## IMPLEMENTATION OF AUGMENTED REALITY IN THE UTY CAMPUS 1 LAB ROOM IN THE FORM OF ANDROID-BASED LOCATION BASED SERVICE (Case Study: University of Technology Yogyakarta)

HAESTI NUR KHANIFAH

Informatics Study Program, Faculty of Science & Technology University of Technology Yogyakarta Jl. Ringroad Utara Jombor Sleman Yogyakarta E-mail: <u>haestink2003@gmail.com</u>

## ABSTRACT

New student or MABA is the status of students in their first year of college. MABA students often have difficulty finding a room in the UTY Campus 1 building. One reason is that the room plan is still 2D. Along with technological developments in recent years, one of the mobile devices is augmented reality (AR). This technology is a combination of 2D or 3D objects with real objects into a virtual environment in real time. This research aims to create an augmented reality location guidance application using the Location Based Service (LBS) method. The method used in this research is waterfall, starting with needs analysis followed by UML (Unified Modeling Language) diagram planning. The research results are presented in the form of a navigation application that produces point-to-point routes with AR support. The use of these two technologies can help MABA activities and using a smartphone allows the floor plan application to be used flexibly.

Keywords: UTY, MABA, Augmented Reality, Location, Location Based Service