Test Appraisal System Application Based on YII Framework as Media Input Student Value Final Project and Thesis Session at Higher Education

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Abstract

System development is a form of effort to improve the quality of the system to be more innovative. Raharja College is a college of computer science that has many systems to support its academic activities. At Raharja College there is a Thesis Session Assessment and Final Assignment system which makes it easy for lecturers as a media to provide a thesis trial or final assignment assessment. The Testing Assessment System is very important in the process of running a thesis trial or final assignment, because it makes it easier for lecturers to provide an assessment of the results of student thesis research. However, in the current assessment system, the testers have problems, which are still using local networks, which of course still use UTP cables as their connector. by online. In the development of the scoring system these testers use the method of swot analysis and elicitation. And use one of the PHP Framework, Yii Framework.

Keywords: Valuation, Testers, Skripsi, Paper type, Research paper

1. Introduction

The trial is a media discussion involving more than 2 (two) examiners with material from the participants' scientific work, and is a formal meeting to produce a decision that uses clearly applicable rules.

The definition of valuation has the function of allocating existing resources in order to achieve the stated goals and to control and correct any irregularities that arise, so that the assessment of the session can be completed on time and in accordance with the plan set. The quality and knowledge of the world of education along with its current elements, of course, are all inseparable from the use of computer technology as one of the many useful media. Technology is now not only reaching offices but also community agencies such as universities. However, the fulfillment of the need for information at this time cannot be separated from the use and utilization of computers to the maximum extent possible. Compared to the previous process, with the existence of this computer-based system, the work done will be more effective and efficient. Compared to the absence of technology, a lack of understanding of computer technology impedes the access or running of an academic institution to the outside world.

At present, the Raharja College still uses a grading system for undergraduate testers who still use a local network where when the trial takes place it still draws UTP cables toconnect existing Personal Computers (PCs) with the examiner's rating system.

However, in the current system, there are a number of shortcomings where the scoring system for thesis students and final assignments still uses local networks and is very inefficient, so it wants to be applied to be accessed online. At the Raharja College, the trial examiner's assessment system is a very important part of the trial process because the examiners input the values on the system.

With these problems, a system is needed, namely an assessment of the thesis examiners and final assignments that can be accessed online and can be accessed on the Session Assessment system along with other trial support systems that have previously been online such as Meeting Objective Assessment and Advisory Assessment. The purpose of the Session Assessment system is to optimize the trial assessment, save time and to make it easier for trial examiners to be more effective and efficient. The Raharja College Meeting Appraisal system website is a system of meeting Objective Assessment that can be accessed independently and online, so students can submit anywhere and anytime. Which is intended to facilitate students in fulfilling the 10 points of the Objective Assessment during the TA / Thesis Session. The Session Assessment system itself stands for Thesis Session Assessment and Final Assignment) [1].

With the website of the Session Appraisal system at Raharja College, it is very helpful for each Raharja Person especially for students who want to complete Thesis and Final Project. In the Session Assessment system students can use some of the features available in the Session Assessment system namely Raharja Career Validation, Citation Validation Journal, Thistle Validation, Guidance Validation Consultation, Thistle Validation, Tridharma Certificate Validation, Poster Session Validation, Session File Validation, Certificate Validation, Journal Validation.

In addition to validating the final Thesis and Final Project preparation preparations, the Session Assessment system website will be applied to the Thesis and Final Project examiner app assessment system application. So that all the trial process from the gathering of the hearing file, the assessment of the counselor and the assessment of the trial examiner can be found on a Session Valuation system website, which can make the entire trial process run effectively and efficiently.

This research was conducted to improve the quality and quality and analyze any constraints that exist in the Examiner Assessment system that is currently running and make a system that makes it easier for trial examiners to provide an assessment of the Session Assessment system relating to the assessment of the trial at Raharja College.

