

ABSTRACT

The subject matter is one of the important factors in learning process. There are many kinds of the subject matters in the elementary school. One kinds of the subject matter is the social science. The social science is kind of the subject matter that explains the social life based on the historical study and the social knowledge. There is material discusses about the Indonesian traditional house in the social science. The variations of the Indonesian tradition house sometimes make the students are difficult to know and to comprehend the form and the characteristic of it. It happens because there is no learning media that support the material.

The form of the Indonesian traditional house learning application uses the augmented reality technology to support the concept of the material explanation. Besides, the method that is used in designing and making the application is the multimedia developing method. The multimedia developing method consists of the concept, the material roundup design, the making method, the trial method, and the distribution. The kinds of the software that are used to make the Indonesian traditional house are *Autodesk 3DS Max* application as the 3D object maker, the *OpenSpace3D Editor* as the visual *Augmented Reality* maker, *CorelDraw X4* as the handy guide application usage, *Adobe Flash Professional CS5* as the interface maker, *Adobe Photoshop CS3* as the material maker and 3D object texture, and *Inno Setup Compiler* as the installer program maker.

The augmented reality usage technology application as the learning-based multimedia of the Indonesian traditional house has been successfully created to solve the problems of the interactive learning media. This application is expected to be useful as the supporting learning for the fourth grade students of the elementary school. The Indonesian traditional house application visualizes the usage of the camera that detects the marker to display the object of the traditional house in 3D appearance. Moreover, there are previews of the traditional house with its description and the exercise to evaluate the material that has been studied.

Keywords: *application, traditional house, and augmented reality.*