

Designing a Web-Based Information System for Monitoring Final Projects

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Abstract

The final project is a crucial requirement for students to complete their studies. At STMIK Jayakarta, the final project monitoring process is still conducted manually using Google Classroom, Google Forms, and WhatsApp. This approach leads to difficulty tracking student progress, data security vulnerabilities, data loss risks, and communication challenges. This study's primary objective is to design a comprehensive web-based monitoring information system that integrates the final project process, from initial registration and guidance to the thesis defence and issuance of the provisional graduation letter. The research design focuses on system modelling, and the Unified Modeling Language (UML) methodology is employed to define system requirements and structure the system's design. The primary outcomes include a detailed system architecture that addresses efficiency, transparency, and accuracy in final project management. The results indicate that this web-based system will significantly improve manual methods, offering better tracking, security, and communication capabilities. In conclusion, this study demonstrates that the proposed system design can serve as a strong foundation for developing a fully functional application, enhancing the effectiveness and transparency of final project management for all stakeholders.

Keywords: Final Projects, Information System, Monitoring, System Design, Web-Based.

1. Introduction

Higher education institutions face challenges in managing students' final projects. At the bachelor's level (S1), the final project is called a thesis; at the diploma level (D3), it is referred to as a final project. STMIK Jayakarta still relies on a manual system for monitoring final projects, covering the entire process from registration, guidance, and thesis defence to final revisions. This system utilizes various nonintegrated platforms, leading to delays, data duplication, and ineffective communication. Therefore, a web-based information system is needed to facilitate coordination among students, academic advisors, examiners, and the administrative division. Several previous studies, particularly at STMIK Jayakarta, have discussed the design of web-based academic information systems. For example, a survey by Zulhalim [1] demonstrated that a web-based system can improve efficiency in monitoring thesis guidance. However, this study focused only on the guidance process and did not cover the thesis defence and revision stages. Another survey by Sepbryan [2] proposed using UML in academic system design to ensure that user requirements are well accommodated. However, this research only resulted in a prototype for a thesis defence application. Therefore, this study aims to design an information system that comprehensively covers the entire process, from initial registration to post-defence revisions. The goal is for this design to be further developed into a fully functional application that can be implemented at STMIK Jayakarta.

2. Literature Review

2.1. Design

The design transforms perceptions of environmental conditions into a structured plan that can be systematically implemented. In general, the design aims to represent the system to be developed, including planning and organizing various separate elements into a unified and comprehensive whole, making it understandable for programmers and users [3]. Design can also be defined as arranging all necessary aspects before initiating an activity or system to achieve the desired outcome [4].



2.2. Monitoring

Monitoring is the process of overseeing the implementation of a policy, encompassing the relationship between execution and the outcomes achieved [5]. It can also be defined as the supervision and evaluation process to ensure that all organizational and managerial goals and objectives are achieved effectively and efficiently [6].

2.3. Qualitative research methodology

Qualitative research methodology is defined as an approach conducted by a single researcher to collect data, although a field team may assist it. This method develops social science theories and methodologies within the Indonesian context, as well as to uncover and understand hidden aspects behind an event that have not been previously known [7]. Qualitative research is based on postpositivist philosophy and aims to explore and understand subjects' experiences within their social context. This approach views reality as a subjective social construction. Its reporting structure is flexible, employs an inductive method, focuses on individual meaning, and describes the complexity of situations [8].

2.4. Unified Modeling Language (UML)

UML is a graphical modelling language used to visualize, design, and document object-oriented software development systems [9]. One of UML's advantages is its ability to represent system requirements in greater detail. This is possible because UML diagrams are designed to model objects using a simple approach, resulting in clear and easily understandable visualizations [10]. There are several types of UML diagrams, including Use Case Diagrams, Activity Diagrams, Sequence Diagrams, and Class Diagrams.

2.5. HIPO (Hierarchy Plus Input Process Output) diagrams

HIPO (Hierarchy Input Process Output) diagrams are a documentation tool designed to help understand the hierarchical structure of a program, illustrating system functions and modules without directly displaying programming instructions. Using HIPO, a system's inputs, processes, and outputs can be clearly explained, making it easier for programmers to develop structured and efficient systems [11]. HIPO serves several key purposes [12], including:

- 1. Providing a structured framework for understanding system functions.
- 2. Emphasizing the functions a program must perform rather than merely displaying program code.
- 3. Clearly describing the inputs used and the outputs produced by each function at various levels of the HIPO diagram.

