Utilization of Macromedia Flash Application Technology as Learning Media Development in Solving Islamic Religion Test Questions SPSS Data Processing

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Abstract
The use of Multimedia Technology in the development of learning innovations in the digital era shows that the use of macromedia flash applications is very influential on the interest and motivation of students in solving both practice questions and exam questions, this is because in addition to using computer tools, the scores we get are directly listed. after doing the questions. Based on the results of testing using the SPSS application related to learning media and motivation on student satisfaction with a large sample of 30 people, the results obtained F = 21,645 with sig 0.000 meaning that there is a significant influence with the use of multimedia on student satisfaction in the implementation of learning.

*Keywords: **Macromedia Flash, Spss, Multimedia, Technology, Learning, Waterfall***

INTRODUCTION

Advances in Science and Technology (IPTEK) have brought rapid changes to humans. Work that is done by humans manually can be replaced by machines that we often see and are widely used, namely computers or laptops, including one of the developments in information and communication that can be done easily and quickly as needed. So the progress of science and technology has affected all aspects of life, including in the world of education.

Education is the key to a country's progress, with better education, superior Indonesian human resources will be developed. The challenge of education in the current digital era is the development of media using multimedia-based technology which used to still use a lot of media manually, so to realize good education it is necessary to have innovation and creation in learning including making and answering questions with a certain time and the scores listed are immediately visible. the result. The first innovation that must be done is by assessing in the form of test questions using the macromedia flash application. Educators must continue to practice using computers to create interactive learning. One of the demands of education with advances in technology and knowledge affects the education and teaching process, this results in demanding educators to be able to use media. (Kurniawan, 2020)

RESEARCH METHODS

This type of research is research development or Research and Development (R&D), which is a research method that is carried out to produce a particular product and assess the effectiveness the product (Sugiyono, 2009). R & D aims to improve the quality of learning and its development can be in the form of media, teaching materials and evaluation of learning (Estri, 2019); (Tovan, 2019) flowchart with waterfall model (Malabay, 2016); (Tristianto, 2018)
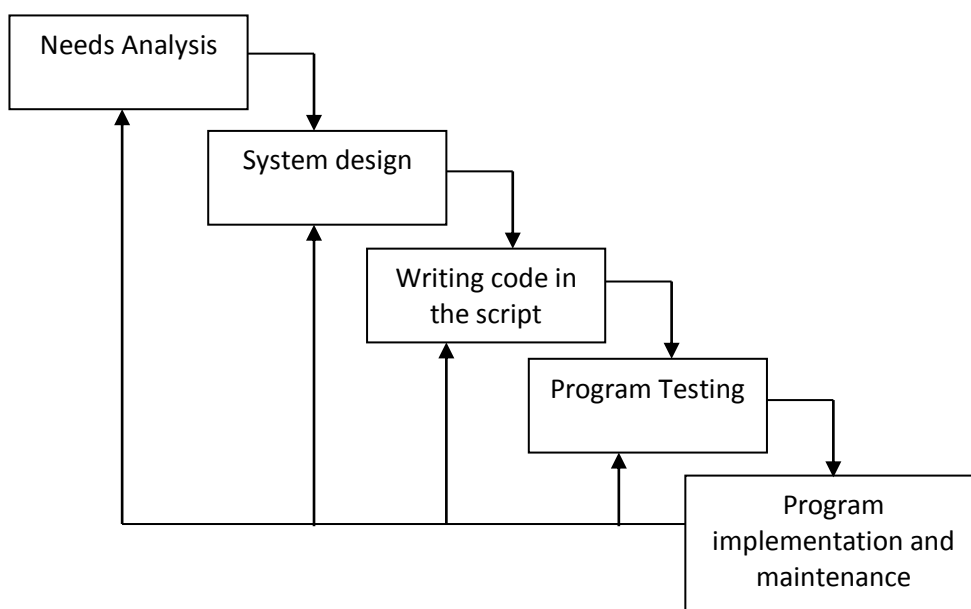
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Figure 1. Stages in the Waterfall model used

Based on Figure 1, the stages in the use of multimedia applications using macromedia flash are needs analysis in which learning activities must continue to be innovated, especially in the implementation of working on Islamic religious questions, after that it is designed in such a way in the process that there is a previous stage that must be logged in first, the process is carried out using the time listed on the multimedia macromedia flash, in making the macromedia flash multimedia application using the code in this script we can develop it according to the wishes of the educator in making questions, program testing is carried out on students with all of them having to log in first and finally implementing the program and maintenance where efforts must continue to be made to develop the quality of learning using technology to improve efficiency in learning.

