having grown up during the tech boom, he is very familiar with technology but doesn't like it being unnecessarily introduced where it's not needed.
- For him, the museum is his place to relax. It feels like home for him and his wife, and any changes that are made must be for the better or he'll be very disappointed.
- That being said, he's always willing to try new things, and he's very interested by the new interactive addition to the museum.



EMPATHY MAP 3

Says

- “It’s exciting that they’ve added something new.”
- “This could be fun for my friends.”

Thinks

- I hope this doesn’t distract from the actual exhibits
- Is this just for kids? Can I do it?
- I hope they didn’t just use this technology because they thought it would make them seem trendy

Does

- Visits the museum regularly and often briefly
- Decides to give the new experience a try, knowing he’ll give his friends and coworkers an honest review

Feels

- Skeptical about how informational and engaging the experience will be
- Impressed when the technology deepens understanding of the museum
- Excited for future possibilities in museums

Goals

- Enjoy a visit to a place that feels like home
- Support the museum
- Give recommendations to friends
- See the museum through a new lens

Pain Points

- The museum feels like home and changes bring new risk of something not being as good
- He already likes the original so why would he want to change anything?
- Doesn’t want to do anything too childish



DESIGNING





MISSION STATEMENT

The goal of this experience is to transform a visit to the museum into an immersive journey where guests become an active participant in history. By combining physical exploration with digital storytelling, visitors step into roles such as archaeologist, collector, or historian to curate their own virtual museum and leave with a personalized story that they can tell far beyond the walls of the museum.

FEATURES

- **Role Assignment**
 - Guests receive/choose a role (i.e. archaeologist, historian, collector, explorer, etc.) when they receive their RFID-enabled Discovery Medallion
- **Role and Time-Specific Quests**
 - Every role has specific quests that they can complete to unlock additional features inside their virtual museum
 - Additionally, depending on time of year, the museum could highlight specific exhibits or artifact categories
- **Artifact Kiosks with Role-Based Interactions**
 - Artifacts will have various kiosks to allow guests to engage with them further. Some will be digital-based and some will be physical-based
 - Their role leads to them getting tailored content, like the archaeologist might learn more about how the artifact was excavated while the historian might learn more about how the artifact was used in its culture

FEATURES

- **Artifact Collection**

- Guests collect artifacts by tapping their Discovery Medallion at a specific point on the Artifact Station
- Each artifact is added to a personal collection
- Guests could unlock hidden or rare items if they complete certain quests or explore less-visited areas in the museum

- **Virtual Museum Builder**

- At the end of the guest's visit, their artifacts are compiled into a custom animated video
- This video shows a walkthrough of their museum while telling the story of their artifacts
- Guests are given links to their museum so they can visit it again at any time

STORYBOARDING



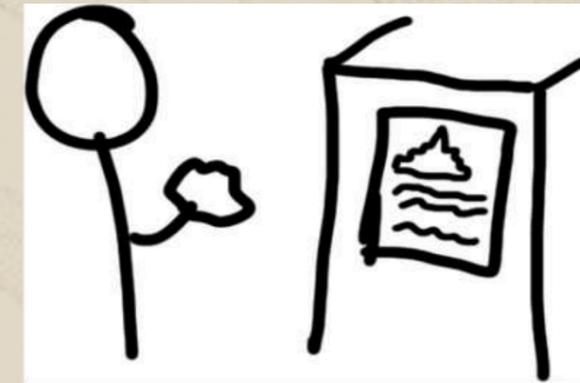
Guests drawn in by signs and advertising for game



Guests assigned role and quest



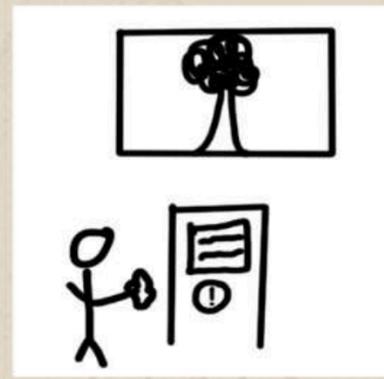
Guests wander around museum, looking for pieces to collect and to complete their quest



Guests interact with kiosks to learn more about artifacts, tailored to their role



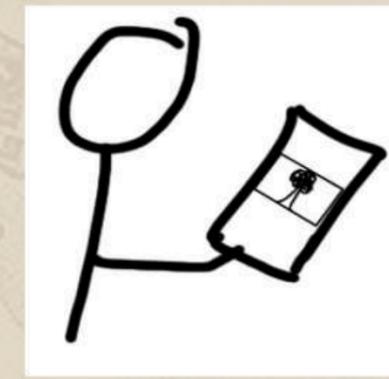
Some kiosks have physical interaction points and games where guests earn points for the leaderboard