2.6. Draw.io

Draw.io is an online diagram editor that serves as a leading solution for web-based sketching and diagramming functions. This editor is compatible with various storage platforms and can also be used offline through a standalone desktop application [13]. Draw.io enables users to create UML diagrams online. It features a responsive interface and seamless integration with Google Drive, allowing users to store and manage files [14] conveniently.

2.7. Final project

The final project is an academic requirement for senior students, encompassing stages from proposal submission to thesis defence and serving as one of the graduation requirements for earning a bachelor's degree [15]. While completing the final project, students must undergo supervision with an assigned academic advisor and fill out a final project guidance form. This ensures that the project is well-structured and achieves the intended objectives within the specified timeframe [16].

2.8. SWOT analysis

SWOT analysis is a method used to identify a project's internal strengths and weaknesses, as well as the external opportunities and threats it faces. This method evaluates four key elements: Strengths (S), Weaknesses (W), Opportunities (O), and Threats (T). Strengths and weaknesses are internal factors that can be controlled to some extent, while opportunities and threats stem from the external environment, where control is more limited [17]. The purpose of SWOT analysis is to assess a company's current situation, understand the external conditions it will face in the future, and optimize internal strengths to respond to emerging external challenges [18] effectively.

3. Research Methods

3.1. Place and Time of Research

This research was conducted at STMIK Jayakarta, located at Jalan Salemba I No. 8-10, RT 004 RW 006, Kelurahan Kenari, Kecamatan Senen, Central Jakarta, Special Capital Region of Jakarta, Postal Code 10430. The research was carried out over four months, from October to January 2025.

3.2. Research Paradigm

This study adopts a qualitative approach using a descriptive method. The qualitative paradigm aims to gain an in-depth understanding of phenomena by exploring relevant empirical data. The descriptive approach provides a detailed overview of the manual process currently implemented at STMIK Jayakarta, including its challenges, user requirements, and how the proposed system can address these needs. This research focuses on user perceptions, interpretations, and experiences, particularly in terms of the ease of use of the final project monitoring application.

3.3. Research Stages

The research consists of the following stages:

1. Observation—Directly observing the manual process of managing final projects at STMIK Jayakarta to identify challenges and inefficiencies.

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- 2. Interviews—Engaging with academic advisors, students, and administrative staff to gain insights into existing issues and gather feedback on system requirements.
- 3. Documentation—Collecting relevant documents, such as forms and procedures used in the current final project process, to analyze workflow and identify areas for improvement.

3.4. Data Analysis Techniques

This research applies a descriptive research method with a qualitative approach. The qualitative approach allows for an in-depth examination of the research focus, particularly concerning issues in the final project monitoring process. SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats) is widely used in academic and corporate settings. It is an effective method for evaluating key aspects of the proposed information system and its potential implementation.

Below is a summary of the SWOT analysis for the current system:

- A. Strengths:
 - 1. Student, lecturer, and final project data are managed in a structured and centralized manner.
 - 2. The existing manual system has a straightforward workflow but is not yet integrated.
 - 3. Active participation from students and lecturers in the guidance process.
- B. Weaknesses:
 - 1. The lack of integration between platforms makes tracking the final project process difficult.
 - 2. The manual system is prone to data loss, communication delays, and input errors.
 - 3. Limited time availability for students and lecturers due to their respective schedules.
- C. Opportunities:
 - 1. The development of a web-based system can automate existing workflows.
 - 2. Web-based technology enables the implementation of cost-effective, fast, and efficient solutions.
 - 3. Growing awareness of the importance of digitalization in academic environments.
- D. Threats
 - 1. User resistance to transitioning from a manual to an automated web-based system.
 - 2. Limited IT infrastructure at STMIK Jayakarta to support the new system.
 - 3. Data security risks if the system is not designed correctly.
 - 4. Privacy concerns and ethical violations in the use of personal accounts.

4. Result and Discussion

4.1. Design Stages

This research employs a UML-based system design approach consisting of several stages:

- 1. Requirement Analysis: Gathering information from students, lecturers, and administrative staff regarding the challenges in the current manual system.
- 2. System Design: Creating UML diagrams such as use case, activity, and class diagrams to document system requirements.
- 3. Design Validation: Evaluate the system design to ensure the proposed design meets user requirements.