RESULTS AND DISCUSSION

Use of Macromedia Flash Applications

The use of the macromedia flash application in working on Islamic religious questions is very effective compared to using it manually, and is more concentrated and motivated to continue answering these questions. Besides that, with multimedia-based, there is very transparency on the results of the scores obtained.

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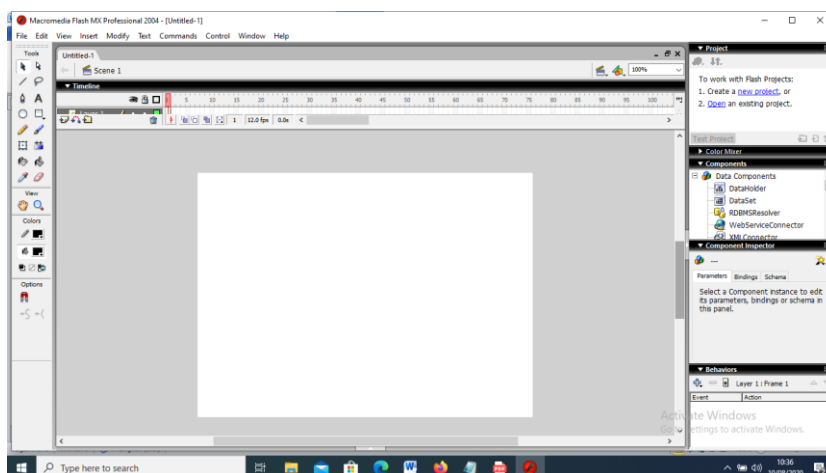Figure 2. Macromedia flash computer window

Figure 3. Macromedia Flash display

In this view, the function is for the user or users to do a test, the steps to be carried out are: we must login by typing the given name and password. We will see, the initial menu for the Ability Test will appear in working on the questions. to run the program we open it by means of CTRL + Enter after that the following display will appear.
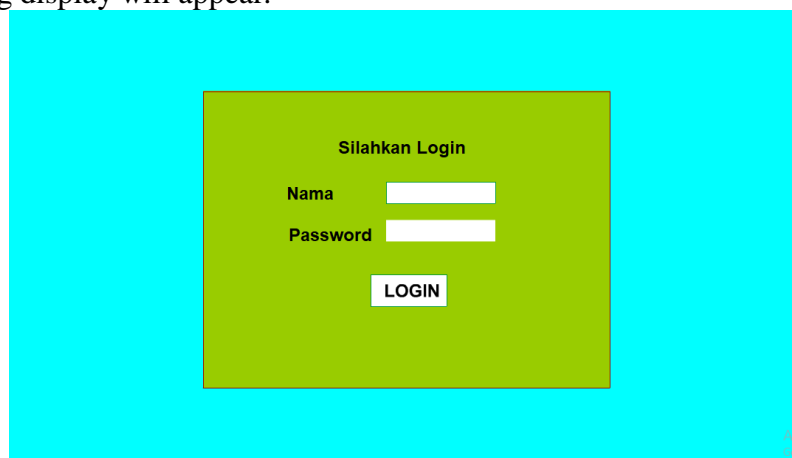

Figure 4. Main menu display

In Figure 4, to run the Macromedia application program in the execution of the questions, you must first enter by typing your name and password, in this case, given by the operator to the user, then click Login.
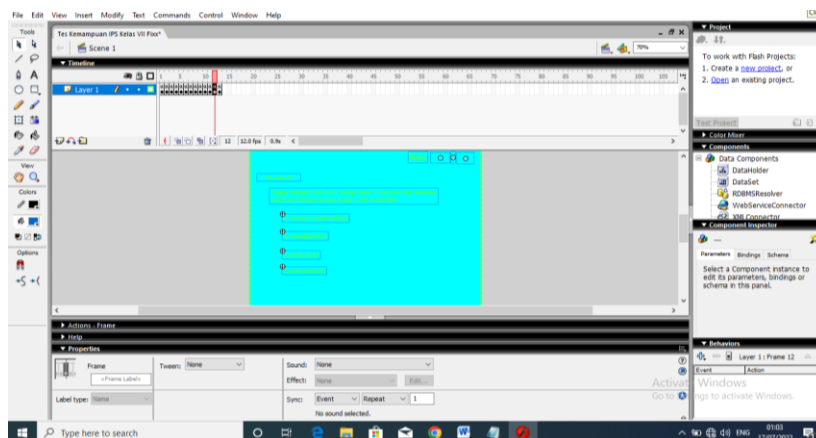

