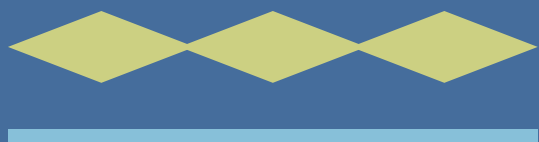


AR App Development

Ohio History Connection



1.

Research

PHASE 1





Linda, 71

Loving grandmother to Connor and Wyatt. Ohio History Connection member of 8 years. Recently retired by trying to stay active and busy.

Wants/Needs:

- To enjoy the day at the museum with her grandsons
- Accessible options
- Technology that is easier to understand

Frustrations

Unfamiliar with new technology, and far-sighted so needs large print to read



Connor & Wyatt, 8 & 11

Brothers in the sixth grade who learn the best in interactive teaching situations. Connor is more cautious and obedient, Wyatt is more adventurous and independent. Both are digital natives, but neither have their own smartphones.

Wants/Needs:

- Engaging exhibitions and activities
- Technology on grandma's phone

Frustrations

Don't have devices of their own, have both been to a museum a handful of times, Wyatt gets bored and needs more stimulating exhibitions



Anne, 68

Degree in museum studies, docent for 22 years. Likes to lead tours and interact with visitors. Knowledgeable and open-minded.

Wants/Needs:

- To provide an enjoyable experience for museum-goers
- Easily understood technology that she can show others how to use

Frustrations

Nervous to be responsible for explaining the app, keeping young children engaged



★ Current Visitation Experience



Park in parking lot



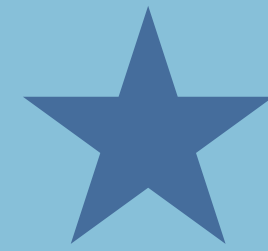
Start at museum entrance



Decide to go to Lustron Home first



Explore space and interact with museum staff



Current Visitation Experience



They use a map and signage to find their way around.



They interact with available objects at the Lustron House.



Connor really wants to go to the Ohio Village; they head there



End up stopping at some other exhibits on the way



Stop at the gift shop on the way out and get gift for Mom



Ideal Visitation Experience



Park in parking lot



Start at museum entrance



View instructions to download app and partake in AR experiences



Open app and become familiar with the interface



Select a character to become their guide



Ideal Visitation Experience



Navigate to first experience using map



Scan image target



Follow along with experience on smartphone



Interact with other objects and staff



Stop at the gift shop on the way out and get gift for Mom

2.

Our Strategy

PHASE 2



Brainstorm

Objectives

We want to make the user feel engaged and accomplished while staying true to the 1890s time period. We want to add to but not interfere with the museum experience.

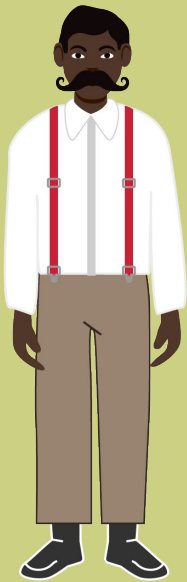
App Ideas

- Home screen is a map to let users know where they are/AR experiences are
- Select different characters/avatars to guide experience
- Guided/free play option

Characters



Characters Continued



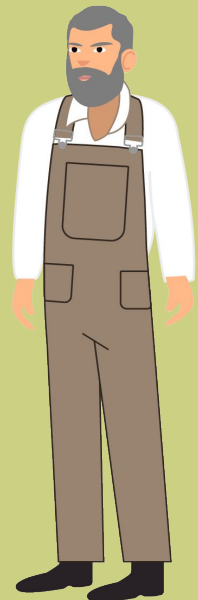
Clarence, Barber

Hello, my name is Clarence. I'm the town barber. I began my work cutting hair across town, but moved to this village right here because the pay is much better. If you're curious, I'll show you around. There's lots to see!



Addie, Pharmacist

Good afternoon. My name is Addie, and I work as the pharmacist. I studied and worked very hard growing up. Pharmacy work is not easy, but I love a good challenge. I have to run some errands, care to join me?



Henry, Blacksmith

How do you do? I'm Henry, the Blacksmith in this great village. I come from a long line of Blacksmiths. The town depends on me for things like hoes, plows, and horseshoes. Let me show you around town—I'll teach you all I know.



Joyce, Housewife

Well hi there, my name is Joyce. I am a proud mother of two who just moved into an amazing new Lustron house! Wanna see? I do have some errands to run real quick first, hope you don't mind!

Final Concept

The App

Our final concept will combine the existing AR experiences taking place at the barbershop, the blacksmith shop, the pharmacy, and the Lustron home into one cohesive app. The app will also include a responsive map and instructions to guide users at the museum through the locations of experiences.

In addition to these experiences, the app will also include options for at-home enjoyment! This will allow users to participate in the AR experiences virtually. Additional at home experiences include baking gingerbread cookies, playing 1890s baseball with the Muffins, and printing newspapers.

