

Innovation in Management Digital-Based Paper Research of Bachelor Student in Information Engineering Study Program Faculty of Computer Science Uniku

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Abstract. Kuningan University is one of the universities located in Kuningan. To become a superior university, it is not only supported by facilities and infrastructure but also supported by other supports such as the use of information technology in various activities. Currently, the use of technology allows for easy data processing, can produce the required information accurately, streamline time and costs so that it is more efficient. One of the obstacles faced by the Faculty of Computer Science, especially the Informatics Engineering study program, is managing thesis data which is done manually. At this time, the management of thesis data in the study program, especially in Informatics Engineering at the FKOM UNIKU level, is still done manually starting from submitting titles and processing thesis data, where the title submission goes to the supervisor and study program, the thesis file is not neatly arranged, and Borrowed research reports of bachelor student are not returned. This is seen as the need for an application so that some activities that take a long time can use an application faster. To overcome these problems, in this study an application will be designed to manage thesis data. The research method used is library research, observation, interviews, and stages of Rapid Application Development (RAD) as a system development method. The application is designed using UML and several tools for application development such as XAMPP, Macromedia Dreamweaver, and PHP as a programming language. The result of this design is a Web-Based Thesis Management Application for the Informatics Engineering Study Program, Faculty of Computer Science, Universitas Brass.

Keywords: *Skripsi*; Study Program; RAD; UML; Web

1 Introduction

According to UU Number 14 (2005 in Dikti, 2010) a study program is a unified study plan as a guide for the implementation of academic and/or professional education which is held on the basis of a curriculum and is intended so that students can master the knowledge, skills, and attitudes in accordance with the curriculum objectives. [1]

Reaserach of Bachelor Student is a final project that must be followed by all students in order to get the title and to prove that the student has studied as well as possible in college. For research data processing in the Informatics Engineering Study Program, it is still done manually starting from submitting titles and processing research data. This resulted in several

problems, namely, title submissions were made during working hours, title submissions had to go to prospective supervisors and study programs, research reports were not arranged neatly, and borrowed research reports were not returned.

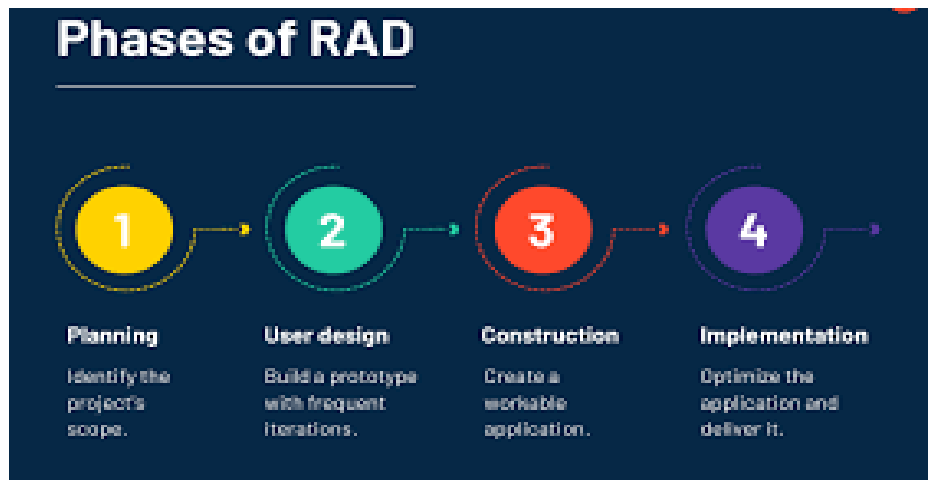
The mechanism for selecting supervisors in the Informatics Engineering Study Program, Faculty of Computer Science, Uniku, is carried out by students but for the appointment of supervisors, examiners, and thesis exam schedules, the study program is carried out. The title that has been approved will be submitted to the supervisor while the examiner and schedule are informed through the eclass system. So this process requires good management so that students get mentors in accordance with the scientific field and the right exam schedule so as not to interfere with the lecturer's schedule. By using a system that integrated makes it easy for all parties to get information quickly and optimal. [2].

