
PENILAIAN PRAKTIKUM MAHASISWA POLTEKKES KEMENKES YOGYAKARTA BERBASIS WEB

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ABSTRACT

Industrial revolution 4.0 or called the digital era which means all aspects of our lives are related to digital devices. Using web-based software can reduce data management problems, both in terms of data storage and data sharing with other users who need data, it also provides fast, precise and accurate data and information that is needed. Sooner or later the education system must evolve following the development of this digital era. For this we need a system for our educations. Make an application for assesing student- practices with web based that can make it easier for students to submit practicum reports, facilitates lecturers in assessing practicum activities and student practices reports. This research is a quantitative study with design research and development study (R and D). first by making an application which was then tested by Lecturers, Instructors, Students at the Polytechnic of the Ministry of Health Yogyakarta. Then the application is approved by Information Technology Experts and users namely Lecturers, Instructors and Students. Quantitative data is created in the feasibility presentation, whether the information system is created is appropriate or not.

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1. INTRODUCTION

Today we live at the beginning of a revolution that changes the way we work, study, communicate and socialize with our fellow humans. This revolution is called the industrial revolution 4.0, or known as the digital era. The industrial revolution 4.0 is called the digital era because almost all aspects of our lives are related to digital devices¹. Sooner or later the education system must evolve following the development of this digital era.

The Health Polytechnic of the Ministry of Health of Yogyakarta (Poltekkes Kemenkes Yogyakarta) is one of education institutions in Yogyakarta and has several Departments, namely the Health Analyst, Nutrition, Midwifery, Nursing, Dental Nursing and Environmental Health Departments. Polytechnic of the Ministry of Health Yogyakarta is a university with a type of vocational education, which means students will carry out the learning process in the form of practice with more time than the time for theory.

In accordance with the generic description of the Indonesian National Qualification Framework (KKNI) for graduates of Diploma III and Applied Bachelor Programs in Presidential Regulation No. 8 of 2012 concerning the Indonesian National Qualification Framework / KKNI that graduates of Diploma III Study Program (Associate Expert / Level 5) are required to have general skills, one of which is able to compile reports of results and work processes accurately and authentically and communicate them effectively to other parties who need ". Whereas graduates of the Applied Undergraduate Study Program (Level 6) must have general skills one of which is " able to study the case of the application of science and technology that pays attention to and applies humanities in accordance with their fields of expertise in order to produce prototypes, standard procedures, designs or works of art, compile the results of the study and the form of working papers, design

specifications, or art essays, and upload them on the college website². Learning methods both in the Study Program DIII and Applied Bachelor in the form of theory, discussion, practice and Field Work Practices (PKL). The Structure of Study Programs in both DIII and Applied Bachelor Degree include 60% practical learning and 40% theoretical learning. With 60% of the program structure is practice learning, there will also many assignments in making practice reports given to students.

One of the activities to support the above is that every time after completing the practice, student college will make a practice report that will be approved by the related lecturer. The practicum report is collected in hardcopy form. With so many practice reports made by student college, so many papers are used which in the end this paper will become rubbish.

To reduce waste paper in the Law of the Republic of Indonesia No. 8 of 1997 concerning Company Documents that discuss technology that has been published and documents made on paper transferred to electronic media or made directly in electronic media³. The use of information and communication technology becomes very important to do anywhere can also penetrate long distances.

Based on the aforementioned background description, researchers are interested in conducting research to develop research applications for research with the title "Assessment of Practice of Polytechnic Students of the Ministry of Health of Yogyakarta (siapma.poltekkesjogja.ac.id) Web-Based"

2. RESEARCH METHOD

This research is a quantitative study with research and development (R n D) research design with descriptive methods. R n D research is a research method used to produce certain products, and test the effectiveness of these products. These products are not always in the form of objects or hardware, such as books, stationery, and other learning tools. But it can also be in the form of software⁴.

