



Student Professional Practice Management Information System At UIN Raden Fatah Palembang

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Abstract

Professional Practice (Internship) is one of the mandatory subjects in the Information Systems Study Program. Activities that occur during the implementation of the Professional Practice course are still conventional and not paperless. Moreover, there are several obstacles, such as students having difficulty finding a place for practical work because the study program does not yet have a list of companies that can do this activity. Moreover, it is also difficult for the Study Program to monitor whether students carry out activities appropriately. So that the Information Systems study program requires a Management Information System, which can assist the study program in carrying out practical work activities. The Management Information System built is web-based and uses the Waterfall method. From the research results, Management Information Systems assist students in registering and collecting reports; the study program makes it easier to assess and monitor students and makes document management easier.

Keywords: Management Information System, Waterfall, Professional Practice, Internship

1. INTRODUCTION

Professional Practice (Practical Work) is one form of systematic and synchronous implementation between educational programs on campus with expertise mastery programs obtained through work activities directly in the world of work to achieve a certain level of expertise [1]. Professional Practice or Practical Work in the Information Systems study program is a mandatory course that each student must take and follow. This Professional Practice is carried out for 40 working days or according to the provisions in the company / institution where students conduct Professional Practice courses.

In the implementation of professional practice activities, there are several obstacles. Students have difficulty finding a place for Professional Practice activities because the Study Program does not have a list of companies that cooperate with study programs or companies that have been used as professional



practice places for previous students. In terms of document management, it seems not paperless. Because the final report students must be collected in printed form. In terms of monitoring from the study program to students is still lacking. This is because the study program cannot come to the location to check students one by one. So that the study program only monitors the daily absence collected when collecting the final report of Professional Practice. Then in the provision of grades by supervisors, still use the assessment form, so it takes time to process the value of both field supervisors (companies) and professional practice supervisors (lecturers). So it takes a management information system to overcome these obstacles where management information systems can assist management in solving problems and provide quality and useful information for users [2].

The research [3] creates a Field Work Practice Information System where the management of activities becomes better, more effective, and efficient. As well as being able to display the information needed. The same research was also conducted by [4], where submitting and assessing Field Work Practices became easier. And accelerate the performance of ADDAK Poltekes Tanjung Karang staff. Then the assessment was carried out by [5], producing a Final Project Information System and Field Work Practice in the Informatics Engineering study program of Diponegoro University, which helps the administrative process of TA and PKL, lecturers, and students can use it as an information medium. Another research is to design the Project Development Monitoring Information System at PT. Semesta Primary Core [6]. The purpose of this research is to build a web-based project development monitoring information system to make it easier for managers to monitor project development so that supervision of work in IPS companies can be done even if they do not directly plunge into spaciousness. Thus making work and effectiveness of time more guaranteed. Similar research also created a Practical Work Management Information System at Yapis University Papua [7]. This research was carried out to maximize the implementation of student practice work at Yapis University Papua. The result of this research is a practical work management information system to process data to get information from the implementation of practical work in agencies in the form of problems, recording practical work topics, guidance, exam schedules, revisions to the acquisition of grades.

From several studies conducted, it can be seen that managing and monitoring professional practice course activities have obstacles. So that researchers create a Management Information System that can help the study program monitor students to carry out activities. The results of this study can help students in the registration process, upload reports and provide information related to companies to carry out Professional Practice activities. Furthermore, assist field supervisors and supervisors in verifying reports and providing assessments. Moreover, facilitate study programs in monitoring students. The system was built using the Waterfall model. The waterfall model is sometimes called the linear sequential

sequence model (sequential linear) or classic life cycle (classic life cycle). System creation activities are systematically and sequentially starting from the specification of user needs, planning, modeling, construction to system submission. The advantage of the waterfall method is that when all system needs can be defined completely and correctly at the beginning of the project, the software can run well and correctly. As well as in its application using this model easily, the advantage of this model is when all system needs can be defined completely, explicitly, and correctly at the beginning of the project. Then the software can run well and correctly[10].

