ABSTRACT

Clinics as health service facilities have an important role in providing fast and appropriate treatment to the community. One crucial aspect in clinic operations is drug stock management. At Azzahra Clinic, the drug stock management process is still carried out manually, which has the potential to cause various problems such as delays in service, recording errors, and unmonitored expired drugs. To answer these problems, this study designed a website-based drug stock management application equipped with a transaction recording system using a blockchain hashing approach. This system is built with the Laravel and MySQL frameworks, and adopts the Waterfall software development method. The application developed is divided into two services, namely the main service for stock management and supporting services for blockchain-based transaction recording to ensure data transparency and integrity. An automatic notification feature is also added to remind of minimum stock and drugs approaching expiration via the Telegram platform. The results of this design are expected to be able to increase the efficiency of drug management, reduce the risk of human error, and provide a safe and transparent recording system for Azzahra Clinic.

Keywords— Drug Stock Management, Blockchain, Waterfall.