3. RESULTS AND DISCUSSION

Polytechnic of the Ministry of Health in Yogyakarta has its address at Jl. Tatabumi No. 3, Banyuraden, Gamping, Sleman, D.I. Yogyakarta. Polytechnic of the Ministry of Health Yogyakarta consists of six majors Health, Nutrition, Midwifery, Nursing, Dental Nursing, Environmental Health Analysts and Environmental Health. The Polytechnic of the Ministry of Health Yogyakarta has 16 study programs, 12 of which already accredited, namely Diploma III and Applied Health Analysts with A accreditation, Diploma III and Applied Nutrition Undergraduate programs with A accreditation, Diploma III Study Programs and Applied Accreditation A, Diploma III Study Programs and Diploma III Applied Bachelor of Nursing accreditation A, Diploma III of Dental Nursing accreditation A and Applied Bachelor of Nursing Dental accreditation B, Diploma III and Applied Bachelor of Applied Environmental Health accreditation B.

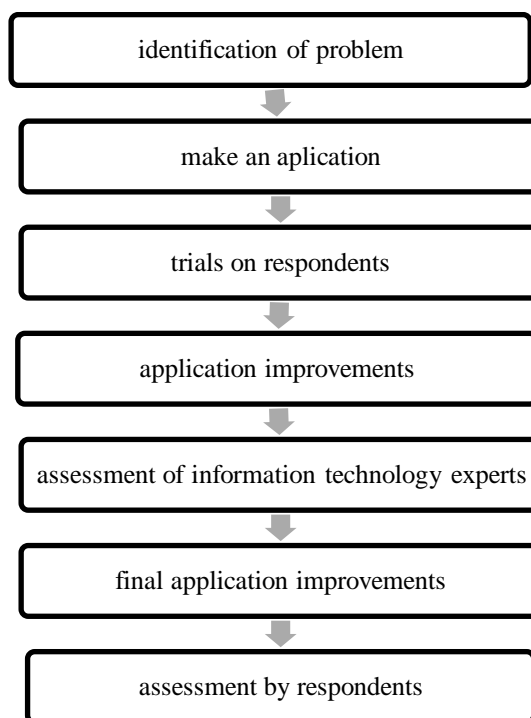
Polytechnic of the Ministry of Health in Yogyakarta will graduate Associate and Applied Bachelor who are professional and ready to apply their knowledge in the world of work, as well as providing education at a higher level and capable of entrepreneurship. Learning methods both in the Study Program DIII and Applied Bachelor consists of Theory, Discussion, Practice and Job Training (PKL). Structure of Study Program both DIII and Applied Bachelor download 40% theory learning and 60% practice learning. With 60% of the program structure is practical learning, there are many assignments in making practice reports given to students.

3.1 Preparing of Make an Reporting and Assesment Practice System Application

One of the results of practice learning in the diploma and applied programs in the Yogyakarta Health Ministry Poltekkes is the preparation of practice reports which will be assesment by the lecturers. The practicum report is collected in hardcopy form. With so many practice reports made by students, so many papers are used which in the end this paper will become rubbish.

With current technological advances, changes need to be made so that records and documents made on paper can be transferred to electronic media or made directly on electronic media⁵. The use of information and communication technology becomes very important to do anywhere can also penetrate long distances. The following is a chart of the process of making a practice reporting and assessment system:

Chart 1. The process of making a reporting application and practice evaluation



This application system that was made to simplify the process of reporting and assesment practice of students in the Polytechnic of the Ministry of Health Yogyakarta is called the Application System for Reporting and assesment Practice Students of the Polytechnic of the Ministry of Health of Yogyakarta (siapma.poltekkesjogja.ac.id). The purpose of making the Siapma application is to facilitate students in making and sending practice reports and facilitating lecturers in assessing practicium activities to student practice reports.

With the existence of Siapma, it is expected to be able to benefit for students, lecturers and institutions. In addition to the ease of making, sending and evaluating the practice report, it also makes it easier to recapitulate the report value because the application system automatically recaps the values that have been recorded in the application's item. Siapma can also make it easier for students, lecturers and academics to find out the value of existing practices reports.