2. Research Method

Efforts to improve the Assessment of Examiners as input media for the value of the Session Valuation system website, there are several literature reviews that have been prepared to identify gaps, avoid repetition, and continue the research that has previously been done. Some of the literature reviews include the following:

1. 1.Research conducted by Indri Handayani, et al. (2016), entitled "Application of Journal Validation System in Pessta + As An Assessment of Scientific Articles in Supporting Academic Activities" This research reviews an ASGM system that has not been able to automatically access journal validation points and has not yet applied the Decree (Decree) that determines recognized and unrecognized journals at Raharja College. STATE (Thesis Session Assessment and Final Assignment) is a campus service system that is intended for the board of examiners in compiling the flow of the session, session participants and audience in the implementation of the thesis trial and final assignment at Raharja College. To solve this problem, it is necessary to work out a solution, by developing the STESP system into PESSTA + is an information system for the assessment of trial thesis and final assignments plus. The trial participants can submit their journals since semester 1 if there is already or before the trial so that the journal's value is immediately keyed into the system so that when the board of examiners is held there is no need to check the files brought by the participants and give a score PO (Objective Assessment) on the ASGM system.
2. 2.This research was carried out by Indri Handayani, Erick Febriyanto, Kevin Rama (2018), entitled "Viewboard Implementation as a Thesis Session Information Media at PESSTA + in Higher Education" This application reviews PESSTA + (Thesis Session Assessment and Final Project Plus) as media validation journals and grants carried out by students online and independently are expected to provide quality and reliable information, therefore, facilities are needed to provide solutions, evaluate processes and monitor the performance of ongoing processes. By designing a Viewboard, it is

expected to provide an overview of information about the thesis trial / final project activities of PESSTA +.

3. 3.This application was carried out by Indri Handayani, Qurotul Aini, Priyatna Abdul A (2018), entitled "Utilization of Generic Session Scheduling in Yii Framework-Based PESSTA + in Higher Education" This research is about generating systems for scheduling TA / Thesis in higher education is an information system based on Yii Framework where the system can facilitate scheduling effectively and efficiently. Facilitate the scheduling process and its scheduling application to speed up and simplify the delivery of information on the TA / Thesis trial schedule. with the validation of student data, lecturer schedule, room, time and day so as to speed up the process of scheduling TA / Thesis sessions and also accelerate performance in compiling the trial schedule.

4. 4.This research was carried out by Warsito, et al (2014), entitled "Yii Framework Study in Developing College Websites". This study reviews about generally in PHP language programming, people tend to write coding from the beginning. It seems like the Raharja College Website has 4 (four) problems including in terms of appearance, content, security and technology. Because the Raharja College website still uses conventional methods in its development, which takes a long time in the end it can lead to problems such as complexity in the preparation of program code. Where it can lead to the length of time the website is developed and it is difficult to carry out further maintenance because the program code that is arranged does not have a good standard of application development. As a solution to the 4 (four) solutions to the above problems including website infrastructure, website display, website content and system dashboards, this can be managed more easily by implementing a PHP-based framework such as Yii Framework. Yii Framework is a framework that contains functions and classes using the MVC method contained in it. MVC is a method that separates parts of a web application consisting of Model, View, and Controller. With the existence of Yii Framework the benefits are very significant because it easily develops all types of web applications because Yii is very lightweight and is equipped with satisfying solution management, and is very suitable for application development with high traffic. In terms of security, it also has a fairly good level of security, including prevention of cross site scripting (xss), counterfeiting cross-site requests, and prevention of cookie attacks. With the establishment of the Raharja College website using Yii Framework, it is expected to improve the performance of the website as a spotlight for Raharja's personal information going forward.

5. This research was conducted by Mohamad Farozi, M. Suyanto, Emha Taufiq Lutfi in (2015), entitled "DESIGNING INFORMATION SYSTEMS FOR ASSESSMENT OF HUMAN RESOURCES PERFORMANCE USING THE GAMIFICATION METHOD". The design of the HR performance assessment information system with the gamification method is displayed through the website and allows the challenges (tasks and responsibilities) of employees to be more fun to work on, users (employees) will be given points and badges (reward) when successfully completing challenges and other users (employees) can see the performance of each user (employee) through the leaderboard.

