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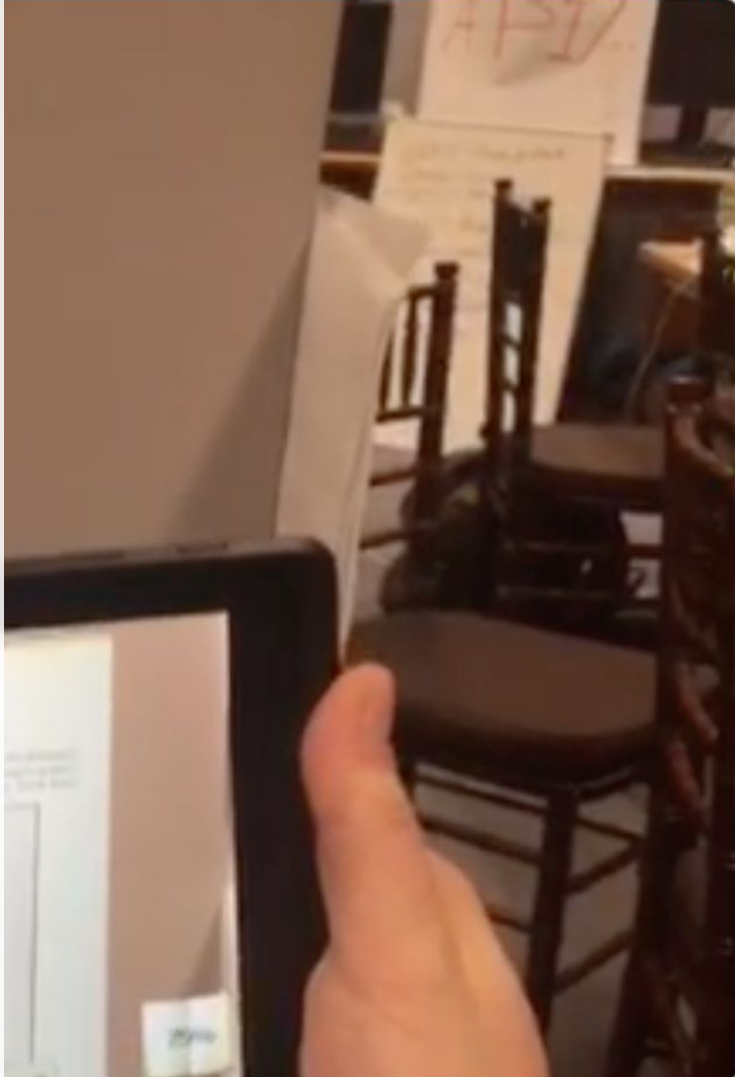
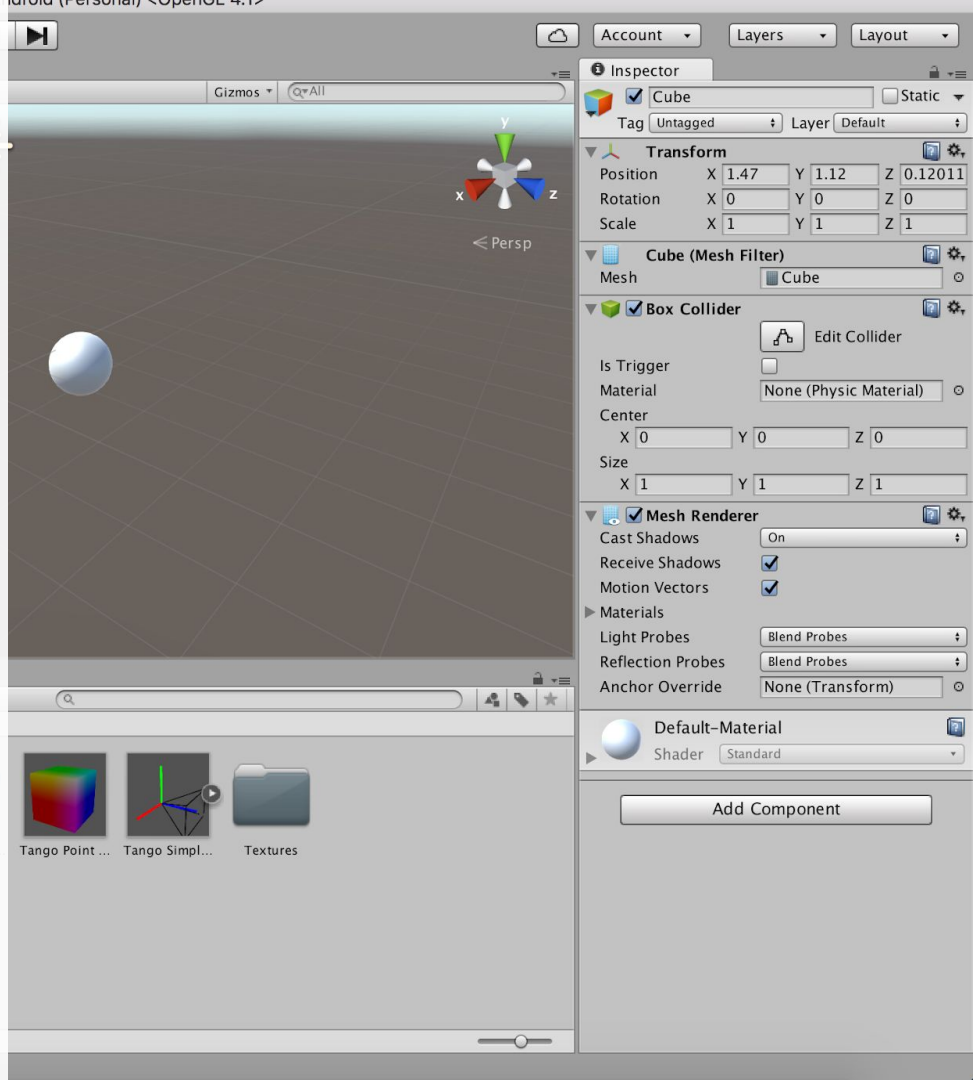
Tango Time Machine

