

APLIKASI INFORMASI PENJUALAN HASIL PERTANIAN KOMODITAS PALAWIJA BERBASIS *MOBILE*

Nama Mahasiswa : Dinda Permata Sari
Nim : 6103230044
Dosen Pembimbing : Sri Mawarni, M.Si

ABSTRAK

Aplikasi Informasi Penjualan Hasil Pertanian Komoditas Palawija Berbasis Mobile dibuat untuk membantu petani dan pedagang (toke) di Kecamatan Kinali, Kabupaten Pasaman Barat dalam proses jual beli komoditas palawija. Selama ini, pemasaran hasil pertanian masih dilakukan secara langsung sehingga petani kesulitan memasarkan hasil panen, sedangkan pedagang harus datang ke lokasi untuk melihat stok dan kualitas komoditas. Oleh karena itu, dikembangkan aplikasi berbasis *mobile* yang dapat mempertemukan petani dan pedagang dalam satu platform. Penelitian ini menggunakan metode *Waterfall* yang meliputi tahap analisis kebutuhan, perancangan, implementasi, pengujian, dan pemeliharaan. Pengumpulan data dilakukan melalui observasi, wawancara, dan studi pustaka. Aplikasi dikembangkan menggunakan Flutter sebagai *framework mobile*, *PHP* sebagai *backend*, dan *MySQL* sebagai *database*. Aplikasi ini memiliki tiga jenis pengguna, yaitu *Admin*, Petani, dan Pedagang (Toke). Fitur yang tersedia meliputi pengelolaan data komoditas, informasi stok secara *real-time*, prediksi harga pasar, pencarian berdasarkan lokasi, booking komoditas, *verifikasi* identitas pedagang, *integrasi* WhatsApp, rating dan ulasan, serta pengelolaan transaksi oleh admin. Hasil pengujian menggunakan metode *Black Box Testing* menunjukkan bahwa seluruh fitur pada aplikasi dapat berjalan dengan baik sesuai fungsinya. Dengan adanya aplikasi ini, proses pemesanan dan transaksi komoditas palawija menjadi lebih mudah dan aman, dapat membantu petani maupun pedagang dalam melakukan jual beli secara lebih efisien, sebagai proses pemesanan dan transaksi.

Kata Kunci: *Flutter*, *PHP*, *MySQL*, *Waterfall*, Komoditas Palawija, Kecamatan Kinali.

MOBILE-BASED INFORMATION SYSTEM FOR PALAWIJA AGRICULTURAL PRODUCT SALES

Name : Dinda Permata Sari

Nim : 6103230044

Supervisor : Sri Mawarni, M.Si

ABSTRACT

The Mobile-Based Agricultural Sales Information System for Second Crops (Palawija) was developed to assist farmers and traders (toke) in Kinali District, West Pasaman Regency, in the buying and selling process of second crops. Thus far, the marketing of agricultural products has been conducted directly, making it difficult for farmers to market their harvests, while traders must physically visit locations to check stock and crop quality. To address this issue, a mobile-based application was developed to connect farmers and traders within a single platform. This study utilized the Waterfall method, which includes the stages of requirements analysis, design, implementation, testing, and maintenance. Data collection was carried out through observation, interviews, and literature reviews. The application was developed using Flutter as the mobile framework, PHP for the backend, and MySQL as the database. The system accommodates three types of users: Admins, Farmers, and Traders (Toke). The available features include crop data management, real-time stock information, market price predictions, location-based searches, crop booking, trader identity verification, WhatsApp integration, ratings and reviews, as well as transaction management by the admin. The results of the Black Box Testing demonstrated that all features within the application functioned properly and according to their intended design. With the implementation of this application, the ordering and transaction processes for second crops have become easier and more secure, thereby helping both farmers and traders conduct buying and selling activities more efficiently.

Keywords: Mobile Application, Palawija (Second Crops), Waterfall Method, Flutter, Black Box Testing.