

Inventory System Design And Development at PT. Mitra Puding Mas - Palm Oil Mill

Mustofa Kamal Arifin^{1*}, Andi Christian², Fajriyah³

^{*1,2,3)} Universitas Prabumulih, Jl. Patra No. 50, Sukaraja, South Prabumulih District, Prabumulih City, South Sumatra 31111, Indonesia

^{*1}email : mustofakamalarifin03@gmail.com

²email : Andichristian918@gmail.com

³email : rhieyah.mti12@gmail.com

(Article Received: 23 October 2026; Article Revised: 21 November 2026; Article Published: 1 December 2026;)

ABSTRACT – PT. Mitra Puding Mas – Palm Oil Mill is a palm oil processing company with intensive operational activities that depend heavily on the availability of inventory, including machine spare parts, raw materials, and production support equipment. However, its inventory management is still conducted manually using notebooks and spreadsheets, resulting in recording errors, data duplication, archive loss, and delays in preparing inventory reports. This study aims to design and develop a structured and accurate web-based inventory information system capable of providing real-time stock information to minimize potential losses caused by machine downtime and improve operational efficiency. Data were collected through literature review, direct field observation, and interviews with the Head of Administration (KTU) of PT. Mitra Puding Mas – Palm Oil Mill. The system was developed using the Model-View-Controller (MVC) architecture with the Laravel framework, PHP programming language, and MySQL database. System functionality was tested using Black-Box Testing. The results show that the developed system successfully integrates login, item category management, supplier management, incoming and outgoing inventory records, purchase transactions, and automatic report generation, including invoices and official transaction documents. The implementation transforms manual procedures into computerized processes, reduces human error, and supports faster and more accurate managerial decision-making based on valid inventory data.

Keywords – Inventory Information System; Web-Based System; Laravel; MySQL; Black-Box Testing

Sistem Inventori Pada PT. Mitra Puding Mas – Palm Oil Mill

ABSTRAK - PT. Mitra Puding Mas – Palm Oil Mill merupakan perusahaan pengolahan kelapa sawit dengan aktivitas operasional yang padat dan sangat bergantung pada ketersediaan stok barang seperti suku cadang mesin (spare part), bahan baku, dan alat pendukung produksi lainnya. Namun, pengelolaan inventori saat ini masih dilakukan secara manual menggunakan buku catatan dan lembar kerja spreadsheet, yang memicu berbagai kendala seperti kesalahan pencatatan, duplikasi data, risiko kehilangan arsip, serta keterlambatan dalam penyusunan laporan persediaan. Penelitian ini bertujuan untuk merancang dan membangun sistem informasi inventori berbasis web yang terstruktur, akurat, dan mampu menyajikan laporan stok secara real-time guna meminimalkan risiko kerugian akibat downtime mesin serta meningkatkan efisiensi operasional. Metode pengumpulan data dilakukan melalui studi pustaka, observasi langsung di lapangan, serta wawancara dengan Kepala Tata Usaha (KTU) PT. Mitra Puding Mas – Palm Oil Mill. Sistem ini dikembangkan menggunakan arsitektur Model-View-Controller (MVC) dengan memanfaatkan framework Laravel, bahasa pemrograman PHP, dan basis data MySQL. Pengujian fungsionalitas sistem dilakukan dengan menggunakan metode Black-Box Testing. Hasil dari penelitian ini berupa sistem informasi inventori berbasis web yang berhasil mengintegrasikan fitur login, manajemen data kategori barang, data pemasok, pencatatan barang masuk dan keluar, transaksi pembelian, hingga pembuatan dokumen laporan otomatis seperti faktur dan berita acara. Implementasi sistem ini mampu mentransformasi prosedur manual menjadi terkomputerisasi, mengurangi human error, serta mempermudah pihak manajemen dalam pengambilan keputusan manajerial yang cepat dan tepat berbasis data persediaan yang valid.

Kata Kunci - Rancang Bangun, Sistem Inventori, Web, Laravel, Black-Box Testing.

