

ABSTRAK

PENGEMBANGAN FRONT-END APLIKASI *SCREENING SPEECH DELAY* BERBASIS WEB MENGGUNAKAN METODE SCRUM

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Screening speech delay sangat penting dilakukan terhadap anak pada usia 6 bulan hingga 5 tahun guna mendeteksi adanya indikasi potensi masalah dalam perkembangan bicara (*speech delay*). Namun, kebanyakan rumah terapi atau rumah sakit masih menerapkan metode screening secara mengisi *form screening speech delay* manual dengan datang ke tempat dokter tumbuh kembang anak atau rumah terapi, tidak semua daerah di seluruh Indonesia memiliki tempat untuk melakukan *screening speech delay*. Penelitian ini bertujuan mengembangkan aplikasi berbasis web untuk melakukan *screening speech delay* dengan menerapkan metode Scrum. Aplikasi ini mencakup fitur utama *screening speech delay*, menampilkan hasil dan analisa *screening*, serta grafik pemantauan perkembangan hasil *screening*. Proses pengembangan aplikasi menggunakan Scrum dilakukan selama 5 sprint dengan 21 item dalam *product backlog*. Tahapan penelitian dengan metode Scrum yaitu *Sprint Planning*, *Daily Scrum (Daily Meeting dan Development)*, *Sprint Review* dan *Sprint Retrospective*. Uji coba aplikasi dilakukan melalui pengujian *Black-box testing* yang difokuskan pada fungsionalitas fitur-fitur aplikasi. Sebanyak 5 fitur diuji melalui 21 skenario tes, hasilnya menunjukkan bahwa seluruh fitur yang diuji berjalan dengan sesuai dan sesuai dengan kebutuhan fungsional yang telah ditentukan. Hasil evaluasi *User Experience Questionnaire (UEQ)* yang melibatkan 25 responden, aplikasi web *Screening Speech Delay* mendapatkan nilai *mean excellent* atau sangat baik pada kategori *attractiveness*, *efficiency*, *dependability*, *stimulation* dan *novelty*, serta nilai *mean good* untuk kategori *perspicuity*.

Kata kunci: *Screening Speech Delay*, Web, Scrum, UEQ

ABSTRACTION

DEVELOPMENT OF WEB-BASED FRONT-END APPLICATION FOR SCREENING SPEECH DELAY USING SCRUM METHOD

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Screening for speech delay is crucial for children aged 6 months to 5 years to detect potential issues in speech development. However, most therapy centers or hospitals still employ manual screening methods, where individuals fill out speech delay screening forms by visiting a child development doctor or therapy center. Not all regions in Indonesia have facilities for conducting speech delay screenings. This research aims to develop a web-based application for speech delay screening using the Scrum methodology. The application includes key features for speech delay screening, displaying screening results and analysis, as well as monitoring the development progress of screening outcomes. The application development process using Scrum took place over 5 sprints, involving 21 items in the product backlog. The Scrum method research phases included Sprint Planning, Daily Scrum (Daily Meetings and Development), Sprint Review, and Sprint Retrospective. Application testing was conducted through Black-box testing, focusing on the functionality of application features. A total of 5 features were tested through 21 test scenarios, and the results showed that all tested features functioned correctly and met the predefined functional requirements. The evaluation results from the User Experience Questionnaire (UEQ), involving 25 respondents, indicated that the Screening Speech Delay web application received an average rating of "excellent" for attractiveness, efficiency, dependability, stimulation, and novelty categories, as well as an average rating of "good" for the perspicuity category.

Keywords: Screening Speech Delay, Web, Scrum, UEQ