6. The research conducted by Taufik et al. (2014), entitled "DESIGNING APPLICATION OF EMPLOYEE PERFORMANCE ASSESSMENT SYSTEM USING THE MBO AND BARS METHOD (CASE STUDY OF PLANT MANINJAU)" This study reviews the Application of employee performance appraisal to meet the demand for qualified human resources, which is a branch of PT PLN and is under the Bukittinggi Generation Sector, has tried to prepare a workforce that is able to meet the needs of business demand. One way to do this is to assess employee performance. The assessment of work performance carried out at the Maninjau PLTA is currently unable to see the performance and achievements of each worker. The Maninjau PLTA must improve the process of assessing their employees. The method that can be used to assess employee performance is Management By Objective (MBO) and Behaviorally Anchored Rating Scale (BARS). For the sake of answering the need to provide data that is increasing rapidly.

7. This research was conducted by Saefudin and Sri Lestari in (2017), entitled "Decision Support Systems for Employee Performance Evaluation of PT. Mulya Spindo Mills Using the C4.5 Algorithm Method "Decision Support System for Employee Performance Evaluation at PT. Mulya Spindo Mills Using the C4.5 Algorithm Method is a system built to be able to help the company in determining employee performance according to the criteria. The system is expected to be able

to overcome the problems that occur at PT. Mulia Spindo Mills in particular can change the performance appraisal of employees who were previously subjectively to be more objective.

8. Subsequent research was conducted by Azlina Johari, Norliza Zaini, Mohd Fuad Abdul Latip, Nina Korlina Madzhi and Rosni Abu Kassim (2015) entitled "Online-based continuous assessment repository for lecturers and students". Research aimed at developing an online-based continuous assessment repository system designed to meet the needs of lecturers and students. The conventional method for notifying continuous assessment marks, for example test marks or assignments to students includes displaying student marks on a bulletin board or simply by returning tests or assignments that are marked to students.

9. The research was conducted by Wahyu Ardi Wibawa, Luciana Andrawina, Amelia Kurniawati (2015) entitled "Designing Business Process Knowledge Conversion-Based Lecturer Performance Assessment Using the Seci Method and 5C-4C in the Information Systems Study Program". This research produces knowledge that the performance of each lecturer is still uneven even though it is in the same cluster.

10. 2. The research conducted by Sucipto in 2017, entitled "Analysis of Advisory Recommendations Using Multi-Attribute with Weighted Product Methods" This research is about designing a system to facilitate students recommending supervisors according to their needs. In the recommendation process the supervisor of field work is carried out by assessing five variables. The variables obtained came from the lecturer performance assessment.

From some of the literature review above, it can be concluded that a lot of research has been done on the importance of a scoring system that can be used as a medium to input one's values both performance and understanding.

3. Findings
3.1 Problem
With current technological developments, there is not the slightest gap for resources not to use the technology, especially in the field of education. If in the various information obtained there are many assessment systems that are already web-based. In the Local Session Valuation system there is an assessment of examiners that is useful for facilitating lecturers in giving assessments to students of the tasks that have been done during the Thesis. But the examiner's assessment system in the Local Assembly Assessment System at Raharja Higher Education still has many shortcomings that need to be analyzed and then developed into a more useful system for lecturers of Higher Education Raharja.

From the above problems, the author intends to develop a testing appraisal system that is already in the Local Session Assessment system which will then be applied to the Session Assessment system. The Session Valuation system is one of the systems in Raharja Higher Education which has many advantages over the Local Session Assessment system. Session Valuation system that can be accessed anywhere and anytime so it is very easy for lecturers and students.

Picture 1. Display the login of the Local Session Assessment system

Using a username and password when logging into a system has begun to be abandoned at this time. Because the login process using this method is very ineffective because it can forget the username and password at any time so that it will hinder the process. In the Session Assessment system that still uses localhost or the local network the login system still uses a username and password, especially in the trial examiner's rating system. The method will later hinder the trial when the board of examiners have forgotten

their password or username.

3.2 Research Implementation

After conducting research on the problems faced, the Session Assessment System for the assessment of examiners who previously still use the local network or localhost is entered into the Session Assessment system that has used the internet to access it. So that the login process can use e-mail using the SSO or (Single Sign ON) method.

Application of examiners' assessment on the Session Assessment system following other applications that support the proceedings of the trial, namely the Session Objective Assessment and Advisory Assessment. The testing appraisal system that is applied to the Session Valuation system is of course made to facilitate the board of examiners in accessing it and can also smooth the process of running the session to be more effective and efficient.

