INTEGRASI API *MIDTRANS* DALAM SISTEM PEMBAYARAN RESERVASI SALON BERBASIS WEB

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ABSTRAK

Industri salon terus berkembang seiring meningkatnya kesadaran masyarakat akan perawatan diri, namun masih banyak salon menggunakan reservasi manual yang tidak efisien. Salah satunya adalah Salon Ty-2 (Two) di Pematangsiantar, yang masih menggunakan reservasi melalui media sosial dan pembayaran secara tunai, sehingga rawan *miskomunikasi,* tumpang tindih jadwal, serta memperlambat transaksi. Penelitian ini mengembangkan sistem reservasi salon berbasis web dengan metode *Rapid Application Development* (RAD), yang memungkinkan pengembangan cepat dan responsif melalui prototipe iteratif. Sistem ini menyediakan fitur reservasi *online*, pemilihan layanan dan jadwal, manajemen karyawan, *dashboard* operasional, integrasi visualisasi 3D model rambut, serta *chatbot*. Integrasi API *Midtrans* mendukung berbagai metode pembayaran digital, seperti *e-wallet*, QRIS, transfer bank, dan kartu kredit, sekaligus tetap menyediakan opsi tunai. Hasil uji fungsionalitas dengan *blackbox* menunjukkan semua fitur berjalan sesuai harapan, yaitu sistem mampu merespons setiap aksi pengguna dengan tepat dengan 47 skenario yang dicobakan. Uji performa menunjukkan rata-rata waktu respons di bawah *Service Level Agreement* (SLA) sebesar 250 *ms*, bahkan pada beban tinggi tidak terjadi permintaan yang gagal. Tingkat penerimaan pengguna mencapai 87,66% dan termasuk ke dalam kategori "Sangat Baik". Sistem ini dinilai mampu meningkatkan efisiensi operasional, kenyamanan, dan kepuasan pelanggan.

Kata kunci : sistem reservasi, salon, pembayaran digital, *Rapid Application Development*

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ABSTRACT

The salon industry continues to grow as public awareness of self-care increases; however, many salons still rely on manual reservation methods that are inefficient. One example is Salon Ty-2 (Two) in Pematangsiantar, which still uses social media for reservations and cash payments, making it prone to miscommunication, overlapping schedules, and slower transactions. This study developed a web-based salon reservation system using the Rapid Application Development (RAD) method, enabling fast and responsive development through iterative prototyping. The system provides features such as online reservations, service and schedule selection, employee management, operational dashboards, 3D hairstyle visualization, and a chatbot. The integration of the Midtrans API supports various digital payment methods, including e-wallets, QRIS, bank transfers, and credit cards, while still offering a cash option. Functional testing with blackbox results show that all features work as expected, with the system accurately responding to each user action that 47 scenarios for testing. Performance testing indicates an average response time below the Service Level Agreement (SLA) threshold of 250 ms, with no failed requests even under high load. User acceptance reached 87.66%, categorized as "Very Good." This system is considered effective in improving operational efficiency, user convenience, and customer satisfaction.

***Keywords**: reservation system, salon, digital payment, Rapid Application Developmen*