Guests collect pieces they like the most



Leaderboard updates



Guests view virtual collection online after leaving museum

LOOK & FEEL BRANDING

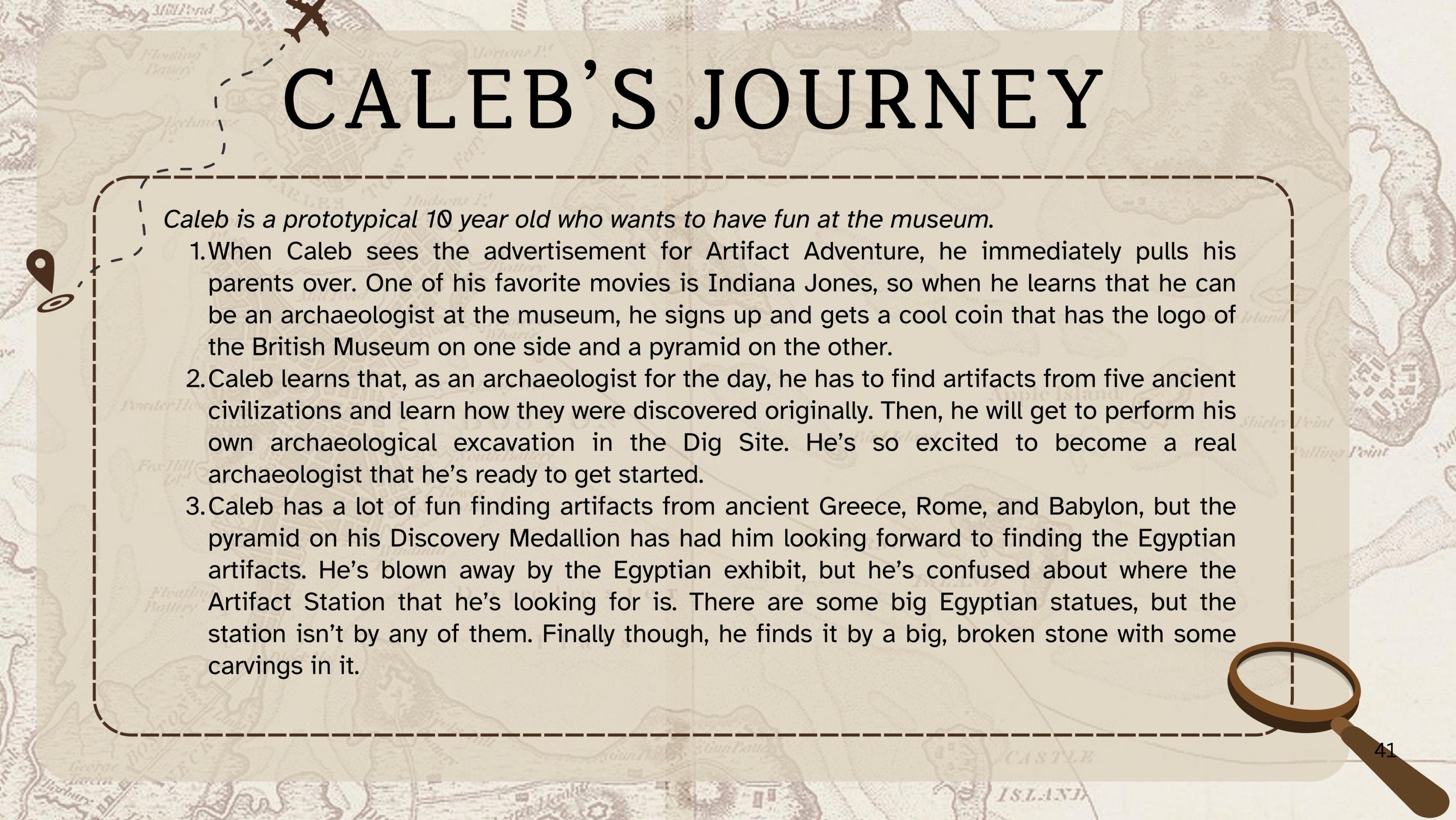
Brand Principles:

1. *Fun with Others*
2. *Learning*
3. *Exploration*
4. *Making Memories*

**ARTIFACT
ADVENTURE**

THE JOURNEY

1. Guests choose what role they want to explore the museum as when they claim their Discovery Medallion. These tokens are RFID enabled and linked to their role as well as their individual identity as a guest.
2. Based on their role, guests are assigned a quest. This quest requires them to visit notable artifacts in the museum, gather information related to their role, and complete a physically interactive activity as well.
3. Throughout the museum, guests will find Artifact Stations, which are kiosks at various artifacts that invite further exploration. These stations offer opportunities for guests to unlock physical and digital interactions that teach more about the artifact in an accessible way.
4. If a guest would like to add an artifact to their personal collection, they tap their Discovery Medallion on the station's touchpoint.
5. At the end of their visit, guests are sent an animated video showing their entire virtual museum and a link to visit again at any time.