2. METHOD

The system development method used in this research is the Waterfall model, which consists of six stages: Communication, Planning, Modeling, Construction, and System Delivery[11]. Here is an overview of the waterfall model shown in figure 1 below:

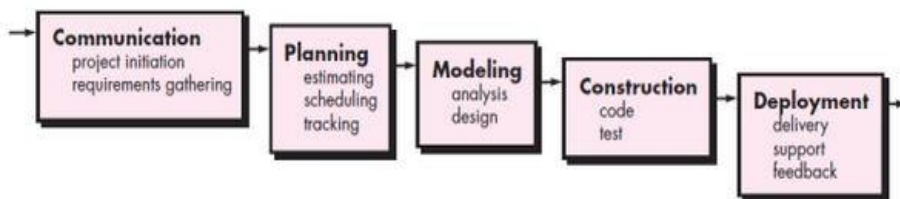


Figure 1. Waterfall Model Stages

The stages in the waterfall model are as follows:

1. Communication.

This stage is the initial stage to get the specifications of user needs. In this study, data collection was carried out by conducting interviews with several students who participated in Professional Practice activities and conducted interviews with the Head of the Information Systems Study Program related to technicalities, constraints, and needs in making systems. Planning. At this stage, an estimate of the needs needed in creating the system, scheduling, and tracking the system work process is carried out.

2. Planning

Planning and creating a work schedule.

3. Modeling.

At this stage, analysis of the design and modeling of the system's architecture to be built is carried out. In process modeling using Data Flow Diagram (DFD) is a tool used to describe an existing system or a new system that will be developed logically without considering the physical environment in which the data flows or the physical environment in which the data will be stored.

Data modeling uses an Entity Relationship Diagram (ERD), a data model that uses multiple notations to describe data in the context of the entity and the relationship described by the data.

4. Construction.

At this stage, the programming process or coding is based on the design and then testing the system and code that has been created.

5. Deployment.

It is a stage of implementation, maintenance, repair, evaluation, and development so that the system can continue to run and develop following its functions.

3. RESULT AND DISCUSSION

3.1. Communication

This stage of communication is carried out through an interview with the Head of Information Systems Study Program. From the results of communication obtained by users and the needs of users who will use the system. The needs of users can be seen in Table 1.

Table 1. User Needs

No	User	Requirement
1	Student	Can Register for Profesi Practice. You can see a list of companies for activities. Upload the Final Report. Enter data on Professional Practice activities. Can see the value of Professional Practice.
2	Study Program	Can see and refer to student activities as a form of monitoring. View and verify Final student Reports. Can Add a Supervisor. You can see the value of students. Add to the list of companies that can be used as a place for student Professional Practice
3	Lecturer	Give an assessment. I can see the Mahasiswa Final Report.
4	Company	Give an assessment. See and verify mahasiswa activities as a form of monitoring. View and verify the Final Report.
5	TU Section (Academic Sub-District)	They were checking students who applied for Professional Practice registration. Print a cover letter.

3.2. Planning

The next stage is planning by making a schedule and estimating the work time starting from the first stage, namely communication to system creation and testing.

3.3. Modeling

At this stage, the proposed system design process describes process modeling using DFD and data modeling using ERD. Moreover, the design of the system interface is carried out. Process modeling describes the design of the proposed system using a Data Flow Diagram (DFD). The DFD design of the proposed system can be seen in Figure 2 below:

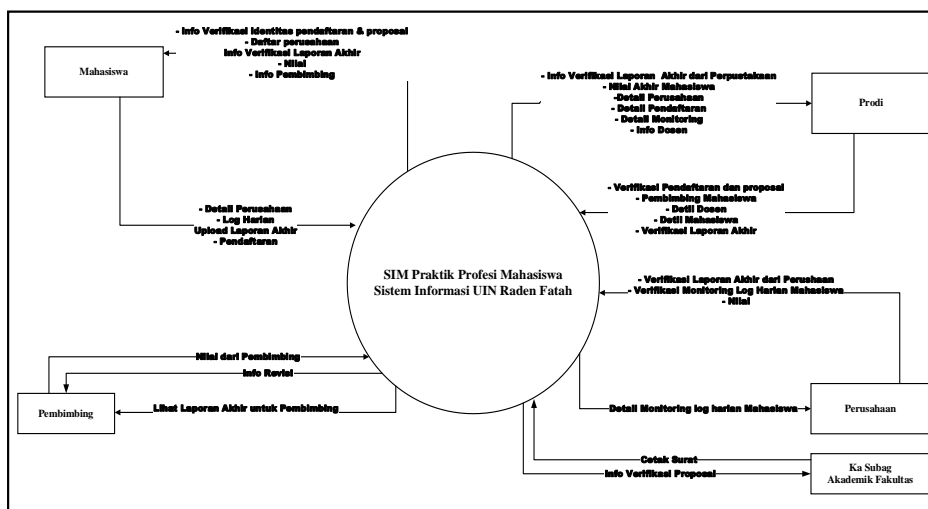


Figure 2. Proposed System DFD

In the proposed system, five entities will use the system: Students, Study Programs, Supervisors (Lecturers), Companies (Field Supervisors), and Academic heads of the Faculty. As for the process of the proposed system, students are looking for company reference that has been the place where the implementation of professional practice courses then registers and uploads proposals, inputs company details, inputs daily activities like monitoring, and the final report is uploaded. The study program verifies the registration and proposals of the student. See details of students, companies, monitoring, final reports. Input the student's schedule and final grades and provide access rights to all parties in the system. The company verifies daily log reports, students' final reports, and inputs grades. The supervisor can see the final report from the student and input the grades. After all, are finished inputting, the study program verifies the value so that students can

see it. Data modeling describes the design of the database to be used using er diagrams. The database design can be seen in figure 3 below:

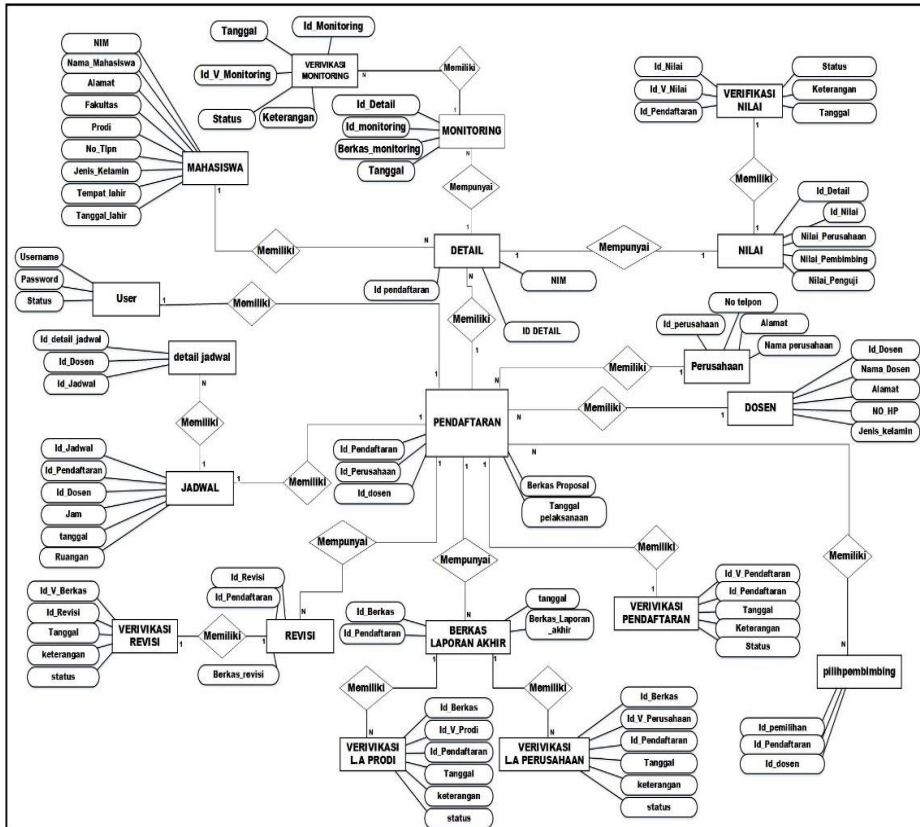


Figure 3. Database Design

3.4. Information System Construction

As for the application display of the Professional Practice Management Information System, students in the Information Systems study program are:

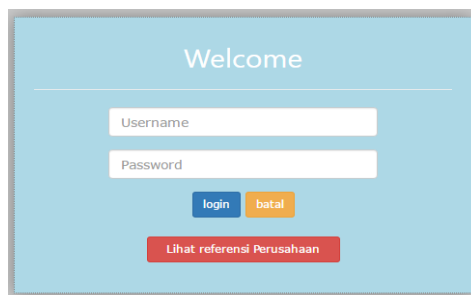


Figure 4. Login page

In Figure 4, a login interface is used to enter usernames and passwords. Students can also see a list of companies as reference materials for professional practice placed on the login page.