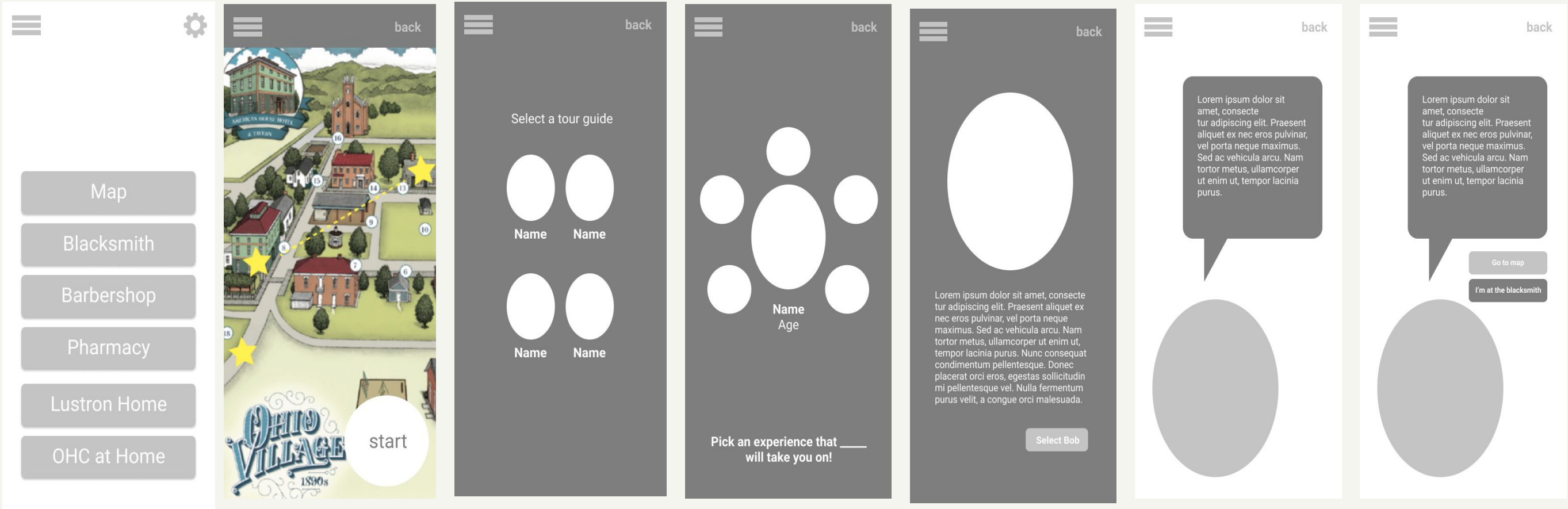
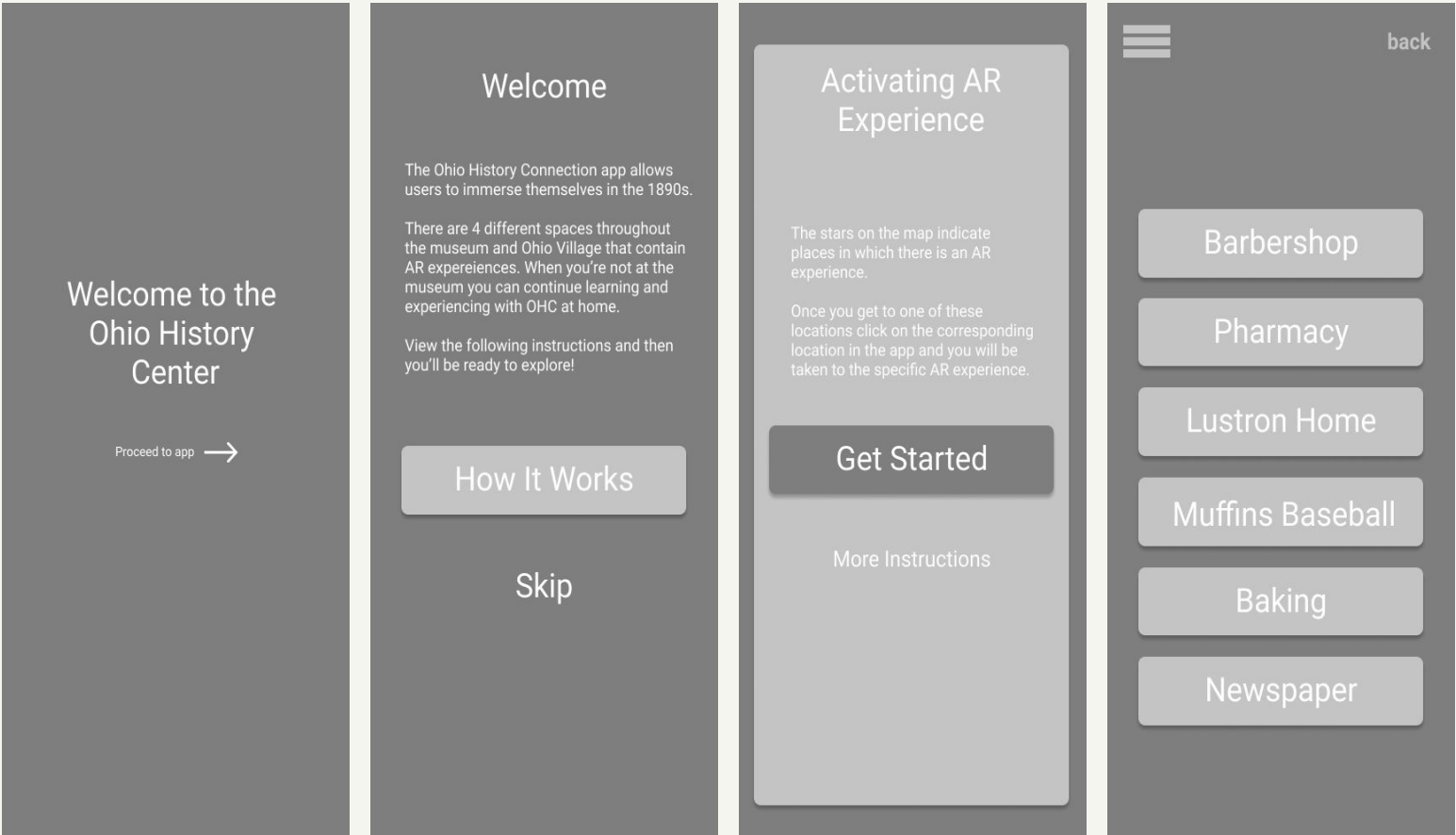


Final Prototype

PHASE 3



Wireframes



Welcome



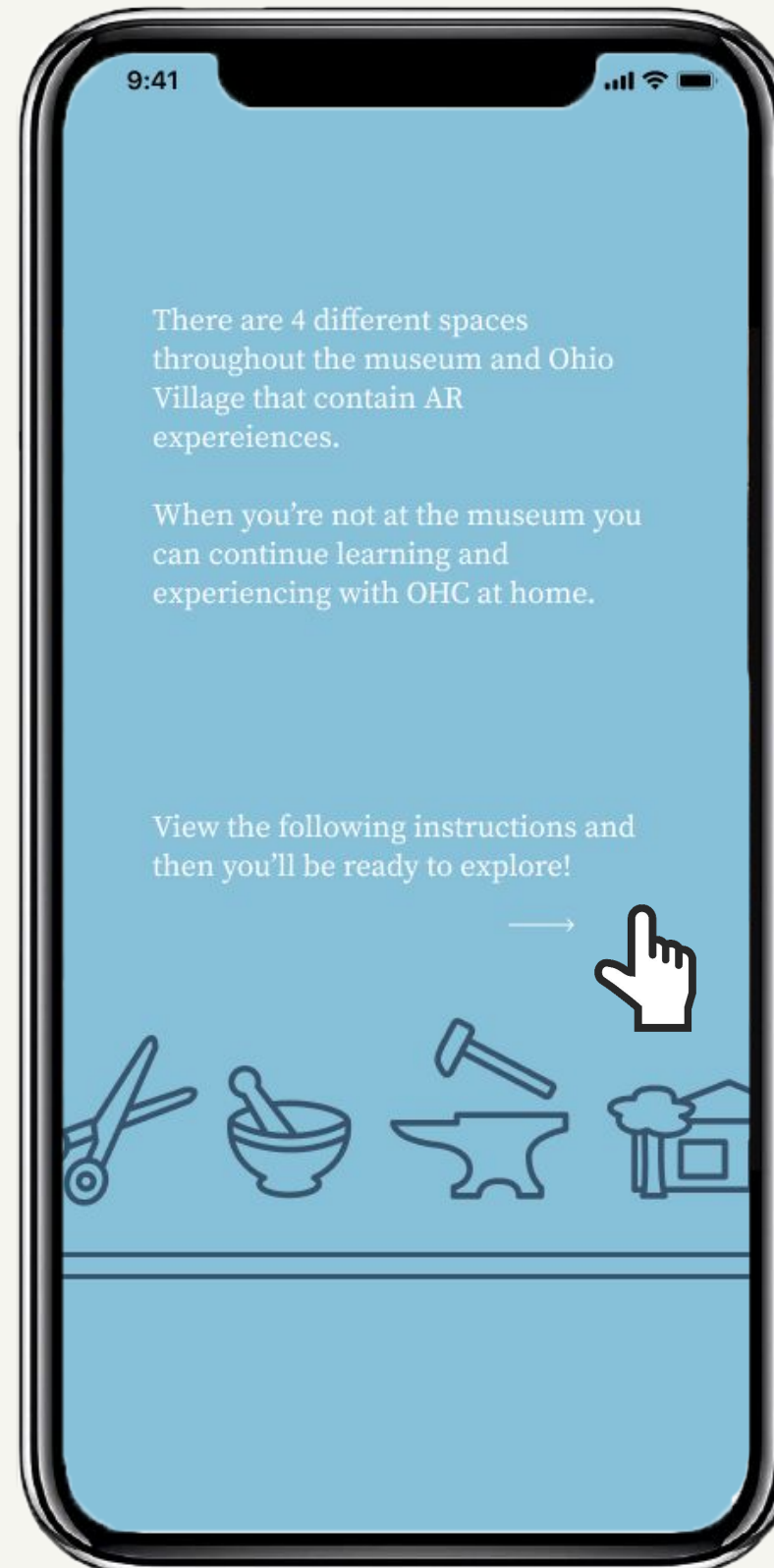
Linda, Connor, and Wyatt arrive at the museum. They see posters advertising the app, and Linda downloads it on her phone.

These are the first screens they see that introduce them to the app and explain how they work.