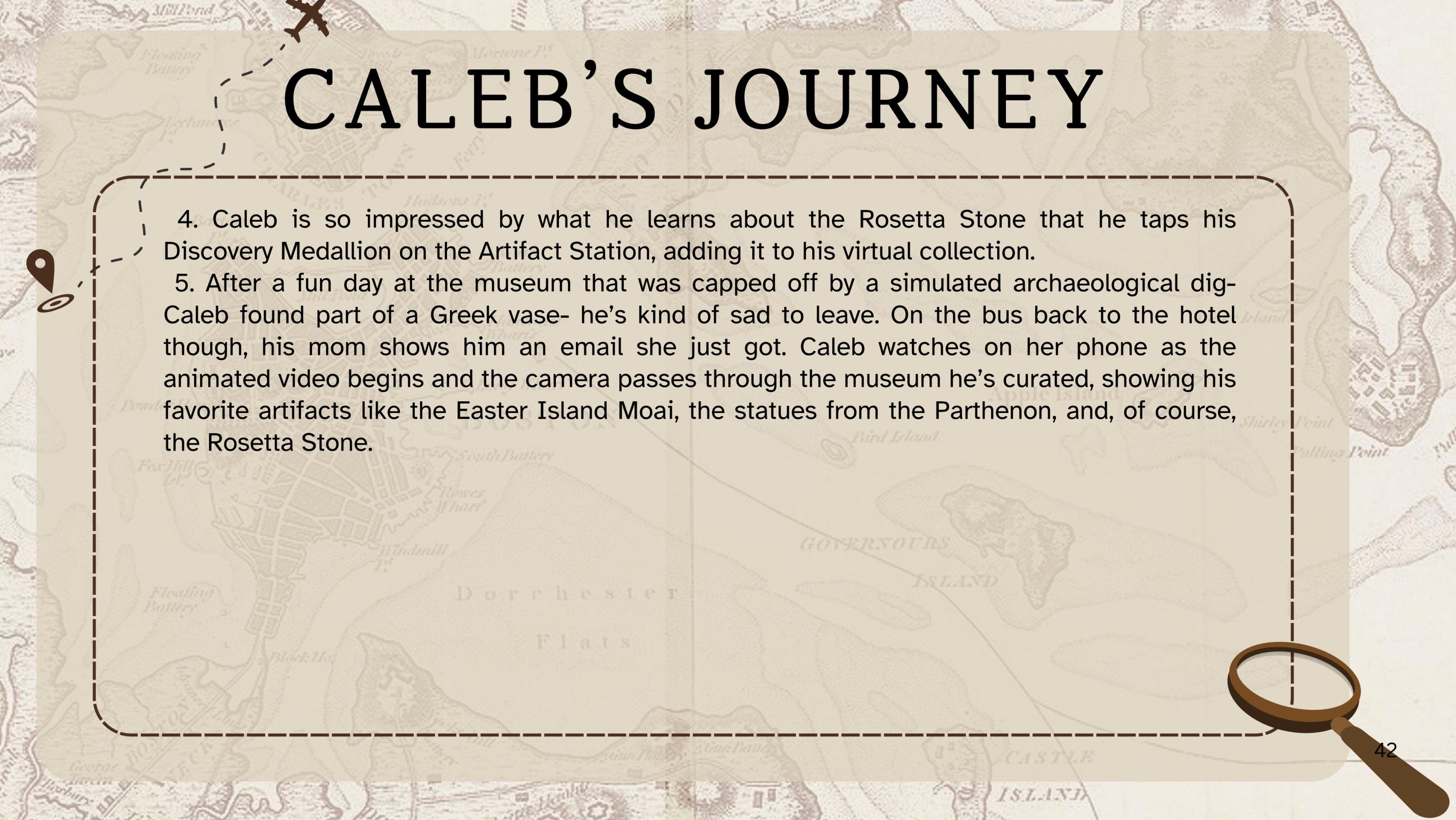


CALEB'S JOURNEY



Caleb is a prototypical 10 year old who wants to have fun at the museum.

1. When Caleb sees the advertisement for Artifact Adventure, he immediately pulls his parents over. One of his favorite movies is Indiana Jones, so when he learns that he can be an archaeologist at the museum, he signs up and gets a cool coin that has the logo of the British Museum on one side and a pyramid on the other.
 2. Caleb learns that, as an archaeologist for the day, he has to find artifacts from five ancient civilizations and learn how they were discovered originally. Then, he will get to perform his own archaeological excavation in the Dig Site. He's so excited to become a real archaeologist that he's ready to get started.
 3. Caleb has a lot of fun finding artifacts from ancient Greece, Rome, and Babylon, but the pyramid on his Discovery Medallion has had him looking forward to finding the Egyptian artifacts. He's blown away by the Egyptian exhibit, but he's confused about where the Artifact Station that he's looking for is. There are some big Egyptian statues, but the station isn't by any of them. Finally though, he finds it by a big, broken stone with some carvings in it.
- 

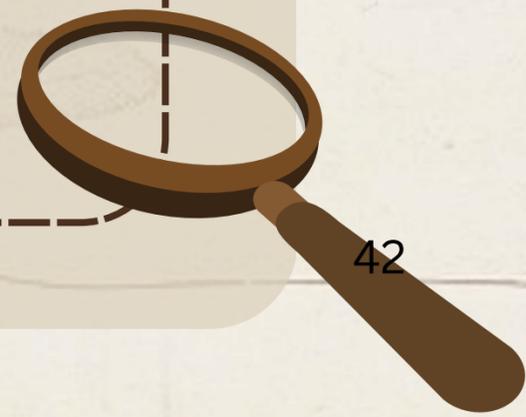


CALEB'S JOURNEY



4. Caleb is so impressed by what he learns about the Rosetta Stone that he taps his Discovery Medallion on the Artifact Station, adding it to his virtual collection.

