Strategy Development Of Human Source Competitiveness Strengthening With Learning Media System Analisis Model

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ABSTRACT

In this research will Develop Online Teaching Media Application As A Strategy Strengthening Human Resources Competitiveness Facing Globalization. Where the specific purpose of this research is to help the government in its efforts to educate the life of the nation by providing competitiveness and scholarship skills that could only be obtained in college to the graduates of high school and vocational school who can not follow the education in college, whether because of limited funds and because they prefer to work, for free through online teaching media. This online teaching medium will provide various kinds of knowledge required by its users such as Science Management, Accounting, Information Technology or other scholarship for free, in the form of course content, curriculum, teaching videos, and lectures as well as the interaction between teachers and users using office programs. This online teaching media will also work with several university institutions as a form of social responsibility that the academic community gives to their communities to strengthen the competitiveness of Indonesian human resources in ASEAN Community.

Keywords: Text media applications, analysis model, website

1. Introduction.

One of the challenges of increasing economic development in Indonesia is how to create qualified human resources and have skills and highly competitive in the global competition that we will face in the future. When we talk about opportunities there is, of course, a tremendous opportunity for an increase in the number of Indonesian workers who will work abroad because the boundaries between countries will be truly opened, and the movement of goods and services will continue to be facilitated in that era. However, to note also, the challenge faced at the time of ASEAN Community is how the Indonesian nation to improve the quality of its human resources to compete with other ASEAN neighboring countries.

To overcome the above problems, it is necessary a strategy and an applicable way to improve the competitiveness of human resources in Indonesia. One of the most likely ways is how we can maximize education by means of interactive learning to improve competitiveness. The problem is the method and what kind of media that allows the graduates of SMA and SMK are able to access the higher science.This condition allows us to build a teaching medium online to strengthen the graduates of high school and vocational schools in achieving the competitiveness of science. This online teaching media will also work with several university institutions as a form of social responsibility that the academic community gives to their communities to strengthen the competitiveness of Indonesian human resources to welcome the ASEAN Community.

2. Research Method.

The research method used in this research is qualitative and quantitative research method. According to Schiffman & Kanuk [5] Qualitative research is an intrepretivism research that is used to understand and collect inputs to develop an object and acquire new ideas. While Quantitative Research is more descriptive which is useful to understand the influence of various inputs to the object under study.Qualitative research used in the development of online teaching media is Object Oriented

Development. According to Laudon & Laudon (2004) Object Oriented Development provides approaches that are believed to be most appropriate for the development of systems such as E-Learning, which can respond to rapid changes in the business environment, including web applications. This method combines data and action that can be done on the data into a single object. Object-oriented development uses objects as the basic unit of analysis and system design.The system is formed as a collection of objects and relations between objects. The data are summarized in an object that can only be accessed and modified by the operation or method associated with the object.
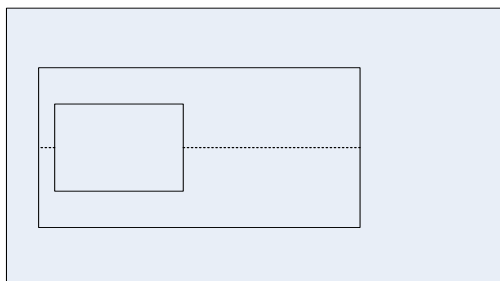

Figure 1. Object-Oriented Development Stage

The stages of object-oriented development are similar to those of conventional systems, consisting of analysis, design, and implementation. However, object-oriented development is more characteristic of iterative and incremental. During the analysis, the system builders documented the functional requirements of the system, determined the most important system properties, and what the system should do. The interaction between the system and its users is analyzed to identify objects, which include data and processes.Object-oriented design stages illustrate how objects behave and interact with each other. Similar objects are grouped into classes and classes are grouped into hierarchies where subclasses inherit attributes and methods from the superclass.

The system is then implemented by translating the design into the program code, reusing the classes that are already available in the reusable software object library and adding new objects created during the object-oriented design stage. The implementation also involves the creation of object-oriented databases. The resulting system should be tested and evaluated in its entirety.

