

**MOHAMMAD ALFIN BAKHTIAR, 21.240.0059**  
**PENGEMBANGAN SISTEM INFORMASI PERSEDIAAN BARANG**  
**BERBASIS WEBSITE DENGAN METODE ANALISIS PIECES PADA AHSAN**  
**BAKERY & CAKE**, di bawah bimbingan Bapak Dr. Paminto Agung Christianto,  
M.Kom. dan Bapak Agus Ilyas, M.Kom.

182 + xv halaman / 112 gambar / 14 tabel / 4 lampiran / 20 pustaka (2019 – 2024)

## **ABSTRAK**

*Ahsan Bakery & Cake Batang menghadapi tantangan dalam pengelolaan persediaan barang akibat penggunaan Microsoft Excel, seperti efisiensi manajemen transaksi yang rendah, tidak adanya sistem kasir terpisah, dan pelaporan yang kurang terstruktur. Untuk mengatasi permasalahan tersebut, dibangun sistem informasi persediaan berbasis website yang mengintegrasikan manajemen transaksi, sistem kasir, dan pelaporan terstruktur. Sistem dikembangkan menggunakan metode Waterfall yang mencakup tahap Communication, Planning, Modelling, Construction, dan Deployment. Desain sistem menggunakan Unified Modelling Language (UML) dan Lembar Kerja Tampilan (LKT), dengan implementasi berbasis PHP, framework Laravel, dan database MySQL. Pengujian dilakukan melalui metode White Box, Black Box, dan User Acceptance Test (UAT). Hasil pengujian menunjukkan sistem berfungsi sesuai desain dengan risiko rendah (White Box), seluruh fitur berjalan valid (Black Box), dan diterima dengan baik oleh manajer serta karyawan kasir (UAT). Sistem ini diharapkan meningkatkan efisiensi dan produktivitas kerja manajer serta karyawan kasir di Ahsan Bakery & Cake.*

**Kata Kunci:** *Sistem Informasi, Pengelolaan Persediaan Barang, Website, Waterfall*

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**PENGEMBANGAN SISTEM INFORMASI PERSEDIAAN BARANG BERBASIS WEBSITE DENGAN METODE ANALISIS PIECES PADA AHSAN BAKERY & CAKE**, under the guidance of Mr. Dr. Paminto Agung Christianto, M.Kom., and Mr. Agus Ilyas, M.Kom.

182 + xv pages / 112 figures / 14 tables / 4 appendices / 20 references (2019–2024)

## **ABSTRACT**

*Ahsan Bakery & Cake Batang faces challenges in inventory management due to the use of Microsoft Excel, such as low transaction management Efficiency, the absence of a separate cashier system, and unstructured reporting. To address these issues, a web-based inventory Information system was developed that integrates transaction management, a cashier system, and structured reporting. The system was developed using the Waterfall methodology, encompassing the stages of Communication, Planning, Modelling, Construction, and Deployment. The system design utilized Unified Modelling Language (UML) and Display Worksheet (LKT), with implementation based on PHP, the Laravel framework, and a MySQL database. Testing was conducted using White Box, Black Box, and User Acceptance Test (UAT) methods. The test results showed that the system functioned as designed with low risk (White Box), all features operated validly (Black Box), and it was well received by manager and cashier employee (UAT). This system is expected to enhance the Efficiency and productivity of manager and cashier employee at Ahsan Bakery & Cake.*

**Keywords:** *Sistem Informasi, Pengelolaan Persediaan Barang, Website, Waterfall*