1. INTRODUCTION

The palm oil processing industry is one of the many industries that has undergone significant changes due to advances in information technology in the era of Industry 4.0. Through the implementation of computerized information systems, this digital transformation encourages companies to improve efficiency, accuracy, and competitiveness.

In the context of the palm oil processing industry, the accuracy of inventory data is essential for ensuring the continuity of the production process. Shortages of certain materials or components can cause machine *downtime*, which directly affects productivity. Conversely, excessive inventory can also lead to waste due to increased storage costs, while some materials have a limited shelf life. These conditions indicate that accurate, efficient, and information-system-based inventory management is highly necessary for companies to improve work effectiveness and minimize the risk of financial losses.

PT. Mitra Puding Mas – Palm Oil Mill is one of the palm oil processing companies with intensive operational activities and a strong dependence on the availability of inventory, including raw materials, machine spare parts, and other production support equipment. The availability of these items must be properly monitored to ensure that the production process is not disrupted. However, inventory management at the company is currently still carried out manually using notebooks and *spreadsheet* worksheets. This method creates various problems, including recording errors, data loss, and duplication of inventory information.

The manual process currently implemented also causes delays in preparing inventory reports. Whenever an up-to-date stock report is required, the warehouse department must manually check and recapitulate the data, which takes considerable time and is prone to errors. In addition, the absence of an integrated system between the warehouse and management departments makes it difficult to obtain accurate and up-to-date inventory information.

Considering these problems, a web-based inventory system is needed to address the existing challenges. The system should be capable of managing inventory data automatically, in an integrated manner, and with easy access for

authorized users whenever needed. The implementation of such a system is expected to facilitate the recording of incoming and outgoing goods, accelerate report generation, and provide accurate inventory information. Consequently, company management can monitor inventory conditions directly and use accurate information to make faster and more appropriate decisions.

Through the design and development of this web-based inventory system, inventory management at PT. Mitra Puding Mas – Palm Oil Mill is expected to be carried out in an integrated manner through features for recording incoming goods, outgoing goods, inventory management, and inventory reporting that can be accessed directly by management.

Therefore, this research aims to design and develop a web-based inventory system at PT. Mitra Puding Mas – Palm Oil Mill. The system is expected to serve as a digital solution that facilitates inventory management, reduces recording errors, and improves the accuracy of inventory reports. Through the implementation of a computerized and integrated system, the company's operational activities are expected to become more efficient and transparent.

Accordingly, this research is entitled “Design and Development of an Inventory System at PT. Mitra Puding Mas – Palm Oil Mill” as an effort to create an efficient, structured digital solution that meets the company's operational needs.

2. LITERATURE REVIEW

2.1 Theoretical Foundation

A research study requires a theoretical foundation to provide an understanding of the theories and definitions related to the research topic being discussed. In this study, the theories and concepts related to the research topic are as follows:

2.1.1 Definition of Design and Development

Design and development is a process of creating and designing a new system or improving an existing system (I. Setiawan et al., 2023). Design and development is a planning process that describes systematic stages in the development of a program or application. In addition, design and development is also related to system design, in which the results of the

analysis are translated into software (Muzdhalifatul Ijfi et al., 2025).

Design and development refers to the depiction, planning, and creation of sketches or arrangements of several separate elements into a complete and functional unit (Dwi Amri et al., 2023).

Based on the definitions above, it can be concluded that design and development is a process of designing and developing a new system or improving an existing system, in which the results of the analysis are translated into software or an application.

2.1.2 Definition of a System

A system can be defined as a collection or set of elements, components, or variables that are organized, interact with one another, and are integrated into a unified set of variables or components. Basically, a system consists of a set of elements that interact, depend on one another, and work together to achieve a particular objective (Muhammad Fikri et al., 2025).

A system is a collection of different objects, components, or parts that are interconnected, cooperate, and influence one another to achieve a particular objective within a complex environment (Sijabat & Elisa, 2024).