3.1.1 The results of the problem identification

Results Identification of problems in making and sending practices reports are summarized as follows:

- 3.1.1.1 Most practice reports must be typed and collected to the student coordinator then collected to the lecturer.
- 3.1.1.2 The report collection exceeds the specified time limit because it waits for all student reports to be collected.
- 3.1.1.3 Evaluation of practice reports by lecturers and instructors cannot be done on other place because there is a lot of practice reports must being bringing.

3.1.2 Making Siapma

Developing an application system that suits the needs to facilitate the sending and reporting of practices and can overcome existing problems such as the following:

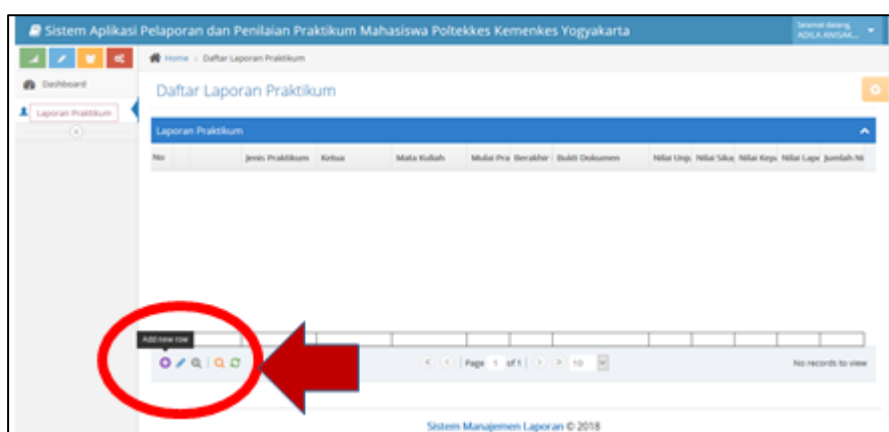
- 3.1.2.1 No need to print (more efficient can also reduce paper waste)
- 3.1.2.2 No need to be collected in the student coordinator so that they can collect reports about the practice directly to the lecturer at any time before going to the end specified.
- 3.1.2.3 Lecturers and instructors can assess the practice activities and reports of this practice anywhere and anytime, not limited by space and time.
- 3.1.2.4 Application System for Reporting and assesment Practice Students must include of:
 - 3.1.2.4.1 Subjects are distinguished according to the school year, study programs and semesters
 - 3.1.2.4.2 The name of all the lecturer, instructor and student to enter the application system
 - 3.1.2.4.3 Menu for selecting reports to be sent also uploading practicium reports
 - 3.1.2.4.4 Menu to be assessed by lecturers and instructors