Tango Time Machine is an augmented reality experience that helps visitors to the museum to imagine AMNH as it was 100 years ago. By exploring the present-day museum users collect AMNH Exhibition Guidebook pages from 1916 and recreate the records kept by the library, rewarding them with an unlocked map of the museum floorplan from 1916.



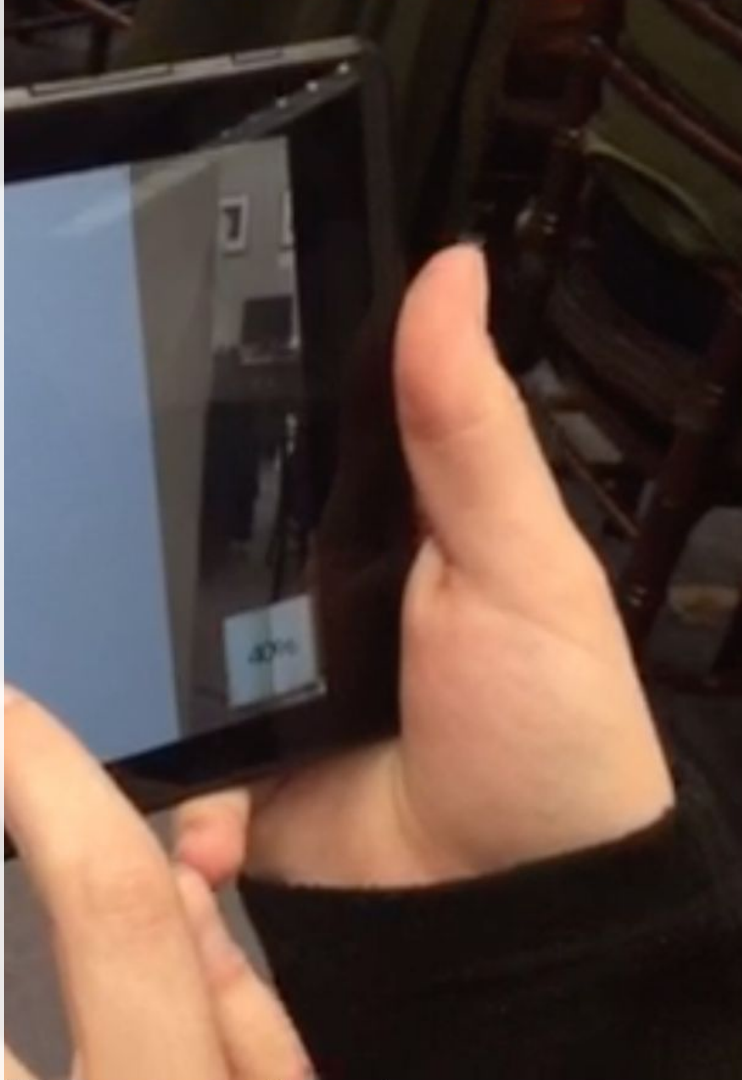
Use of AR

The Tango Time Machine takes advantage of Google Tango's depth perception abilities to recognize and render pages on surfaces. Users walk through the museum and collect pages to add to their vintage guidebook.



MVP Features

- Map slider comparing 1916 and 2016 floor layouts
- User location selection within the museum
- Guidebook pages positioned against walls rendered to appear as if they were in the physical space
- Guidebook pages organized by floor and exhibition



