

ABSTRAK

Proses pendaftaran penduduk dan pencatatan sipil pada Dinas Kependudukan dan Pencatatan Sipil (Disdukcapil) Kota Pagar Alam masih dilakukan secara manual melalui formulir fisik dan penginputan data berulang, sehingga menyebabkan antrean panjang, penumpukan berkas, dan pelayanan yang kurang efisien. Penelitian ini bertujuan untuk merancang dan membangun Sistem Informasi Layanan Administrasi Kependudukan Berbasis *Website* yang mendukung pendaftaran daring, pengelolaan data terintegrasi, dan pemantauan status layanan secara *real-time*. Metode pengembangan sistem yang digunakan adalah *waterfall*, yang meliputi tahapan analisis, desain, implementasi, pengujian, dan pemeliharaan. Pengumpulan data dilakukan melalui observasi, wawancara, dokumentasi, dan studi pustaka. Sistem dibangun menggunakan PHP dengan framework *Laravel* dan basis data MySQL, serta diuji menggunakan metode *Black Box Testing*. Hasil penelitian menunjukkan bahwa aplikasi Dukcapil Digital berhasil diimplementasikan dengan tiga hak akses utama, yaitu Masyarakat, Admin, dan Kepala Dinas. Fitur yang dikembangkan meliputi registrasi akun berbasis validasi NIK, pengajuan dokumen kependudukan seperti Kartu Keluarga, Akta Kelahiran, Akta Kematian, dan Pindah Domisili, pelacakan status berkas, manajemen antrean loket harian dengan kuota otomatis maksimal 70 berkas per hari, serta ekspor laporan rekapitulasi dalam format PDF. Berdasarkan hasil pengujian fungsional, seluruh fitur sistem berjalan dengan baik tanpa ditemukan kegagalan fungsi. Dengan demikian, aplikasi ini layak diterapkan untuk mendigitalisasi birokrasi, meningkatkan efisiensi kerja petugas, serta mewujudkan transparansi pelayanan publik bagi masyarakat Kota Pagar Alam.

Kata kunci: Sistem Informasi, Administrasi Kependudukan, *Website*, *Waterfall*, *Laravel*.

ABSTRACT

The population registration and civil registry processes at the Department of Population and Civil Registration (Disdukcapil) of Pagar Alam City are currently still conducted manually through physical forms and redundant data entry, leading to long queues, file accumulation, and inefficient services. This research aims to design and develop a web-based Population Administration Service Information System that supports online registration, integrated data management, and real-time service status monitoring. The system development method employed is the Waterfall model, which encompasses the stages of analysis, design, implementation, testing, and maintenance. Data collection was carried out through observation, interviews, documentation, and literature review. The system was built using PHP with the Laravel framework and a MySQL database, and it was tested using the Black Box Testing method. The results indicate that the "Dukcapil Digital" application was successfully implemented with three primary access levels: Citizen, Admin, and Head of Department. The developed features include NIK validation-based account registration, submission of population documents such as Family Cards, Birth Certificates, Death Certificates, and Domicile Relocation, file status tracking, daily counter Queue Management with an automated daily quota of up to 70 files, and recap report export in PDF format. Based on the functional testing results, all system features operated properly without any functional failures. Consequently, this application is feasible to be implemented to digitalize bureaucracy, enhance officers' operational efficiency, and establish public service transparency for the people of Pagar Alam City.

Keywords: Information Systems, Population Administration, Website, Waterfall, Laravel.