

Evaluasi Usability Aplikasi Mobile Access by KAI Menggunakan Metode Heuristic Evaluation dan User Testing

ABSTRAK

Penelitian ini bertujuan menilai *usability* aplikasi mobile Access by KAI dengan menggabungkan metode *Heuristic Evaluation* Jakob Nielsen dan pengujian pengguna berbasis metrik ISO 9241-11 (*Effectiveness, Efficiency, Satisfaction*). Latar belakang penelitian berangkat dari nilai rata-rata aplikasi di *Playstore* yang cukup rendah yaitu dengan nilai 3,2 (Agustus 2023) hingga 3,3 (April 2025) yang menandakan adanya isu kenyamanan penggunaan. Tahap pertama melibatkan 3 *evaluator* UI/UX yang menemukan 30 masalah *usability*, di mana pelanggaran terbesar terjadi pada prinsip “*Match Between System and the Real World*”, “*Visibility of System Status*”, dan “*Consistency and Standards*”, dengan sebagian masalah tergolong kritis dan mayor. Tahap kedua melibatkan 10 mahasiswa Universitas Malikussaleh yang mengerjakan 14 skenario tugas utama. Hasil pengujian menunjukkan Tingkat Penyelesaian Tugas sebesar 92,57 %, *Time-Based Efficiency* mencapai 1,210 tugas per menit, dan *Overall Relative Efficiency* sebesar 74,99 %, survei kepuasan menggunakan *System Usability Scale* menghasilkan skor rata-rata 67%, yang masuk dalam kategori “C” cukup (*Average*). Secara keseluruhan, aplikasi Access by KAI dinilai cukup memuaskan secara umum, namun masih perlu beberapa peningkatan efisiensi pada alur pemesanan, desain antarmuka dan juga konsistensi standar. Rekomendasi utama meliputi penyederhanaan tampilan desain visual, konsistensi sistem pembayaran dan bahasa, mempercepat alur pemesanan tiket, serta umpan balik *realtime* guna meningkatkan kenyamanan.

Kata Kunci: *Usability, Heuristic Evaluation, Effectiveness, Efficiency, Satisfaction (EES), System Usability Scale, Access by KAI.*

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ABSTRACT

This study aims to evaluate the usability of the Access by KAI mobile application by combining Jakob Nielsen's Heuristic Evaluation method with user testing based on the ISO 9241-11 metrics (Effectiveness, Efficiency, and Satisfaction). The research was prompted by the application's relatively low average rating on the Google Play Store, which ranged from 3.2 (August 2023) to 3.3 (April 2025), indicating potential issues related to user comfort. The first phase involved three UI/UX evaluators who identified 30 usability issues, with the most frequent violations occurring under the principles of "Match Between System and the Real World," "Visibility of System Status," and "Consistency and Standards." Several of these issues were categorized as major or critical in severity. The second phase included usability testing with ten students from Malikussaleh University performing 14 core task scenarios. The results showed a Task Completion Rate of 92.57%, a Time-Based Efficiency of 1.210 tasks per minute, and an Overall Relative Efficiency of 74.99%. A satisfaction survey using the System Usability Scale (SUS) yielded an average score of 67%, which falls into the "C" or "average" category. Overall, the Access by KAI application was assessed as moderately satisfying in terms of usability. However, improvements are still needed, particularly in optimizing the ticket booking flow, enhancing interface design, and ensuring standard consistency. Key recommendations include simplifying the visual interface, standardizing payment and language systems, accelerating the ticket reservation process, and providing real-time feedback to improve user experience.

Keywords: *Usability; Heuristic Evaluation, Effectiveness, Efficiency, Satisfaction (EES), System Usability Scale, Access by KAI.*