

## **ABSTRACT**

*The development of an efficient system for managing drug stock is crucial in pharmacy operations to ensure the availability of the right medications for patients. One of the main challenges faced by pharmacies is suboptimal stock management, which can lead to overstocking or understocking, as well as operational losses. This final project aims to build a Mobile application based on a system for managing drug stock integrated with the FIFO (First In First Out) method to ensure more accurate and efficient management. This application was developed for Batu Permata Pharmacy with the aim of increasing efficiency, simplifying transaction recording, and facilitating real-time stock monitoring. The development process follows the Waterfall model, consisting of planning, needs analysis, design, implementation, and testing. The MediMe application is equipped with features for recording sales, updating stock, and low stock notifications to support optimal stock management. System testing was conducted using the black-box testing method to ensure each main function works as expected. The test results indicate that the system is able to improve operational efficiency, reduce recording errors, and accelerate data-based decision-making. This system allows for real-time stock and transaction monitoring, meeting the operational needs of Batu Permata Pharmacy.*

*Keywords: System Development, Drug Stock Management, Mobile Application, FIFO, Pharmacy, Waterfall*