A system is a collection of objects, elements, or parts that have different meanings, are interconnected, cooperate with, and influence one another, and are related to the same plan in achieving a particular objective (Darmansyah, 2025).

Based on the definitions above, it can be concluded that a system is a unified set of components that interact with and depend on one another to achieve a particular objective. Each element within the system works in a coordinated manner to produce the expected output.

2.1.3 Definition of an Inventory System

An inventory system consists of various rules and controls that enable the monitoring of stock levels, determination of when replenishment is required, and determination of the quantity that needs to be ordered periodically (Widiatma & Abdillah, 2025).

An inventory system is a series of policies and control mechanisms aimed at monitoring inventory levels, determining the amount of inventory that needs to be maintained, determining when stock should be replenished, and determining the quantity that needs to be ordered (Murod, Hadiwiyanti, Satria, et al., 2024).

Inventory refers to all goods owned by a company at a particular time, intended to be resold or used in the company's operational cycle.

Goods owned for future sales or use can also be categorized as inventory, depending on the nature and type of the company's business (Syahisro Mirajdandi & Dedy Irfan, 2021).

Based on the definitions above, it can be concluded that an inventory system is a method of managing inventory involving policies and controls to monitor stock levels, determine when goods need to be replenished, and determine the optimal quantity of goods to be ordered.

2.1.4 Definition of a Website

A website is a page or collection of pages available on the internet that can be accessed using internet-enabled devices such as computers, laptops, smartphones, and tablets (Harrys Qomarul Zamani et al., 2023).

A website is a collection of interconnected web pages that can be accessed through the internet using devices such as computers, smartphones, or tablets. Websites consist of various elements such as text, images, videos, and applications that are displayed in a web browser (Zaky et al., 2025).

A website is an internet facility that provides connections within local and remote environments. Documents on a website are referred to as web pages, while links on a website allow users to move from one page to another through hypertext, either between pages stored on the same server or on servers located throughout the world. Pages can be accessed and read through browsers such as Netscape Navigator, Internet Explorer, Mozilla Firefox, Google Chrome, and other browser applications (Rusdianto & Firmansyah, 2022).

Based on the definitions above, it can be concluded that a website is a collection of interconnected web pages containing various elements such as text, images, videos, and applications that can be accessed through devices such as laptops, smartphones, or tablets.

2.1.5 Definition of PHP (Hypertext Preprocessor)

PHP, which stands for *Hypertext Preprocessor*, is a free and open-source server-side web programming language. PHP functions as a script that operates on a server and is integrated with HTML. It is known as server-side embedded HTML and is used to process information on the internet (Shabrina et al., 2024).

PHP (*Hypertext Preprocessor*) is a programming language used to create server-side scripting for website development (Christian et al., 2024).

PHP is a popular programming language for web development. With PHP, developers can create dynamic websites by embedding PHP code

within HTML scripts, which is the standard markup language used on the web. PHP can also be used to develop Content Management Systems (CMS) (Herman & Ma'sum, 2025).

Based on the definitions above, it can be concluded that PHP (*Hypertext Preprocessor*) is a programming language commonly used in website development. PHP can be integrated with HTML to process data, perform various backend functions, and build processes that operate behind the scenes.

2.1.6 Definition of MySQL

MySQL is a database management system used to manage databases within websites (A. Setiawan & Kritiana, 2023).

MySQL is a relational database management system that is important for storing, managing, and processing data in web applications. MySQL is used in pharmaceutical information systems to store data such as medicine stock, management reports, transaction histories, and user data. It is suitable for pharmaceutical management needs because of its high scalability, allowing it to handle large volumes of data without reducing system performance (Zainudin et al., 2024).

Around 1994, MySQL was developed by database developers and consultants at MySQL AB. Its initial purpose was to create a web-based application for clients. MySQL is a database management system (DBMS) based on SQL and has been widely used worldwide (Lestari Dalimunthe, 2022).

Based on the definitions above, it can be concluded that MySQL is a free SQL-based database management system that is stable and commonly used in web applications due to its compatibility with PHP.

