

Learning The Alphabet Letters Recognition Media For Kindergarten

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Abstract. This study aims to find out how to design, create and test multimedia software for alphabet letter recognition media with macromedia flash 8.0. The purpose of making this learning media is to introduce letters of the alphabet to Early Childhood. The subjects in this study were the Development of Interactive Learning Media on the Subject of Introduction to the Alphabet for Kindergarten Children. Data collection in this study uses literature study, observation, and interview methods. The application is compiled with procedures that include identification of problems, actual system analysis, analysis of new systems, designing menu structures, designing menus, designing opening menus, designing main menus, designing submenu materials, designing training submenus, designing submenu profiles, implementing systems, testing systems with black box and alpha test, the use of the system and the final stage is maintaining the system. The results of this study are building interactive multimedia alphabet letter recognition software. The application was tested using a black box and alpha test. And the test results obtained are: SS (Strongly Agree) 10%, S (Agree) 80%, KS (Less Agree) 8%, TS (Disagree) 2%, it can be concluded that the application can help recognize letters of the alphabet.

1. Introduction

At this time information technology in the world of education can be classified into two types of systems. First is a computer peripheral system and second is an internet network system. These two systems are related to each other so that they are one entity. The renewal effort in learning has inspired a large conscience that understands the importance of education which has a central and strategic role in the development of human resources.

The concept of introduction to information technology in early childhood is the introduction of information provided by parents / teachers / educational institutions within a framework supported in the information age. Information technology in early childhood uses computer technology devices, for example software related to educational information technology for assistance in learning activities. Utilizing advances in information technology for the purposes of learning activities are also needed. Related to investment costs, learning effectiveness, attitudes and readiness of teaching staff.

In the initial learning phase, every parent will quickly be able to read their children at school age who have not been able to read well. Packaging that can be accepted, understood, read, and written is a fundamental thing that must be nurtured from an early age to be used as provisions for children who move to the world of education. More than that, the ability to recognize letters and read is the main asset for children to open the future, an initial step in mastering science. In general, a child starts school at the elementary level at the age of 6 years. However, it is necessary to consider the education of children as early as possible, for example if children have started 3-5 years old can be put into kindergarten. Education of children at an early age is very necessary because this system will affect the behavior and thinking patterns of children.

Learning to recognize letters is the process of recognizing speech sounds (phonemes) and words that begin to be captured by children as spoken language. In this process of recognition, the child has not

yet reached the learning process, only knows and understands the sounds. When it comes to the process of recognizing the letters of the alphabet / alphabet in children, there are other important things that are of concern. Observing the memory ability of children needs to be done so as not to ask for the safety of children to memorize all the letters in a short time. Although reading is indeed a process that requires a person to recognize letters, it is therefore necessary to have a visual-sound recognition media letter for early childhood.

According to information obtained from the TK Syuhada Kotabaru Mosque in Yogyakarta the learning process of introducing letters of the alphabet is still conventional, namely using drawing or poster media, blackboards and books. From the phenomenon of the existence of different children's ability to grasp different lessons, therefore the need for computer-assisted learning media. One such learning media is attractive interactive multimedia, by adding animated images, animated text, and sound. Learning by using interactive multimedia is expected to be fun, easy to introduce letters of the alphabet in early childhood.

2. Research Method

The subject in this study was the Development of Interactive Learning Media about Subject Introduction to the Letters of the Alphabet for Kindergarten Children. Data collection in this research uses literature study method, method of collection, and interview method. Applications compiled by procedures that include identification of problems, actual system analysis, analysis of new systems, designing menu structures, managing menus, discussing opening menus, discussing main menus, discussing submenus of material, discussing submenus of exercises, discussing submenus of profiles, discussing systems, testing systems with black box and alpha test, system usage and the end of system use.

Frame by frame animation is an animation that is arranged based on objects in each frame. The Timeline window is marked with black dots. How to make the animation is: click frame 1 layer 1 then create the first object, right click frame 2 layer 1 then enter the keyframe, delete the first object to re-create the second object, right click frame 3 layer 1 then enter the keyframe, select the object to create an object for new , do up to the next frame in the same way, to run the animation press Ctrl + Enter. Animation of Frame by frame can be seen in Figure 1.

