

ABSTRAK

EDUNEX PAC IPNU IPPNU Kalitengah Lamongan merupakan program yang bergerak di bidang pendidikan dan organisasi, seperti MPLS, LDKMS, seminar, dan pelatihan. Pengelolaan layanan, pemesanan kegiatan, pembayaran, serta penjadwalan masih dilakukan secara manual sehingga menyebabkan data tersebar, proses pengecekan berulang, serta berpotensi menimbulkan keterlambatan informasi dan benturan jadwal. Penelitian ini bertujuan merancang sistem informasi pemesanan jasa *event organizer* pendidikan berbasis *website* untuk mendukung pengelolaan layanan EDUNEX. Metode pengembangan yang digunakan adalah *System Development Life Cycle (SDLC)* model *Waterfall* yang meliputi analisis kebutuhan, perancangan, implementasi, dan pengujian. Sistem dimodelkan menggunakan *Unified Modeling Language (UML)* dan diimplementasikan menggunakan framework *Laravel*. Hasil penelitian menunjukkan bahwa seluruh fungsi sistem berjalan sesuai kebutuhan berdasarkan pengujian *Blackbox Testing*. Pengujian performa menggunakan Apache JMeter menunjukkan bahwa sistem mampu menangani akses 5, 10, dan 20 pengguna virtual dengan nilai error sebesar 0% serta waktu *respons* rata-rata yang masih berada dalam batas yang dapat diterima. Selain itu, pengujian *User Acceptance Testing (UAT)* memperoleh nilai 87.43% dari pengguna dan 96% dari administrator yang termasuk kategori Sangat Setuju. Hasil tersebut menunjukkan bahwa sistem dapat mendukung pengelolaan layanan EDUNEX secara lebih efektif, terintegrasi, dan andal.

Kata kunci: Sistem Informasi, *Event Organizer Pendidikan*, *Waterfall*, *User Acceptance Testing*

ABSTRACT

EDUNEX PAC IPNU IPPNU Kalitengah Lamongan was a program operating in the fields of education and organizational development, providing services such as MPLS, LDKMS, seminars, and training activities. The management of services, event bookings, payments, and scheduling was still carried out manually and was not yet integrated, resulting in scattered data, repetitive verification processes, delays in information delivery, and potential scheduling conflicts. These conditions indicated the need for an information system capable of integrating all service processes into a centralized platform. This study aimed to design and develop a website-based service booking information system to support service management at EDUNEX. The system was developed using the System Development Life Cycle (SDLC) Waterfall model, which consisted of requirement analysis, design, implementation, and testing stages. The system was modeled using Unified Modeling Language (UML) and was implemented using the Laravel framework. The results showed that all system functions operated according to the specified requirements based on Blackbox Testing. Performance testing using Apache JMeter demonstrated that the system was capable of handling 5, 10, and 20 concurrent virtual users with an error rate of 0% and acceptable average response times. Furthermore, User Acceptance Testing (UAT) produced scores of 87.43% from users and 96% from administrators, which were categorized as Strongly Agree. These findings indicated that the developed system could support EDUNEX service management more effectively, in an integrated, structured, and reliable manner.

Keywords: Information System, Event Organizer Education, Waterfall, User Acceptance Testing