2 Literature Survey

System Design can be defined as drawing, planning, and making sketches or arrangements of several separate elements into a unified whole and functioning [3]. The web is a distributed information system based on hypertext. Documents managed on the web can be of various types (word processors, worksheets, data-driven tables, presentations, hypertexts and others) and various formats (.doc, .pdf, .xls, .ppt, .htm) [4]. An information system is a system within an organization that brings together daily transaction processing needs, supports operations, is managerial and strategic activities of an organization and provides certain outside parties with the necessary reports [5].

3 Methodology

This study uses a system development method in the form of Rapid Application Development (RAD).



There are 4 phase of RAD :

1. Planning
In this phase, identification project scope including problem of system that used in Engineering Study Program using interviews, literature study and observation.
2. User Design
After planning, build a prototype (user design) for back end and front end user.
3. Cosntruction
Model what data is needed based on business modeling and define its attributes and their relationships with other data. At this stage, the author makes a design using Rich Picture, Flowchart, UML (Use Case Diagram, Class Diagram, Sequence Diagram)
4. Implementation
implementing the design results into a programming language using PHP and MySql as the database.

4 Discussion and Results

Design of the system can be seen in figure 1.

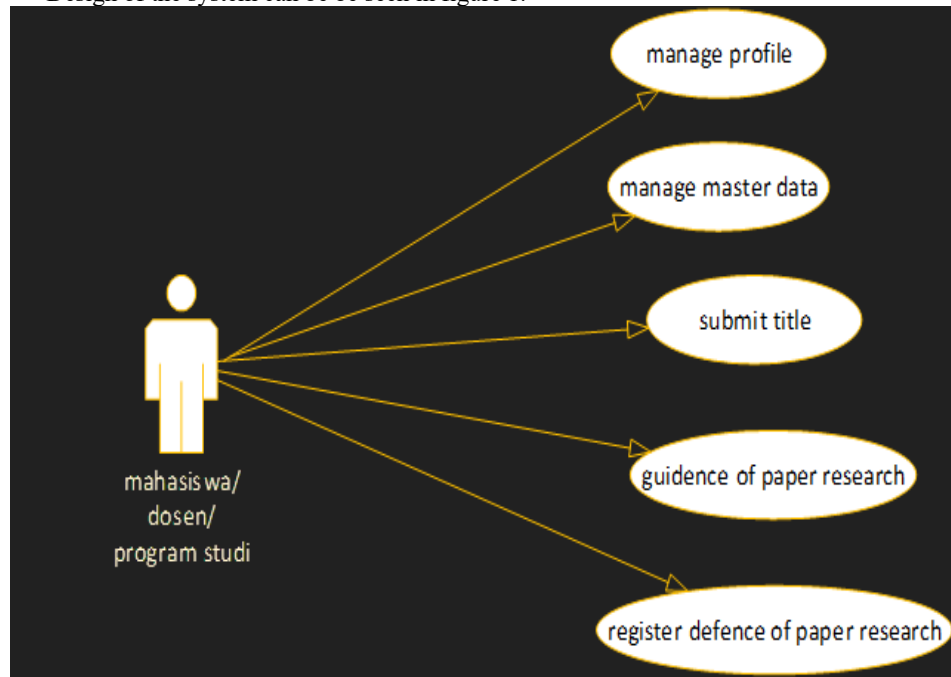


Figure 1. Use Case Diagram

In this system, lecture/student/study program can manage profile, manage master data, submit title of paper research, guidance of paper research and register defence of paper research.

5 Conclusion

The research that is built can help Student to know lectures that available to choose for guidance paper research, Student and lecture to guidance of paper reaseach, Study program can monitoring and evaluation progress of research student. The application will run on the web platform as a lecture, student and for the admin/study program. The results of the application made are as in figure 2, 3, 4, 5, 6 and 7.