4.2. Analysis of the Current System Process

The ongoing process is analyzed by outlining the entire workflow from start to finish. To facilitate problem identification, the process is divided into six main stages:

- 1. Registration Stage Students register for the final project and fulfil administrative requirements.
- 2. Proposal Stage Students submit their research proposals for review and approval by the assigned advisors.
- 3. Guidance Stage Regular consultation sessions occur between students and advisors to refine the final project.
- 4. Pre-Defense Stage Students undergo preliminary evaluations to ensure their readiness for the thesis defense.
- 5. Defence Stage The final project is formally presented and assessed by examiners.
- 6. Post-Defense Stage Students complete the necessary revisions and administrative procedures before final submission.

Each stage is crucial in ensuring a structured and effective final project process. The identified challenges in these stages highlight the need for an integrated web-based system to improve efficiency, monitoring, and communication.

4.3. System Design

In this section, the author proposes a new system design and model that can be implemented as a solution at STMIK Jayakarta.

4.3.1. HIPO (Hierarchy Plus Input-Proses-Output) diagram



Fig 1. HIPO diagram

4.3.2. Use-case diagram



Fig 2. Diagram use-case

4.3.3. Activity diagrams



Fig 3. Activity Diagram for the Guidance Stage



Fig 4. Activity Diagram for the Defense Stage

4.3.4. Class diagram



Fig 5. Class Diagram

4.3.5. Screen mockup design

A. Login screen mockup

Selamat Datang di Portal JASINTA (STMIK <u>Ja</u> yakarta - <u>S</u> istem <u>In</u> formasi <u>T</u> ugas <u>A</u> khir)	
eMail Password	
Lupa Password ? <u>klik disini</u> Anda mahasiswa yang baru mau mendaftar? <u>klik disini</u>	

Fig 6. Login screen mockup

B. Student Registration Screen Mockup

) st	Mik Jayakart	A Sistem Informasi Tugas Akhir	Selasa, 28 Jan 2025 15:15 WIB
	PEND	AFTARAN BIMBINGAN ONLINE	
		Alarnat email	
		name@example.com	
		Nama Lengkap mahasiswa	
		NM	
		Level dan jurusan	
		S1/Sistem Informasi, S1/Telenik Informatika, D3/Manajernen Informatika	•
		Jenis Bimbingan	
		Baru, Mengulang	-
		Password	
		Pesan Pendaftaran	
		A	Ajukan sekarang
	L		

Fig 7. Student registration mockup

C. Mockup of the Student Dashboard Screen

🚇 STMIK JAYAKARTA	Sistem Informasi Tugas Akhir	Ferry Hariyanto 23566001 -	Selasa, 28 Jan 2025 15:15
Baranda Pendaltaran Bimbingan Persyaratan Pra-Bimbingan Pengajuan Proposal SK Bimbingan	TAHAP SAAT INI 5/14 -BIMBINGAN BAB 2	SISA WAKTU (hari) 73	
Bimbingan Persyaratan Pra-Sidang Sidang Revisi Akhir Persyaratan Pasca-Sidang Surat Keterangan Lulus Sementara Profil	TANGGAL DAN WAKTUJUDULP10-11-202411:40Libur Imlek dan Isra MirajD08-11-202408:22Pengumpulan pas fotoK06-11-202413:30Pembagian SK BimbinganD	ESAN iumumkan kepada mahasiswa epada para mahasiswa yang iiberitahukan kepada seluruh mahasiswa	AKSI Tanya/Jawab Tanya/Jawab Tanya/Jawab
Keluar	Apakah Anda punya pertanyaan kepada Administrator?	anya Administrator	



