



Integrating Computer Game Technologies with Museum Experiences



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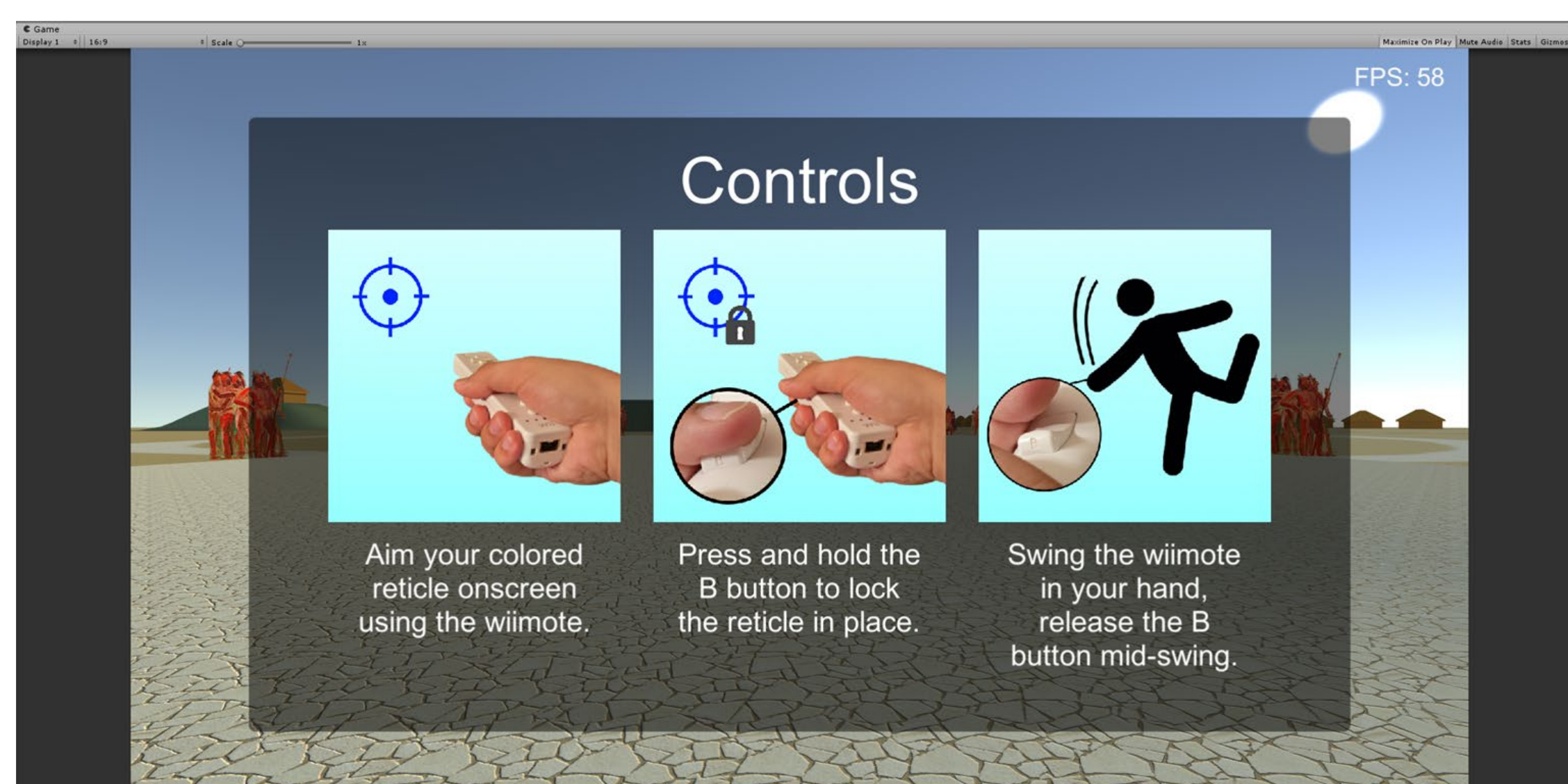
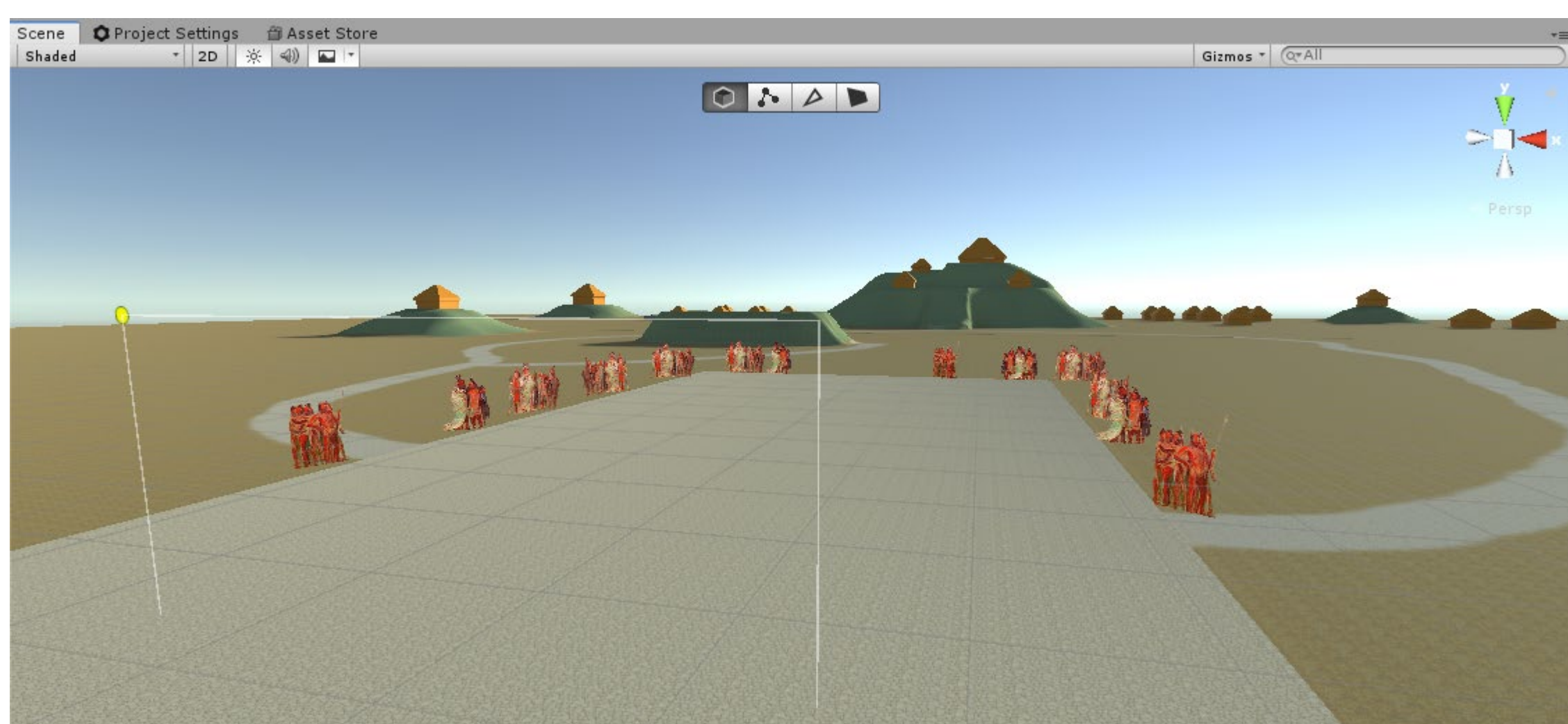


