## ABSTRACT

The availability of medications is crucial for the community to maintain mental and physical health. The medications consumed by the public are distributed by various companies in the pharmaceutical and healthcare sectors, including independent pharmacies that provide access for people to obtain medications. However, independent pharmacies face serious challenges, one of which is the availability of medications within the pharmacy itself. Stockouts and shortages of medications make it difficult for the community to obtain them. Additionally, excess inventory can lead to medications expiring and deteriorating due to prolonged storage. This research aims to develop a web-based medication inventory management and control system. With this system, pharmacies can effectively manage their medication inventory. The inventory can be organized from the receipt and distribution of medications to notifications about medication conditions and inventory reports using first expired first out (FEFO) method. This research *employs the Extreme Programming method in developing the medication inventory* management and control system, using the Express.js framework for back-end development and implemented to website. The benefits of this research include minimizing human error, ensuring medication availability in pharmacies, and saving time and effort.

Keywords: Pharmacy, Medication Inventory, Website, Back-end, Extreme Programming, Express.js