Figure 5. Home Menu Page

Gambar 5 is the main page (Home) that will appear after the user successfully logs in. On the main page, there is a menu that can be used based on user access rights.

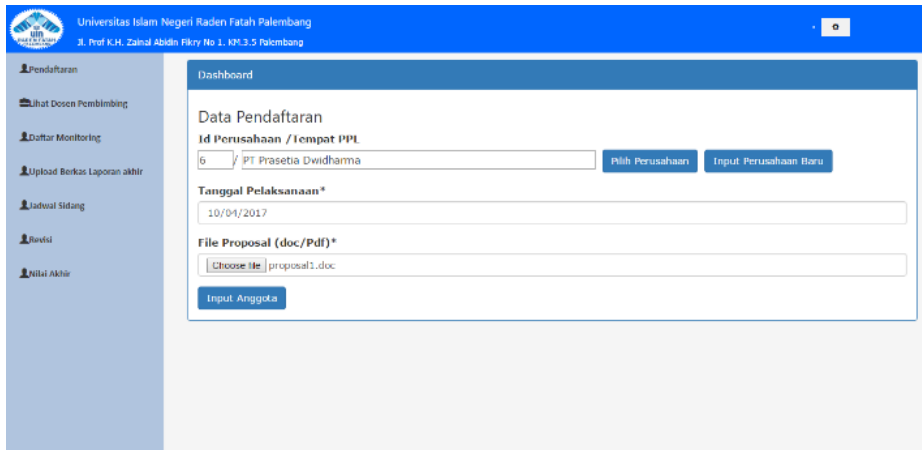


Figure 6. Registration Page

Gambar 6 is the registration page. Students use this experience to register for Professional Practice, after which students can upload proposals for professional practice activities. While in the study program user, you can see groups of students who follow professional practices and can download activity proposals. After the student registers, the study program will verify whether it is approved or not. While the registration verification page can be seen in figure 7 below:

Universitas Islam Negeri Raden Fatah Palembang
Il. Prof. K.H. Zamal Akbari Fikry No. 1, KM.3.5 Palembang

Pendaftaran
Show 10 entries

No Pendaftaran	Nama Perusahaan	Tanggal Pelaksanaan	Berkas proposal	Action
1	PT Teruna	2017-02-25	Download	Verifikasi Selesai
2	Pt Telkom Indonesia	2021-10-12	Download	Verifikasi Pendaftaran
3	PT Lintasarta	2016-11-27	Download	Verifikasi Selesai
4	PT PLN	2017-10-15	Download	Verifikasi Selesai
5	pt sukasuka	2016-05-01	Download	Verifikasi Selesai
6	PT Prasetya Dwidharma	2017-04-15	Download	Verifikasi Selesai

Showing 1 to 6 of 6 entries

Form Verifikasi data
Keterangan verifikasi *

Lakukan Verifikasi

Figure 7. Verification Registration page

The Monitoring Verification page displays a page containing a form for verification of monitoring of students' daily activities that carry out Professional Practice courses based on data inputs carried out by students. This page is used by field supervisors (companies) and study programs to monitor student activities during professional practice activities, whether it is appropriate. The monitoring verification page can be viewed in figure 8 below:

Universitas Islam Negeri Raden Fatah Palembang
Il. Prof. K.H. Zamal Akbari Fikry No. 1, KM.3.5 Palembang

Dashboard
Monitoring
Show 10 entries

No Monitoring	NIM	Nama mahasiswa	Tanggal Monitoring	Berkas Monitoring	Action
7	12540130	M. Ebni Hannibal	2017-03-27	Download	Verifikasi monitoring

Showing 1 to 1 of 1 entries

Form Verifikasi data
Keterangan verifikasi *

Lakukan Verifikasi

Figure 8. Monitoring Verification Page

This page serves to provide grades to students who follow Professional Practice. The value is given by the Field Supervisor who represents the company and the supervisor. The assessment page on the company can be seen in Figure 9, while the assessment page on the supervisor can be seen in Figure 10.

