DEVELOPMENT OF MOBILE AUGMENTED REALITY AS A MEDIA FOR LEARNING RESPIRATORY AND DIGESTIVE ORGANS IN HUMAN

FAISHAL MUHAMMAD FAATIH

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

ABSTRACT

Learning about the anatomy of the internal organs in the human body can only be done in a school biology laboratory using human organ teaching aids or by using books in each classroom. Learning in the laboratory is limited by time and the number of teaching aids available, and not all schools have adequate laboratory facilities. In this research, researchers aim to help overcome this problem by designing an application to introduce internal organs in humans using augmented reality technology, especially the respiratory and digestive organs. The research stages consist of system analysis, system design, implementation, and finally testing. The results obtained from this research is an application called cernapas ar. This application can introduce human respiratory and digestive organs through three-dimensional visuals that utilize augmented reality technology. Based on the test results using black box testing, the application designed in this research is running smoothly and in accordance with what was expected. The application that has been designed in this research has the potential to increase the effectiveness of learning in understanding human internal organs, especially internal organs in the respiratory system and digestive system.

Keywords: Respiratory Organs, Digestive Organs, Augmented Reality, Unity3D, VuforiaSDK