

ABSTRAK

Perwakilan Badan Kependudukan dan Keluarga Berencana Nasional (BKKBN) Sumatera Selatan masih menerapkan proses peminjaman mobil dinas luar secara manual melalui komunikasi lisan dan pencatatan pada logbook, sehingga menimbulkan kendala berupa kurangnya efisiensi, transparansi, serta kesulitan dalam pengelolaan dan pemantauan data peminjaman. Penelitian ini bertujuan untuk merancang dan membangun aplikasi peminjaman mobil dinas luar berbasis web yang mampu memfasilitasi proses pengajuan, persetujuan, dan pengelolaan kendaraan secara real-time. Metode yang digunakan meliputi identifikasi masalah, pengumpulan data, analisis sistem, perancangan sistem menggunakan Data Flow Diagram (DFD) dan Entity Relationship Diagram (ERD), serta pengujian fungsional menggunakan metode Black Box Testing. Hasil penelitian menunjukkan bahwa aplikasi berhasil dirancang dengan melibatkan tiga aktor utama, yaitu pegawai, admin, dan pimpinan, serta menyediakan fitur pengajuan peminjaman, verifikasi, pengelolaan data kendaraan, monitoring, dan pembuatan laporan. Berdasarkan hasil pengujian Black Box Testing, seluruh fitur aplikasi berfungsi sesuai dengan kebutuhan tanpa ditemukan kesalahan yang mengganggu kinerja sistem. Dengan demikian, aplikasi yang dikembangkan mampu meningkatkan efektivitas, efisiensi, transparansi, dan akuntabilitas dalam proses pengelolaan peminjaman mobil dinas luar di lingkungan BKKBN Sumatera Selatan.

Kata Kunci: Aplikasi Berbasis Web, Peminjaman Mobil Dinas, Sistem Informasi, Black Box Testing, BKKBN Sumatera Selatan.

ABSTRACT

The Representative Office of the National Population and Family Planning Agency (BKKBN) of South Sumatra still manages official vehicle loan requests manually through verbal communication and physical logbook records, resulting in inefficiency, limited transparency, and difficulties in managing and monitoring loan data. This study aims to design and develop a web-based official vehicle loan application that facilitates real-time vehicle reservation, approval, and management processes. The research methods include problem identification, data collection, system analysis, system design using Data Flow Diagrams (DFD) and Entity Relationship Diagrams (ERD), and functional testing using the Black Box Testing method. The results show that the application was successfully designed with three main user roles, namely employees, administrators, and managers, and provides features for vehicle loan requests, verification, vehicle data management, monitoring, and report generation. Based on the Black Box Testing results, all application features functioned as expected without any critical errors affecting system performance. Therefore, the developed application is capable of improving the effectiveness, efficiency, transparency, and accountability of official vehicle loan management within the BKKBN Representative Office of South Sumatra.

Keywords: *Web Based Application, Official Vehicle loan, Information System, Black Box Testing, BKKBN South Sumatra.*