

ABSTRAK

RANCANG BANGUN SISTEM INFORMASI KASIR DAN PENGELOLAAN STOK BARANG BERBASIS WEBSITE UNTUK EFISIENSI OPERASIONAL TOKO KELONTONG

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Digitalisasi UMKM menjadi langkah penting untuk meningkatkan efisiensi operasional, termasuk di toko kelontong. Penelitian ini bertujuan merancang sistem informasi kasir dan pengelolaan stok berbasis website menggunakan Laravel, guna menggantikan proses manual yang rawan kesalahan dan tidak efisien. Pengembangan sistem dilakukan dengan metode Waterfall, serta menggunakan arsitektur client-server. Laravel digunakan sebagai backend, MySQL sebagai database, dan Apache melalui XAMPP sebagai web server. Sistem menerapkan algoritma FIFO untuk memastikan pengambilan stok berdasarkan urutan barang masuk saat transaksi penjualan. Pengujian menggunakan metode blackbox testing, dan seluruh fitur berjalan sesuai fungsinya. Fitur utama sistem meliputi login multi-level, manajemen barang, transaksi penjualan, laporan PDF, dan notifikasi stok minimum. Hasil penelitian menunjukkan sistem mampu meningkatkan kecepatan, akurasi, dan efisiensi operasional toko kelontong.

Kata Kunci: Sistem Informasi, Kasir, Stok Barang, FIFO

ABSTRACT

DESIGN AND DEVELOPMENT OF A WEB-BASED CASHIER AND INVENTORY MANAGEMENT INFORMATION SYSTEM FOR OPERATIONAL EFFICIENCY IN GROCERY STORES

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The digitalization of micro, small, and medium enterprises (MSMEs) is a crucial step in improving operational efficiency, including for traditional grocery stores. This study aims to design a web-based cashier and inventory management information system using Laravel, intended to replace manual processes that are prone to errors and inefficiency. The system was developed using the Waterfall method and implemented with a client-server architecture. Laravel was used as the backend framework, MySQL as the database, and Apache via XAMPP as the local web server. The system applies the FIFO (First In, First Out) algorithm to ensure stock usage is based on the order of goods received during sales transactions. Black-box testing was used for evaluation, and all features performed according to expectations. Key features include multi-level login, inventory management, sales transactions, PDF reporting, and minimum stock notifications. The results show that the system improves speed, accuracy, and operational efficiency in grocery store operations.

Keywords: Information System, Cashier, Inventory, FIFO