2.1.7 Definition of Laravel

Laravel is an open-source framework that provides various tools and application architecture, including bundles, migrations, and a command-line interface (CLI) known as Artisan (Murod, Hadiwiyanti, Satria, et al., 2024).

Laravel is a PHP framework that enables website development to be more efficient and dynamic. Laravel uses the MVC (*Model-View-Controller*) architecture. By using the MVC structure, Laravel users can more easily understand the system's workflow and processes, making it easier for developers to use the framework and accelerate the development of web-based applications (Denny Rusdianto & Yudi Herdiana, 2023).

As a PHP-based framework, Laravel provides various modern features that assist

developers in building applications. These features include *Bundles*, *Eloquent ORM (Object-Relational Mapping)*, *Query Builder*, *Resource Controller*, *Blade*, *Migration*, *Middleware*, and *Automatic Pagination* (Indah Melyani et al., 2023).

Based on the definitions above, it can be concluded that Laravel is an open-source PHP framework developed by Taylor Otwell that supports the MVC architecture and provides various tools and application architecture.

2.3 2.2 Conceptual Framework

The conceptual framework is a description of the conceptual structure used to solve the research problem. The conceptual framework of this research is presented as follows:

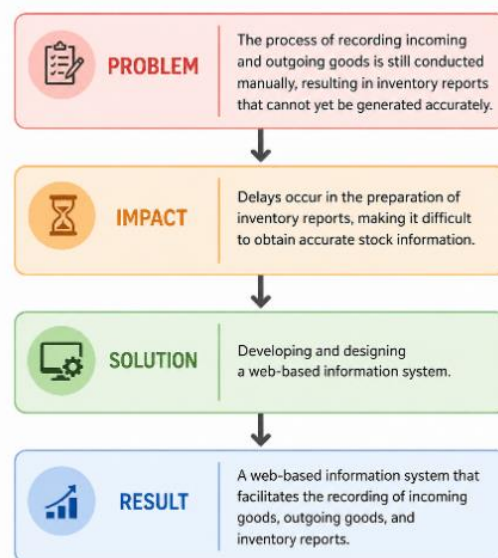


Figure 1. Conceptual Framework

1.Problem:

The recording of incoming and outgoing goods is still conducted manually using books, making the process vulnerable to human errors, such as incorrect quantities or dates, and inefficient because each transaction must be recorded individually.

2.Impact:

The manual process causes delays in inventory reporting and difficulties in obtaining information about current stock levels. This condition can hinder quick decision-making, such as decisions regarding stock replenishment.

3.Solution:

The proposed solution is to use Laravel and the PHP programming language to design and develop a web-based information system.

4.Result:

A web-based information system that facilitates the recording and management of

incoming and outgoing goods and the preparation of inventory reports.

3. RESEARCH METHODS

This research uses a descriptive approach to design and develop a web-based inventory information system at PT. Mitra Puding Mas – Palm Oil Mill. The research focuses on identifying problems in the existing inventory management process and developing a computerized system to improve the accuracy and efficiency of inventory data management.

3.1 Data Collection Methods

Data were collected through three methods: literature study, observation, and interviews. The literature study was conducted by reviewing books, scientific journals, and previous research related to inventory information systems, web-based systems, PHP, MySQL, Laravel, and system development. Direct observation was conducted at PT. Mitra Puding Mas – Palm Oil Mill to examine the process of recording incoming and outgoing goods, stock management, and inventory reporting. Interviews were conducted with the Head of Administration (KTU) and employees involved in inventory management to obtain information regarding the problems, requirements, and system specifications needed by the company.

3.2 System Development Method

The system was developed using the Waterfall method. This method consists of several sequential stages, namely requirements analysis, system design, implementation, testing, and maintenance. The requirements analysis stage was conducted to identify user needs and existing problems in inventory management. The system design stage involved designing the database, system processes, and user interface. The implementation stage involved developing the system using PHP programming language with the Laravel framework and MySQL database. The testing stage was conducted to ensure that each system function operates according to the specified requirements. The final stage involves system implementation and maintenance to ensure that the system continues to operate properly.

