

ABSTRAK

PENGEMBANGAN *FRONT-END* APLIKASI *AUTISM TREATMENT EVALUATION CHECKLIST* (ATEC) BERBASIS ANDROID

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Autism Spectrum Disorder (ASD) memerlukan penanganan dan pemantauan perkembangan yang berkelanjutan. Saat ini, instrumen *Autism Treatment Evaluation Checklist* (ATEC) versi web yang tersedia memiliki keterbatasan pada fitur visualisasi data dan penyimpanan riwayat, sehingga menyulitkan orang tua dan terapis dalam melakukan pemantauan longitudinal secara terstruktur. Penelitian ini bertujuan untuk mengembangkan *front-end* aplikasi ATEC berbasis Android yang mampu menampilkan grafik perkembangan dan riwayat penilaian. Aplikasi dibangun menggunakan *framework* Flutter dengan penerapan metode manajemen proyek Kanban. Alur pengembangan dimulai dari perumusan *User Story* hingga tahap *Done* dengan pembatasan *Work In Progress* (WIP) maksimal dua kartu tugas untuk menjaga efisiensi waktu, yang tercatat total 200 jam pengerjaan. Pengujian sistem dilakukan menggunakan *Black-box Testing* untuk fungsionalitas dan *User Acceptance Testing* (UAT) untuk mengukur penerimaan pengguna. Hasil pengujian *Black-box* menunjukkan bahwa seluruh komponen fungsional berjalan sesuai rancangan tanpa *error*. Sementara itu, hasil UAT terhadap 25 responden menunjukkan nilai rata-rata 87,5% dengan predikat "Sangat Baik", meliputi aspek fungsionalitas, kinerja, antarmuka, dan efisiensi. Dapat disimpulkan bahwa aplikasi ini berhasil dikembangkan dengan stabil, mudah dipahami, serta efektif dalam membantu proses evaluasi perkembangan anak dengan autisme.

Kata Kunci: Android, ATEC, Flutter, Kanban, *User Acceptance Testing*.

ABSTRACT

FRONT-END DEVELOPMENT OF THE ANDROID-BASED AUTISM TREATMENT EVALUATION CHECKLIST (ATEC) APPLICATION

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Autism Spectrum Disorder (ASD) requires continuous handling and developmental monitoring. Currently, existing web-based Autism Treatment Evaluation Checklist (ATEC) instruments have limitations regarding data visualization and history storage features, making structured longitudinal monitoring difficult for parents and therapists. This research aims to develop the front-end of an Android-based ATEC application capable of displaying progress graphs and assessment history. The application was built using the Flutter framework by implementing the Kanban project management method. The development workTask started from formulating User Stories to the Done stage with a Work In Progress (WIP) limit of two task cards to ensure time efficiency, recording a total of 200 working hours. System testing was conducted using Black-box Testing for functionality and User Acceptance Testing (UAT) to measure user acceptance. Black-box testing results indicated that all functional components operated according to the design without errors. Meanwhile, UAT results from 25 respondents showed an average score of 87.5% with a "Very Good" predicate, covering functionality, performance, interface, and efficiency aspects. It can be concluded that this application was successfully developed to be stable, easily understood, and effective in assisting the evaluation process of children with autism.

Keywords: *Android, ATEC, Flutter, Kanban, User Acceptance Testing.*