Recognition of Human Body Members and Movements For Kindergarten Kids Based on Android

Rizky Fauzi Sapta Purnama¹, Faiz Rafdhi²

¹,²University Saintek Muhammadiyah

E-mail: rizkyfauzisapta@gmail.com¹

Received: May 2022  Accepted: June 2022  Published: June 2022

Abstract
Learning media needs to be used as a supporter of material delivery to reduce failure in communication and maximize the ongoing process of teaching and learning. Early Childhood Education is in dire need of learning media. With android technology based on android smartphones, learning media becomes more interesting, easier and not boring to learn anywhere and anytime. Learning media in android smartphones are better known as learning applications. The MDLC method is an appropriate method in designing and developing a multimedia application which is a combination of image, sound, video, animation and other media. The MDLC method has six stages as follows: Concept, Design, Material Collecting, Assembly, Testing and Distribution. Recognition of Human Body Members and Movements for Kindergarten Children Based on Android. This application is made using the Android Studio programming language as a medium for making and other supporting software to create images of human body parts. The results of developing educational applications as learning media for early childhood can help in understanding and studying each member of their body.

Keywords: Android, Human Body Members and Movements, Learning

Introduction
The development of communication technology is currently very rapid and affects the lifestyle of the wider community. One of the developments in communication technology is mobile phones. Previously, cell phones were only used for communication. Now mobile phones are not only used to communicate, but can also be used for entertainment and information media. In addition, mobile phones can also be used as a medium for learning. Mobile phones that have developed in such a way. known as smartphones. With great technological advances,

This rapidly requires an application that can coordinate the needs of each user, one of which is an application that can replace a book that can provide information or knowledge anywhere and anytime. One of the applications needed is an application about learning. Learning applications are media that can be used to convey the material content of a lesson or science.

Education in Indonesia itself starts from an early age, when individuals are in the family, community or school environment. Formal education in Indonesia generally starts from Early Childhood Education and then continues at the Elementary School, Junior High School and Senior High School levels.

One of the educations taught from an early age is the introduction of body parts and their functions, which is better known as body anatomy. Knowledge of body anatomy is very important, therefore it should be if children learn it from an early age. By using learning the limbs and functions based on Android, children are expected to be able to understand the science easily and not get bored. Based on the description above, a study was made with the title "INTRODUCTION OF BODY MEMBERS AND HUMAN BODY MOVEMENTS FOR KINDERGARTEN BASED ON ANDROID".
Methodology
The method used in developing the recognition of human limbs and human body movements for Android-based kindergarten children is MDLC (Multimedia Development Life Cycle), Figure 3.1 is a diagrammatic form of the MDLC model and its explanation.

Result

Needs Analysis
To design this application. The process of making apk requires good hardware and software so that it can run smoothly starting from design to implementation and application testing runs well.

Fig 2. Use Case Diagram
Fig 3. Activity Diagram

The activity diagram above is carried out, there are:
1 Initial Node, activity starts in an object
14 Actions, in the process of application
4 Decision Node, to describe the choice of a process
1 Final Node, as an object
The dashboard page sequence diagram contains:
1. Actor, namely the user.
2. Lifeline, namely system and dashboard.
3. Message, which is to run the system, enter the dashboard page and display the dashboard page.

**User Interface**
Scan 1, displays the contents of the dashboard, on the dashboard page there are:
1. Body Parts Button to display body parts.
2. Body Movement Button to display body movements.
3. Video button to display videos about body parts.
4. Profile button to display the profile page.

**Conclusion**
From the results of the analysis, implementation and testing of the introduction of body parts and human body movements for android-based kindergarten children. The conclusions that can be drawn are as follows:
Introduction of body parts and human body movements for Android-based kindergarten children is made to help teachers introduce body parts and body movements to children through smartphones. Recognition of limbs and human body movements for Android-based kindergarten children makes it easier for teachers and parents to teach children and can be better understood with children about recognizing body parts and human movements.
Refrence