

ABSTRAK

IMPLEMENTASI *DESIGN THINKING* DALAM PERANCANGAN *USER INTERFACE* DAN *USER EXPERIENCE* APLIKASI ATEC (*AUTISM TREATMENT EVALUATION CHECKLIST*) BERBASIS *MOBILE*

Autisme merupakan gangguan pada kondisi perkembangan yang berdampak dalam kemampuan individu untuk berinteraksi secara sosial, berkomunikasi, serta menunjukkan pola perilaku tertentu. *Autism Treatment Evaluation Checklist* (ATEC) adalah alat evaluasi yang dirancang guna membantu dalam menilai efektivitas intervensi terhadap individu dengan autisme. Penelitian ini bertujuan guna menyusun *user interface* (UI) dan *user experience* (UX) aplikasi ATEC berbasis *mobile* dengan pendekatan *Design Thinking* guna meningkatkan kemudahan penggunaan bagi terapis dan orang tua dalam memonitor perkembangan anak penyandang autisme. Metode penelitian yang digunakan ialah *Design Thinking*, yang meliputi lima tahapan utama: *Empathize*, *Define*, *Ideate*, *Prototype*, dan *Test*. Proses perancangan melibatkan wawancara dengan orang tua dan terapis di Yayasan Mata Hati Bandar Lampung untuk memahami kebutuhan pengguna. Setelah itu, dilakukan perancangan UI/UX menggunakan *Figma*, serta pengujian dengan metode *Heuristic Evaluation* dan *USE Questionnaire* untuk mengevaluasi tingkat usability aplikasi. Temuan penelitian menunjukkan bahwa pendekatan *Design Thinking* berhasil menciptakan desain UI/UX yang lebih intuitif dan relevan dengan kebutuhan pengguna. Pengujian menunjukkan bahwa aplikasi memiliki level kemudahan pemakaian yang besar, serta mampu meningkatkan efisiensi pemantauan perkembangan anak autisme oleh orang tua dan terapis. Dengan adanya aplikasi ini, harapannya mampu mempermudah proses evaluasi dan penanganan autisme secara lebih sistematis dan berbasis data.

Kata kunci: UI/UX, *Design Thinking*, ATEC, *Autism*, *Usability Testing*

ABSTRACT

IMPLEMENTATION OF DESIGN THINKING IN THE USER INTERFACE AND USER EXPERIENCE DESIGN OF THE MOBILE-BASED ATEC (AUTISM TREATMENT EVALUATION CHECKLIST) APPLICATION

Autism is a developmental disorder that affects an individual's ability to engage in social interaction, communicate effectively, and display specific behavioral patterns. The Autism Treatment Evaluation Checklist (ATEC) serves as an assessment instrument developed to assist in evaluating the effectiveness of interventions for individuals with autism. This study aims to design a mobile-based ATEC application interface focusing on user interface (UI) and user experience (UX) through the Design Thinking approach, with the goal of improving usability for therapists and parents in monitoring the progress of children with autism. The research adopts the Design Thinking methodology, which consists of five core stages: Empathize, Define, Ideate, Prototype, and Test. The design phase involved conducting interviews with parents and therapists at Yayasan Mata Hati in Bandar Lampung to identify and understand user needs. Following this, the UI/UX was developed using the Figma platform, and usability testing was carried out using the Heuristic Evaluation method and the USE Questionnaire to assess user satisfaction and system usability. The results indicate that the implementation of Design Thinking effectively led to the development of a UI/UX design that is more user-friendly and aligned with user expectations. The testing phase revealed that the application offers a high level of ease of use and contributes significantly to improving the efficiency of developmental monitoring by both parents and therapists. It is hoped that this application will support a more structured and data-driven approach to autism evaluation and treatment.

Keywords: UI/UX, Design Thinking, ATEC, Autism, Usability Testing