The screenshot shows the 'Tambah Pengajuan Judul Skripsi' page. The sidebar on the left contains the following items: 'Sisfo Skripsi' logo, user profile 'Rahila Hikmah Yuliar', a search bar, 'Home', 'Dosen Pembimbing', 'Judul Skripsi', 'PROGRESS', 'Bimbingan', 'SEMINAR/SIDANG', and 'Pendaftaran'. The main content area has a blue header 'Pengajuan Judul'. Below it, the form includes: 'Tanggal' with a date input field (mm / dd / yyyy); 'Pembimbing 1' with a dropdown menu 'Pilih Salah Satu'; 'Pembimbing 2' with a dropdown menu 'Pilih Salah Satu'; 'Upload Form Pengajuan Skripsi' with a 'Browse...' button and 'No file selected.'; 'Upload Jurnal Nasional Referensi *dalam bentuk rar (minimal 3 jurnal nasional)' with a 'Browse...' button and 'No file selected.'; and 'Upload Jurnal Internasional Referensi *dalam bentuk rar (minimal 2 jurnal internasional)' with a 'Browse...' button and 'No file selected.'. A blue 'Submit' button is at the bottom.

Figure 2. Student/Study Program Interface for Add Title of Paper Research

Data Bimbingan Skripsi

Pembimbing 1: Yati Nurhayati, M.Kom

No	Tanggal	Bab	Status	Lihat
1	12/4/2021	Proposal	Revisi	Lihat Data

Showing 1 to 1 of 1 entries

Created 2021 - Sistem Informasi Skripsi Fakultas Ilmu Komputer Universitas Kuningan

Figure 3. Student/Study Program Interface for List of First Lecture Guidance Research

Data Bimbingan Skripsi

Pembimbing 2: Heru Budianto, M.Kom

No	Tanggal	Bab	Status	Lihat
1	5/4/2021	Proposal	Revisi	Lihat Data
2	12/4/2021	Proposal	ACC	Lihat Data

Showing 1 to 2 of 2 entries

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Figure 4. Student/Study Program Interface for List of Second Lecture Guidance Research

