

**THE IMPLEMENTATION OF A MOBILE-BASED
WAREHOUSE INVENTORY APPLICATION
(Case Study: Nabila Tani, Ogan Komering South Ulu)**

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ABSTRACT

Nabila Tani is an agricultural supply enterprise located in Ogan Komering South Ulu, South Sumatra. The current inventory operations at Nabila Tani still rely on manual methods, including handwritten logs for tracking incoming and outgoing goods, stock levels, and product inspections. These outdated practices often result in errors, including the mishandling of expired products, which leads to financial losses due to unsold inventory. This study aims to develop a mobile-based warehouse inventory application using the Flutter framework, built within the Visual Studio Code environment. Flutter is a mobile application development SDK that utilizes Dart as its programming language, and MySQL as the database management system (DBMS) for data storage. The application incorporates the First In First Out (FIFO) and First Expired First Out (FEFO) methods to assist owners and warehouse staff in prioritizing the sale of products nearing expiration, thereby minimizing potential losses. The application was evaluated using User Acceptance Testing (UAT), and the results showed an average score interpretation of 89%, classified as "Very Good." These findings indicate that the application effectively meets user requirements and enhances inventory management efficiency.

Keywords: *Application, Warehouse Inventory, Mobile, Flutter, Nabila Tani*