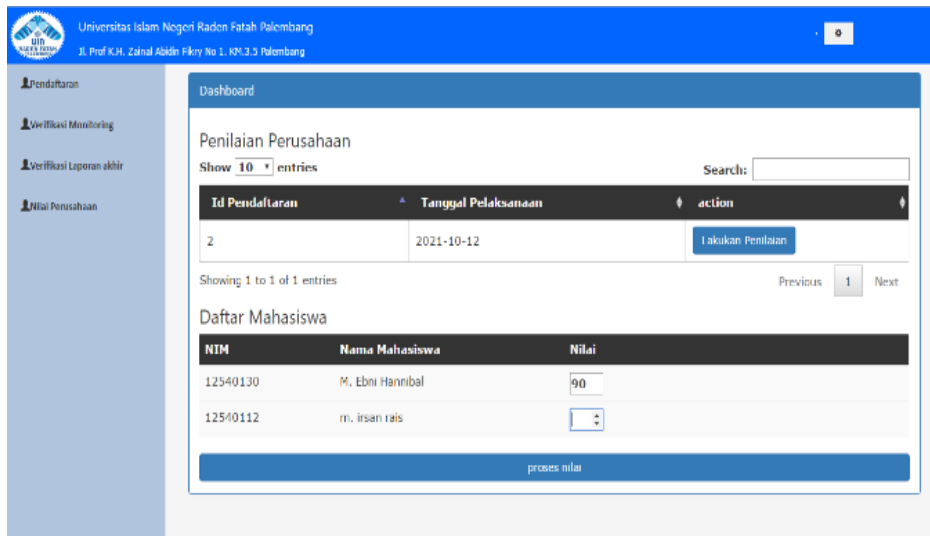


Figure 9. Field Supervisor Assessment Page (Company)

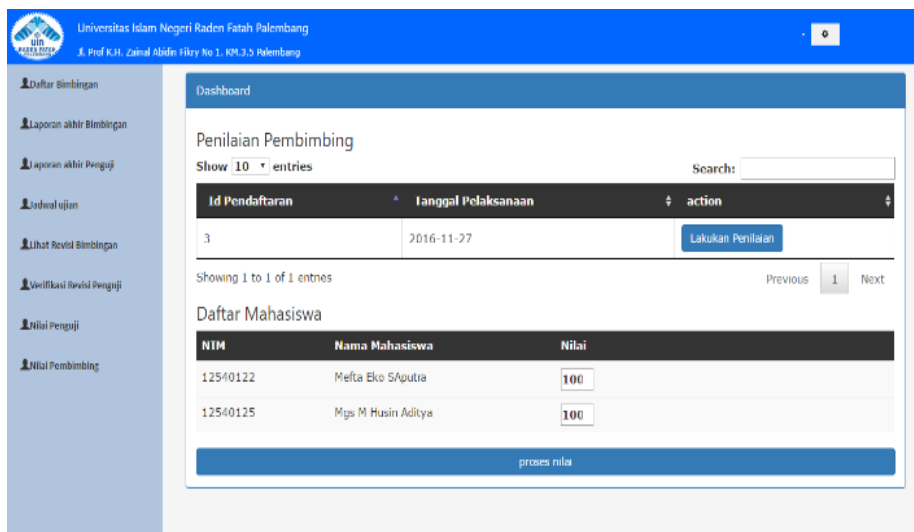


Figure 10. Lecturer Assessment Page

The company and the study program can see the final report of student Professional Practice activities on this page where previously students uploaded the report first. This page serves to see and check if the final report is appropriate, accepted, and approved. The report verification page can be viewed in Figure 11.

