



Educational Game Compiling Al-Quran Verses Based on Android in Elementary School

Sherly Agustini*¹

¹IbnuSina University, Jl. Teuku Umar, Lubuk Baja Informatics Engineering Study Program,
Ibnu Sina University Batam
e-mail: *serli34@gmail.com,

Abstract

This research was conducted on elementary school students who implement a learning system that requires students to memorize short letters on the subject of Islamic Religious Education (PAI). Al-Qur'an is a way of life for all Muslims in the world. The Qur'an has 114 surahs in which there are 6236 verses and 77,845 words. So to understand and read the Qur'an, it is necessary to have basic knowledge of how to read the Qur'an correctly. Hijaiyah letters are the basic science of reading the Qur'an, namely as a means to be able to read and understand the Qur'an correctly, according to what is in the Qur'an itself. As a solution, educational games are made which are one of the learning media to increase student interest in active and creative learning, so that learning becomes fun. This educational game is entitled "Composing Verses of the Qur'an". Android-based game with question material that is displayed randomly and comes from PAI textbooks for grades 1 to 5 which are used in ongoing learning.

Keywords— Educational Games, Android, Quran

INTRODUCTION

As we know that the Al-Quran is the holy book of Muslims which is a guide for daily life. Generally, parents have introduced the Qur'an to their children since childhood. Childhood is the best time to start memorizing the Qur'an. Arinal (2017) states that children have pure white minds that are not filled with busyness and thoughts like adults. Therefore, some parents choose to send their children to Islamic educational institutions that have programs to memorize the Qur'an from an early age, such as those implemented in elementary schools.

Along with high mobility, in recent years mobile devices or portable devices have grown rapidly. One of the fastest mobile devices is Smartphone where almost everyone has one. Mobile which was originally a communication tool, is now more than its basic function. Various types of features have been embedded, such as image and video processing, document processing and so on. This can not be separated from the use of the operating system on a mobile phone such as on a computer, it can also be installed various desired applications.

But in this modern era where humans have used a lot of technological sophistication to obtain information contained in the Qur'an. The use of existing technology is very helpful for human life, including in the religious field, the available technology can be in the form of applications that we can download into smartphones or in the form of websites that we can visit easily at any time.

Technology is currently considered to be able to help improve the effectiveness of the world of education because everything is digital, one of which we can use Android mobile devices. The combination of technology and education is able to provide new innovations in the learning process such as through the development of educational games. Games are one of the features that are quickly understood by children. Most children are also more fun and fast in

learning to memorize children's songs, memorize Al-Quran readings, learn to read, recognize colors, recognize shapes and objects, and learn to count using gadgets. Games provide comfort and focus for children to play easily. Educational games can encourage students to learn actively and creatively and better understand the material provided through applications that can be accessed at any time.

Understanding the Qur'an by Language

Judging from the language, the word Al-Qur'an is taken from the words: قرأنا - قرأه - بقرا - قرأ - which means something that is read. In this sense it has the meaning of recommending Muslims to read and understand the Qur'an. The Qur'an also has the meaning of gathering and gathering, which is the mashdar form (noun) of القراءه. It has such a meaning because it is as if the Qur'an collects several letters, words, and sentences in an orderly manner so that they are neatly and correctly arranged.

And also from the word qira'ah the Qur'an has the meaning of gathering and collect. The meaning of collecting letters and words with each other in a neatly arranged speech. The word Al-Quran was originally like qira'ah, namely mashdar (noun) from the words qara'a, qira'atan, qur'an

RESEARCH METHODS

Research methodology is the steps taken in conducting research.

Steps in Research

The steps taken in the process of making this Final Project are as follows:

Data collection

The literature review aims to collect data and information, in the form of theories, journals, methods or approaches that have been developed.

System design

The first step of this stage is to design the flow of system performance using UML (Unified Modeling Language) and flowcharts that will describe the processes in the system in detail.

Study Material

This research material is in the form of reference books for related materials, especially the Koran and android programming books which will later become a data source for the applications that are built.

Functional Requirements

This hijaiyah letter learning application has functions and features that can be implemented, including:

1. Applications can guess letters, recognize letters and numbers about learning hijaiyah letters.
2. This application can be run on Android devices with a minimum version of 4.1.
3. This application can display all hijiyah learning content contained in the database.
4. Applications can use the search method.

RESULTS AND DISCUSSION

The user interface displays the graphic design of the interface. Display forms in this application include the display of the hijaiyah learning home page, profile page, letter game page, all letter game page, letter matching game page and exit menu. On the main page there are three choices of circular buttons that are useful for accessing the menus on this system. The music button is useful for turning music on and off, the play button is useful for displaying the game play menu, while the profile button is useful for displaying a profile page about the developer profile.



Figure 1 Home page display

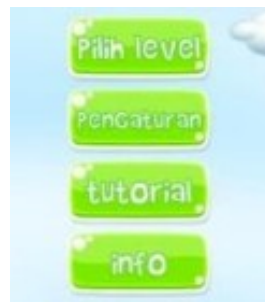


Figure 2 Menu display

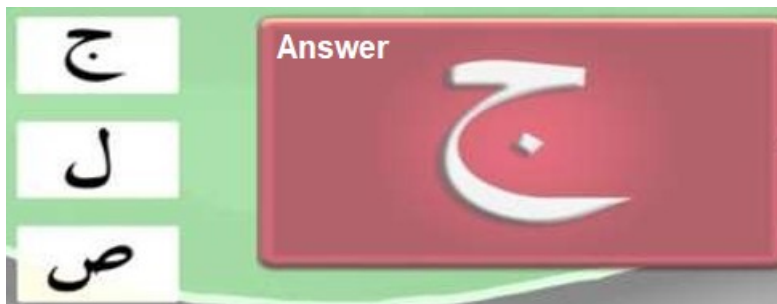


Figure 3 Game view

Table 1. Application Test

Device	Application Click Response	Respon Game drag & drop
1	Responsive	Responsive
2	Responsive	Responsive
3	Responsive	Responsive

Based on the results of testing the Al-Quran Verse Compiler application carried out on smartphone devices, it can be concluded that the Al-Quran Compiler application runs well on the Android OS. The average system response speed is 1 second.

CONCLUSION

The conclusions obtained from this research are as follows:

1. Making educational games Composing Quranic Verses is a learning media that can be used as an alternative learning tool that can be accessed at any time and helps students in elementary schools to memorize short letters. The application of compiling the Qur'anic Verses is very good running on the android OS.
2. This Hijaiyah Learning application works well because it is based on tests that have been carried out previously running properly.

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