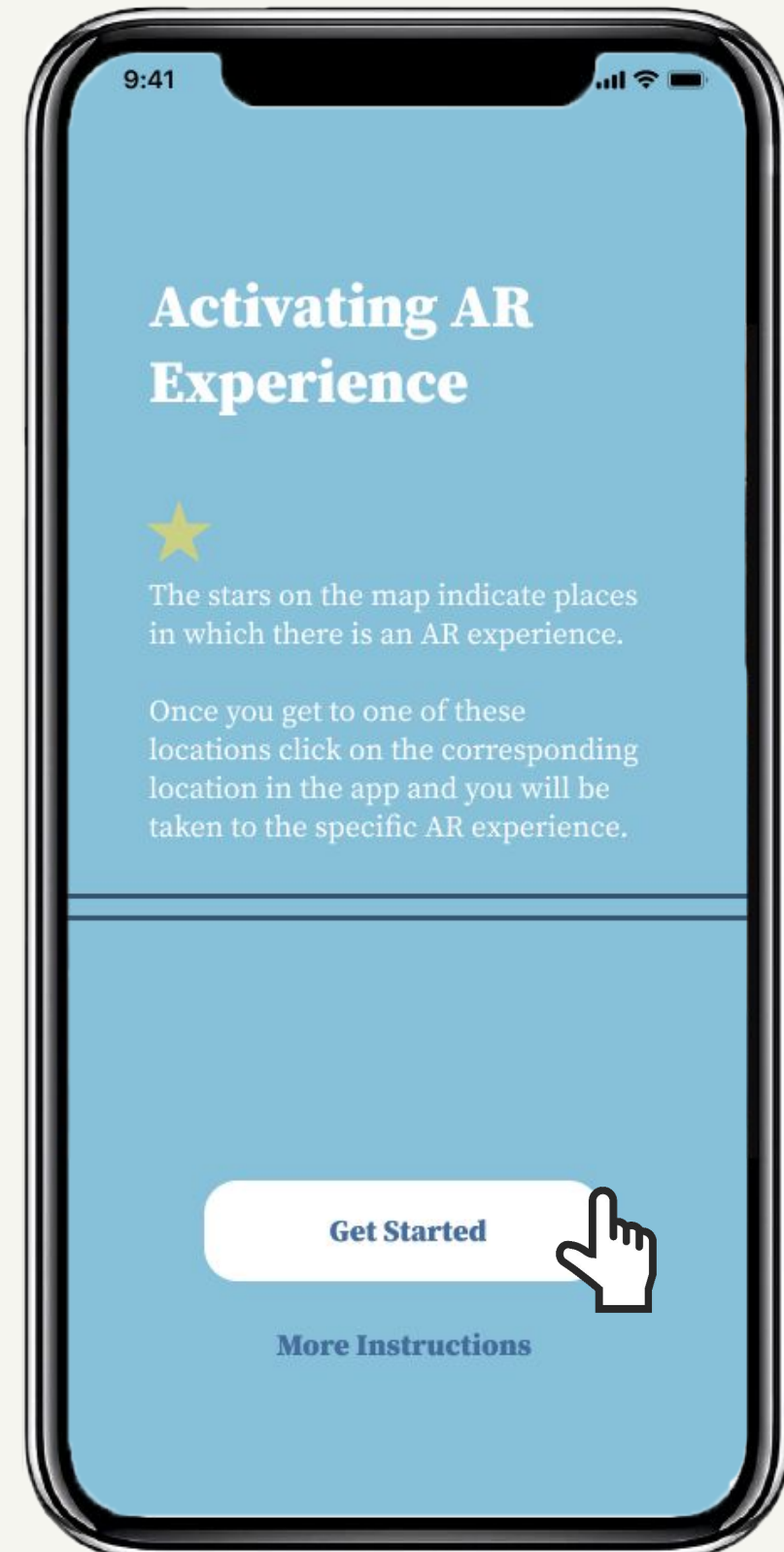




Initial welcome screen



Introduction to AR experiences



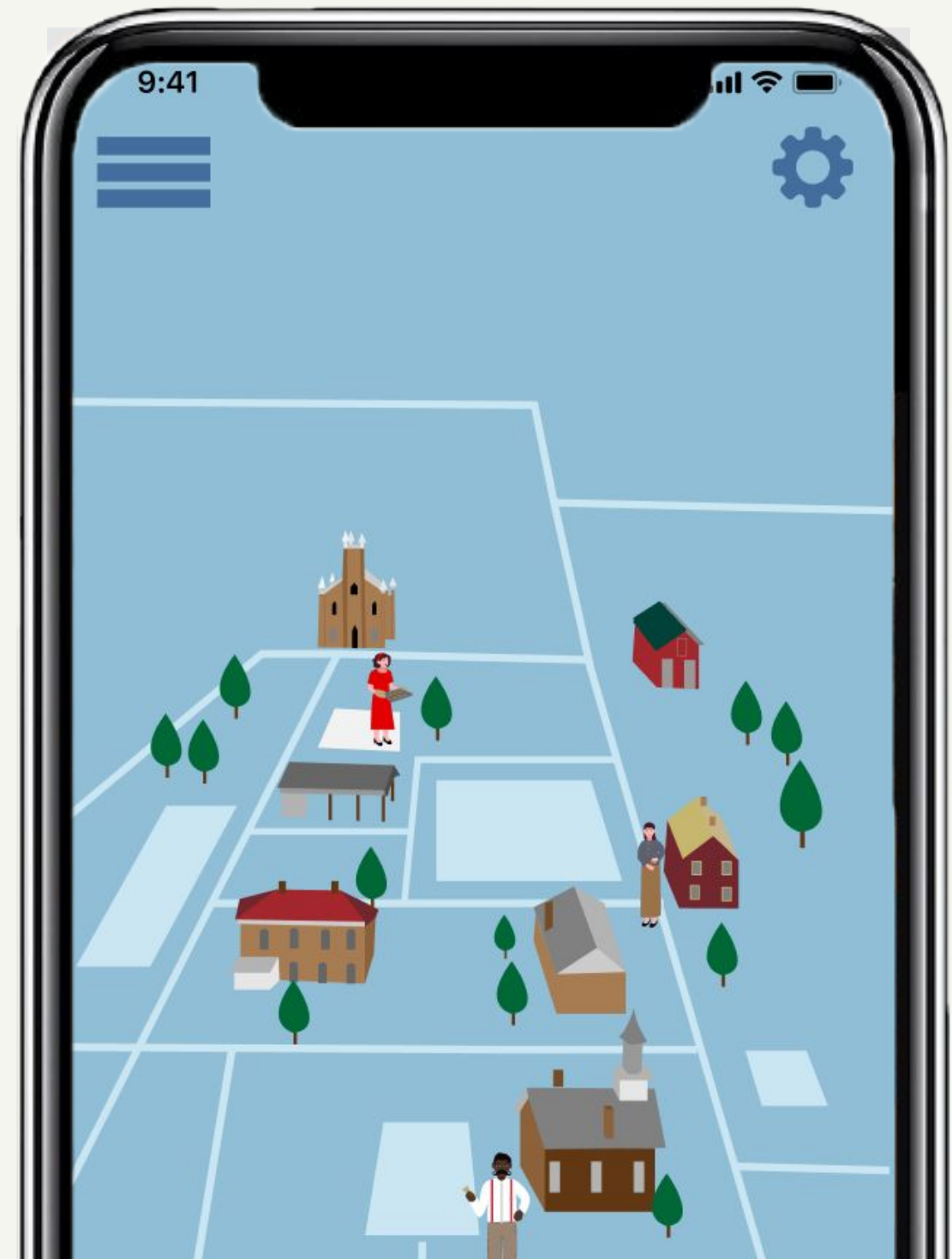
Explanation of how to find AR experiences