Abstract

This project entailed the creation of an interactive program that allowed users to engage in a recreation of a Native American game activity, intended for enrichment of museum exhibits.

Introduction

From a cultural perspective, games teach knowledge and, sometimes, physical skills that each society values. Computer-based versions of traditional games can simulate those skills and help today's visitors experience a traditional and historically significant game.



Hypothesis

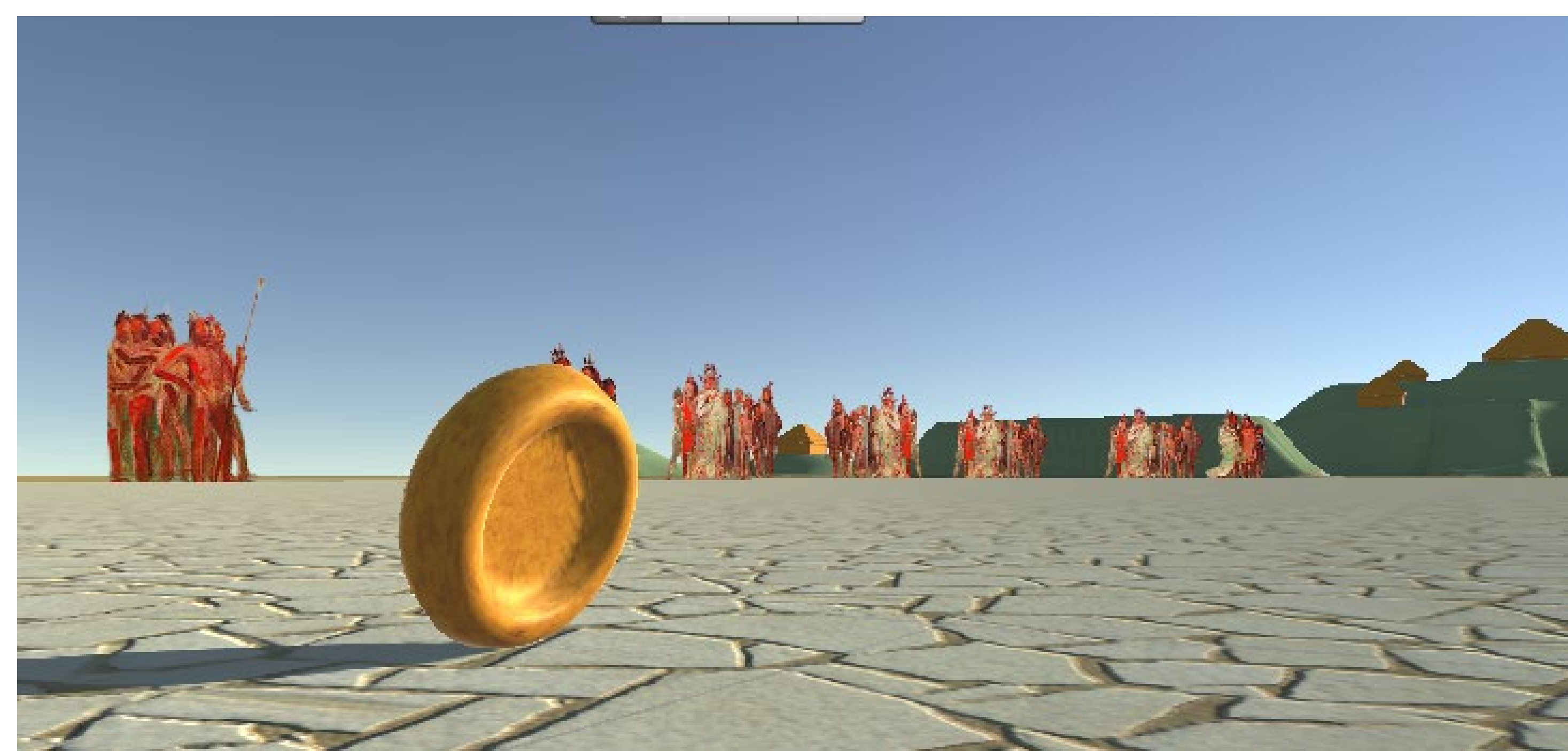
A simple game can be used to enrich a cultural and historical learning environment such as a museum.

Methods and Materials

The objective of this project is to integrate interactive computer technology with museum exhibits in order to provide an enhanced experience for the museum visitors. The program must be easy to understand and use, as well as inform its users of Native American history.

Results

***Spear Thrower VR* is a recreation of the Native American game of *Chunkey*. Up to 4 players can participate in the game using Nintendo Wii remote controllers. The program has a number of accessibility features to make it easy to pick up and play.**



Discussion and Conclusions

The program was made in Unity 3D with custom code written in C#. A third-party library under the MIT license was used for support of the Wii remote controllers.

Our intention is to have a test exhibit present in a museum or similar setting and gather data from play sessions. This feedback will contribute to the refinement of the program toward a desired product.

Future Directions

We hope to have museums utilize the application to positively enrich exhibits on the history of Native American culture.

Literature Cited

Games of the North American Indians,
Stewart Culin

Letters and Notes of the North American Indians,
George Catlin

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