

HOLOGRAPH MAP

Discovery and Wonder

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Despite the fact that conventional maps did offer useful information, they were less engaging to the human eye. While searching for a better alternative, holographic maps appealed to us as a solution to the less exciting aspects of 2D maps because they had the ability to give people different perspectives and had a better chance of attracting the attention of the human eye.

At first, we found several ways of implementing holograms into our map project. Among the many options available, we chose

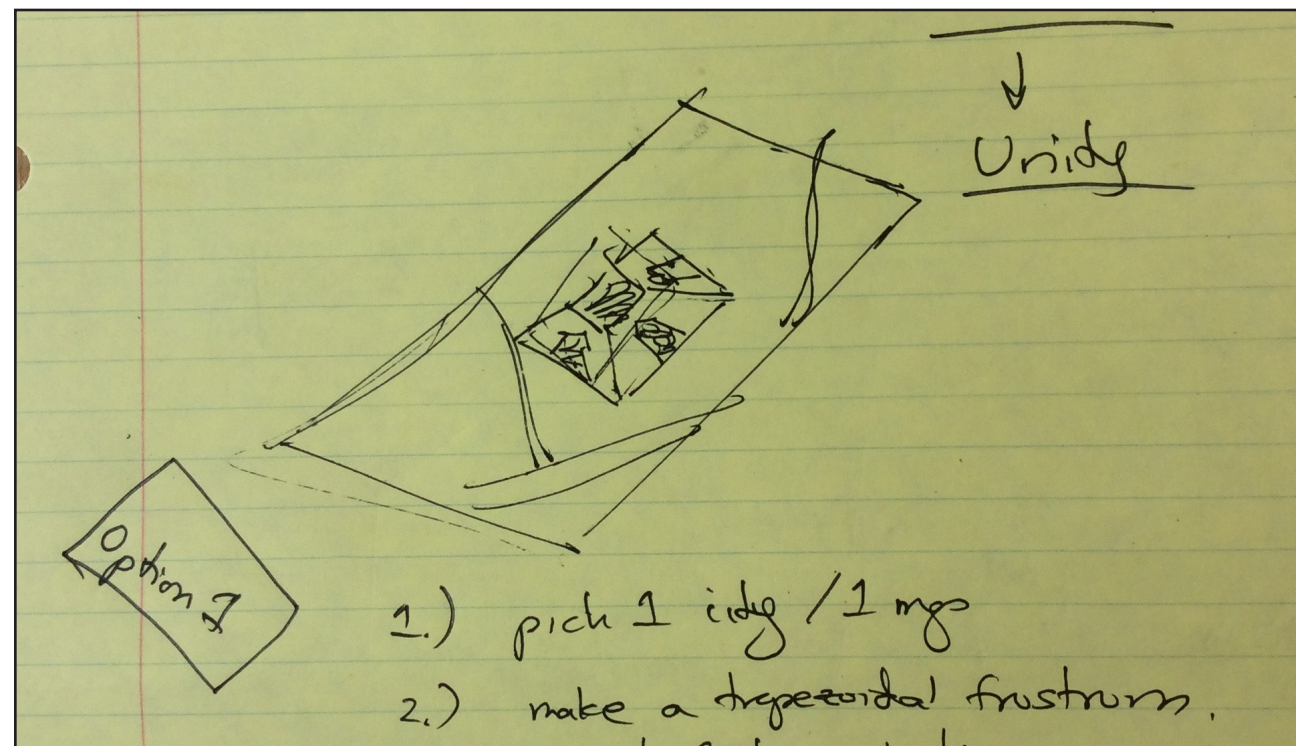
to use a pyramidal holographic projector due to its simplicity. We also decided to use processing as the visual programming platform for our map and an iPad mini as the display for our map. Lastly, we used an Arduino and a potentiometer (switch) to control the map. The first step in creating this holographic experience involves the use of Processing, a programming platform that allows us to generate shapes and images through coding. While it is running, the program is connected to an Arduino which is, in turn, connected to a potentiometer. The potentiometer is used to allow a certain control on the holographic map, such as how much of the map is revealed. As the shapes and images are generated on the computer screen, it is mirrored to an iPad screen. Finally, a holographic projector is placed on the screen of the iPad in order to achieve the holographic experience.