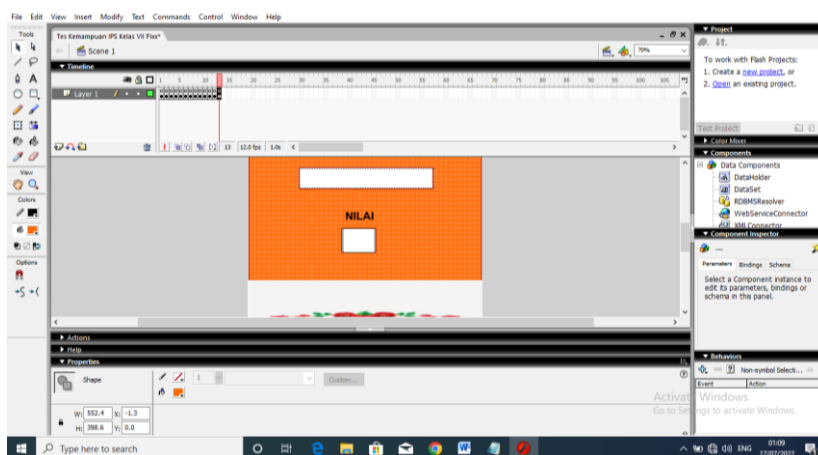Figure 5. The Process of Making Questions

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Figure 6. Value Result Display

Figure 5 shows the display for the results obtained after the student finished working on the Islamic religious questions given by the educator with the transparency of the student knowing how much ability and insight he got by looking at the results in the form of values that have been displayed after completing the test.

Listing Script

Table 1. Listing script Making questions about Macromedia Flash

stop ();
score=0
input_m =20;
input_d =02;
waktu_hidup = false;
mulai.onRelease = function (){
    gotoAndPlay (3);
    waktu_hidup= true;
};
	stop ();
	fps = 0;
	on Enter Frame = function () {
	    if (input_m<8) {
	    _root.minute = "0"+input_m;
	    } else {
	    _root.minute = input_m;
	    }
	    if (input_d<9){
	    _root.second ="0"+input_d;
	    } else {
	    _root.second = input_d;
	    }
	    if (waktu_hidup){
	        fps++;
	        if (fps == 15) {
	            input_d -= 1;
	            fps = 0;
	        }
	    if (input_m>0 && input_d == 0) {
	        input_m -= 1;
	        input_d = 59;
	    }
	    if (input_m == 0 && input_d == 0){
	    gotoAndPlay (15);
	        delete this.onEnterFrame;
	    }
	    }
	};
		stop ();
		*nilai=score*5;*

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Based on table 1 there is a script for making learning multimedia using macromedia flash that is in accordance with our wishes both regarding the score, processing time and the number of questions desired.

Response Analysis of Macromedia Flash Media Development in working on questions

the response to macromedia flash learning media was given by several samples in which the determination was carried out randomly with the number of responses from 30 people who had tried to solve Islamic religious questions with the provisions of the points given, with 5 points namely strongly agree (SS), 4 Agree (S), 3 Disagree (TS), 2 Strongly Disagree (STS), and 1 No answer (TW) points.The data is managed by using SPSS so that the results obtained are: So we will find out the values entered into the (simple) linear regression equation by using the formula: Multiple Linear Regression $Y = \alpha + \beta 1 X1 + \beta 2 X2$ (Mardani, 2021)

Table 2. Anova results from data processing using the SPSS application

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.501	1	13.501	21.645	.000[b]
	Residual	17.465	28	.624		
	Total	30.967	29			

a. Dependent Variable: Kepuasan Pelajar

b. Predictors: (Constant), Media Pembelajaran, motivasi

From the results obtained using SPSS, we can know that the value of F = 21,645 with sig 0.000 means that learning media, motivation has a significant effect on student satisfaction.

CONCLUSION

The use of information technology in Islamic religious learning media related to the implementation of working on questions is very effective in the use of macromedia flash where students see learning media and student motivation is very enthusiastic about the use of learning innovations so that they are encouraged to continue to increase knowledge insight in order to get satisfactory results. In this case, they transparently immediately know their ability to solve Islamic religious problems.

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