

Nor Halimah. 2026. Pengembangan Sistem Informasi Akademik Berbasis Website di SMKS Al Muhajirin. Skripsi, Program Studi Pendidikan Informatika, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Trunodjoyo Madura. Pembimbing : Nuru Aini, S.Kom., M.Kom.

ABSTRAK

SMKS Al Muhajirin masih mengalami kendala dalam pengelolaan administrasi akademik karena sebagian besar proses dilakukan secara manual. Kondisi tersebut menyebabkan kesulitan dalam pengelolaan data siswa, guru, jadwal pelajaran, absensi, nilai, serta laporan akademik yang berpotensi menimbulkan kesalahan dan keterlambatan informasi. Penelitian ini bertujuan untuk mengembangkan Sistem Informasi Akademik berbasis *website* guna mempermudah pengelolaan data akademik secara lebih efektif dan efisien serta Mengetahui hasil pengujian sistem informasi akademik dengan pengujian standar ISO 25010. Metode yang digunakan dalam penelitian ini adalah *Research and Development* dengan model *Waterfall*. Tahapan pengembangan meliputi analisis kebutuhan, perancangan sistem, implementasi, pengujian, dan pemeliharaan. Sistem dikembangkan menggunakan bahasa pemrograman PHP dengan framework *Laravel* 10 dan basis data MySQL. Pengujian sistem dilakukan berdasarkan standar ISO 25010 pada aspek *functional suitability*, *Performance efficiency*, *portability*, dan *usability*. Hasil pengujian menunjukkan bahwa aspek *functional suitability* memperoleh nilai sebesar 100%, aspek *usability* memperoleh nilai sebesar 85%, serta aspek *performance efficiency* menunjukkan waktu respons rata-rata sebesar 2,2 detik. Selain itu, sistem mudah dipelihara dan dapat dijalankan pada berbagai browser. Berdasarkan hasil pengujian tersebut, Sistem Informasi Akademik berbasis *website* yang dikembangkan dinyatakan layak untuk diterapkan di SMKS Al Muhajirin karena mampu membantu pengelolaan data akademik secara lebih cepat, akurat, dan terstruktur.

Kata Kunci: ISO 25010, Sistem Informasi Akademik, *Website*, *Laravel*, *Waterfall*.

Nor Halimah. 2026. Development of a Website-Based Academic Information System at SMKS Al Muhajirin. Undergraduate Thesis, Informatics Education Study Program, Faculty of Teacher Training and Education, Universitas Trunojoyo Madura. Supervisor: Nuru Aini, S.Kom., M.Kom.

ABSTRACT

SMKS Al Muhajirin still faces challenges in managing academic administration, as most processes are carried out manually. This condition leads to difficulties in managing student data, teacher data, class schedules, attendance, grades, and academic reports, which can potentially cause errors and delays in information delivery. This study aims to develop a website-based Academic Information System to facilitate academic data management more effectively and efficiently, as well as to evaluate the system using the ISO 25010 standard. The method used in this study is Research and Development with the Waterfall model. The development stages include requirements analysis, system design, implementation, testing, and maintenance. The system was developed using the PHP programming language with the Laravel 10 framework and a MySQL database. System testing was conducted based on the ISO 25010 standard, covering the aspects of functional suitability, performance efficiency, portability, and usability. The test results show that the functional suitability aspect achieved a score of 100%, the usability aspect achieved a score of 85%, and the performance efficiency aspect demonstrated an average response time of 2.2 seconds. In addition, the system is easy to maintain and can be run on various browsers. Based on these test results, the website-based Academic Information System developed is declared suitable for implementation at SMKS Al Muhajirin, as it is capable of supporting academic data management in a faster, more accurate, and more structured manner.

Keywords: ISO 25010, Academic Information System, Website, Laravel, Waterfall.