5. After a fun day at the museum that was capped off by a simulated archaeological dig- Caleb found part of a Greek vase- he's kind of sad to leave. On the bus back to the hotel though, his mom shows him an email she just got. Caleb watches on her phone as the animated video begins and the camera passes through the museum he's curated, showing his favorite artifacts like the Easter Island Moai, the statues from the Parthenon, and, of course, the Rosetta Stone.





THE EXPERIENCE

EXPERIENCE OVERVIEW

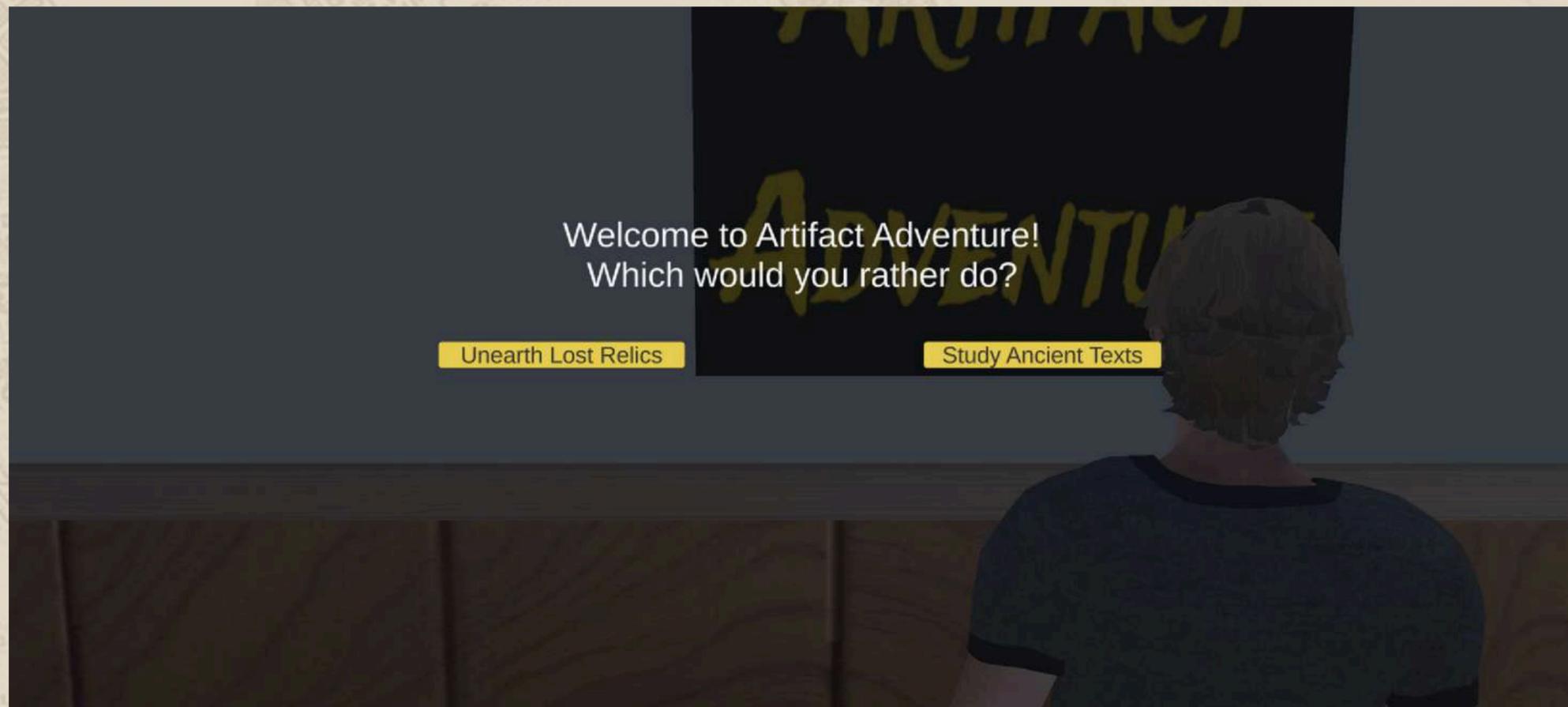
The interactive portion of this experience is a Unity demo build that presents a fully walkable museum that combines physical exploration, digital interaction, and narrative immersion.

Players begin by approaching a front desk where a short role-selection questionnaire assigns them as either an Archaeologist or Historian. Based on their role, they receive a quest to find and collect one artifact in the museum. Then, the museum is the user's to explore, visiting 4 Artifact Stations where they can learn more about the exhibits digitally and collect artifacts they like. Additionally, there is an interactive game called Artifact Dredge that simulates artifact recovery in the ocean.

Once the player completes their quest, they are congratulated and receive a reward pin.

At the end of the experience, when guests exit, they can view the virtual museum that is composed of the artifacts they collected during their visit.

