ABSTRACT

PENERAPAN TEKNOLOGI AUGMENTED REALITY SEBAGAI MEDIA PEMBELAJARAN DASAR-DASAR ILMU TAJWID BERBASIS ANDROID

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Mutiara Islam Integrated Islamic Elementary School is a superior school for Islamic religious education. At the school, he learned many things about Islamic religious education, one of which was the basics of Tajweed. The science of recitation is very important in reading the Qur'an, so that the reading of the letters of the Qur'an and the pronunciation are good and correct, because one of the things that must be applied when reading the Qur'an is to understand the science of Tajweed. Different levels of students' understanding of the applied learning process methods. Interactive learning media in which there are interesting visualizations further increase students' enthusiasm for learning and increase students' understanding of the material being taught. Based on this, in this research, an Augmented Reality (AR)-based interactive learning media for Tajweed is built with an application platform that has been built, feasibility testing can be done using the SUS (System Usability Scale) test method. Application development adopts the Android Mobile MDLC (Multimedia Development Life Cycle) software development model in the form of a computer application. The tracking method in Augmented Reality (AR) technology that can be used in this study is Marker Based Tracking, this method uses markers to display virtual objects. Based on the functional test results indicate that the application is working properly. To check the distance, please the 15 cm distance result has a high success rate, while for the below 15 cm distance it still doesn't work because the marker is too close to the AR camera. In the test results, the angle that shows the tilt angle is 20 degrees has a high success rate and has a maximum angle limit of 80 to 90 degrees per smartphone with different specifications. For the results of user satisfaction analysis, good test results through a questionnaire conducted with 30 respondents resulted in an average SUS score of 86.8, which leads to the conclusion that the application can be accepted by users with a Excellent adjective rating category.

Keywords: Augmented Reality, Tajwid Science, Marker Based Tracking, Multimedia Development Life Cycle