UNIVERSITI TEKNOLOGI MARA

LOST AND FOUND MANAGEMENT SYSTEM WITH SECURE MESSAGING

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ABSTRACT

The Lost and Found Management System developed for Mardhiyyah Hotel provides a computerized alternative to the traditional manual logbook approach, aiming to improve efficiency, accuracy, and reliability in managing lost items. The previous manual process was time-consuming, prone to human error, lacked real-time tracking, and often delayed item retrieval, negatively affecting guest satisfaction. To address these limitations, the proposed system offers a centralized digital platform where lost and found items can be reported, logged, monitored, and managed efficiently, with features such as real-time item status updates, role-based access control, and secure messaging to enable private and traceable communication between guests and hotel staff. The system was developed using the Agile Prototyping methodology, allowing iterative refinement based on continuous user feedback, while Shneiderman's Eight Golden Rules of Interface Design were applied to ensure usability, consistency, and error reduction. System usability was evaluated using the System Usability Scale (SUS) involving public users, achieving a score of 80.4, which indicates excellent usability and ease of use. Overall, the system demonstrates improved operational efficiency, reduced manual errors, and enhanced guest satisfaction; however, future enhancements may include mobile application support, automated item matching using image recognition, and integration with courier services to further improve scalability and service effectiveness in the hospitality industry.