Context image



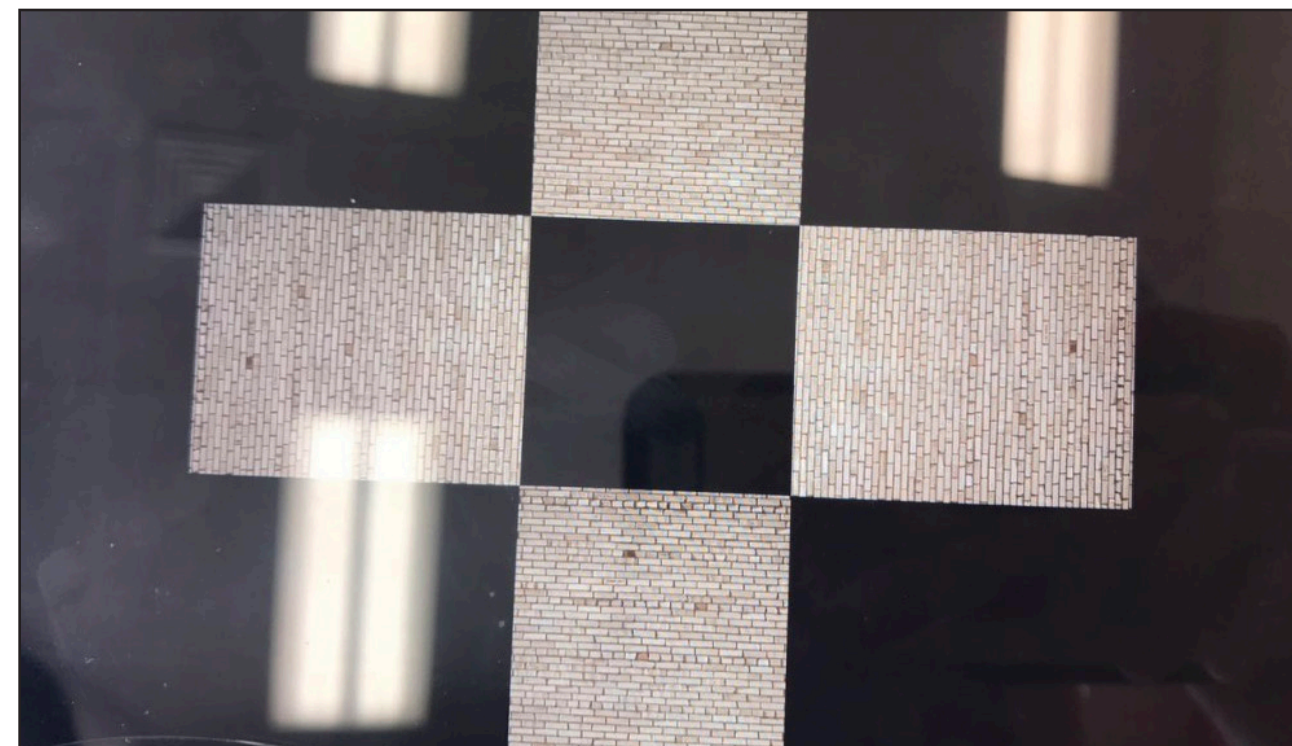
A Holographic Projector used on cellphones serving as a 3d display

