

EVALUASI *USABILITY* MANUAL DAN OTOMATIS PADA APLIKASI WAYGROUND MENGGUNAKAN METODE *USER EXPERIENCE QUESTIONNAIRE (UEQ)* DAN *TASK TREE BASED INTERACTION LOG ANALYSIS*

ABSTRAK

Usability merupakan salah satu aspek penting dalam menentukan kualitas pengalaman pengguna suatu aplikasi. Wayground sebagai *platform* pembelajaran berbasis kuis interaktif masih memiliki beberapa kendala pada aspek pengalaman pengguna dan navigasi sehingga perlu dilakukan evaluasi *usability*. Penelitian ini bertujuan untuk mengevaluasi *usability* aplikasi Wayground secara manual menggunakan *User Experience Questionnaire (UEQ)* dan secara otomatis menggunakan *Task Tree Based Interaction Log Analysis* melalui *platform* Useberry, serta menyusun rekomendasi perbaikan berdasarkan hasil evaluasi yang diperoleh. Penelitian menggunakan pendekatan kuantitatif dengan melibatkan 30 responden pada evaluasi manual menggunakan teknik *purposive sampling* dan 30 pengguna pada evaluasi otomatis melalui delapan *task case*. Analisis manual dilakukan menggunakan *UEQ Data Analysis Tools* dan analisis statistik deskriptif, sedangkan evaluasi otomatis dianalisis menggunakan metrik *Success Rate*, *Directness*, *Time Spent*, *First Click*, *Destination*, dan *Tree Testing Path*. Hasil penelitian menunjukkan bahwa berdasarkan *UEQ Data Analysis Tools*, variabel *Attractiveness*, *Perspicuity*, *Stimulation*, dan *Novelty* memperoleh kategori positif, sedangkan *Efficiency* dan *Dependability* berada pada kategori netral. Analisis statistik deskriptif menghasilkan persentase *usability* sebesar 69% dengan kategori baik. Sementara itu, hasil evaluasi otomatis menunjukkan nilai rata-rata *Success Rate* sebesar 62%, *Directness* sebesar 41%, *Time Spent* selama 23 detik, *First Click* sebesar 63%, dan *Destination* sebesar 62%. Temuan tersebut menunjukkan bahwa aplikasi Wayground telah memiliki tingkat *usability* yang cukup baik, namun efisiensi penggunaan, keandalan sistem, dan struktur navigasi masih memerlukan penyempurnaan. Berdasarkan hasil evaluasi, direkomendasikan peningkatan pada aspek *Efficiency* dan *Dependability*, penyempurnaan struktur navigasi, peningkatan visibilitas fitur, serta optimalisasi antarmuka untuk meningkatkan kualitas *usability* aplikasi Wayground.

Kata Kunci: *Usability*, *User Experience Questionnaire (UEQ)*, *Task Tree Based Interaction Log Analysis*, Useberry, Wayground.

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ABSTRACT

Usability is a crucial aspect of determining the quality of an application's user experience. Wayground, as an interactive quiz-based learning platform, still exhibits several issues related to user experience and navigation, making a usability evaluation necessary. This study aims to evaluate the usability of the Wayground application manually using the User Experience Questionnaire (UEQ) and automatically using Task Tree-Based Interaction Log Analysis through the Useberry platform, as well as to propose usability improvement recommendations based on the evaluation results. A quantitative approach was employed, involving 300 respondents in the manual evaluation using purposive sampling and 30 users in the automated evaluation across eight task cases. Manual evaluation was conducted using the UEQ Data Analysis Tools and descriptive statistical analysis, while the automated evaluation employed the Success Rate, Directness, Time Spent, First Click, Destination, and Tree Testing Path metrics. The results show that the UEQ Data Analysis Tools classified Attractiveness, Perspicuity, Stimulation, and Novelty as positive, while Efficiency and Dependability remained neutral. Descriptive statistical analysis produced an overall usability score of 69%, categorized as good. The automated evaluation yielded an average Success Rate of 62%, Directness of 41%, Time Spent of 23 seconds, First Click of 63%, and Destination of 62%. These findings indicate that Wayground demonstrates good usability; however, improvements are still needed in efficiency, system dependability, and navigation structure. Accordingly, improvements are recommended for the Efficiency and Dependability dimensions, navigation structure, feature visibility, and interface design to enhance the application's overall usability.

Keywords: Usability, User Experience Questionnaire (UEQ), Task Tree Based Interaction Log Analysis, Useberry, Wayground.