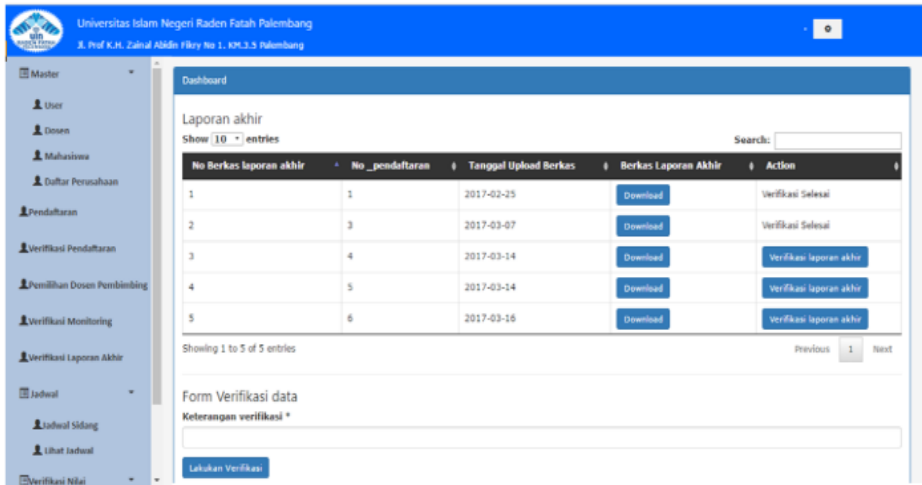


Figure 11. Final Report Verification Page

The Student Value Report page is a page that displays the Value Report of students who have completed the Professional Practice Course, whether it is perilous or all student grades, as shown in Figure 12.

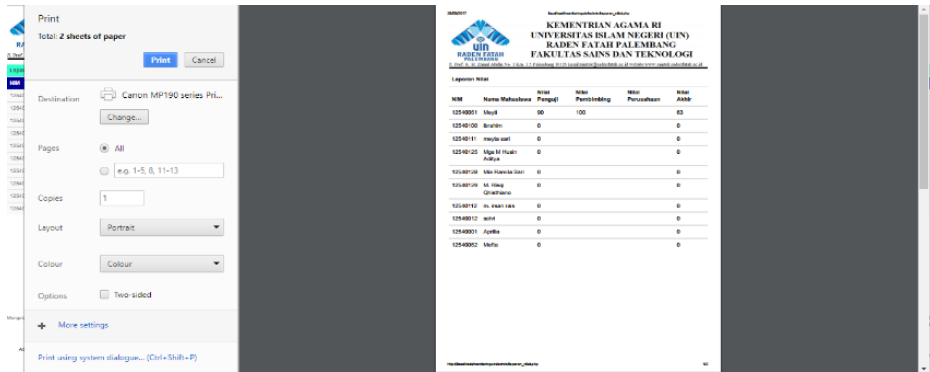


Figure 12. Student Value Report page

The Print Page of the registration letter displays a page that displays a table containing information from student registration starting from the company, the date of implementation, the proposal file, and other information. Kasubag TU Faculty use this page. As shown in Figure 13.

Universitas Islam Negeri Raden Fatah Palembang
Jl. Prof. K.H. Zainal Abidin Fikry No 1, KM.3.5 Palembang

Cetak Surat Pendaftaran

Dashboard

Pendaftaran

Show 10 entries Search:

No Pendaftaran	Nama Perusahaan	Tanggal Pelaksanaan	Berkas proposal	Tanggal verifikasi	Action
1	PT Taruna	2017-02-25	Download	2017-03-24	Cetak Surat
3	PT Lintasarta	2016-11-27	Download	2017-03-24	Cetak Surat
5	pt sukasuka	2016-05-01	Download	2017-03-24	Cetak Surat
6	PT Prasetya Dwidharma	2017-04-15	Download	2017-03-24	Cetak Surat

Showing 1 to 4 of 4 entries Previous 1 Next

Figure 13. Registration Letter Print Page

4. CONCLUSION

With the Professional Practice Management Information System, UIN Raden Fatah Palembang Information System students can help and facilitate the process of student Professional Practice activities where the Professional Practice Management Information System of UIN Raden Fatah Palembang Students can manage company data that was once a place for student implementation in pursuing Professional Practice courses so that it becomes a reference for students who have not carried out Professional Practice courses. Can manage student data that will and have been completed and monitored in implementing Professional Practice courses. So that the study program has information on how many students have finished doing activities. Finally, the process from submitting proposals, monitoring, and collecting final reports to scheduling the final report exam can reduce paper use (paperless).

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