ABSTRACT

DESIGN AND IMPLEMENTATION OF FRONT-END WEBSITE-BASED DRUG STOCK AVAILABILITY MANAGEMENT WITH THE METHOD

by

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The rapid advancement of information technology has encouraged the public to access information quickly and easily, including in the healthcare sector. Pharmacies, as essential institutions for the distribution of medications, require an efficient system to manage drug stock availability. Dian Brata Medika Pharmacy, located in Purbalingga, Central Java, faces challenges in managing drug stock using manual methods such as bookkeeping and Excel. This manual method often leads to recording errors, resulting in over-purchasing or insufficient stock, as well as waste due to expired drugs. This research aims to design and implement a website-based information system to manage drug stock availability more efficiently. The system is developed using the Extreme Programming (XP) method, known for its iterative approach and flexibility in software development. The XP method is chosen because of its ability to simplify the development process, making it more responsive to changing needs, especially for the front-end, which is expected to improve ease of use by pharmacy staff. The front-end of the system is developed using ReactJS and Tailwind CSS, enabling the creation of a responsive, intuitive user interface that can be easily accessed by pharmacy managers. The system provides features such as real-time drug stock recording, notifications for low or expired stock, and reports to facilitate the management and monitoring of drug stock. The results of this research are expected to help Dian Brata Medika Pharmacy manage drug availability more accurately and efficiently, reduce human errors in stock recording, and accelerate the process of updating stock data. Additionally, the system is expected to improve the quality of pharmacy services and support better decision-making in drug management.

Keywords: Pharmacy, Drug Stock Management, Website, Front-End, Extreme Programming