

ABSTRACT

Reading is one of the important activities in human life. Therefore, the ability to read is mandatory, especially when humans enter the educational phase in kindergarten because it is the initial stage in taking the process of further education. However, not all children can enjoy the process because not a few children have special needs, one of which is dyslexia.

Dyslexia is a learning disorder that causes problems in reading due to neurological disorders in the brain stem. In the process of learning to read for people with dyslexia, it will be difficult to understand the material provided, therefore we need a method to help sufferers in the learning process, one of which is application as a form of implementation of technological advances that affect the scope of education.

From these problems, this final project research makes a learning media application by implementing the phonic method as a form of therapy for children with dyslexia, gamification as a method of motivating children to do learning activities, and Augmented Reality technology as multimedia that learning media is more interactive.

The results of this study on testing the quality of markers with the marker-based tracking Augmented Reality method, the results obtained at 50 cm got a score of 28 with a total accuracy of 93.3%. At 100 cm, it gets a score of 22 with a total accuracy of 73.3% and at 150 cm, it gets a score of 15 with a total accuracy of 50%. The results of the QoS test are the latency is 1,27546 *s* when charged by 100 users, 1,29925 *s* when charged by 200 users, 1,530853 *s* when charged to 300 users, 1,651053 *s* when charged to 400 users, and finally 1,72718 *s* when charged 500 users. While the throughput test obtained throughput of 7,9 *kbps* when charged to 100 users, 7,6 *kbps* when charged to 200 users, 7 *kbps* when charged to 300 users, 6,9 *kbps* when charged to 400 users, and 6,2 *kbps* when charged to 500 users.

Keywords: Reading, Learning media, Dyslexia, Augmented Reality.