UNIVERSITI TEKNOLOGI MARA

DEBT REMINDER SYSTEM FOR PARENTS OR GUARDIANS IN MALAYSIA IMPLEMENTING BY FOLLOWING JAKOB NIELSEN'S 10 USABILITY HEURISTICS

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ABSTRACT

The increasing complexity of financial responsibilities and high household debt in Malaysia highlight the pressing necessity for efficient debt management strategies, especially for parents or guardians who manage family debts. This study focuses on Malaysia households, where debt is ranked among the highest in the ASEAN region, exacerbated by reliance on inefficient manual tracking method. This study emphasizes major shortcomings, such as the inefficiency of traditional approaches, insufficient resources tailored to family needs, and the absence of robust systems for effective debt oversight. To address these issues, the study aims to develop and execute a Debt Reminder System that includes automated reminders, real-time debt monitoring, and dashboard visualization. Following a System Development Life Cycle framework and Prototyping Model, the approach covers planning, analysis, design, development, testing, and evaluation phases, embedding Jakob Nielsen's usability heuristics for improved user experience. Testing and evaluation with 30 users and three experts measured usability metrics such as learnability, effectiveness, efficiency, memorability, and error rates, validating the system's robust functionality and usability. The effectiveness construct received the highest mean score of 4.5 (90%) from users, emphasizing their capability to efficiently meet goals with the system. Experts evaluated efficiency as the top priority with an average score of 4.5 (90%), indicating the system's ability to considerably shorten task completion duration and lessen manual tracking workload. Findings illustrate the system's capacity to reduce financial strain and facilitate proactive financial planning through enhanced debt tracking and management. The research finishes by suggesting future improvements, including mobile application integration, to meet changing user requirements and ensure enduring financial well-being.

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