Concept Sketch



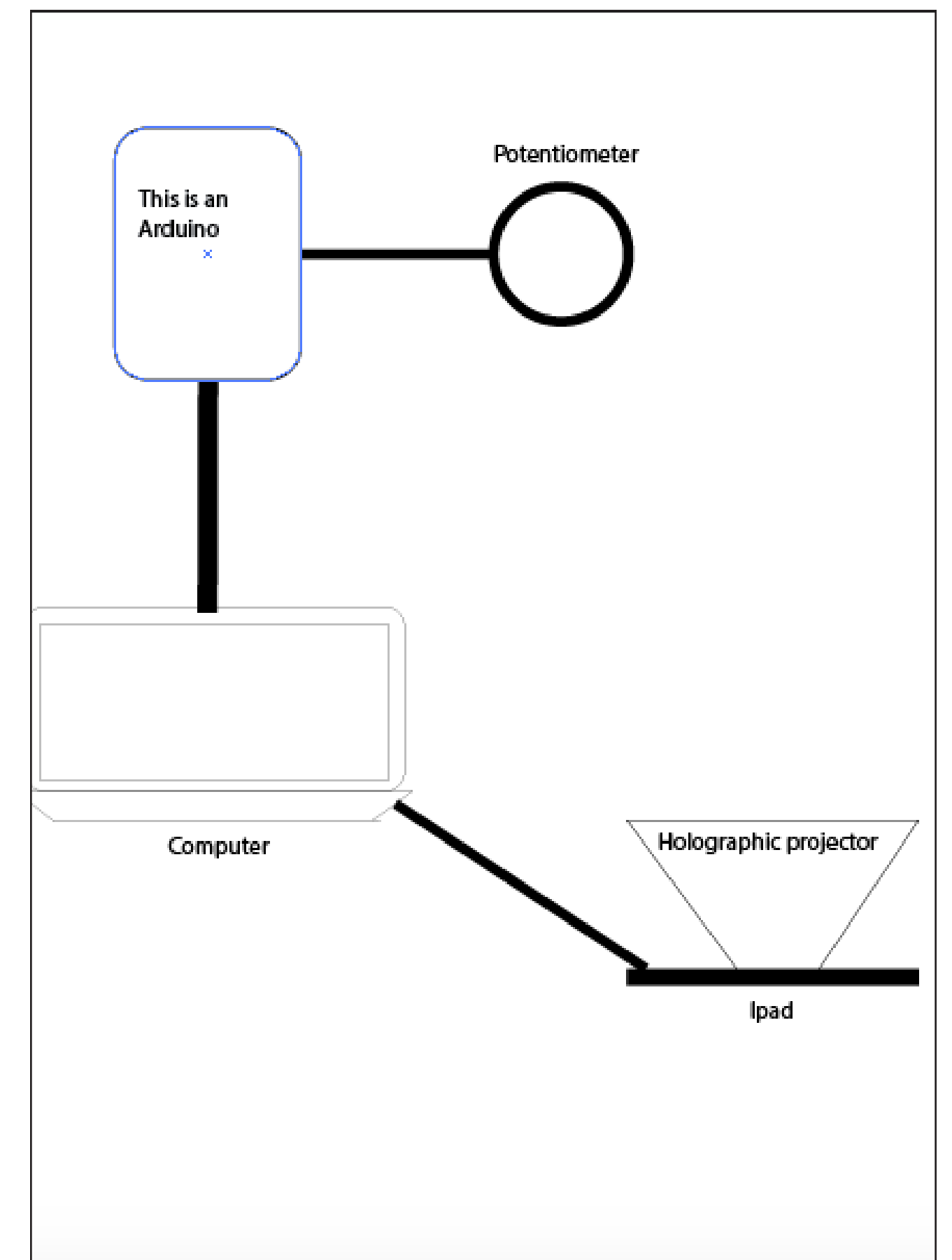
This is one of the first sketches we did to plan our project

Iteration 3



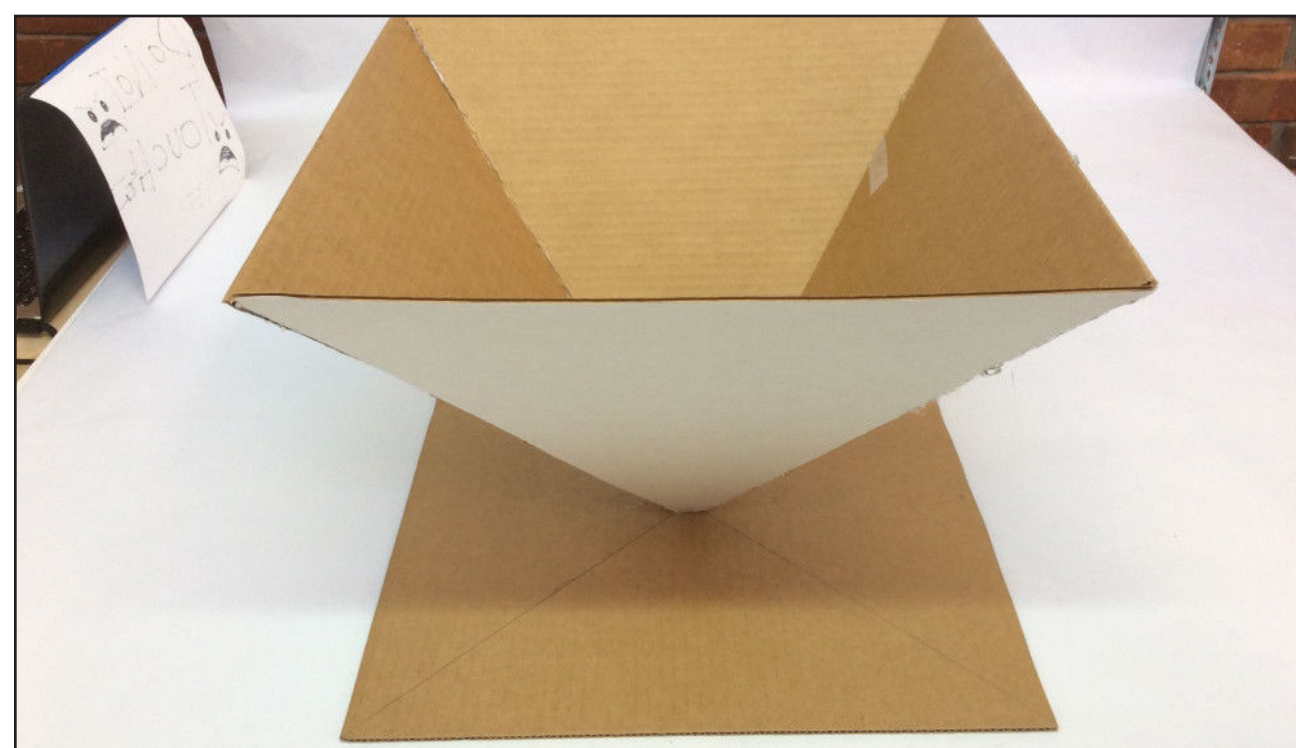
One of the first designs for the holographic mapping