3.3 System Testing

System testing was conducted using the Black-Box Testing method. This method focuses on testing the functionality of the system based on input and output without examining the internal source code. Testing was performed on the main features of the system, including login, item category management, supplier data

management, incoming and outgoing goods recording, purchasing transactions, stock management, and inventory report generation.

3.4 Data Analysis

The collected data were analyzed descriptively by identifying the problems and requirements of the existing inventory management process. The results of the analysis were used as a basis for designing the system and determining the features required to support inventory management. The developed system was then evaluated based on its functionality and ability to facilitate inventory recording, stock monitoring, and report generation.

3.5 Research Location and Time

The research was conducted at PT. Mitra Puding Mas – Palm Oil Mill. Data collection, system analysis, design, development, and testing were carried out during the research period.

4. RESULTS AND DISCUSSION

4.1 Results

The research resulted in a web-based inventory information system for PT. Mitra Puding Mas – Palm Oil Mill. The system was developed to overcome problems in the previous manual inventory management process, particularly in recording incoming and outgoing goods, monitoring stock, and preparing inventory reports. The system was developed using PHP with the Laravel framework and MySQL database.

The developed system consists of several main features. The login feature is used to control access to the system, while the item category and supplier features are used to manage basic inventory data. The system also provides features for recording incoming and outgoing goods, purchasing transactions, and monitoring current stock. In addition, the system can generate inventory reports automatically based on the recorded transactions.

The incoming goods feature allows users to record information such as item names, quantities, dates, and related transaction data. Meanwhile, the outgoing goods feature records items released from the warehouse so that the stock quantity can be updated according to each transaction. The stock management feature provides information about the availability of goods, making it easier for users to monitor inventory conditions.

The inventory reporting feature enables users to obtain inventory information without manually recapitulating data from notebooks or spreadsheets. The system processes transaction

data and presents it in the form of inventory reports. This makes the reporting process more structured and reduces the possibility of errors caused by repeated manual data entry.

System functionality was tested using the Black-Box Testing method. Testing was conducted by examining the input and output of the main system features without examining the internal source code. The testing covered login, item category management, supplier management, incoming goods, outgoing goods, purchasing transactions, stock management, and inventory reporting. The results showed that the developed functions operated according to the required system processes.

Overall, the results demonstrate that the developed system provides an integrated platform for managing inventory data. The system is capable of storing transaction data systematically, updating inventory information, and generating reports based on the data entered by users.

4.2 Discussion

The development of the web-based inventory information system provides a solution to the problems identified at PT. Mitra Puding Mas - Palm Oil Mill. Previously, inventory recording was performed manually using notebooks and spreadsheets, which created risks of recording errors, duplicated data, data loss, and delays in preparing inventory reports. The developed system changes this process into a computerized and integrated procedure.

The integration of incoming and outgoing goods records with stock management allows inventory information to be updated based on recorded transactions. This is important for a palm oil processing company because the availability of spare parts, raw materials, and production support equipment needs to be monitored properly. Accurate inventory information can help reduce the risk of shortages that may interfere with operational activities and cause machine downtime.

The system also improves the efficiency of inventory reporting. In the previous process, employees needed to check and recapitulate data manually whenever an inventory report was required. Through the developed system, transaction data can be stored in a database and processed into reports more efficiently. Therefore, employees can obtain inventory information without repeating the entire manual recording and recapitulation process.

The use of the Laravel framework, PHP programming language, and MySQL database

also supports the development of a structured inventory system. Laravel provides an MVC-based application structure that separates the data, interface, and application processes. This structure makes the system easier to manage and develop, while MySQL provides a database for storing inventory, supplier, transaction, and user data.

The results of Black-Box Testing further indicate that the system functions according to the specified requirements. Testing focuses on the functionality that users interact with, allowing the researchers to determine whether each feature produces the expected output. Thus, the testing results provide support that the system can be used to perform the main inventory management activities.

