

Alvienda Ricka Seviaana. 2026. *Pengembangan Sistem Informasi Penerimaan Peserta Didik Baru Berbasis Web Di MA Sunan Kalijaga Nganjuk*. Skripsi, Program Studi Pendidikan Informatika, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Trunodjoyo Madura. Pembimbing: Nuru Aini, S.Kom., M.Kom.

ABSTRAK

Proses Penerimaan Peserta Didik Baru (PPDB) di MA Sunan Kalijaga Nganjuk masih dilakukan secara manual sehingga kurang efisien dalam pengelolaan data dan penyampaian informasi. Selain itu, calon peserta didik harus datang langsung ke sekolah untuk melakukan pendaftaran dan menyerahkan berkas persyaratan. Penelitian ini bertujuan untuk mengembangkan Sistem Informasi Penerimaan Peserta Didik Baru berbasis web serta mengetahui kualitas sistem berdasarkan standar ISO 25010. Pengembangan sistem menggunakan *framework* Laravel dengan metode *Software Development Life Cycle* (SDLC) model *Waterfall* yang meliputi tahapan *requirements definition*, *system and software design*, *implementation and unit testing*, *integration and system testing*, serta *operation and maintenance*. Pengujian sistem dilakukan pada aspek *Functional Suitability*, *Performance Efficiency*, *Usability*, *Maintainability*, *Portability*, *Compatibility*, *Reliability*, dan *Security*. Hasil pengujian menunjukkan bahwa sistem memperoleh nilai *Functional Suitability* 100%, *Usability* 93,41%, *Portability* 100%, dan *Reliability* 99,74%. Aspek *Performance Efficiency* menghasilkan rata-rata waktu muat halaman 1,21 detik dengan nilai *PageSpeed* 93% dan *YSlow* 97,67%. Selain itu, sistem dapat berjalan dengan baik pada berbagai perangkat dan *browser*, mudah dipelihara, serta tidak ditemukan kerentanan keamanan dengan tingkat risiko *Critical* maupun *High*. Berdasarkan hasil tersebut, sistem yang dikembangkan dinyatakan layak digunakan untuk mendukung pelaksanaan PPDB secara efektif di MA Sunan Kalijaga Nganjuk.

Kata Kunci: penerimaan peserta didik baru, sistem informasi, web, *Waterfall*.

Alvienda Ricka Seviana. 2026. Development of a Web-Based New Student Admission Information System at MA Sunan Kalijaga Nganjuk. Thesis, Informatics Education Study Program, Faculty of Teacher Training and Education, Trunodjoyo University, Madura. Supervisor: Nuru Aini, S.Kom., M.Kom.

ABSTRACT

The New Student Admission Process (PPDB) at MA Sunan Kalijaga Nganjuk is still done manually so it is less efficient in data management and conveying information. In addition, prospective students must come directly to the school to register and submit the required documents. This study aims to develop a web-based New Student Admission Information System and determine the quality of the system based on the ISO 25010 standard. The system development uses the Laravel framework with the Software Development Life Cycle (SDLC) method of the Waterfall model which includes the stages of requirements definition, system and software design, implementation and unit testing, system integration and testing, and operation and maintenance. System testing was carried out on the aspects of Functional Suitability, Performance Efficiency, Usability, Maintainability, Portability, Compatibility, Reliability, and Security. The test results show that the system obtained a Functional Suitability score of 100%, Usability 93.41%, Portability 100%, and Reliability 99.74%. The Performance Efficiency aspect resulted in an average page load time of 1.21 seconds with a PageSpeed value of 93% and YSlow of 97.67%. In addition, the system can run well on various devices and browsers, is easy to maintain, and no security vulnerabilities were found with a Critical or High risk level. Based on these results, the developed system is declared suitable for use to support the effective implementation of PPDB at MA Sunan Kalijaga Nganjuk.

Keywords: *acceptance of new students, information systems, website, Waterfall.*