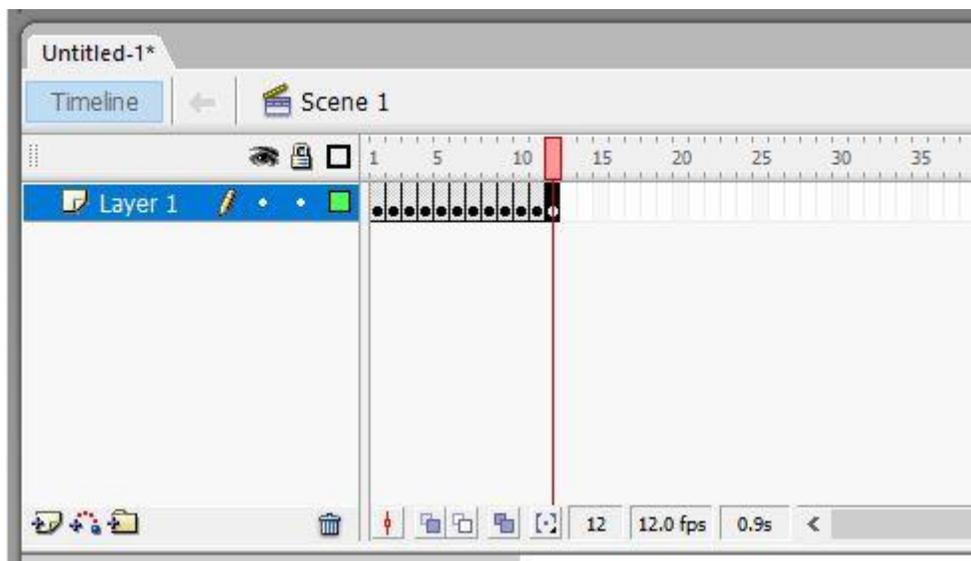


Figure 1. Frame by frame animation

3. Result and Discussion

1. Black Box Test

Black Box Test is a testing program by observing whether the application output is in accordance with the input provided. This test is carried out by people who have the knowledge and competence in the case being tested. This test observes and looks for errors in some basic aspects of a system with little showing the internal logic structure of the software. After that the respondents were asked for their opinions verbally and answered the questionnaire about the resulting program. The black box test was conducted by Setiawan Pajirai, Septiono, and As'adul Bahri, black box testers.

Table 1. Black Box Test

No	Statement	Assessment	
		Yes	No
1	The application program displays two-dimens well	3	0
2	The compatibility between the input and the output detected is good	3	0
3	The application interface and displays are easy to use	3	0
Total		9	0

Based on the results above can be presentation Black Box Test assessments namely: $9/9 \times 100\% = 100\%$. After it is made according to the trial, the program is quite good and is feasible to be implemented.

2. Alpha Test

Program testing is done by inviting several prospective users to run the application and then each prospective user is given a list of questions to give opinions about the program being run. Users who test in this method are ordinary users. For system testers using alpha tests conducted by 10 children.

Table 2. Alpha Test

Rating description:

SS = Strongly Agree

S = Agree

KS = Disagree

TS = Disagree

No	Statement	Assessment			
		SS	S	KS	TS
1	Are the images displayed according to the learning theme of the letters of the alphabet?		9	1	
2	Is this learning media easy to use?		9	1	
3	Is this menu of learning media interesting?	1	8	1	
4	Is the display of the program attractive?	3	7		
5	Does this program help you recognize letters of the alphabet?	1	7	1	1

Based on the above results, the following Alpha Test assessment presentation can be obtained. SS (Strongly Agree) = $5/50 \times 100\% = 10\%$, S (Agree) = $40/50 \times 100\% = 80\%$, KS (Less Agree) = $4/50 \times 100\% = 8\%$, TS (No Agree) = $1/50 \times 100\% = 2\%$. From the results of testing of the application, it can be concluded that the system is appropriate to be used as a multimedia-based alphabet recognition media.

All Alpha Tests were conducted by Kindergarten B students of the Ayyub Kindergarten in the Syuhada Kotabaru Mosque in Yogyakarta. On Thursday July 18 2019.

4. Conclusion

Based on the results of the discussion and testing conclusions can be drawn as follows:

1. Creation of the Application of Alphabet Recognition for Kindergarten Children using the Macromedia Flash 8.0 program.
2. Application of Alphabet Letter Recognition for Kindergarten Children who use Macromedia Flash can be used as a learning medium to recognize letters of the alphabet and train early childhood children to guess letters in the form of practice exercises.
3. From the test results of the application, it can be concluded that the system is feasible to be used as a multimedia-based alphabet recognition media with a percentage value of 90% to approve this application is feasible.

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