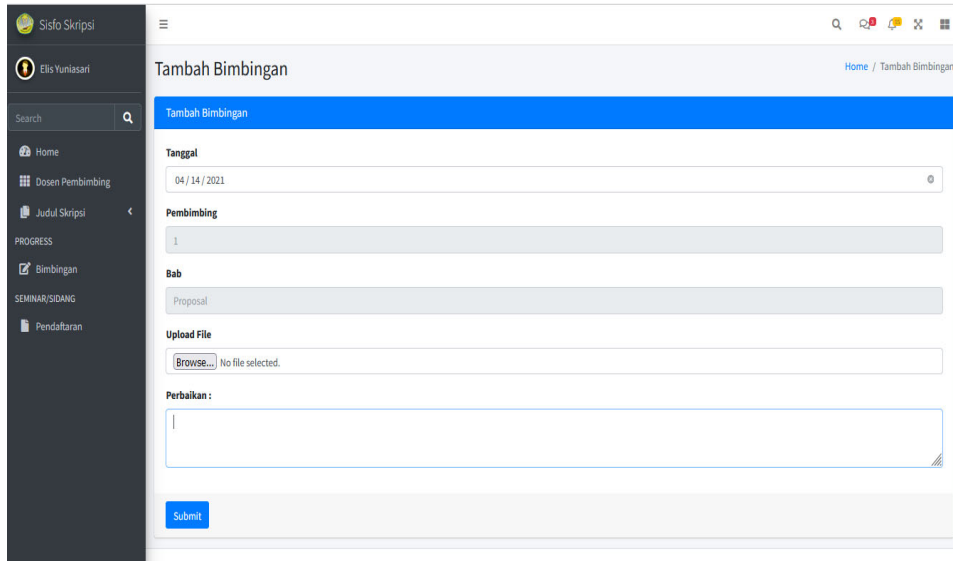


Figure 5. Lecture Guidance Interface for Add Guidance

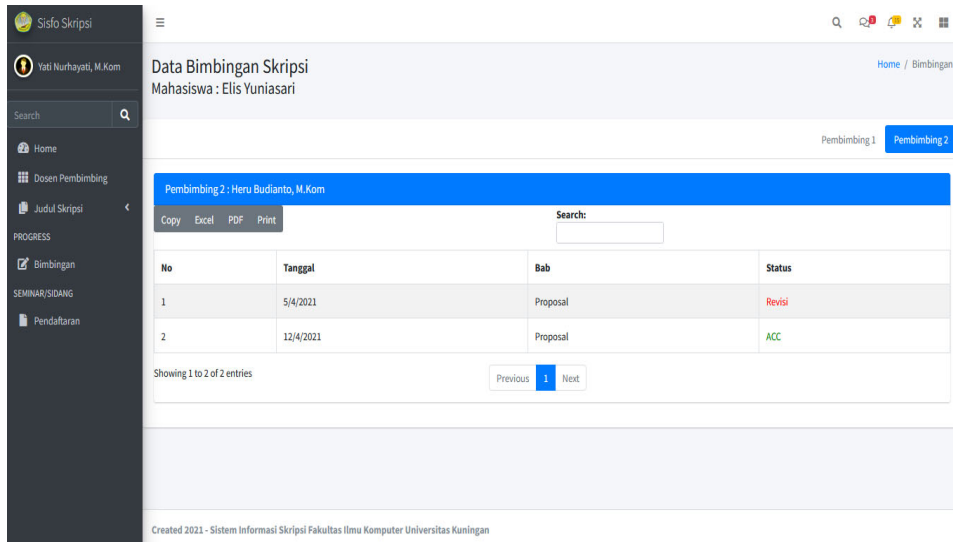


Figure 6. Student Interface for History of Guidance Student

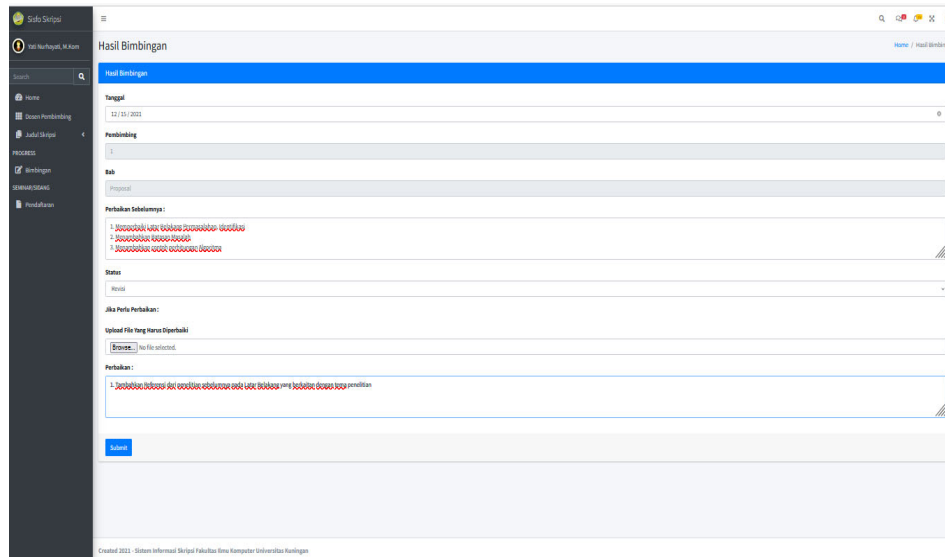


Figure 7.Lecture Guidance Interface for Add Revision of Research student

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