Picture 2. Initial Views of the Session Assessment system website
http://pesstaplus.raharja.ac.id/web/site/login

The picture above is a login view on the Session Assessment system. On the board page the examiners can log in using their rinfo email, so they don't use the username and password anymore. The use of the SSO method in the login process on the examiner's assessment system proved effective and more efficient so that the process of running the SKRIPSI and the Final Projects of the students could run smoothly according to a predetermined schedule.

After the board of examiners log into the Session Appraisal system website at the trial session, a list of several students will be tested by the examiner along with the examiner's position at the hearing.

Picture 3. Test Board's Start Page

As explained above, the initial display after login displays a list of names of students who will be tried along with their trial schedule, so that examiners can find out what their schedule is for the session. This has been effective compared to the examiner's rating system in the local Assembly Assessment system which still displays trial information for just one day and the examiners cannot see their schedule the next day, of course it makes the examiners ask about their schedules. To display the above display using the script below

Picture 4. Index Display Script

Furthermore, the board of examiners selects students who will be tried according to a predetermined schedule and their position as who in the session whether the chairman of the examiner, examiner 1, or even examiner 2 will then appear the session evaluation form to assess the SKRIPSI project or student Final Project.

Picture 5. Display of the Assessment Form

The picture above is a display of the trial examiner's assessment form. The display contains a form to assess the student's SKRIPSI or FINAL PROJECT project such as the radio input form to assess students based on criteria set by the College, besides that it also contains notes from examiners for student project revisions if there is something missing in the project and information displayed in the form of the value of the Meeting Objective Assessment and Assessment of the student's Advisor. In addition, there is also information that displays the total score that has been summed up from the entire assessment to find

out the grade obtained by the student.

After the entire board of examiners made an assessment then the task of the examiner chairman to finalize the trial to end it. If the trial process has been finalized, the sign is that the session has been completed and changes cannot be made to that value. The finalization process determines whether the student is declared eligible to pass and get his degree or even declared ineligible and must repeat the following semester.

Picture 6. Display Finalization of the Session

The picture above is a display for finalizing a trial that can only be opened by the examiner after making an assessment. The Finalize button cannot appear if testers 1 and 2 have not submitted their values. After testers 1 and 2 submit values, the chairman of the examiner can refresh the finalization page and a button will appear to finalize.

4. Conclusion

Based on the analysis carried out by the author at Raharja College, the following are some points of conclusion from the development of a Testing Assessment system on the Session Assessment system :

1. The system that is currently being implemented to input values at the Thesis and Final Assignments at Raharja Higher Education still uses local networks. Development carried out to change systems that still use local networks to be online should not change the flow and logic of existing systems so that the board of examiners do not adapt again.
2. The login process on a system that still uses the local network uses the swipe card method or username and password. It was considered to be less effective and efficient when the trial process would take place because there would be an obstacle for the examiner to forget the username and username that had been given previously. But after the system becomes an online tester there is no need to experience these obstacles because the daily teaching and learning process often uses Rinfo e-mail and has been connected to each examiner's computer devices, so the new system using SSO for logins will be more effective and efficient.
3. Develop a Test Assessment System that can run effectively and efficiently and provide convenience to examiners by changing the system from using a local network system to online. The Testing Assessment System that will be applied to the PESSTA + system can be accessed online and no longer uses local networks, so that it can be accessed with any device with an internet connection. This system does not change much of the previous system flow to maintain effectiveness and efficiency in terms of time in the process of running a comprehensive session.

The suggestions given by the author as a reference to improve the system so that further research can develop this system even better. So that deficiencies and possible errors can be corrected. Here are some suggestions from the author, namely:

1. The Test Assessment System still needs further development because in this system there is still no feature to upload PDF files to student trial reports, so that the admin or session secretary is still uploading manually.
2. The appearance of the Test Assessment system in the Session Assessment system is

now a user interface, but the author feels that the display is still not informative and communicative for the future. It should be further developed but does not change the flow of the existing examiner's assessment system.

3. The examiner's assessment system currently still has many disadvantages, such as in the student profile information section, which the writer feels is still not delivering history during the trial students during his studies. So it still needs to be redeveloped so that the system can convey to the user (board of examiners) information from students in more detail.

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