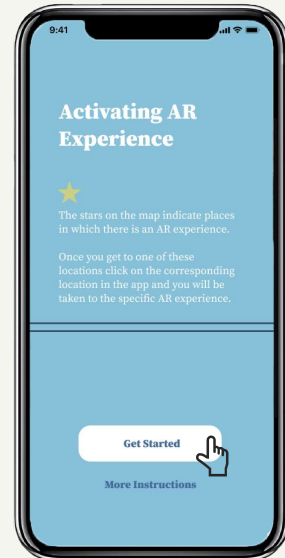
Map and Navigation



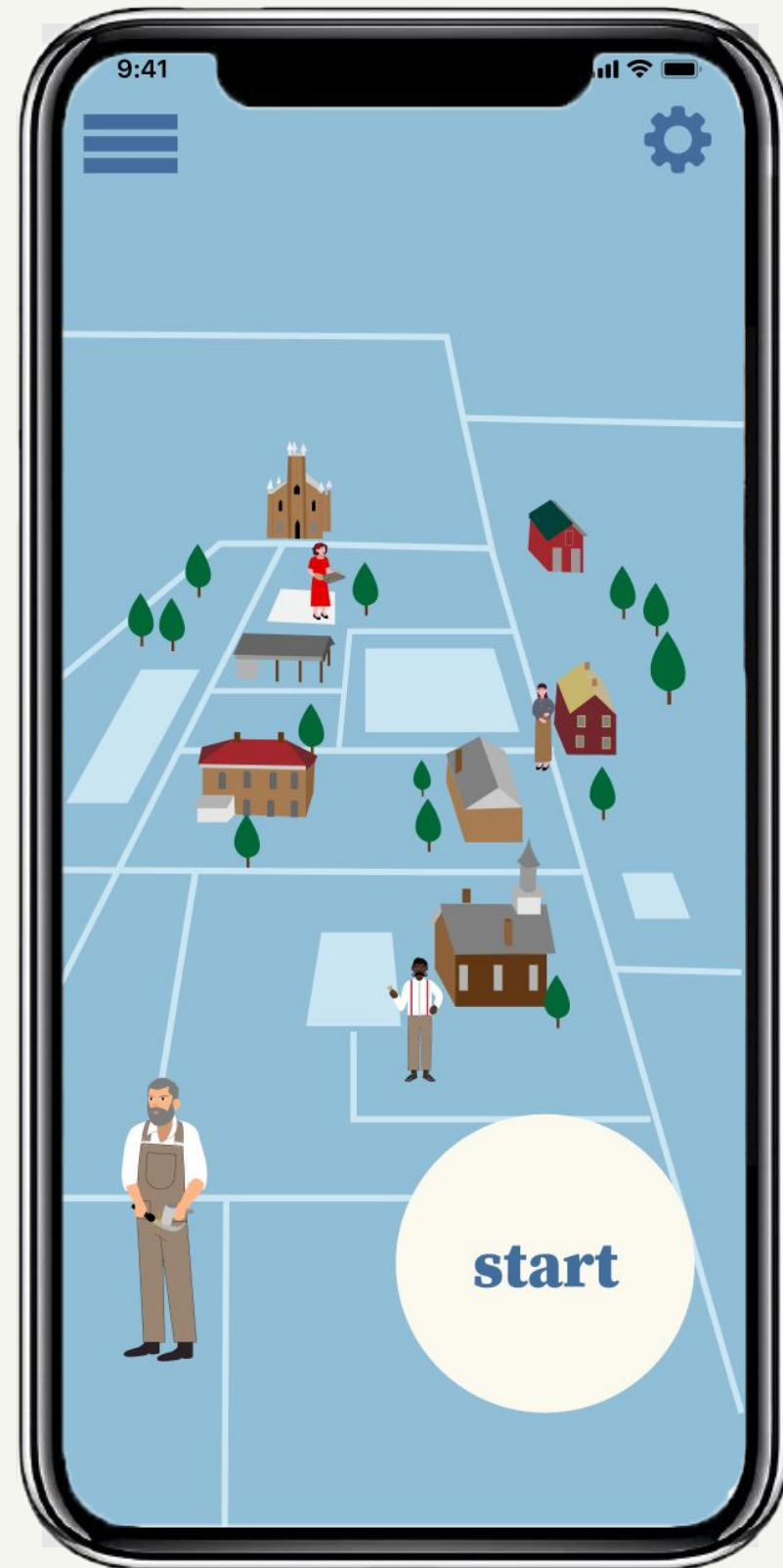
Linda, Connor, and Wyatt are beginning to familiarize themselves with the app's interface. After the first three welcome screens, they are guided to the map.

The map and homepage serve as the primary form of navigation within the app. While the homepage allows users to head directly to an AR experience, the map guides users to the tour guide experience.





Previous screen



The home page functions like a typical navigation app, ex: Google Maps



The home page is found by clicking on the icon on the top left.

Character Guides

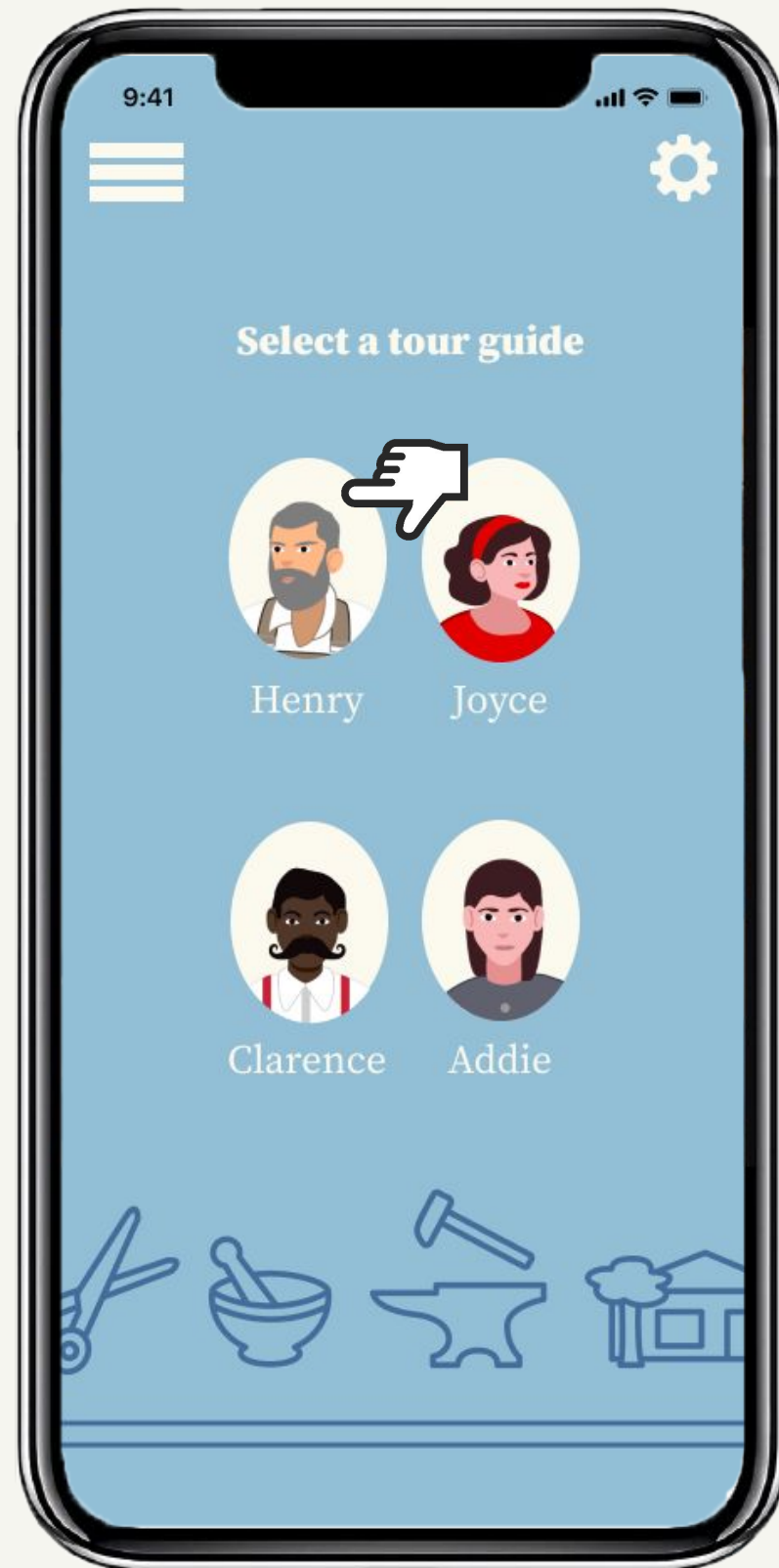


After clicking the “start” button on the app, Linda, Connor, and Wyatt decide on which character to pick. They choose Henry, the blacksmith.

The following screens provide an engaging way for users to be guided to the AR experiences within the museum.



