SCHOOL BUILDING RECOGNITION APPLICATION BASED ON AUGMENTED REALITY

(CASE STUDY: WIDODAREN 1st STATE SMA)

Yoga Maulana Qhadafi

Informatics Engineering Study Program, Faculty of Science and Technology

University of Technology Yogyakarta

Jl. Ring Road Utara, Mlati Krajan, Sumberadi, Kec. Mlati, Kabupaten Sleman, Daerah Istimewa Yogyakarta 55284

ymqhadafi2002@gmail.com

ABSTRACT

SMAN 1 Widodaren (SMASADA) is a senior high school which has the obligation to produce outstanding graduates. Nowadays, the emergence of increasingly sophisticated technology makes competition between educational institutions increasingly fierce, such as competition in school introduction media. SMASADA still uses introduction media in the form of a website and 2D images displayed in the entrance hall, this is considered less effective as an introduction media because prospective students cannot see the detailed shape of the SMASADA building, this will cause prospective students to be less interested in SMASADA as the goal of the next level of education. Based on the problems above, the introduction media used by SMASADA needs to be developed. An effective way that can be used to make this happen is by creating a school building recognition application to display the shape of the building in 3D. This research utilizes augmented reality (AR) technology. This AR combines real conditions with virtual objects into one whole. This building recognition application was created using Unity as software to develop the application and Vuforia SDK as a cloud for

1

storing markers. The data used is building image data and data from the total number of buildings in SMASADA. The final result of this research is an application that will display information related to the SMASADA building in 3D by scanning markers and AR Explore.

Keywords*: SMASADA, 3D Objects, Augmented Reality, Buildings, Android.*