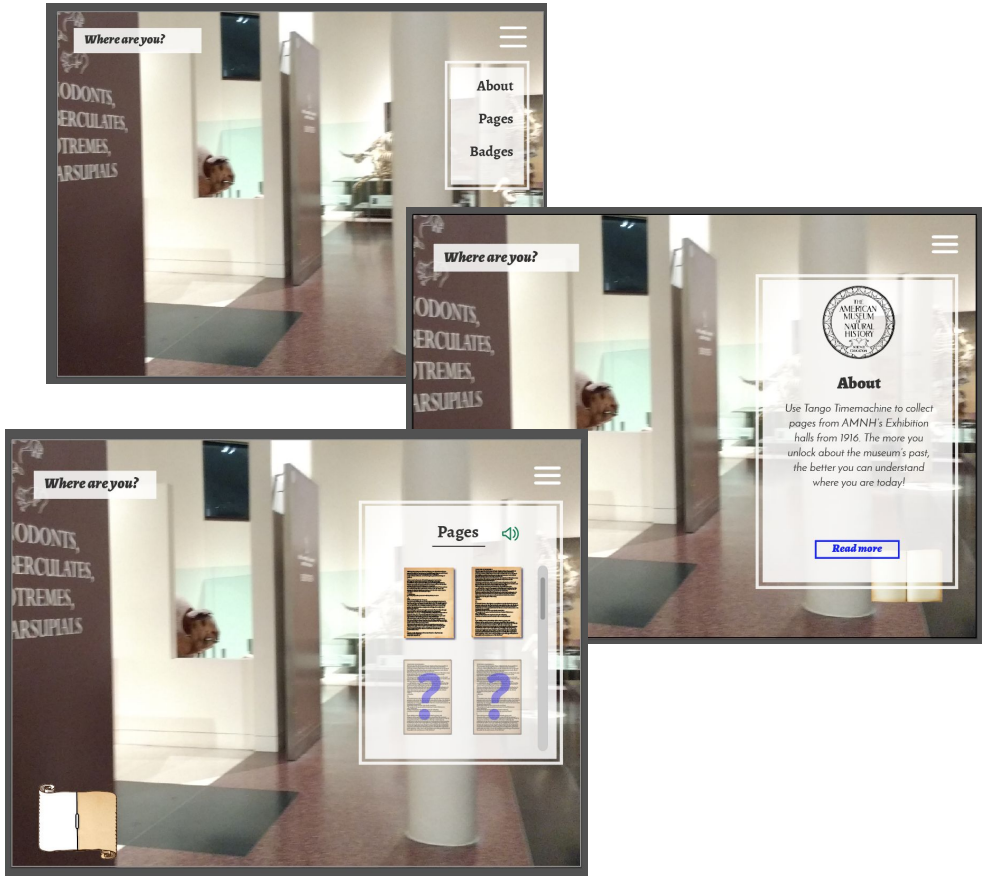
Data features

The pages were cut up and rearranged by exhibition according to the 1916 General Hall Guide. We then found the floor number and section of the Museum for each exhibit from the Table of Contents and we matched that data with present-day maps of the Museum to find where the exhibit would have been today.

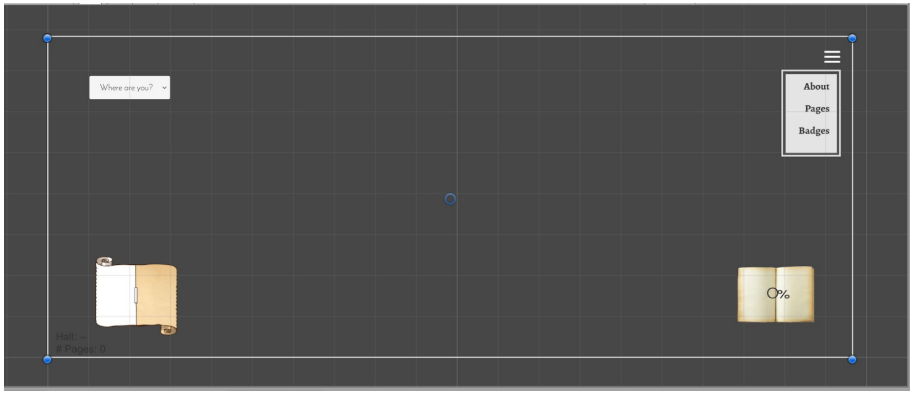
Finally, we converted these images from JPEG2000 to PNG (for transparency support) to JPG (performance reasons). Finally, we made each one a thumbnail for future use in the "Pages" panel.

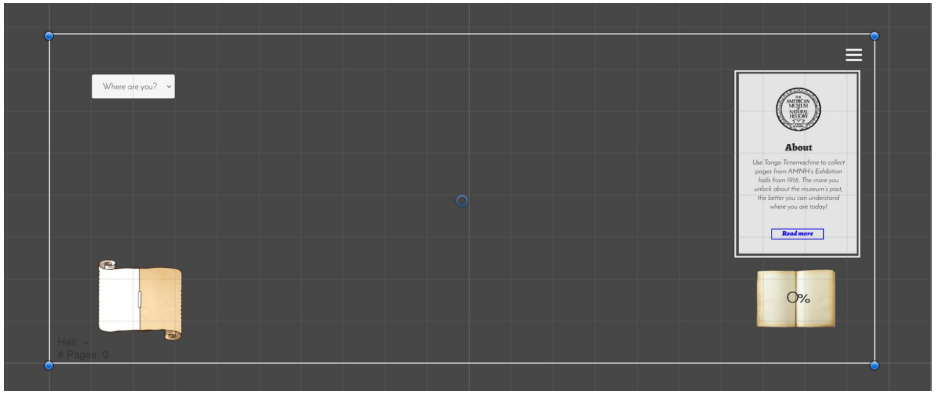
User interface

Our interface was initially designed to be a simple collection game, but was later expanded to reward users for completion by prototyping mapping and audio rewards, as well as to encourage research into AMNH Library data on the web. Our UI is currently designed in Adobe Illustrator, Photoshop and Unity.



Unity Iteration





Video Demo: come play with it after!

Future goals

- Enable users to physically interact with pages on walls
- Connect Guidebook collections to thumbnail interactive book model and audio
- Automatically recentering page objects
- Providing users with geolocation from GPS functionality
- Apply vector maps and fogs