Based on these results, the developed web-based inventory information system can improve the organization of inventory data and facilitate access to stock information. The system does not only replace manual recording but also provides an integrated mechanism for managing inventory transactions and reports. Consequently, the system can support more efficient inventory management and assist management in obtaining information for faster and more appropriate operational decision-making.

5. CONCLUSION

Based on the results of the research, the web-based inventory information system developed for PT. Mitra Puding Mas - Palm Oil Mill provides a solution to the problems of manual inventory management. The system successfully facilitates the recording and management of incoming and outgoing goods, item categories, supplier data, purchasing transactions, stock information, and inventory reports in an integrated manner. The implementation of the system transforms the previous manual recording process into a computerized system, thereby reducing the risk of human error, data duplication, and delays in inventory reporting. The system also makes it easier for users and management to access and monitor inventory information in a more structured and efficient manner. The results of Black-Box Testing indicate that the main features of the system can operate according to the specified requirements. Therefore, the developed system can support inventory management activities and assist management in obtaining more accurate inventory information for faster and more appropriate decision-making. For further development, the system can be enhanced

by adding features such as automatic stock notifications, barcode scanning, user access management, and integration with other company systems to improve inventory management capabilities.

BIBLIOGRAPHY

- [1] Ade Risna Sari, H. A. (2025). *Qualitative, Quantitative, and R&D Research Methods*. Bekasi: Yayasan Putra Adi Dharma.
- [2] Aditya Riyanto Sijabat, E. E. (2024). Design and Development of a Sales Information System for Fishing Equipment at Koperasi Nelayan Batam Madani. *Jurnal Comasie*, 10(5), 144–151.
- [3] Ahmad Zainudin, A. P. (2024). Web-Based Drug Inventory Information System at Bina Kasih Hospital. *Jurnal Ilmiah Sistem Informas*, 3(3), 30–34.
- [4] Aji Setiawan, T. K. (2023). Design of a Web-Based Inventory System at PT. Harapan Sukses Jaya. *Jurnal Manajemen Informatika*, 11(2), 106–111.
- [5] Alfin Murod, R. H. (2024). Design and Development of a Goods Inventory Management Information System Using the Laravel Framework (Case Study: PT. Jazeera Inti Sukses). *Jurnal Informatika dan Teknik Elektro Terapan*, 12(3), 2210–2219.
- [6] Alwi Dwi Amri, L. S. (2023). Design and Development of a Web-Based Goods Inventory Application at SMAN 1 Padang Ganting. *Jurnal Teknik Komputer dan Informatika*, 3(3), 10–16.
- [7] Aurellia, A. S. (2023). Utilization of UML in the Design of a Web-Based Creative Recycled Waste Product Information System. *JITET (Jurnal Informatika dan Teknik Elektro Terapan)*, 13(3), 1739–1749.
- [8] Chandra Christian, A. V. (2024). Design and Development of a Website-Based Inventory Information System Application. *Jurnal Informatika dan Teknik Elektro Terapan*, 12(2), 1500–1509.
- [9] Christian Agung Widiatma, L. A. (2025). Design of a Web-Based Sales Inventory Information System at Yuda Store, Pasar Inpres, Kelapa Gading District. *Jurnal Sains, Bisnis dan Teknologi*, 11(1), 108–117.
- [10] Dalimunthe, A. L. (2022). Web-Based E-Learning Information System at SMA Negeri 1 Rantau Selatan. *Journal of Student Development Informatics Management*, 1(1), 1–11.
- [11] Darmansyah, I. (2025). Goods Inventory Information System at the Batu Bara Regency Regional General Hospital. *Jurnal Teknik Informatika, Sains dan Ilmu Komunikasi*, 3(1), 169–177.
- [12] Denny Rusdianto, F. F. (2022). Analysis of the Utilization of a Village Information System Website in Duku Village, Ibun District, Bandung Regency. *Jurnal Sistem Informasi*, 4(1), 39–52.
- [13] Denny Rusdianto, Y. H. (2023). Design and Development of an Inventory Information System Using the Laravel 8 Framework at PT. Cemara Kwangjin Tekstil. *Jurnal Sistem Informasi*, 5(2), 71–76.
- [14] Harrys Qomarul Zamani, P. P. (2023). Design and Development of a Warehouse Information System Website for Mitra Mandiri Mebel Store, Samarinda, Using the Laravel and Vue.js Frameworks with the Waterfall Method. *Sains, Aplikasi, Komputasi dan Teknologi Informasi*, 5(1), 18–31.
- [15] Haudzan Zaky Syahrani Lasaima, A. M. (2025). Design and Development of a Website-Based Government Bureau Information System for the Regional Secretariat of Southeast Sulawesi Province. *Jurnal Mahasiswa Teknik Informatika*, 9(2), 3175–3182.
- [16] Inessthasia M. Ijfi, R. B. (2025). Design and Development of an Inventory System at Central Motors Using the Waterfall Method. *Jurnal Mahasiswa Teknik Informatika*, 9(3), 5351–5358.
- [17] Iwan Setiawan, S. F. (2023). Design and Development of a Web-Based School Goods Inventory Data Application at SMK Negeri 1 Tanah Abang, PALI Regency. *Jurnal Sistem Informasi dan Teknik Komputer*, 8(1), 61–64.
- [18] Masimbangan Sabarina Harlina, E. S. (2025). Modeling of the Design of the Umami Cookies Store Website Using UML (Unified Modeling Language). *Jurnal Teknologi dan Sistem Informasi Bisnis*, 7(3), 364–371.
- [19] Moh Raihan Romadhoni, N. C. (2025). Design and Implementation of a Website-Based Warehouse Inventory Management System Using a Firestore Database. *Jurnal Mahasiswa Teknik Informatika*, 9(3), 5452–5459.
- [20] Muhammad Fikri, B. M. (2025). Design and Development of a Website-Based Goods Inventory Information System. *Jurnal Riset Teknik Komputer*, 2(1), 01–09.
- [21] Pratiwi, U., Wijaya, K., & Fajriyah. (2021).