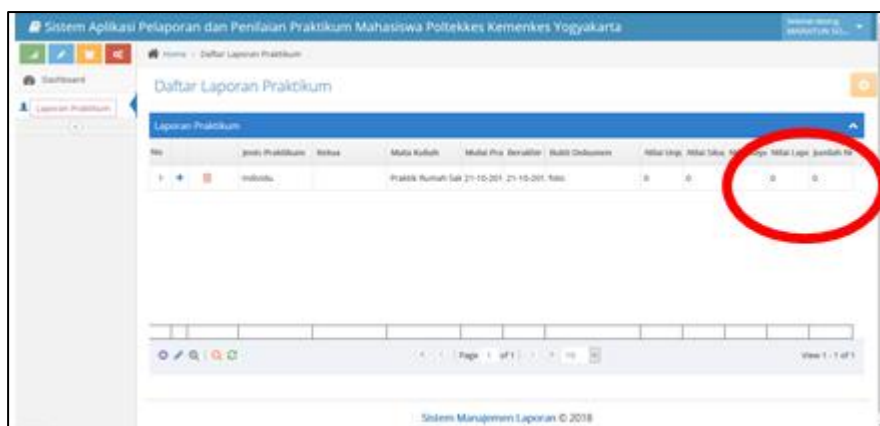
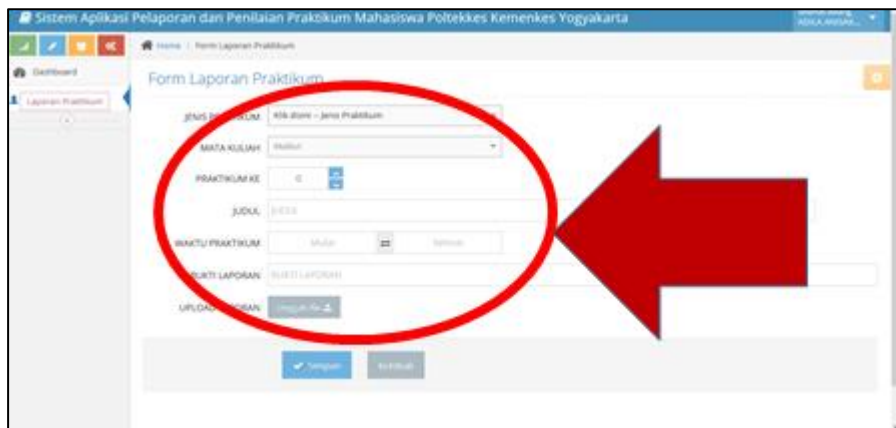
3.1.2.4.5 Menu for students to see the grade given by the lecturer and instructor

3.1.2.4.6 Menu for summarizing grades in one semester or 1 school year.

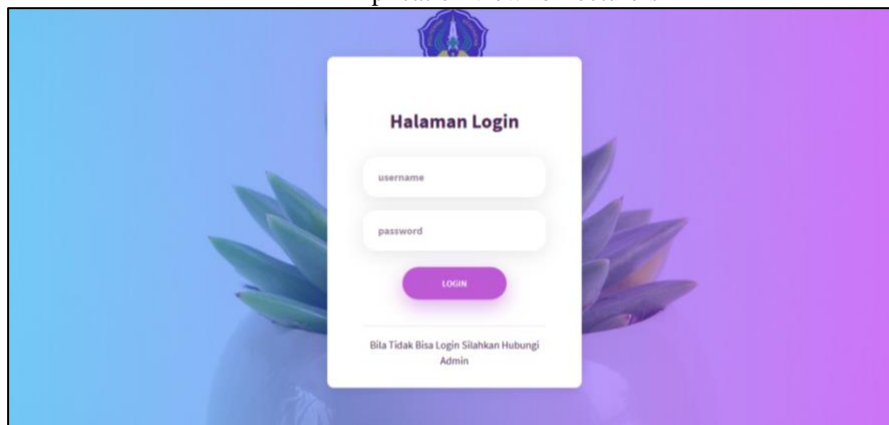
3.1.2.5 Siapma made by information technology experts:

