

ABSTRAK

Ronal Sitorus : *Pengembangan Sistem Pengarsipan Surat Berbasis Web Dengan Fitur Pengelolaan Hak Ases Tata Usaha Di Sekolah Dasar Negeri 017126 Sei Tualang Pandau*. Skripsi . Fakultas Teknik. Universitas Negeri Medan.

Penelitian ini bertujuan untuk merancang dan mengimplementasikan sistem informasi pengarsipan surat berbasis web di Sekolah Dasar Negeri 017126 Sei Tualang Pandau. Sistem yang dirancang bertujuan untuk mempermudah proses pengelolaan administrasi tata usaha, yang mencakup transaksi surat masuk, transaksi surat keluar, buku agenda, serta pengelolaan hak akses pengguna. Metode penelitian yang digunakan adalah Research and Development (R&D), dengan model pengembangan sistem menggunakan metode waterfall. Model ini terdiri dari lima tahapan, yaitu: analysis (analisis), design (perancangan sistem), development (implementasi), testing (pengujian), dan maintenance (pemeliharaan). Pengujian sistem dilakukan berdasarkan standar ISO 25010, yang meliputi aspek functional suitability, usability, compatibility, reliability, dan portability. Berdasarkan hasil pengujian menggunakan standar ISO 25010, sistem ini dinyatakan layak untuk digunakan oleh bagian tata usaha di SD Negeri 017126 Sei Tualang Pandau. Hasil pengujian functional suitability memperoleh kategori “sangat baik”, sedangkan pada aspek usability memperoleh nilai sebesar 94,52% yang termasuk dalam kategori sangat baik. Pemakai jumlah 7 responden, pengujian compatibility menggunakan google chrome developer tools berjalan baik tanpa error, dan google Lighthouse untuk validasi standar kode yang hasilnya baik dan lancar. Pengujian reliability memakai Apache Jmeter mendapatkan hasil 100% saat sistem di uji dengan beban puncak hingga 400 user dan tidak menemukan error. Pengembangan pengarsipan surat berbasis web ini dengan fitur pengelolaan tata usaha sudah lulus standar ISO 25010 dalam lima kostum yaitu functional suitability, usability, compatibility, reliability, dan Portability.

Kata Kunci : Pengembangan Sistem Pengarsipan Surat Berbasis Web , *Waterfall*, ISO 25010.

ABSTRACT

Ronal Sitorus: *Development of a Web-Based Letter Archiving System with Administrative Access Rights Management Features at State Elementary School 017126 Sei Tualang Pandau. Thesis. Faculty of Engineering, State University of Medan.*

This research aims to design and implement a web-based letter archiving information system at State Elementary School 017126 Sei Tualang Pandau. The system is designed to simplify the administrative management process, which includes incoming and outgoing mail transactions, agenda books, and user access rights management. The research method used is Research and Development (R&D), with a system development model using the waterfall method. This model consists of five stages: analysis, design, development, testing, and maintenance. System testing is conducted based on the ISO 25010 standard, which covers aspects of functional suitability, usability, compatibility, reliability, and portability. Based on testing results using the ISO 25010 standard, this system was declared suitable for use by the administration department at SD Negeri 017126 Sei Tualang Pandau. The functional suitability test resulted in a "very good" rating, while the usability aspect achieved a score of 94.52%, which is considered very good. Seven users responded to the test. Compatibility testing using Google Chrome Developer Tools ran smoothly without errors, and Google Lighthouse validated the code standards, yielding good and smooth results. Reliability testing using Apache Jmeter achieved a 100% score when the system was tested with a peak load of up to 400 users and found no errors. This web-based mail archiving system, with administrative management features, has passed the ISO 25010 standard in five categories: functional suitability, usability, compatibility, reliability, and portability.

Keywords: Web-Based Mail Archiving System Development, Waterfall, ISO 25010