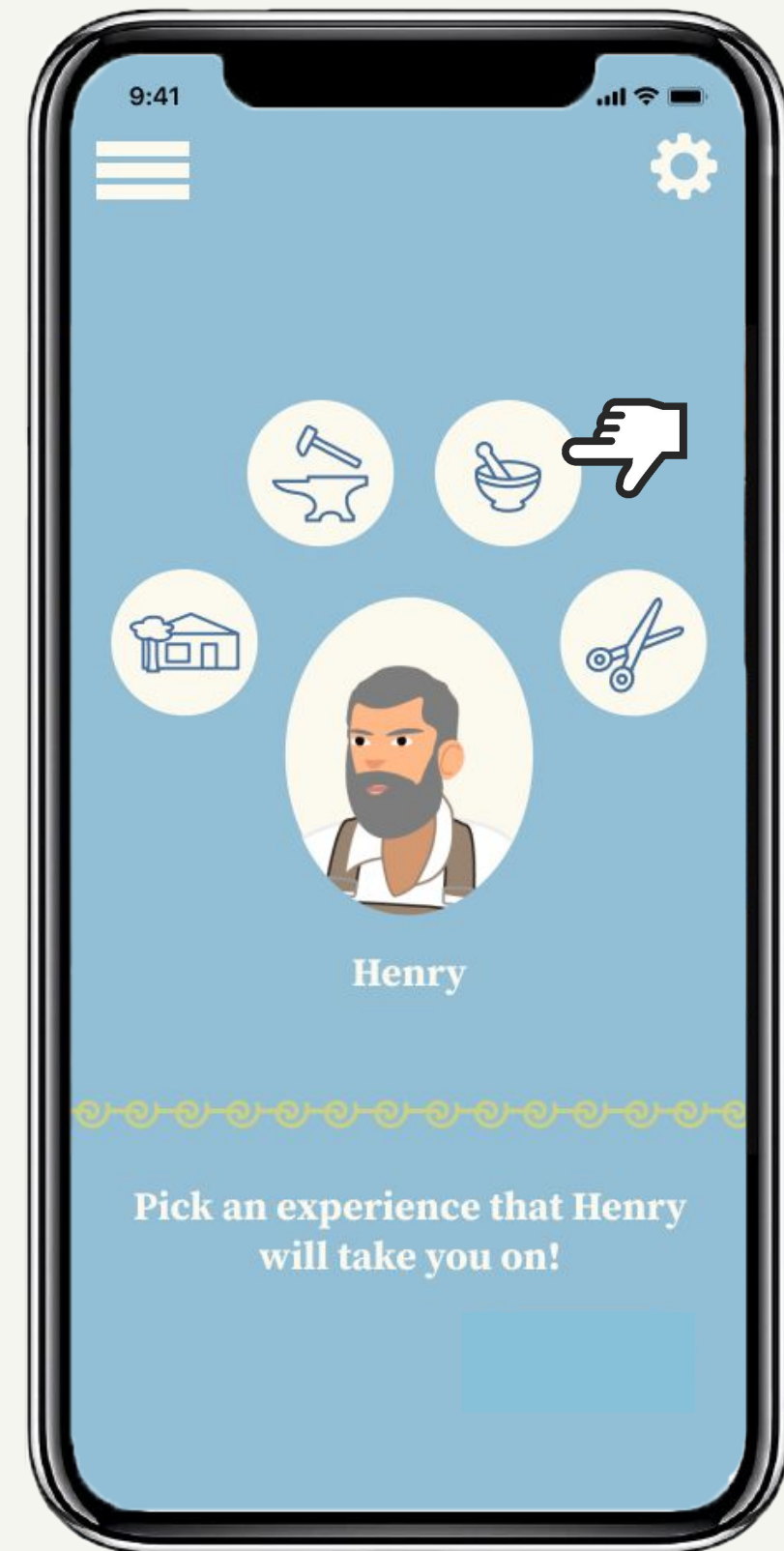
Users click the start button on the map screen to navigate to character selection



Character selection screen



Character description scene



Where users pick an AR experience they want to explore

AR Guide

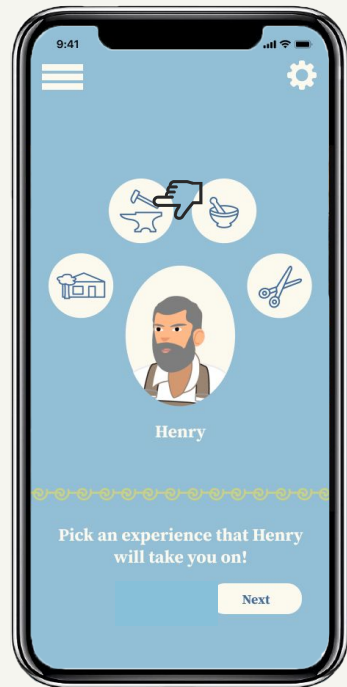


Linda, Wyatt, and Connor decide they want to go to the pharmacy first. The instructions are narrated by Henry, the character they picked.

The rest of the users instructions are narrated by the character they pick. The character's story guides them to each of the AR locations.

I need to pick up a prescription. My cousin Alfred has a bad cough, so I'm going to pick up a remedy from Addie, our local pharmacist. She's one of the best there is.