ROLE SELECTION



QUEST ASSIGNMENT



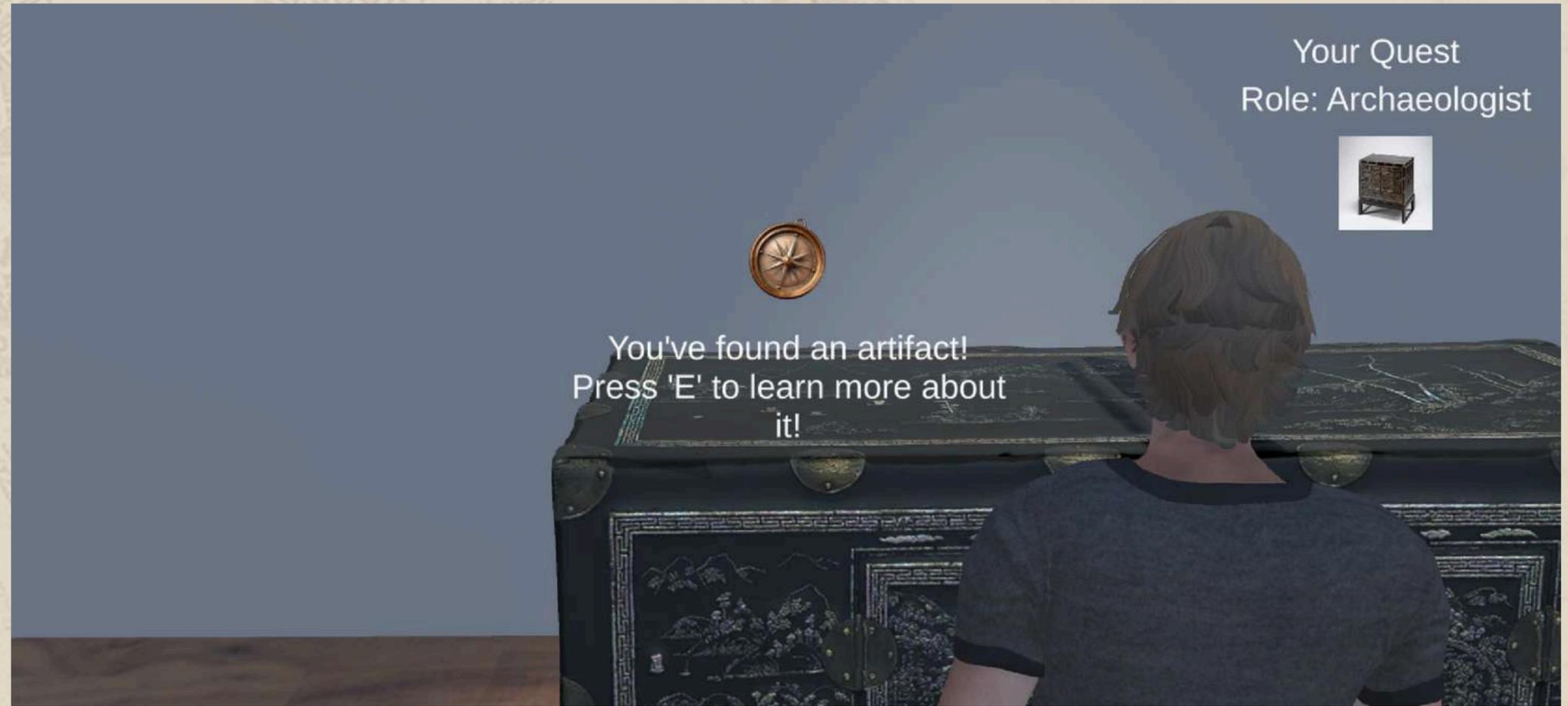
ARTIFACT STATIONS



Your Quest
Role: Archaeologist



ARTIFACT STATIONS



ARTIFACT STATIONS

Najeon Chest
Mother-of-pearl inlaying is the art of inlaying thin, patterned inner layers of mother-of-pearl and abalone on the surface of furniture. This particular chest is decorated with inlaid ornaments, and features a representation of a nineteenth-century map of Tongyeong on its front. The front of the chest, including the hinged upper panel, is edged with a macro-iridid fret pattern applied using the traditional "line-cutting technique" (kkoroneunji), with the map of Tongyeong placed at the center. The map is almost identical to a pictorial map produced in the nineteenth century, which marks important facilities such as Chaeamacha Shrine, Seomunjeon Hall, and Gokhwanjeon Shrine.

Pottary
Pottary is generally divided according to clay, glaze, and temperature.