As for Quantitative research used Sample data test Related to Wilcoxon method, where at the time E-learning system has been built will be held sampling related to each other, because subject (in this case volunteer) got the same measurement, that is measured " before "and measured" after "using the built-in online teaching media system. This is done to find out whether the online teaching media that have been made able to provide tangible benefits to its users in terms of scientific understanding and utilization of science in helping its working competence.

After the quantitative test is done will be continued with the stages of promotion and information e-learning website to target users of high school and vocational high school graduates who can not continue to college. The method of promotion done by the researcher is by doing advertisement online, Public Relation and Publication by cooperating with media and some related institutions and do not forget to do direct marketing by using social media like Facebook, Twitter, Blogs, and path, to capture user target more personal and easier to get feedback.

1. Activity Diagram of Lecturers Proposed In Online Teaching Media Application System.

Describes the activity diagram of lecturers in online teaching media applications to view information and process the proposed class. Starting from opening and viewing the class data being taught, as well as processing the class he teaches.
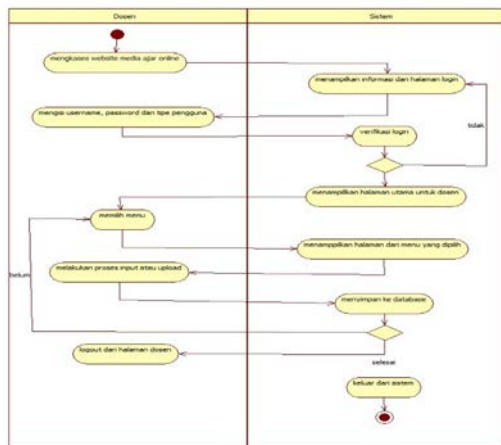
Figure 2. Activity Diagram of lecturers in the online teaching media application to view information and process the proposed class.

3. Discussion.

This Media Tutorial application consists of admin main page, student main page and the main page for the lecturer.

1. Display Home Page For Admin.

The main page for this admin is the page that will be displayed when the admin successfully login. This page serves to perform the data processing of this online teaching media applications. This page has several menus including:Menu Data Information, Data Menu Lecturer, Student Data Menu, Data Menu Departments, Data Menu, Courses, Data Tuition Menu, Academic Data Menu.

2. Testing.

At this stage testing the website of online text media applications with Black Box Testing method. Black Box Testing method is a testing program that prioritizes testing of the needs of the function of a program by finding the fault function in the program.
This test is done by testing the validation of the input program on the website admin system and also testing on a responsive system interface so that it can generate output that suits their needs.

Testing Student Login Page
Here is a black box testing the login page of students on the online teaching media applications. The test of student login function is as follows:

Test scenario: Empty the username and password of Test Case:

Figure 3. Scenario 1 Testing Student Login Page

Expected Result: The system will refuse and display "Please fill out this filed".
Test result:

Figure 4. Scenario Results 1 Testing Student Login Page

Conclusion: Valid
Expected Result: The system will receive and direct to the student's main page. Test result:

Figure 5. Scenario Results 3 Testing Student Login Page

Conclusion: Valid
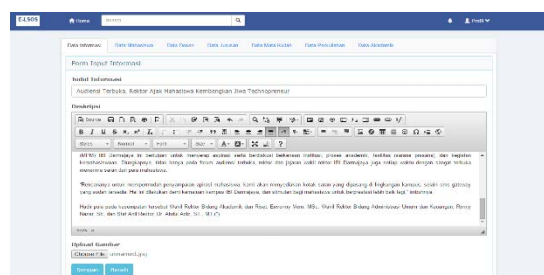Test scenario: Fill out all the inputs on the form.

Test Case :

**Figure 6. Test Scenario Admin
Information Menu Page.**

Expected Result: The system will save to the database display message "data information successfully added"

3. Conclusion.

The online teaching media application system is expected to be a media teaching used by graduates of SMA / SMK / MA equivalent to obtain information about the lecture. So they can get lecture materials, ask with lecturers and also can feel the lectures like real lectures in college actually.

Online teaching media application system is still simple and only describes the course lecture course, so have some shortcomings, among others:
1. Online teaching media application system has not had discussion facilities, chat, and video call as a medium of communication among students and lecturers who are in one class.
2. This online teaching media application system only modeling the registration process and course process and does not have the facilities for the change of semester and course.

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