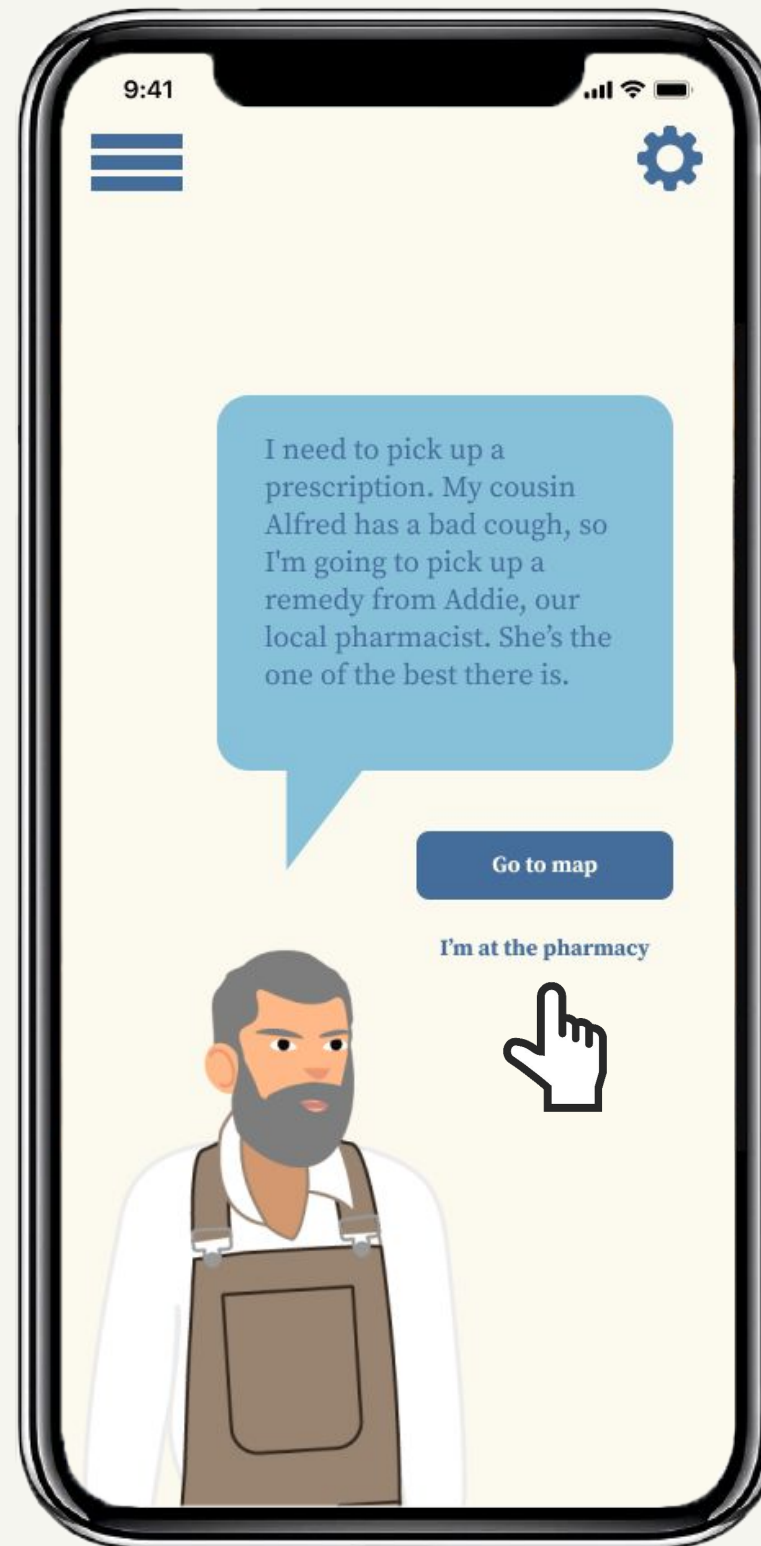




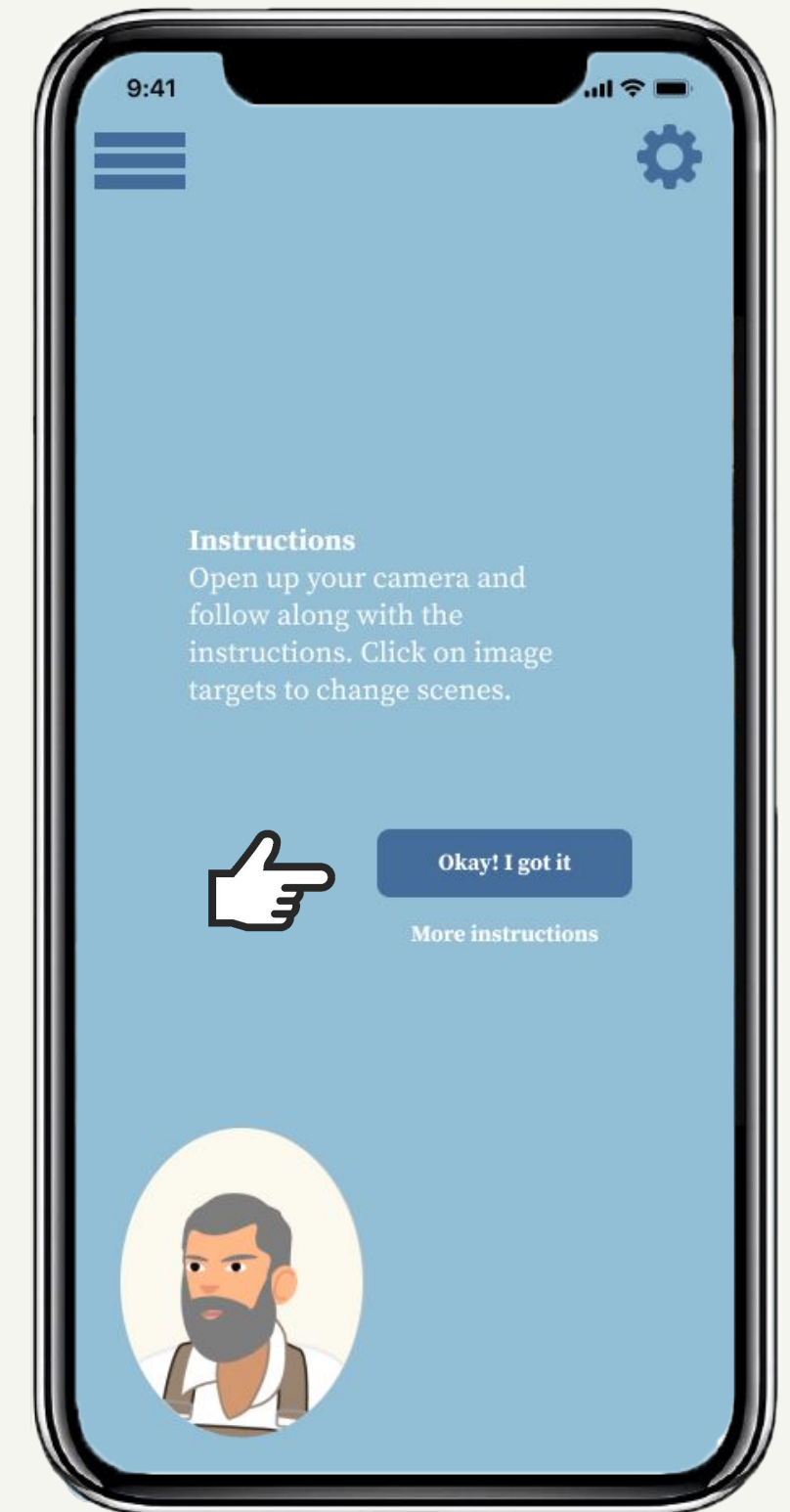
Previous screen



The character introduces the storyline.

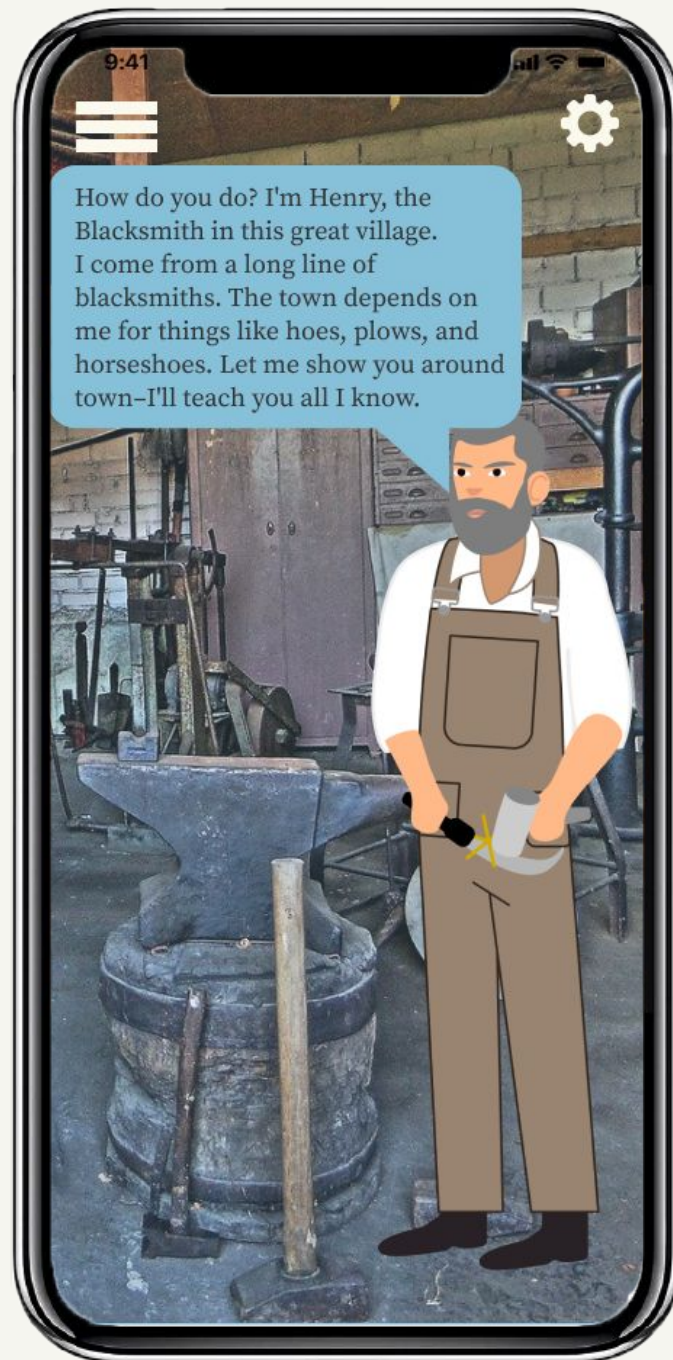


Users can head back to the map and continue when they have arrived at their destination.



Users begin the AR experience when they are ready.

