

ABSTRACT

T. B. Silalahi Center Private Museum is a private museum or footsteps from T. B. Silalahi which is located on Jl. Stone Fence No. 88, Silalahi Village, Balige District, Toba Samosir Regency, North Sumatra Province. This museum was established as a forum to motivate the younger generation to continue to achieve their dreams by seeing the TB experience. Silalahi started as a child as a buffalo shepherd until he became a general. TB Museum. Silalahi is a non-profit foundation founded by Lt. Gen. TNI (Purn) Dr. Tiopan Bernhard Silalahi. However, after the last few years this museum has experienced a decrease in visitors, therefore this museum needs to be renewed in the introduction of objects in the museum.

Based on a survey of needs in application design, this museum needs to use Augmented Reality technology in introducing the history of objects in the museum. Augmented Reality technology is one of the breakthroughs used lately in the field of interaction, the use of this technology will be very helpful in conveying information to users. Augmented Reality is an interaction technology that combines the real world and the virtual world. This technology can be accessed using an Android smartphone by using markers to display 3D objects equipped with audio, video, and information or information from 3D objects.

Tests based on recognition markers using android are obtained, namely markers that greatly affect light intensity and in this test also use distances and angles obtained at a distance of 20cm-30cm. Subjective to the user and the MOS (Mean Opinion Score) calculation is carried out. In this test, the user questionnaire consists of 5 questions which are asked based on the benefits of the application to 20 users. So that, respectively, obtained the average: 2.35,4.5,4.75,4.65 and 4.75

Therefore, with this application, hopefully it can provide education to museum visitors and can increase visitor interest in conducting recreation or research at this museum.

Keywords: Augmented reality, Museum, Android, 3D Objects