

ABSTRAK

Proses pengajuan dan perhitungan upah lembur karyawan tetap di Perumda Tirta Musi Palembang Unit Pelayanan Rambutun masih dilakukan menggunakan Microsoft Excel dan dokumen fisik yang belum terintegrasi dalam satu sistem. Kondisi tersebut menyebabkan pengelolaan data lembur memerlukan waktu yang lebih lama serta berpotensi menimbulkan kesalahan dalam pencatatan dan perhitungan upah lembur. Untuk mengatasi permasalahan tersebut, penelitian ini bertujuan membangun aplikasi pengajuan dan perhitungan upah lembur karyawan tetap berbasis *website* yang dapat membantu proses pengelolaan lembur secara terintegrasi. Pengumpulan data dilakukan melalui observasi, wawancara, dan studi pustaka, sedangkan pengembangan sistem menggunakan metode *Waterfall*. Perancangan sistem dilakukan menggunakan *Unified Modeling Language* (UML) yang terdiri dari *Use Case Diagram*, *Activity Diagram*, *Sequence Diagram*, dan *Class Diagram*. Aplikasi dikembangkan menggunakan *framework Laravel* dan *database MySQL*. Hasil penelitian menunjukkan bahwa aplikasi mampu mengintegrasikan proses pengajuan Surat Perintah Lembur (SPL), persetujuan oleh manager dan direktur, rekapitulasi data lembur, perhitungan upah lembur secara otomatis, serta pembuatan laporan pembayaran lembur. Berdasarkan pengujian menggunakan metode *Black Box Testing*, terdapat 27 item pengujian utama yang telah dilakukan pada sistem dan seluruh fungsi sistem berjalan sesuai dengan kebutuhan pengguna. Dengan adanya aplikasi ini, proses pengajuan dan perhitungan upah lembur dapat dilakukan dengan lebih cepat dan akurat, sehingga membantu meminimalkan kesalahan pengolahan data, mempermudah pemantauan data lembur, serta mendukung kinerja pegawai dalam pengelolaan administrasi lembur.

Kata Kunci: Pengajuan Lembur, Perhitungan Upah Lembur, Karyawan Tetap, *Waterfall*, *Laravel*.

ABSTRACT

The overtime submission and overtime wage calculation processes for permanent employees at Perumda Tirta Musi Palembang, Rambutan Service Unit, are still carried out using Microsoft Excel and physical documents that are not integrated into a single system. This condition causes overtime data management to take longer and increases the risk of errors in recording and calculating overtime wages. To address these issues, this study aims to develop a web based application for overtime submission and overtime wage calculation for permanent employees that supports integrated overtime management. Data were collected through observation, interviews, and literature studies, while the system was developed using the Waterfall method. The system was designed using Unified Modeling Language (UML), consisting of Use Case Diagrams, Activity Diagrams, Sequence Diagrams, and Class Diagrams. The application was developed using the Laravel framework and MySQL database. The results show that the application is able to integrate the processes of Overtime Work Order (SPL) submission, approval by managers and directors, overtime data recapitulation, automatic overtime wage calculation, and overtime payment report generation. Based on testing using the Black Box Testing method, there were 27 main test items conducted on the system, and all system functions operated in accordance with user requirements.. The application enables overtime submission and wage calculation processes to be carried out more quickly and accurately, helping to minimize data processing errors, simplify overtime monitoring, and support employee performance in managing overtime administration.

Keywords: Overtime Submission, Overtime Wage Calculation, Permanent Employees, Waterfall, Laravel.