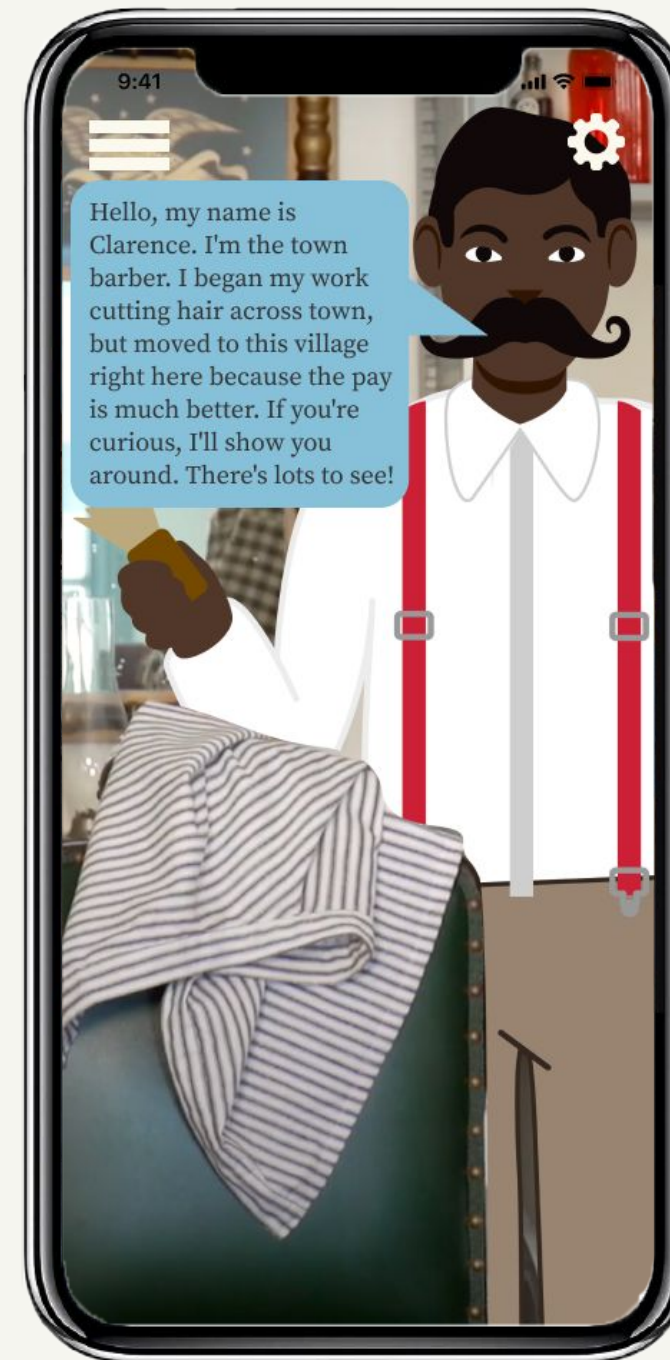
When the user starts their AR experience, they will open up their camera and point it towards where the experience occurs. Then, the respective character to each experience will appear and aid the user in the task.



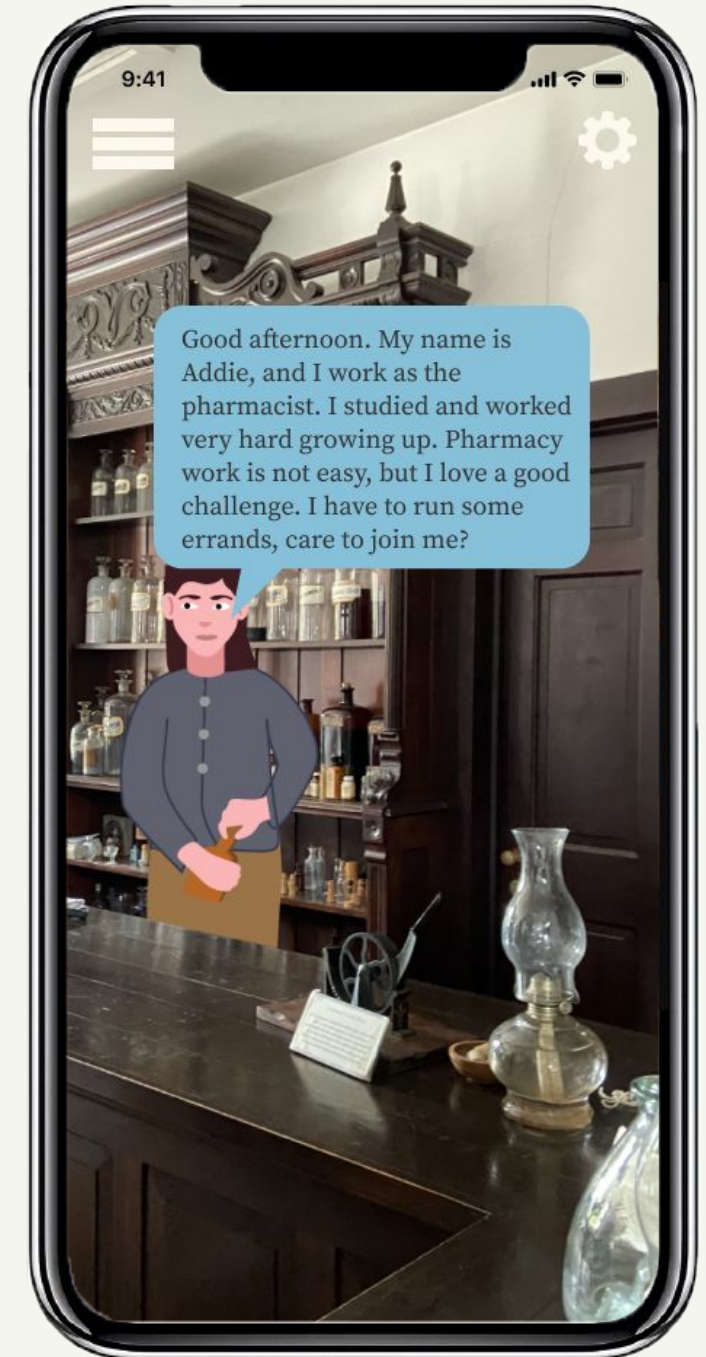
Blacksmith



Lustron Home



Barbershop



Pharmacy

At-Home Extension



After they visit the museum, Linda, Wyatt, and Connor head home. They talk about how much they enjoyed their visit and what they learned.