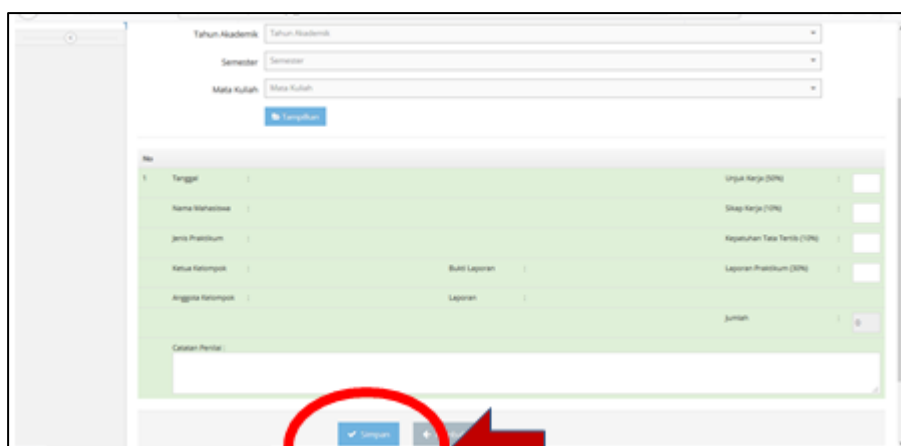
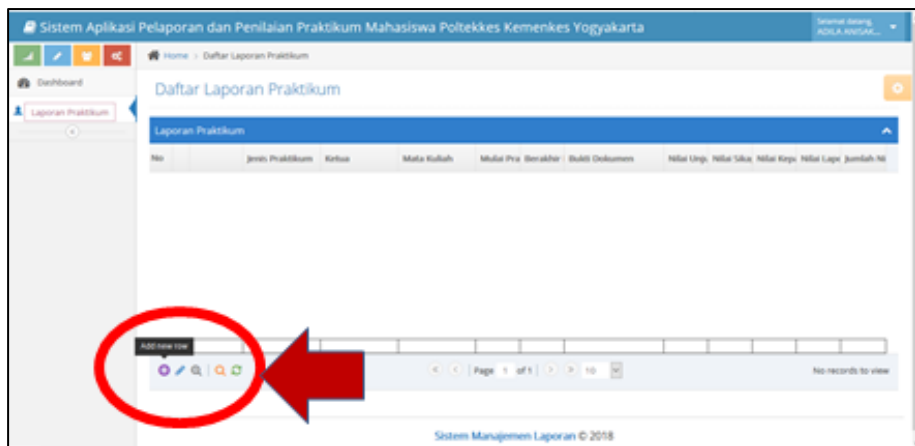
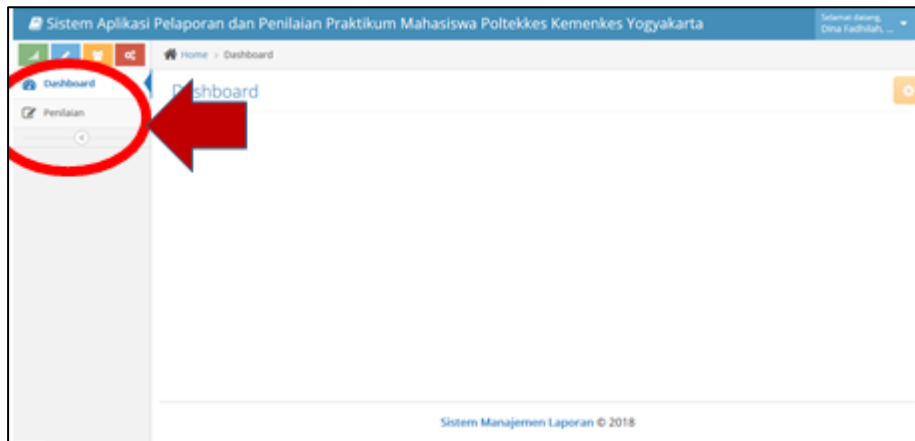
Application view for students

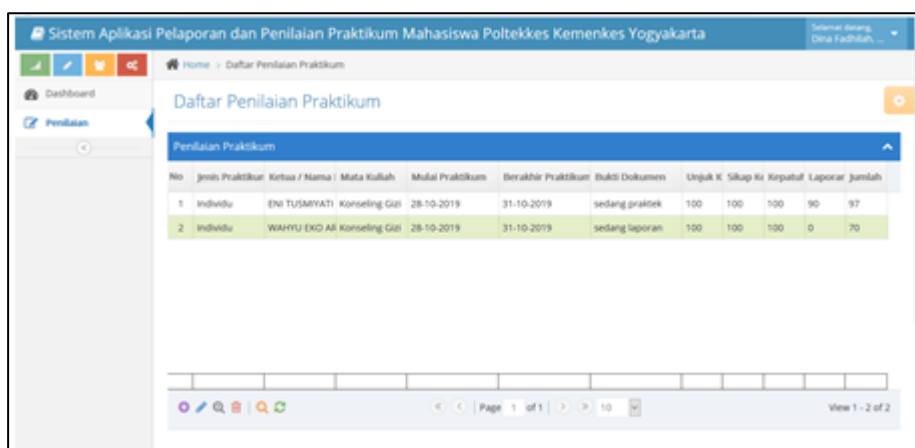




Application view for lecturers







3.2 Siapma trial of respondent

The trial of Siapma performed by representatives of lecturers, instructors and students.

