ABSTRACT

DESIGN AND CONSTRUCTION OF WEB-BASED DRUG EXPIRY DATE TRACKING APPLICATION AT XYZ PHARMACY

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The development of digital transformation in the health sector has encouraged XYZ Pharmacy to implement technology in the drug stock management process. This study aims to design and develop a web-based drug expiration date tracking application using the Rapid Application Development (RAD) approach. The problems identified include the recording process which is still done manually using spreadsheets, delays in identifying expired drugs, and the absence of an automatic warning system. The RAD method was chosen because it allows a fast and adaptive development process through iterative stages, namely needs planning, user design, and system construction. The results of the study show that the application built is able to present drug stock information in real-time, provide automatic notifications for drugs approaching their expiration date, and generate stock and expiration reports systematically. Thus, this application has been proven to increase the operational efficiency of pharmacies and support the improvement of the quality of service to patients. Suggestions for further development include integration with the purchasing management system, development of a mobile version, and implementation of more comprehensive data security features.

Keywords: Expiry date tracking, Drug stock management, web application, RAD, Pharmacy.

Number of references: 29

Year of publication of references: 2003–2025