

PERANCANGAN SISTEM INFORMASI PERPUSTAKAAN BERBASIS WEB (Studi Kasus: Perpustakaan SDN Banguntapan)

Hersa Faiz Aulia, Sutarman S.Kom., M.Kom., Ph.D.

Abstrak

Pengelolaan perpustakaan di SD N Banguntapan sebelumnya dilakukan secara manual, mulai dari pencatatan kunjungan, peminjaman, pengembalian, hingga pembuatan laporan. Hal ini menyebabkan proses menjadi lambat, kurang akurat, serta berisiko terhadap kesalahan pencatatan dan kehilangan data. Penelitian ini bertujuan untuk merancang dan mengimplementasikan sistem informasi perpustakaan berbasis web guna mendukung proses pengelolaan data perpustakaan agar lebih terstruktur dan terotomatisasi. Penelitian menggunakan metode pengembangan waterfall, dengan tahapan mulai dari observasi, identifikasi masalah, studi literatur, perancangan sistem, desain sistem, implementasi, hingga pengujian sistem. Sistem dikembangkan menggunakan PHP framework Laravel dan basis data MySQL. Hasil implementasi menunjukkan bahwa sistem mampu memfasilitasi pencatatan transaksi kunjungan, peminjaman, pengembalian, pengecekan status peminjaman, serta penyusunan laporan dengan lebih praktis dan terintegrasi. Berdasarkan pengujian menggunakan metode Black Box dengan 37 skenario dinyatakan valid dan pengujian User Acceptance Test (UAT) sistem memperoleh tingkat kepuasan pengguna sebesar 86,75%, yang termasuk dalam kategori "Sangat Setuju". Dengan adanya sistem ini, diharapkan dapat meningkatkan kualitas pelayanan perpustakaan dan mendukung kegiatan belajar mengajar di SD Negeri Banguntapan.

Kata kunci: Sistem Informasi, Perpustakaan, Web, Laravel, SD N Banguntapan.

DESIGNING A WEB-BASED LIBRARY INFORMATION SYSTEM

(Case Study: Banguntapan Elementary School Library)

ABSTRACT

The library management at SD N Banguntapan was previously conducted manually, including the recording of visits, book loans, returns, and the generation of reports. This method resulted in slow processes, inaccuracies, and a high risk of record-keeping errors and data loss. This study aims to design and implement a web-based library information system to support a more structured and automated management of library data. The research employed the Waterfall development method, which included the stages of observation, problem identification, literature review, system design, system implementation, and testing. The system was developed using the Laravel PHP framework and a MySQL database. The implementation results demonstrate that the system effectively facilitates the recording of transactions, including visits, loans, returns, loan status checks, and report generation, making the process more efficient and integrated. Testing using the Black Box method with 37 scenarios confirmed the system's validity, and the User Acceptance Test (UAT) showed a user satisfaction rate of 86.75%, categorized as "Strongly Agree." With the implementation of this system, it is expected that the quality of library services will improve, thereby further supporting teaching and learning activities at SD Negeri Banguntapan.

Keywords: Information System, Library, Web, Laravel, SD N Banguntapan.