

SISTEM INFORMASI INVENTORI BAHAN BAKU BATIK BERBASIS WEB PADA YULFIE COLLECTION

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ABSTRAK

Yulfie Collection masih mengelola persediaan bahan bakunya dengan pendekatan konvensional. Metode yang masih manual tersebut membuat durasi pencatatan hingga pelaporan menjadi lebih panjang dan rentan terhadap selisih jumlah stok. Di samping itu, pengawasan terhadap ketersediaan bahan baku juga tidak berjalan sistematis yang berdampak pada terganggunya alur produksi. Sebagai solusi atas kendala tersebut, penelitian ini bertujuan untuk merancang sekaligus membangun sebuah sistem informasi inventori bahan baku berbasis web untuk Yulfie Collection. Tahap pengumpulan data mengandalkan metode observasi dan wawancara. Sementara itu, untuk membangun sistem, peneliti menerapkan model *Rapid Application Development* (RAD) yang mencakup fase perencanaan kebutuhan, desain, pengembangan, serta penerapan sistem. Proses analisis kebutuhan sendiri dieksekusi menggunakan kerangka PIECES. Guna mengevaluasi kelayakannya, fungsionalitas program diuji melalui *Black Box Testing*, sedangkan tingkat kecocokannya dengan pengguna diukur menggunakan *User Acceptance Testing* (UAT). Temuan penelitian membuktikan bahwa aplikasi berbasis web yang diciptakan telah memfasilitasi manajemen data bahan baku, pencatatan transaksi masuk dan keluar, pengaturan akun pengguna, pembuatan laporan, hingga monitoring ketersediaan stok. Merujuk pada hasil pengujian Black Box Testing maupun UAT, sistem tersebut terbukti beroperasi secara normal sesuai rancangan desainnya dan mampu memenuhi kebutuhan operasional pihak Yulfie Collection.

Kata Kunci: inventori, bahan baku, rapid application development, sistem informasi, user acceptance testing, web-based

WEB-BASED BATIK RAW MATERIAL INVENTORY INFORMATION SYSTEM AT YULFIE COLLECTION

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ABSTRACT

Yulfie Collection continues to rely on conventional techniques for its raw material inventory management. Such a manual process not only prolongs the recording and reporting phases but also elevates the likelihood of stock inaccuracies. Furthermore, the lack of a structured approach to monitoring material availability threatens to hinder manufacturing operations. In response to these challenges, this research aims to design and construct a web-based information system tailored for raw material inventory at Yulfie Collection. The necessary data were gathered by means of observation and interviews. For system construction, the Rapid Application Development (RAD) methodology was implemented, encompassing the phases of requirements planning, system design, development, and implementation. The PIECES framework served as the basis for analyzing system requirements. To ensure reliability, Black Box Testing was applied to assess the system's functional features, while User Acceptance Testing (UAT) was conducted to verify its alignment with user expectations. The findings reveal that the newly developed web-based application successfully delivers functionalities for managing raw material data, tracking incoming and outgoing items, handling user accounts, generating reports, and monitoring stock levels. Ultimately, the outcomes from both Black Box Testing and UAT evaluations confirm that the system functions entirely as designed and effectively fulfills the operational requirements of Yulfie Collection.

Keywords: *information system, inventory, rapid application development, raw materials, user acceptance testing, web-based*