

ABSTRAK

Brydon Tua Situmorang : *Perancangan Aplikasi Pembayaran Sumbangan Pembinaan Pendidikan (SPP) Di SMKN1 Percut Sei Tuan Menggunakan Metode Unified Software Development Process (USDP)*. Skripsi. Fakultas Teknik Universitas Negeri Medan. 2025

Pada SMKN 1 Percut Sei Tuan yang terletak di Jl. Kolam No.3, Kenangan Baru, Kec. Percut Sei Tuan, Kabupaten Deli Serdang, Sumatera Utara 20371. Seperti banyak sekolah lainnya, mereka memiliki sistem pembayaran SPP (Sumbangan Pembinaan Pendidikan) untuk siswa mereka. Namun, sistem yang mereka gunakan saat ini masih bersifat manual. Sistem pembayaran SPP di SMKN 1 Percut Sei Tuan masih dilakukan secara manual, dengan pencatatan melalui file Excel yang memakan waktu 5–15 menit per transaksi dan menyebabkan antrian panjang. Penelitian ini bertujuan merancang aplikasi pembayaran SPP menggunakan metode Unified Software Development Process (USDP) serta mengukur hasil dan manfaatnya. Uji coba dilakukan terhadap 10 siswa, 2 ahli sistem, dan 1 staf keuangan. Hasil menunjukkan seluruh fitur berjalan normal di empat browser (suitability dan portability). Uji functional suitability memperoleh nilai 100%, functional usability 90,71%, dan uji usability siswa 98,43%, semuanya masuk kategori sangat bermanfaat. Kesimpulannya, aplikasi ini efektif mengatasi kendala sistem manual, meningkatkan efisiensi kerja staf, mempercepat transaksi, serta memberikan informasi pembayaran yang transparan dan real-time. Aplikasi ini sangat layak diterapkan dalam administrasi sekolah.

Kata Kunci: Sistem Pembayaran SPP, Website, *Unified Software Development Process*



ABSTRACT

Brydon Tua Situmorang : *Design of Educational Development Contribution Payment Application (SPP) at SMKN1 Percut Sei Tuan Using Unified Software Development Process (USDP) Method. Thesis. Faculty of Engineering, State University of Medan. 2025*

At SMKN 1 Percut Sei Tuan, located at Jl. Kolam No. 3, Kenangan Baru, Percut Sei Tuan District, Deli Serdang Regency, North Sumatra 20371. Like many other schools, they have an SPP (Education Development Contribution) payment system for their students. However, the system they currently use is still manual. The SPP payment system at SMKN 1 Percut Sei Tuan is still done manually, with recording via Excel files that take 5–15 minutes per transaction and cause long queues. This study aims to design a SPP payment application using the Unified Software Development Process (USDP) method and measure its results and benefits. The trial was conducted on 10 students, 2 system experts, and 1 finance staff. The results show that all features run normally on four browsers (suitability and portability). The functional suitability test obtained a score of 100%, functional usability 90.71%, and student usability test 98.43%, all in the very useful category. In conclusion, this application effectively overcomes manual system constraints, improves staff work efficiency, speeds up transactions, and provides transparent and real-time payment information. This application is very suitable for implementation in school administration.

Keyword: *Tuition Payment System, Website, Unified Software Development Process*

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