Use Diagram



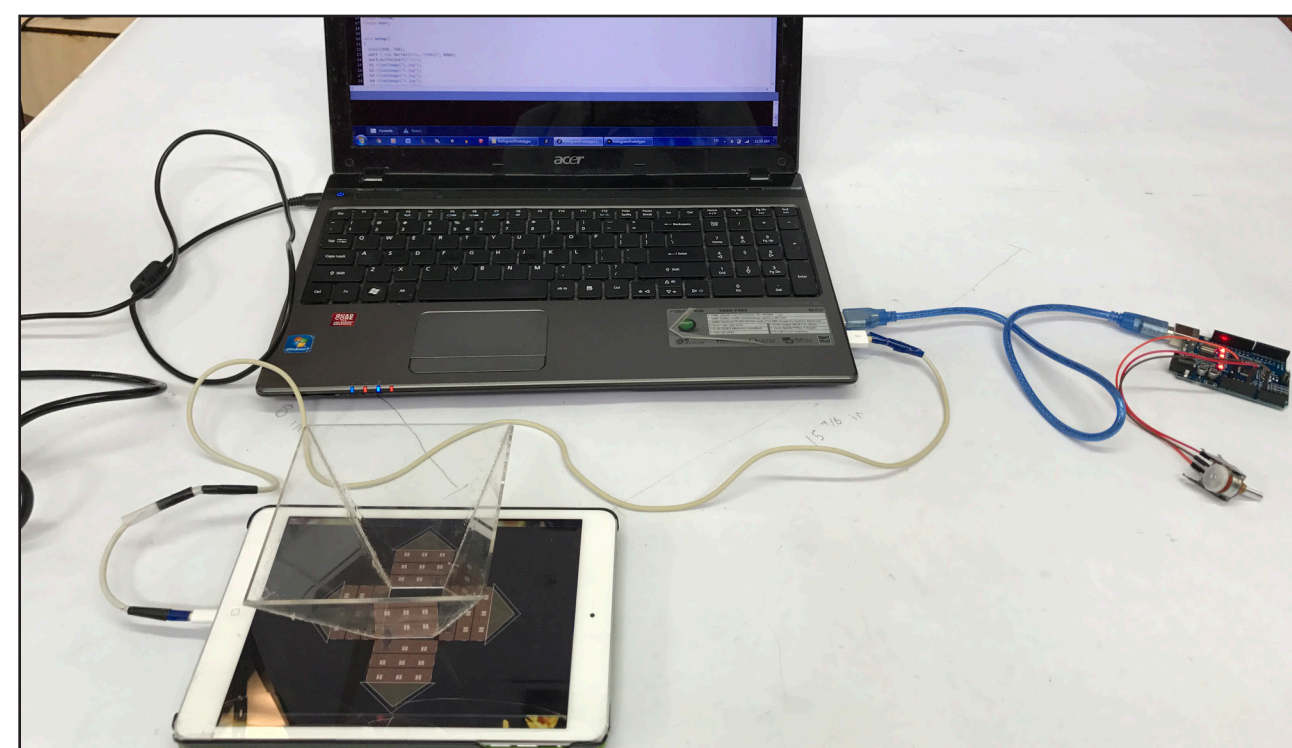
Use diagram of the final iteration of our project

Iteration 1



First mockup of a large Holographic projector

Final Iteration



Picture of the final iteration of the project showing the whole project assembled