

ABSTRAK

Pengelolaan data operasional pada Bimbingan Belajar Privat Juara masih dilakukan menggunakan berbagai media yang terpisah, seperti WhatsApp, Microsoft Excel, aplikasi catatan, dan pencatatan manual. Kondisi tersebut menyebabkan proses pendaftaran siswa, penyaluran guru, penjadwalan, absensi, pembayaran SPP, dan penggajian belum terintegrasi sehingga meningkatkan risiko kesalahan pencatatan, duplikasi data, serta keterlambatan pelaporan. Penelitian ini bertujuan membangun aplikasi pengelolaan data operasional berbasis website yang mampu mengintegrasikan seluruh proses operasional sesuai dengan hak akses admin pusat, admin cabang, guru, dan siswa. Metode yang digunakan adalah Waterfall yang meliputi analisis kebutuhan, perancangan sistem menggunakan UML, implementasi, dan pengujian menggunakan Black Box Testing. Hasil penelitian menunjukkan bahwa aplikasi berhasil dikembangkan dengan sekitar 60 halaman atau form yang mendukung pengelolaan data siswa dan guru, penyaluran guru, penjadwalan, absensi, pembayaran SPP, penggajian, serta pelaporan operasional. Berdasarkan hasil pengujian, seluruh fungsi utama berjalan sesuai kebutuhan. Dengan demikian, aplikasi ini mampu meningkatkan efisiensi pengelolaan operasional, mengurangi kesalahan pencatatan dan duplikasi data, serta mempermudah monitoring operasional lintas cabang secara real-time.

Kata Kunci: Pengelolaan data operasional, Bimbingan Belajar, Website, waterfall, black box testing.

ABSTRACT

Operational activities at Bimbingan Belajar Privat Juara are still managed using separate media, including WhatsApp, Microsoft Excel, note-taking applications, and paper-based records. This condition causes student registration, teacher assignment, scheduling, attendance, tuition payment, and payroll processes to be fragmented, resulting in recording errors, data duplication, and reporting delays. This study aims to develop a web-based operational data management application that integrates these activities into a centralized system for central administrators, branch administrators, teachers, and students. The system was developed using the Waterfall method, consisting of requirements analysis, system design using UML, implementation, and Black Box Testing. The application provides approximately 60 pages or forms that support student and teacher management, scheduling, attendance, teacher assignment, tuition payment, payroll, and operational reporting. The testing results indicate that all major functions perform as expected. Therefore, the application improves operational efficiency, minimizes recording errors and data duplication, and enables real-time monitoring across branches, supporting faster and more accurate decision-making.

Keywords: Operational Data Management, Tutoring Center, Website, Waterfall, Black Box Testing.