

DEVELOPMENT OF AN ANDROID-BASED 3D AUGMENTED REALITY BUILDING APPLICATION AT JOGJA STUDENTS' ISLAMIC BOARDING SCHOOL 2

MUHAMAD ALI NUGROHO RAMADHAN

Informatics Study Program, Faculty of Science & Technology

University of Technology Yogyakarta

Jl. Ringroad Utara Jombor Sleman Yogyakarta

E-mail : ali.rmdhn20@gmail.com

ABSTRACT

Islamic boarding schools are a place to seek religious knowledge for Muslims. In Indonesia, Islamic boarding schools are widely spread, but unfortunately there are still many people who don't know about these boarding school buildings in detail. Most people or prospective students still see Islamic boarding school buildings only through pictures on the internet. So the information obtained about the buildings in the Islamic boarding school is incomplete. Augmented reality is a technology that combines two-dimensional (2D) or three-dimensional (3D) objects into the real world in real time. This research aims to create an AR mobile application for the Jogja 2 student Islamic boarding school building. In creating an augmented reality application for the Jogja 2 Islamic boarding school building, researchers used a waterfall method. In the application there is a picture of the building and room plan of the Jogja 2 Islamic boarding school building. This application is expected to help prospective students or the public who want to know in detail the Jogja 2 student Islamic boarding school building in 3 dimensions. The result of this research is to produce an augmented reality Android application PPM Jogja 2. The application created has been tested using the black box method and all page displays and buttons function well.

Keywords: *Islamic boarding school, Islam, Santri, Jogja, Augmented Reality, Android*