

ABSTRAK

SISTEM INFORMASI AKADEMIK MADRASAH IBTIDAIYAH NURUL HUDA SUKAHARJO BERBASIS WEB

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Sekolah merupakan pusat pembelajaran yang memiliki beberapa elemen seperti guru, siswa dan mata pelajaran. Setiap elemen perlu dilakukan rekapitulasi data sehingga sekolah perlu melakukan pelaporan di setiap bulannya. Penelitian ini dilakukan di Madrasah Ibtidaiyah Nurul Huda Sukaharjo dengan tujuan membuat suatu sistem informasi sekolah menggunakan website untuk mengelola data Pendidikan seperti data siswa, data pelajaran dalam meningkatkan efisiensi dan efektifitas. Sehingga mempercepat proses pelaporan rekapitulasi data di sekolah. Sistem informasi yang digunakan berbasis web dengan menggunakan metode *Waterfall* yang memiliki enam tahapan yaitu *requirement, analysis, design, coding, testing* dan *maintance*. Perancangan sistem menggunakan Unified Modelling Language (UML) dengan menggunakan activity diagram serta membuat rancangan tampilan interface. Pengujian dilakukan dengan metode *Black Box Testing* dengan memperhatikan kesalahan secara detail seperti fungsi yang salah, kesalahan antarmuka pengguna, kesalahan pada struktur data dan akses dari basis data serta kesalahan inisialisasi dan terminasi. Hasil penelitian pada sistem informasi akademik madrasah ibtidaiyah nurul huda sukaharjo berhasil membangun sistem informasi akademik dengan hasil pengujian *black box testing* dan dapat digunakan pada madrasah ibtidaiyah nurul huda sukaharjo.

Kata kunci: Sekolah, *Waterfall*, *Black Box Testing*

ABSTRACT

WEB-BASED ACADEMIC INFORMATION SYSTEM OF MADRASAH IBTIDAIYAH NURUL HUDA SUKAHARJO

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School is a main learning stage that has several elements such as teachers, students and learning subjects. Each element has a data that needs to be recapitulated so that school needs to report every month. This research was conducted in Madrasah Ibtidaiyah Nurul Huda Sukaharjo with the aim of research is creating a school information system by using a website in managing their education data such as students' data and lessons' data so that it becomes more efficient and effective in the process of reporting data recapitulation at school. The information system used is a web based by using Codeigniter Framework with the system development model. The researcher uses the Waterfall method that has six stages, those are requirement, analysis, design, coding, testing, and maintenance. The system design uses the Unified Modeling Language (UML) by implementing diagrams activity and building an interface display design. The testing was done by using the Black Box Testing by paying attention to error details such as malfunction, user interface error, error in data structures and databases access, also initialization and termination error. The result of this research in academic information system of Madrasah Ibtidaiyah Nurul Huda Sukaharjo is successful in building an academic information system with the result of Black Box Testing and it can be used at Madrasah Ibtidaiyah Nurul Huda Sukaharjo.

Keyword: *School, Waterfall, Black Box Testing*