Your Quest
Role: Archaeologist

COLLECT

ARTIFACT DREDGE

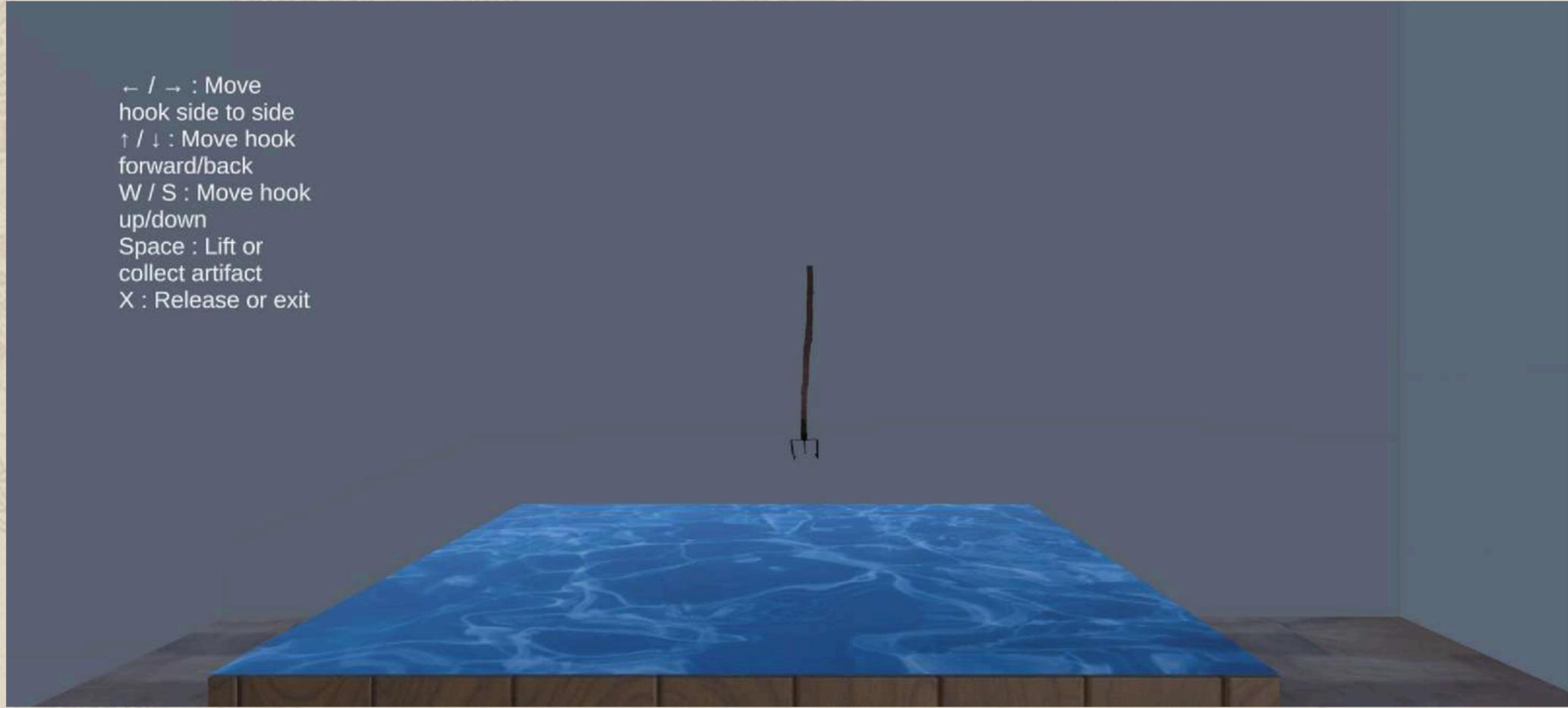


Welcome to Artifact Dredge!
To interact with the experience,
press 'E'!