D. Mockup of the Student Dashboard Screen for Guidance Monitoring

💮 STMIK JAYAKART	A Sistem Informasi Tugas Ak	thir Ferry Hariyanto 23566001 - Selasa, 28 Jan 2025 15:15
Beranda Pendaftaran Bimbingan Persyaratan Pra-Bimbingan	TAHAP SAAT INI 5/14 - BIMBI	NGAN BAB 1 SISA WAKTU (hari) 105
Pengajuan Proposal SK Bimbingan	REKAMAN BIMBINGAN	CETAK DALAM PROSES
Persyaratan Pra-Sidang Sidang Revisi Akhir Surat Keterangan Lulus Sementara Profil	Nama Mahasiswa NIM Level dan Jurusan Judul Tugas Akhir Dosen Pembimbing Materi	FERRY HARIYANTO 23566001 S1 - SISTEM INFORMASI Rancang Bangun Sistem Informasi Tugas Akhir pada STMIK Jayakarta Menggunakan Codelgniter dan MariaDB Thomas Budiman, S. Kom, MTI
Keluar	Dosen Pembimbing Teknis	BAB 1 BAB 2 BAB 3 BAB 4 BAB 5 BUINA BIMBINGAN 22 kali interaksi Akmal Budi Yulianto, ST, MM BAB 1 BAB 2 RAB 3 BAB 4 RAB 5 BUIKA BIMBINGAN 7 kali interaksi

Fig 9. Mockup of the Student Dashboard Screen for Guidance Monitoring

E. Mockup of the Student Dashboard Screen for Online Guidance Sessions

STMIK JAYAKARTA	Sistem Informasi Tugas Akhir Ferry Hariyanto 23566001 - Selasa, 28 Jan 2025 15:15
Beranda Pendaftaran Bimbingan Persyaratan Pra-Bimbingan	TAHAP SAAT INI 5/14 - BIMBINGAN BAB 1 105
Pengajuan Proposal SK Bimbingan	BIMBINGAN - MATERI - BAB 2 DALAM PROSES
Bimbingan Persyaratan Pra-Sidang Sidang Revisi Akhir Surat Kelerangan Lulus Sementara	Nama Mahasiswa FERRY HARIYANTO NIM 23566001 SI - SISTEM INFORMASI Judul Tugas Akhir Rancang Bangun Sistem Informasi Tugas Akhir pada STMIK Jayakarta Menggunakan Codelgniter dan MariaDB Dosen Pembimbing (Materi) Thomas Budiman, S. Kom, MTI
Profil Keluar	FERRY HARIYANTO [10-02-2025 10.15 WIB] Selarnat siang Pak Thomas, terlampir berkas BAB 2, mohon koreksi.
	Thomas Budiman [11-02-2025 12.40 WIB]
	Tambahkan daltar pustaka dari jurnal SINTA 3-5, terbit mulai 2022 atau lebih baru BALAS Baik pak, sudah saya kumpulkan 10 jurnal. Mohon koreksi kembali KIRIM

Fig 10. Mockup of the Student Dashboard Screen for Online Guidance Sessions

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F. Mockup of the Student Dashboard Screen for Final Project Revisions After the Defense

💮 STMIK JAYAKARTA	A Sistem Informasi Tugas Akhir		Ferry Hariyanto	23566001 - Selasa	, 28 Jan 2025 15:15
Beranda Pendaftaran Bimbingan Persyaratan Pra-Bimbingan	TAHAP SAAT INI 12/14 - REVISI AKHIR	0		(hari)	
Pengajuan Proposal SK Bimbingan	REVISI AKHIR - DOSEN PENGUJI 1				DISETUJUI
Bimbingan Persyaratan Pra-Sidang Sidang Revisi Akhir Persyaratan Pasca-Sidang	Nama Mahasiswa FERRY HARIYANTO NIM 23566001 Level dan Jurusan S1 - SISTEM INFORMASI Judul Tugas Akhir Rancang Bangun Sistem Informasi Tugas Akhir pada STMIK Jay Dosen Penguji 1 Ir. Ilan Djunaidi, M.Kom	yakarta Menggu	ınakan Codelgniler dan M	MariaDB	
Surat Keterangan Luius Sementara Profil					
Keluar	NO PERMASALAHAN		STATUS	TANGGAL	AKSI
	Abstrak direvisi Terminilogi harus dilengkapi Latar belakang direvisi Revisi Judul		DISETUJUI	12-02-2005 10.45	Buka Pesan

Fig 11. F. Mockup of the Student Dashboard Screen for Final Project Revisions After the Defense

