PROYEK: PENGEMBANGAN PEMBARUAN PROSES BISNIS PENGAJUAN TUGAS AKHIR PADA APLIKASI LENTERA FIK UPNVJ

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ABSTRAK

Pesatnya perkembangan teknologi informasi menuntut adanya digitalisasi dan tata kelola proses bisnis yang efektif di lingkungan perguruan tinggi, khususnya dalam pelayanan administrasi tugas akhir. Sebelum adanya sistem terintegrasi, alur pengajuan judul dan bimbingan tugas akhir di Fakultas Ilmu Komputer Universitas Pembangunan Nasional "Veteran" Jakarta (FIK UPNVJ) kerap menghadapi kendala berupa hambatan alur kerja (bottleneck), kecenderungan mahasiswa berkumpul pada topik tertentu yang tidak sejalan dengan visi-misi program studi, serta terbatasnya ruang kolaborasi proyek antara dosen dan mahasiswa. Penulisan ini bertujuan untuk merancang dan mengembangkan fitur tambahan (add-on) pada aplikasi Lentera FIK UPNVJ guna mempermudah wa mencari/mengajukan judul tugas akhir, memberikan kontrol penyesuaian topik bagi Koordinator Program Studi (Koorprodi), serta memfasilitasi publikasi dan seleksi proyek penelitian dosen. Pengembangan sistem ini menerapkan metode Prototyping yang terdiri dari tahapan communication, quick planning, modeling quick design, construction of prototype, serta deployment, delivery, and feedback. Perancangan sistem dimodelkan menggunakan Unified Modeling Language (UML) dan Entity Relationship Diagram (ERD), serta dibangun menggunakan framework Next.js dan basis data PostgreSQL. Hasil penelitian menunjukkan bahwa fitur baru ini berhasil memfasilitasi pencarian dan pengajuan judul mandiri berbasis persentase kemiripan topik AI (AI Match Meter), membantu Koorprodi dalam mengelola bank topik dan verifikasi judul, serta menyediakan platform seleksi tim mahasiswa untuk proyek dosen secara transparan. Pengujian sistem yang dilakukan menggunakan User Acceptance Testing (UAT) menghasilkan rata-rata skor kepuasan tinggi dari berbagai role pengguna (mahasiswa, dosen, Koorprodi, dan admin), yang membuktikan bahwa sistem ini efektif, efisien, dan layak diterapkan untuk mendukung alur tata kelola tugas akhir di FIK UPNVJ.

Kata Kunci: Lentera FIK UPNVJ, Tugas Akhir, Sistem Informasi Manajemen, Prototyping, Proyek Kolaboratif, AI Match Meter, User Acceptance Testing (UAT).

PROJECT : DEVELOPMENT AND BUSINESS PROCESS RENEWAL OF THE THESIS SUBMISSION ON THE LENTERA FIK UPNVJ APPLICATION

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ABSTRACT

The rapid advancement of information technology demands digitization and effective business process governance within higher education environments, particularly in final project administrative services. Prior to the implementation of an integrated system, the submission and advising workflow for final projects at the Faculty of Computer Science, Universitas Pembangunan Nasional "Veteran" Jakarta (FIK UPNVJ) frequently encountered bottlenecks, an overconcentration of students on specific topics unaligned with the study program's vision and mission, and limited space for faculty-student project collaboration. This study aims to design and develop additional features (add-ons) for the Lentera FIK UPNVJ application to assist students in searching for and submitting final project titles, provide topic adjustment controls for the Study Program Coordinator (Koorprodi), and facilitate the publication and selection process for faculty research projects. The system was developed using the Prototyping method, encompassing the stages of communication, quick planning, modeling quick design, construction of prototype, and deployment, delivery, and feedback. The system design was modeled using Unified Modeling Language (UML) and Entity Relationship Diagrams (ERD), built with the Next.js framework and a PostgreSQL database. The results demonstrate that the new features successfully facilitate independent title searches and submissions based on topic similarity percentages (AI Match Meter), assist Study Program Coordinators in managing topic banks and title verification, and provide a transparent platform for selecting student teams for faculty projects. System testing conducted via User Acceptance Testing (UAT) yielded high average satisfaction scores across various user roles (students, faculty, coordinators, and administrators), proving that the system is effective, efficient, and suitable for deployment to support the final project governance workflow at FIK UPNVJ.

Keywords**:** Lentera FIK UPNVJ, Final Project, Management Information System, Prototyping, Collaborative Projects, AI Match Meter, User Acceptance Testing (UAT).