

ABSTRAK

RANCANG BANGUN APLIKASI RESERVASI GEDUNG UNTUK KEGIATAN EKSTRAKURIKULER BERBASIS ANDROID (STUDI KASUS : SMAN 1 TANJUNG BINTANG)

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Pengelolaan reservasi gedung untuk kegiatan ekstrakurikuler di SMAN 1 Tanjung Bintang yang masih dilakukan secara manual kerap menimbulkan kendala, seperti inefisiensi proses, kesalahan pencatatan, dan konflik jadwal antar pengguna. Untuk mengatasi hal tersebut, penelitian ini merancang dan membangun sebuah aplikasi sistem informasi manajemen reservasi berbasis Android bernama “RESERVASIKUY”. Aplikasi dikembangkan menggunakan *framework Flutter*, layanan *backend Firebase*, serta metode pengembangan *Kanban*, dengan dukungan tiga peran utama: *Userektrakurikuler*, *Supervisor*, dan *Superadmin*. Pengujian dilakukan melalui dua tahap: pertama, pengujian fungsionalitas menggunakan teknik *black-box testing* berbasis *decision table* dengan 37 skenario yang seluruhnya dinyatakan lolos; kedua, pengujian pengalaman pengguna melalui *User Experience Questionnaire* (UEQ) yang melibatkan 34 responden. Hasil UEQ menunjukkan skor rata-rata pada keenam dimensi (Daya Tarik, Kejelasan, Efisiensi, Ketepatan, Stimulasi, dan Kebaruan) berada pada kategori *Excellent*. Berdasarkan hasil tersebut, dapat disimpulkan bahwa RESERVASIKUY mampu memberikan solusi yang efektif, efisien, dan mudah diterima oleh pengguna dalam mengatasi permasalahan manajemen reservasi gedung di sekolah.

Kata kunci — Sistem Informasi, Reservasi Gedung, Android, Flutter, Firebase, Kanban, User Experience Questionnaire.

ABSTRACT

DESIGN ANDROID BASED BUILDING RESERVATION APPLICATION FOR EXTRACURRICULAR ACTIVITIES (CASE STUDY: SMAN 1 TANJUNG BINTANG)

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The manual management of extracurricular venue reservations at SMAN 1 Tanjung Bintang often leads to inefficiency, data errors, and scheduling conflicts. To address these issues, this research designed and developed an Android-based information system named “RESERVASIKUY”. The application was built using the Flutter framework and Firebase as the backend, following the Kanban development methodology. It provides support for three distinct user roles: extracurricular user, supervisor, and superadmin. System validation was carried out in two stages. First, functional testing was performed through black-box testing with a decision table approach, covering 37 scenarios, all of which successfully passed. Second, user experience evaluation was conducted using the User Experience Questionnaire (UEQ) involving 34 respondents. The results indicated excellent ratings across all six dimensions (Attractiveness, Clarity, Efficiency, Dependability, Stimulation, and Novelty). These findings confirm that RESERVASIKUY delivers an effective, efficient, and user-friendly solution for managing venue reservations, and can serve as a practical alternative to replace the manual process previously used at the school.

Kata kunci — Information System, Venue Reservation, Android, Flutter, Firebase, Kanban, User Experience Questionnaire.