

ABSTRAK

Proses pelaporan cadangan pangan pada Dinas Ketahanan Pangan dan Peternakan Provinsi Sumatera Selatan sebelumnya masih dilakukan secara manual menggunakan Microsoft Excel, sehingga menimbulkan berbagai kendala seperti keterlambatan pengumpulan laporan, risiko kesalahan input data, duplikasi data, serta kesulitan dalam rekapitulasi dan monitoring data secara real-time. Penelitian ini bertujuan untuk merancang dan membangun Aplikasi Pelaporan Cadangan Pangan Berbasis Website yang dapat membantu proses pengelolaan, pelaporan, verifikasi, dan monitoring data cadangan pangan secara terintegrasi. Metode pengembangan sistem yang digunakan adalah Waterfall, dengan tahapan requirement gathering, analysis, design, coding, testing, dan deployment. Pengumpulan data dilakukan melalui wawancara, observasi, dan studi pustaka. Aplikasi dibangun menggunakan teknologi web dengan dukungan basis data terpusat, serta dirancang untuk digunakan oleh tiga jenis pengguna, yaitu admin, pegawai, dan pimpinan. Hasil penelitian menunjukkan bahwa aplikasi yang dibangun mampu mempermudah proses penginputan, penyimpanan, pengelolaan, dan verifikasi laporan cadangan pangan dibandingkan proses manual sebelumnya. Selain itu, aplikasi dapat menyajikan informasi dan statistik cadangan pangan secara real-time, mendukung pengarsipan data yang lebih terstruktur, serta membantu pihak terkait dalam proses monitoring dan pengambilan keputusan. Berdasarkan hasil pengujian black box testing, seluruh fungsi utama pada aplikasi berjalan sesuai dengan kebutuhan sistem, sehingga aplikasi dinyatakan layak digunakan sebagai media pelaporan cadangan pangan pada Dinas Ketahanan Pangan dan Peternakan Provinsi Sumatera Selatan.

Kata Kunci: aplikasi pelaporan, cadangan pangan, website, Waterfall, black box testing

ABSTRACT

The food reserve reporting process at the Department of Food Security and Animal Husbandry of South Sumatra Province was previously carried out manually using Microsoft Excel, which caused various problems such as delays in report collection, risk of data input errors, data duplication, and difficulties in data recapitulation and real-time monitoring. This study aims to design and develop a Website-Based Food Reserve Reporting Application that can support the processes of managing, reporting, verifying, and monitoring food reserve data in an integrated manner. The system development method used in this research is the Waterfall method, which consists of requirement gathering, analysis, design, coding, testing, and deployment stages. Data collection was carried out through interviews, observation, and literature study. The application was developed using web-based technology supported by a centralized database and was designed for three types of users, namely admin, staff, and management. The results of the study indicate that the developed application is able to simplify the process of inputting, storing, managing, and verifying food reserve reports compared to the previous manual process. In addition, the application can provide food reserve information and statistics in real time, support more structured data archiving, and assist related parties in monitoring and decision-making processes. Based on the results of black box testing, all main functions of the application run according to system requirements, so the application is considered feasible to be used as a food reserve reporting medium at the Department of Food Security and Animal Husbandry of South Sumatra Province.

Keywords: reporting application, food reserve, website, Waterfall, black box testing