ABSTRACT

Agriculture is one of the important sectors and concerns the survival of the Indonesian People. Indonesia is also known as an agrarian country because most of the population of Indonesia has a livelihood as farmers or farming. In the era of technology like now all sectors are increasingly combined with technology, one of them is in agriculture. One of them is the application of Augmented Reality (AR). The problem raised in this study is how to apply Augmented Reality (AR) technology in the agriculture. In this case the application is the introduction of plant types and pests to farmers. Augmented Reality (AR) is a technology that can combine the real world with the virtual world.

In this Final Project an application based on Augmented Reality (AR) is made for use by farmers and the Agriculture Office in the process of farming. The AR method used is the marker method. The application process is by the user pointing the smartphone camera at the marker of plants and pests, then 3D objects and information about plants and pests will appear.

From the test results, all content and systems in the application are running as expected, the AR Agricultural application can run well at the optimal distance of marker shooting at a distance of 10-30 cm and the optimal angle of capturing the marker at an angle of 00 to 450. Effect of room light different also affects delay. In conditions inside the room the average smallest delay is at 0.43s, while in outdoor conditions the smallest average delay is at 0.514 s. The best MOS application needs survey with a value of 4.5 while the best benefit MOS application survey results with a value of 4.55

Keyword : Augmented Reality, Plants, Pests, Agriculture