G. Mockup of the Administrator Dashboard Screen for Monitoring Student Progress

STMIK JAYAKARTA Sistem Informasi Tugas Akhir									Administrator - Senin 27 Jan 2025 10:22 W							
Master Data	TOTAL MAHASISWA PESERTA		MAHASISWA TEPAT WAKTU 23 (41%)						SISA HARI MENUJU BATAS PENGUMPULAN 27							
Pesan																
Pendelineen Dimbionen																
Pendattaran Bimbingan	MONITORING TAHAPAN									Downloa	d Excel		Ceta	ak		
Persyaratan Pra-Bimbingan											_					
Pengajuan Proposal	No NAMA MAHASISWA	1	2	3	4	5	6	7	8	9	10	11	12	13		
SK Bimbingan	1 Ahmad Subandi						1			1						
limbingan	2 Ali Suparno															
sindingan	3 Brahmantya Sugiharjo															
Persyaratan Pra-Sidang	4 Cecep Mangunkusumo															
Sidang	5 Didik Pelipurlara															
Revisi Akhir	6 Ellen Sparinga															
Dereventer Deses Cidens	7 Franky Ritanula			-												
rersyaratan Pasca-Sidang	8 Heru Saputra															
Surat Keterangan Lulus Sementara	9 Jejen Belantara		1	A		1										
Aktivitas Pengguna	10 Kumalasari															
Profil	11 Seno Supeno		1													
	12 Tatang Maliputan															
	Legend: 1 Pendaftaran Bimbingan 2 Persyaratan Pro-Bimbingan 3 Pengajuan Proposal 4 Peneribitan SK Bimbingan Target Timeline waktu tahapan		Bimbingo Bimbingo Bimbingo Bimbingo	an Bab 1 an Bab 2 an Bab 3 an Bab 4		9 10 11 12	Bimbinga Persyara Sidang Revisi ak	an Bab 5 tan Pra-Sid hir	lang	13 14	Persyara SKL seme	tan Pasca- intara	Sidang			

Fig 12. Mockup of the Administrator Dashboard Screen for Monitoring Student Progress

H. Mockup of the Administrator Dashboard Screen for Monitoring Guidance Progress

💮 STMIK JAYAKARTA S	iistem Informasi 1	Tugas A	Akhir		Administrator - Senin 27 Jan 2025 10:2	22 WIB						
Beranda				_	STSA HART MENULU BATAS							
Master Data												
Pengumuman	56			23 (41	%) 27							
Pesan												
Pendaftaran Bimbingan	Pendataran Bimbingan KELOLA BIMBINGAN Download Excel Cetak											
Persyaratan Pra-Bimbingan												
Pengajuan Proposal	NAMA MAHASISWA	NIM	LEVEL / JURUSAN	TAHAP SAAT INI	JUDUL TUGAS AKHIR	AKSI						
SK Bimbingan	Edi Sutanto	23561201	S1 / SISTEM INFORMASI	BAB 1	Sentiment Analysis of Sirekap Application Review Using Logistic Regression Algorithm	Buka						
Rimbingan	Ferry Hariyanto	22365241	D3 / MANAGEMENT INFORMATIKA	BAB 2	Rancang Bangun Sistem Informasi Monitoring Tugas Akhir	Buka						
	Kurniasari	20574521	S1 / TEKNIK INFORMATI	BAB 3	Prediksi Kurs Mata Uang Rupiah Terhadap Ringgit Malaysia Menggunakan Algoritma Backpro	Buka						
Persyaratan Pra-Sidang	Budi Yuwono	23575412	S1 / TEKNIK INFORMATI	BAB 2	Pengelompokan Kasus Tuberculosis Dengan Algoritma K-Means Berdasarkan Kelurahan di K	Buka						
Sidang	Lilis Basilia	21571201	S1 / TEKNIK INFORMATI	BAB 1	Penerapan Algortima Genetika Dalam Sistem Penjadwalan Mata Pelajaran Di SD Islam Terpad	Buka						
Revisi Akhir	Theodorus	22574002	S1 / TEKNIK INFORMATI	BAB 2	Design and Build a Boarding House Management Application Using the Flutter Framework	Buka						
Persyaratan Pasca-Sidang	Hengki Pernama	20361036	D3 / MANAGEMENT INFORMATIKA	BAB 3	PENERAPANAN MODEL DETEKSI OBJEK UNTUK ROBOT MENGGUNAKAN MODEL SSD	Buka						
	Irwandi Hasyim	21565024	ST/SISTEM INFORMASI	BAB 4	Penilaian Kualitas Quality of Service Jaringan Internet WLAN P1. Solid Fintek Indonesia	BUKB						
Surat Keterangan Lulus Sementara												
Profil												
Keluar												