Table 1 Distribution of respondents' answers in the trial of Siapma

Criteria	Very good	Good	Enaugh	Not Good	Total
Lecturer	4	1			5
Instructor	1	4			5
Student	1	3		1	5
Total	6	8		1	15

Based on Table 1 is known, from 4 lecturers, they rated it very well and 1 person rated it well. Respondents from the instructor 1 person, they rated very well and 4 people rated it good. While respondents from students as much as 1 person rated it very well and 3 people rated it well this Siapma's application. Therefore this application is declared already passed the trial

3.3 Application improvements

Based on the trial of the Siapma application, the following sections have been corrected:

- 3.3.1 The layout or initial appearance has been improved,
- 3.3.2 Reporting the types of groups that can be used,
- 3.3.3 Students as members of practice groups can see the values of their practice report.

3.4 Assessment of information technology experts

The results of the calculation of the number of respondents using the purposive sampling method amounted to 370 respondents. During the research, not all invited lecturers, instructors and students were present. Especially lecturers and instructors, there is many cannot be present when assesment this applications. When application trial and during application assesment, lecturer and instructor who present is the same person who dan cannot be counted as respondents who have asses this application. The total number of respondents in the study 331 consisted of 23 lecturers, 18 PLP, 288 students and 2 IT experts.

The result assessment Siapma is carried out by lecturers, instructors and students with the following details:

Table 2 Distribution of respondents' responses to Siapma

Criteria	Very good	Good	Enaugh	Not Good	Total
Lecturer	5	13			18
Instructor	4	8	1		13
Student	109	144	23	7	283
IT expert		2			2
Total	118 (37,34%)	167 (52,85%)	24 (7,59%)	7 (2,22%)	316 (100%)

Based on Table. 2 We know that the respondent from the lecturer. 5 people rated it very good and 13 people rated it enough, from the instructor 4 people rated it very well and 8 people rated it well. While respondents from 109 students rated very well, 144 people rated it well this application of Siapma. Of all respondents, 118 scored very well (37.34%) and 167 people scored well (52.85%) including IT experts. If the percentage combine score of very good with well then the total is percentage of 90.19%. Then we can say that this Siapma application can be used in the Yogyakarta Health Ministry Poltekkes.

3.5 Research limitations

- 3.5.1 Need to be developed so that (one) student report can be asses by more than 1 (one) lecturer and instructor.
- 3.5.2 Need to be developed so that the value of this practice can be combined with the value of theory to get the academic value of the course.
- 3.5.3 Due to cost constraints in making this application, all data of theory and practice cannot be achieved yet.

4 CONCLUSION

- 4.1 Application System for Reporting and assesment Practice for Students of the Ministry of Health of Yogyakarta (preparedma.poltekkesjogja.ac.id) is suitable for use in Polytechnic of the Ministry of Health of Yogyakarta,
- 4.2 Siapma help the students in submitting lab reports,
- 4.3 Siapma help the lecturers in assessing practicum activities up to student practice reports.

Discussion

For students of the Polytechnic of the Ministry of Health Yogyakarta. The student have to make and send practice reports immidiatly because appraisers can see the date of delivery of the report.

For practicum lecturers at the Ministry of Health Yogyakarta Health Polytechnic. Lecturers can immediately asses the practice activity and asses practice reports that have been send by students and then the students can check the values of their reports through Siapma.

For the Health Polytechnic of Yogyakarta. Can be used in all practicums in the Yogyakarta Health Ministry of the Polytechnic, but for certain practices need to be related to the number of student assessors. Needs to be developed related to variations in types created by various types of reports made by students.



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