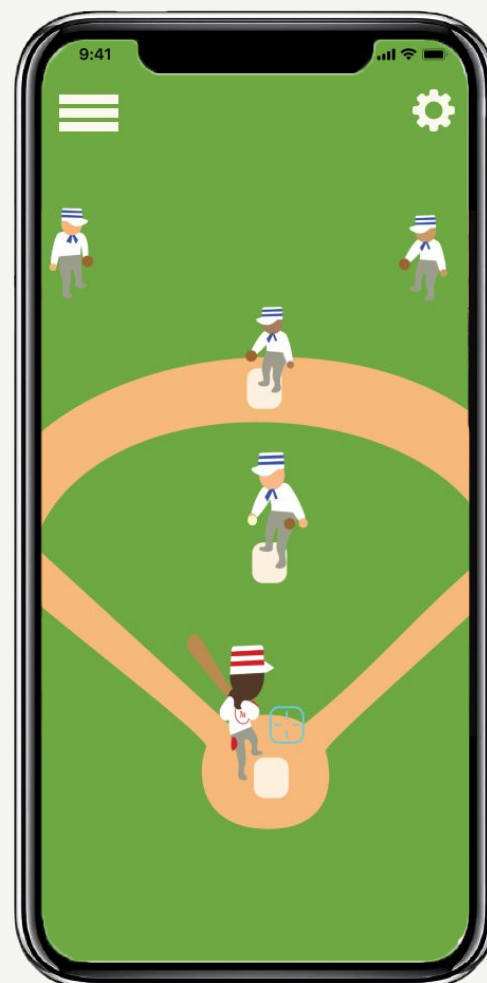
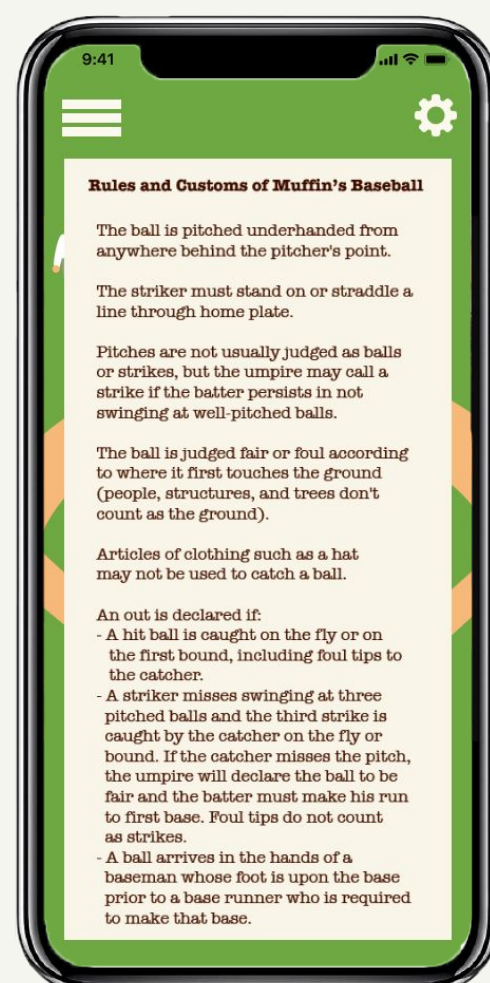
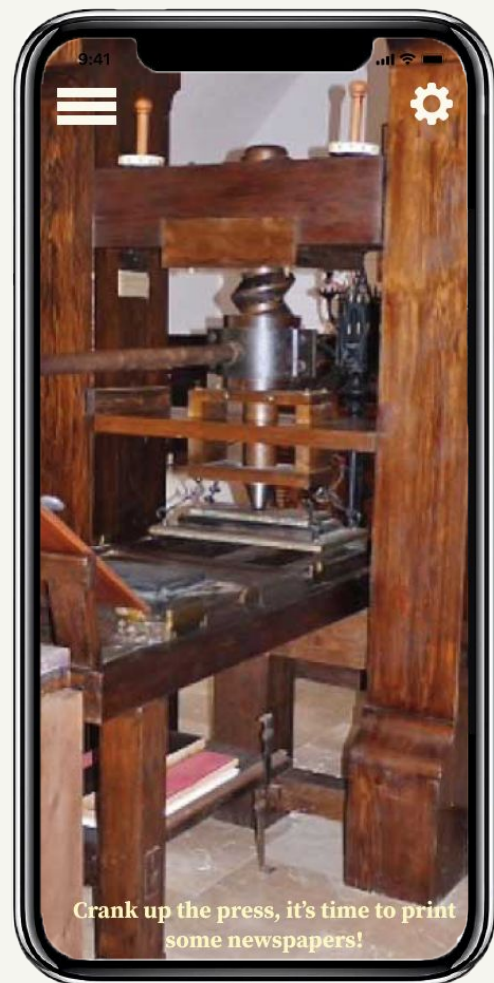
Before they left, Anne told them about the at-home learning games on the app. Linda opens the app and taps on “OHC at Home”, where she finds three mini game options.



At-Home Extension

At home, users are able to play minigames, including:

- Baseball with the Muffins, using 1890's rules
- Baking with Joyce, using a recipe from her grandmother, who lives in Ohio Village
- Newsletter pressing at the Newspaper Office
 - Potential option to include actual Ohio History Connection newsletters



4.

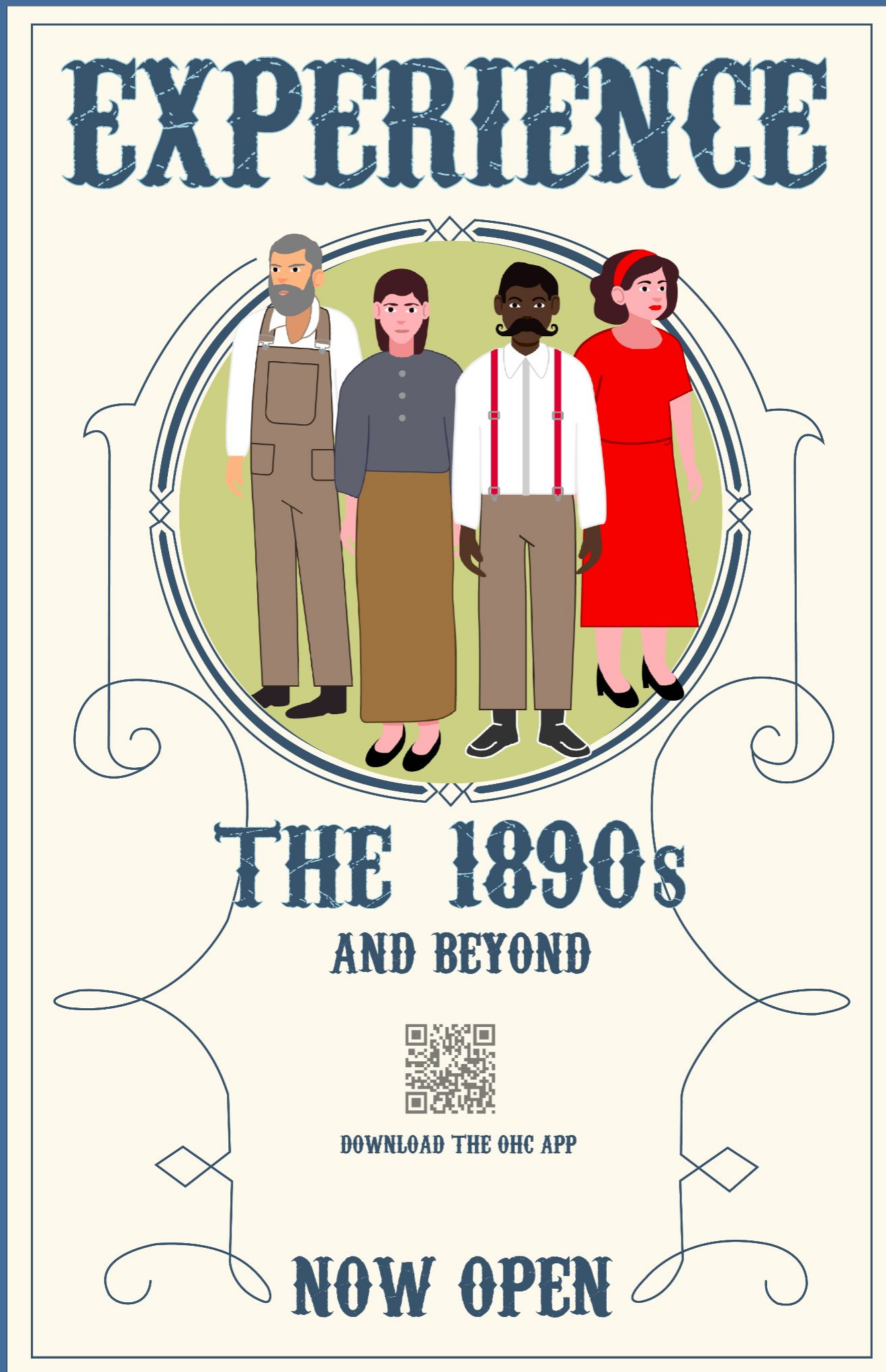
Signage and Advertising

PHASE 4



Signage

This sign will appear at both the main museum entrance and the entrance to the Ohio Village. It will prompt visitors to download the app for the AR experience.



Signage

A sign like the one pictured to the right will appear on the exterior of each location that contains an AR experience.

This sign will prompt visitors to open their app (or download if haven't) and participate in the corresponding AR experience.



Reflection

By having an app that comprises all the AR experiences in addition to an at home component I believe we will be able to engage a wide demographic and improve the overall museum experience.

Using an app instead of technology that the museum would need to provide makes this an accessible and cost effective option. The instructions and map on the app should allow most users to not have to rely on staff in order to enjoy the experience.

Staying true to the time period, the experiences on this app will reinforce The Ohio History Connection's values of preserving and sharing stories with a diverse community using innovative technology.



**Thank you for
listening!**

