

ABSTRAK

Perkembangan penerapan *e-government* mendorong instansi pemerintah untuk menyediakan layanan publik yang berkualitas melalui website. Website Perpustakaan Bantul merupakan media layanan perpustakaan yang digunakan untuk pendaftaran anggota, akses katalog pustaka, peminjaman koleksi, dan penyediaan informasi perpustakaan. Namun, dalam implementasinya masih ditemukan beberapa kendala, seperti proses verifikasi pendaftaran dan login, kecepatan akses website yang belum optimal, permasalahan pencarian katalog, serta isu keamanan. Oleh karena itu, diperlukan evaluasi kualitas website untuk mengetahui tingkat kualitas sistem dan memberikan rekomendasi perbaikan.

Penelitian ini bertujuan mengevaluasi kualitas Website Perpustakaan Bantul menggunakan standar ISO/IEC 25010 yang mencakup delapan karakteristik, yaitu *Functional Suitability*, *performance efficiency*, *compatibility*, *usability*, *Reliability*, *security*, *maintainability*, dan *portability*. Metode penelitian yang digunakan adalah evaluasi kualitas perangkat lunak dengan memanfaatkan *black box testing*, kuesioner CSUQ, serta bantuan tools GTMetrix, JMeter, Acunetix, dan Wappalyzer. Data diperoleh melalui observasi, wawancara, pengujian sistem, dan penyebaran kuesioner kepada pengguna website.

Hasil penelitian menunjukkan bahwa Website Perpustakaan Bantul telah memenuhi lima dari delapan karakteristik ISO/IEC 25010. Karakteristik *Functional Suitability* memperoleh nilai 1, *compatibility* memperoleh nilai 100%, *usability* memperoleh skor 81,51% dengan kategori “Sangat Layak”, *maintainability* memenuhi seluruh aspek pengujian, dan *portability* memperoleh nilai 100%. Sementara itu, karakteristik *performance efficiency*, *Reliability*, dan *security* belum memenuhi standar karena website memperoleh grade D–E pada GTMetrix, nilai reliabilitas sebesar 76,11%, serta tingkat kerentanan keamanan pada kategori *High* (Threat Level 3). Berdasarkan hasil tersebut, direkomendasikan optimalisasi performa website, peningkatan keandalan sistem, serta penguatan aspek keamanan guna meningkatkan kualitas layanan Website Perpustakaan Bantul.

Kata Kunci: ISO/IEC 25010, evaluasi kualitas website, Perpustakaan Bantul, website perpustakaan.

ABSTRACT

The implementation of e-government has encouraged government institutions to provide high-quality public services through websites. The Perpustakaan Bantul Website serves as a digital platform for library services, including member registration, access to library catalogs, collection borrowing, and dissemination of library information. However, several issues have been identified, such as registration and login verification delays, suboptimal website performance, catalog search limitations, and security concerns. Therefore, a quality evaluation is required to assess the website's quality level and provide recommendations for improvement.

This study aims to evaluate the quality of the Perpustakaan Bantul Website using the ISO/IEC 25010 standard, which consists of eight characteristics: Functional Suitability, performance efficiency, compatibility, usability, Reliability, security, maintainability, and portability. The research employed software quality evaluation methods using black box testing, the CSUQ questionnaire, and supporting tools including GTMetrix, JMeter, Acunetix, and Wappalizer. Data were collected through observation, interviews, system testing, and questionnaire distribution to website users.

The results indicate that the Perpustakaan Bantul Website fulfills five out of eight ISO/IEC 25010 quality characteristics. The Functional Suitability characteristic achieved a score of 1, compatibility reached 100%, usability obtained a score of 81.51% categorized as "Very Feasible," maintainability met all assessment criteria, and portability achieved 100%. However, the performance efficiency, Reliability, and security characteristics did not meet the required standards. The website received grades D–E in GTMetrix testing, achieved a Reliability score of 76.11%, and showed a security vulnerability level categorized as High (Threat Level 3). Based on these findings, improvements are recommended in website performance optimization, system Reliability enhancement, and security strengthening to improve the overall quality of the Perpustakaan Bantul Website.

Keywords: *ISO/IEC 25010, website quality evaluation, Perpustakaan Bantul, library website.*