**ONLINE BAKERY MANAGEMENT SYSTEM**

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### *Abstract*

*The bakery industry is experiencing rapid growth within the food sector. However, many bakeries still rely on traditional paperwork for system management, leading to reduced performance in sales and related activities such as inventory management. This approach also results in slower response times, especially during high customer traffic periods. This research aims to develop an online bakery management system to provide an efficient solution for customers to order bakery products online and for managers to handle inventory management effectively. The primary objectives of this research include enabling online ordering for customers with product selection and customization options, managing pending orders, and facilitating order fulfillment. The research design will follow several steps, including requirement identification, data collection through surveys, observations, and document analysis, system design, implementation, and testing. The proposed system will be web-based, utilizing front-end technologies such as HTML, CSS, and JavaScript. The backend will be implemented using PHP, with data stored in a MySQL server. Additionally, the M-pesa API will be integrated to facilitate smooth payment processing for purchased products. This research faced challenges in integrating various technologies and ensuring a user-friendly interface for both customers and staff. The findings indicate that implementing an online bakery management system can significantly improve operational efficiency and customer satisfaction. In conclusion, this system will benefit bakery owners, staff, and customers by streamlining business operations and enhancing the overall customer experience.*

***Keywords/phrases***

*Online bakery management, e-commerce, inventory management, web-based application, M-pesa integration*

***Code Repository*** *https://github.com/WambuiJane/BakeHouse*