

ABSTRACT

The hydrologic cycle (also known as the water cycle) is a cycle that describes the continuous movement of water. Two of the various types of water cycles that exist include the natural water cycle and the urban water cycle. The problem formulated is how to develop a mobile educational application that applies augmented reality technology with an interactive 3D hydrological cycle theme and is able to simulate particle changes in a climate, and how to provide an overview of the hydrological cycle in digital form, especially in 3D models in several landscapes/environments. The aim of this Final Project is to develop a mobile educational application that applies augmented reality technology with an interactive 3D hydrological cycle theme, and creates 11 (eleven) different environments to simulate changes in the climate cycle in 3D objects. The method used for this Final Project is the MDLC (Multimedia Development Life Cycle) method. The output of this Final Project is an AR application for Android with an interactive 3D hydrological cycle theme. The conclusion that can be drawn is that the application has been successfully developed, and all the different environments have been successfully tested and have shown appropriate results.

Keywords: Augmented Reality, Unity, Hydrological Cycle