Fig 13. Mockup of the Administrator Dashboard Screen for Monitoring Guidance Progress

I. Mockup of the Administrator Dashboard Screen for Monitoring Thesis Defense Progress

💮 STMIK JAYAKARTA S	Sistem Informasi Tugas	Akhir				Administra	tor - Senin 27 Jan 20)25 10):22 WIB
Beranda Master Data Pengumuman Pesan	total mahasis 56	WA PESERTA		(C) MAHAS 23	515WA TEPAT WART (41%)	ru 🖸	SISA HARI MENUJU B PENGUMPULAN 27	ATAS	
Pendaftaran Bimbingan Persyaratan Pra-Sidang	KELOLA JADWAL SIDA	NG			Jad	walkan Sidang Dor	wnload Excel	Cetak	
Pennaiuan Proposal	JADWAL SIDANG	NAMA MAHASISWA	NIM	LEVEL / JURUSAN	PENGUJI 1	PENGUJI 2	PENGUJI 3	NILAI	AKSI
	Solasa, 20/02/2025 - 08.00-09.00	Edi Sutanto	23561201	S1 / SISTEM INFORMASI	Ir. Ifan Junaodi, M.Kom	Thomas Budiman, Skom, MTI	Teri Mengkasrinal, S.Kom, M.Kom		Buka
SK Bimbingan	Solasa, 20/02/2025 - 09.00-10.00	Forry Hariyanto	22365241	D3 / MANAGEMENT INFORM	Ir. Ifan Junaodi, M.Kom	Dimas Prasotyo, S.Kom, M.Kom			Buka
Bimbingan	Selasa, 20/02/2025 - 10.00-11.00	Kumiasari	20574521	S1 / TEKNIK INFORMATI	Ir. Ifan Junaodi, M.Kom	Thomas Budiman, Skom, MTI	Tori Mengkasrinal, S.Kom, M.Kom		Buka
	Selasa, 20/02/2025 - 11.00-12.00	Budi Yuwono	23575412	S1 / TEKNIK INFORMATI	Ir. Ifan Junaedi, M.Kom	Dimas Prasetyo, S.Kom, M.Kom	Tomi Loveri , S.Kom, M.Kom		Buka
Persyaratan Pra-Sidang	Rabu, 20/02/2025 - 08.00-09.00	Lilis Basilia	21571201	S1 / TEKNIK INFORMATI	Ir. Ifan Junaedi, M.Kom	Thomas Budiman, Skom, MTI	Ito Riris Immasari, SKom,MMSi		Buka
Sidang	Rabu, 20/02/2025 - 09.00-10.00	Theodorus	22574002	S1 / TEKNIK INFORMATI	Ir. Ifan Junaedi, M.Kom	Dimas Praselyo, S.Kom, M.Kom	Teri Mengkasrinal, S.Kom, M.Kom		Buka
Reviei Akhir	Rabu, 20/02/2025 - 10.00-11.00	Hengki Pernama	20361036	D3 / MANAGEMENT INFOR	Ir. Ifan Junaedi, M.Kom	Thomas Budiman, Skom, MTI			Buka
nevisi Antii	Rabu, 20/02/2025 - 11.00-12.00	Irwandi Hasyim	21565024	S1 / SISTEM INFORMASI	Ir. Ifan Junaedi, M.Kom	Teri Mengkasrinal, S.Kom, M.Kom	Ito Riris Immasari, SKom,MMSi		Buka
Persyaratan Pasca-Sidang Surat Keterangan Lulus Sementara Profil Keluar									

Fig 14. Mockup of the Administrator Dashboard Screen for Monitoring Thesis Defense Progress

5. Conclusion

The design results indicate that the web-based final project monitoring system can integrate various academic processes, including:

- 1. Online final project registration, allowing students to register digitally.
- 2. A well-documented and structured guidance process ensures better tracking of student progress.
- 3. Comply manage and evaluate the thesis defence with organized documentation.
- 4. Real-time supervision and monitoring of each student's final project progress.
- 5. A user-friendly interface makes it easier for users to navigate and access the application.

This study concludes that the design of a web-based final project monitoring information system can solve the final project management challenges at STMIK Jayakarta. Utilizing a UML-based design ensures that every academic process is well-documented and accessible in real time by relevant stakeholders. Implementing this system will enhance efficiency, transparency, and accuracy in managing students' final projects.

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