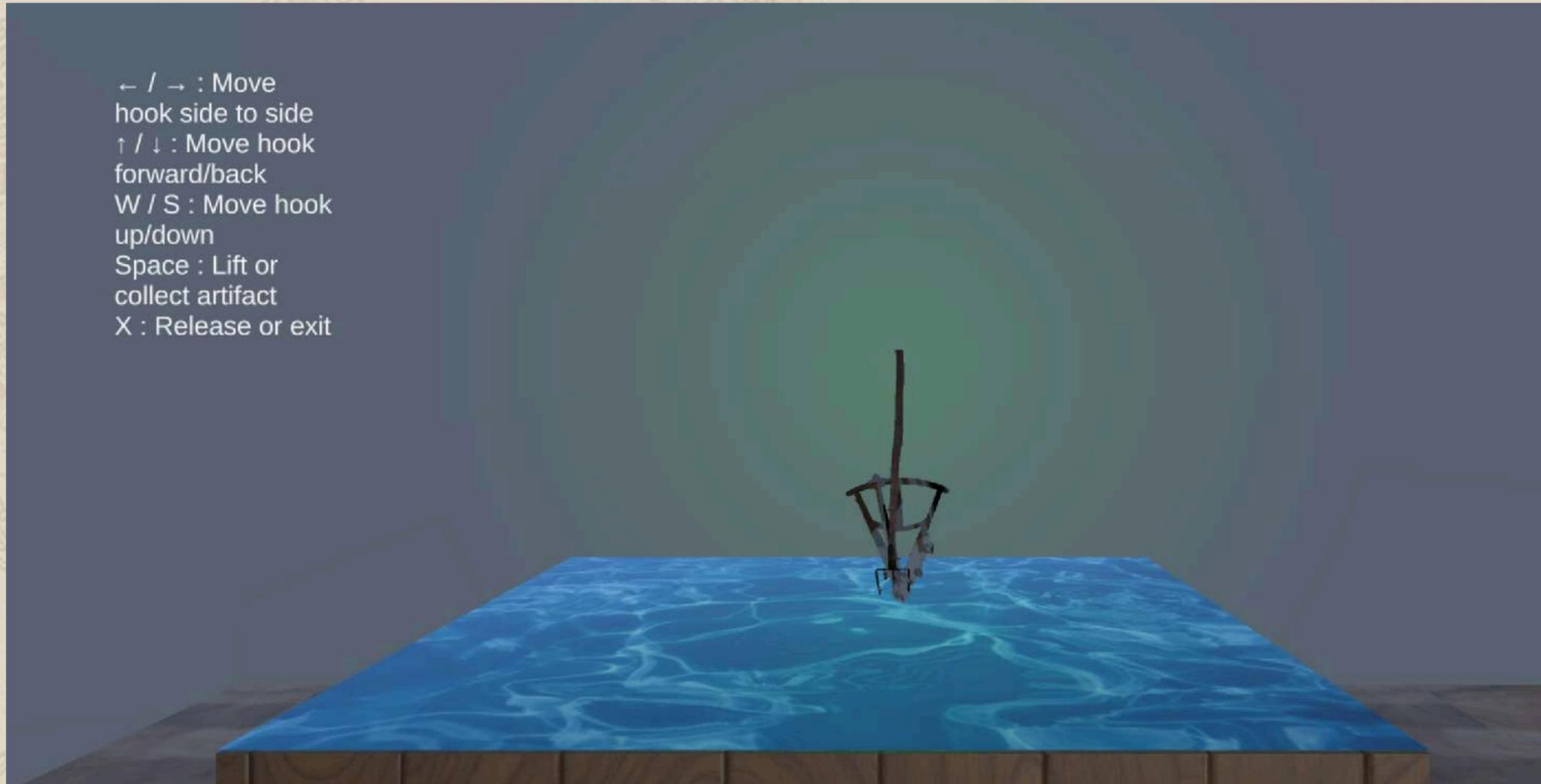
ARTIFACT DREDGE

← / → : Move hook side to side
↑ / ↓ : Move hook forward/back
W / S : Move hook up/down
Space : Lift or collect artifact
X : Release or exit

