

ABSTRAK

Persiapan akreditasi LAM INFOKOM mengalami kendala keterlambatan kompilasi data, tekanan waktu, dan minimnya partisipasi civitas akademika dalam pengumpulan data LKPS. Penelitian mengembangkan purwarupa sistem repositori untuk mengoptimalkan proses pengumpulan data akreditasi menggunakan metodologi *Rapid Application Development* melalui studi kepustakaan dan wawancara PIC kriteria 4 dan 6. Purwarupa berbasis web mengimplementasikan *role-based access control* untuk sepuluh kategori pengguna dengan tujuh fitur: manajemen dokumen CRUD, filter kriteria akreditasi, pencarian komprehensif, *tracking* aktivitas, ekspor PDF, manajemen tenggat waktu, dan *dashboard* visualisasi proses pengumpulan dokumen. Pengujian *blackbox* membuktikan seluruh fungsionalitas memenuhi spesifikasi dengan *output* sesuai ekspektasi. Pengujian beban menggunakan *Apache JMeter* pada simulasi *login* dengan jumlah 60 pengguna menunjukkan rata-rata waktu respons *GET* 698 ms dan *POST* 1.471 ms, sedangkan pada jumlah 500 pengguna meningkat menjadi *GET* 16.682 ms dan *POST* 34.813 ms. Simulasi unggah dokumen PDF 2,4 MB menghasilkan respons 60 pengguna *GET* 1.683 ms dan *POST* 1.632 ms, kemudian meningkat pada 500 pengguna menjadi *GET* 32.298 ms dan *POST* 33.343 ms. Sistem mencapai tingkat keberhasilan 100% tanpa *error*. Implementasi sistem memberikan kontribusi signifikan dalam optimalisasi persiapan akreditasi secara sistematis, transparan, terkoordinasi, meminimalkan kesalahan prosedural, dan mengatasi penundaan pengumpulan data.

Kata kunci : purwarupa sistem, akreditasi LAM INFOKOM, repositori, *Rapid Application Development*

ABSTRACT

Preparation for LAM INFOKOM accreditation faced challenges due to delays in data compilation, time pressures, and minimal participation from the academic community in collecting LKPS data. The research developed a prototype repository system to optimize the accreditation data collection process using the Rapid Application Development methodology through literature review and interviews with key personnel (PICs) for criteria 4 and 6. The web-based prototype implemented role-based access control for ten user categories with seven features: CRUD document management, accreditation criteria filtering, comprehensive search, activity tracking, PDF export, deadline management, and a visualization dashboard for the document collection process. Black-box testing demonstrated that all functionality met specifications, with output meeting expectations. Load testing using Apache JMeter on a simulated login with 60 users showed an average GET response time of 698 ms and POST of 1,471 ms. At 500 users, this increased to 16,682 ms and 34,813 ms. A simulated upload of a 2.4 MB PDF document resulted in a GET response time of 1,683 ms and 1,632 ms for 60 users, which increased to 32,298 ms and 33,343 ms for POST. The system achieved a 100% error-free success rate. The system implementation significantly contributed to optimizing accreditation preparation in a systematic, transparent, and coordinated manner, minimizing procedural errors, and addressing data collection delays.

Keywords: *system prototype, LAM INFOKOM accreditation, repository, Rapid Application Development*