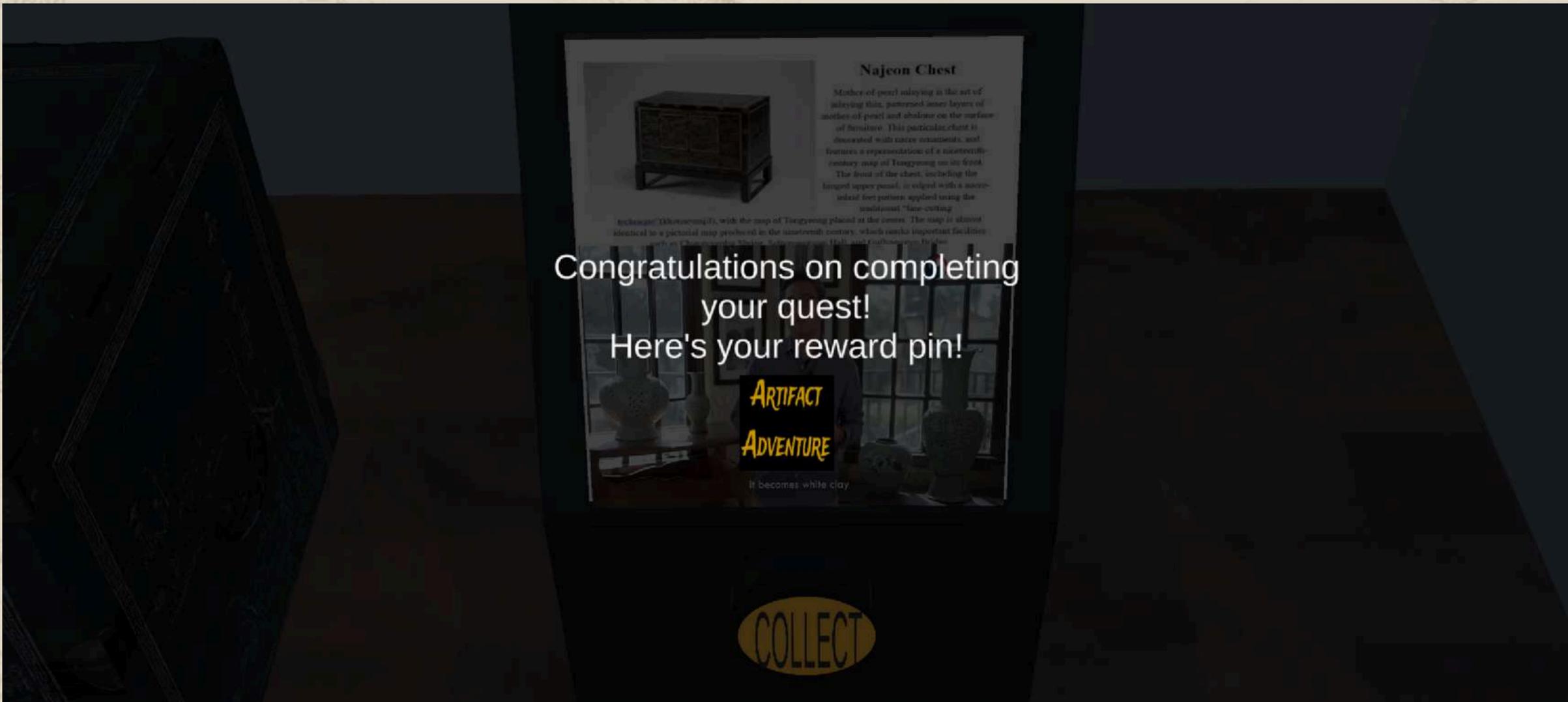


ARTIFACT DREDGE

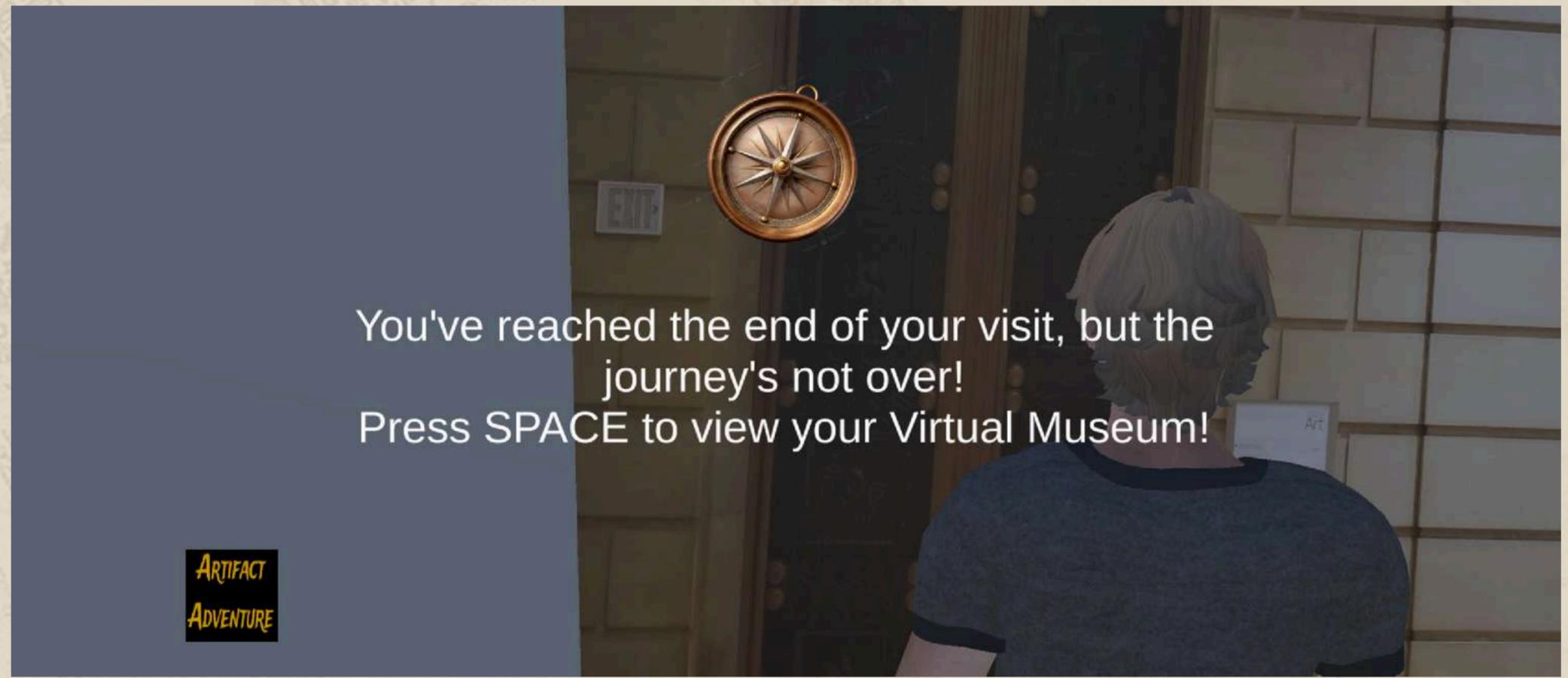
← / → : Move
hook side to side
↑ / ↓ : Move hook
forward/back
W / S : Move hook
up/down
Space : Lift or
collect artifact
X : Release or exit



QUEST COMPLETION

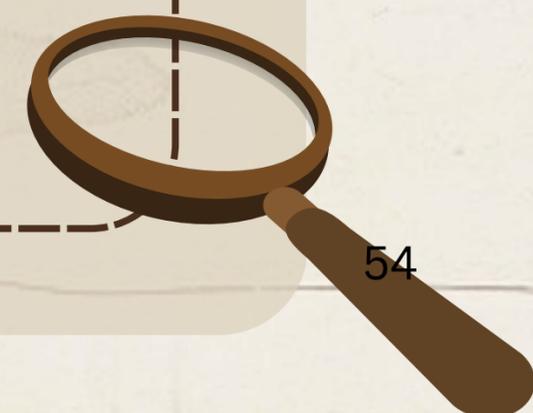


VIRTUAL MUSEUM



You've reached the end of your visit, but the journey's not over!
Press SPACE to view your Virtual Museum!

ARTIFACT
ADVENTURE



VIRTUAL MUSEUM

You've reached the end of your visit, but the journey's not over!
Press SPACE to view your Virtual Museum!



VIRTUAL MUSEUM

YOUR VIRTUAL MUSEUM



Press X to exit the Virtual Museum



VIRTUAL MUSEUM



A historical map of Boston Harbor, Massachusetts, featuring various islands and points of land. The map is rendered in a sepia tone. Overlaid on the map are several navigation-related icons: a location pin on the left, a dashed line with an airplane icon at the top, and a magnifying glass on the right. The text 'THANK YOU' is centered in a large, black, serif font within a dashed-line border.

THANK YOU