- Application of the Prototype Method in the Design of a Website-Based Karate Payment Administration System: A Case Study of Lemkari Prabumulih. *Jurnal Pengembangan Sistem Informasi dan Informatika*, 2(3), 157-173.
- [22] Putri Hadeya Shabrina, S. Z. (2024). Design and Development of an Inventory Information System Using the Rapid Application Development (RAD) Method at Abadi Jaya Store. *Jurnal Ilmiah Informatika*, 12(1), 44-52.
- [23] Rizka Indah Melyani, R. S. (2023). Development of a Web-Based Payroll Information System Using the Laravel Framework with the Agile Software Development Method. *Jurnal Sistem Informasi Akuntansi*, 3(1), 31-36.
- [24] Rizky Aditya, V. H. (2021). Design and Development of an Activity Monitoring Application Using the Prototype Method. *Journal of Information Technology and Computer Science*, 1(1), 47-57.
- [25] Sugiyono. (2023). *Qualitative, Quantitative, and R&D Research Methods*. Bandung: Alfabeta Bandung.
- [26] Suharni, Susilowati, E., & Pakusadewa, F. (2023). Design of the Rumah Makan Ninik Website as a Promotional Medium Using Unified Modeling Language. *Jurnal Rekayasa Informasi*, 12(1).
- [27] Syahisro Mirajdandi, D. I. (2021). Design and Development of a Goods Inventory Information System at Master Dealer CV. Orbit Techno Regional Central Sumatra. *Jurnal Vocational Teknik Elektronika dan Informatika*, 9(4), 55-63.
- [28] Titin Prihatin, N. H. (2023). Development of a Web Application for Goods Stock Management at PT. CBN Nusantara. *Jurnal Sistem Informasi (E-Journal)*, 15(1), 2969-2980.
- [29] Zidan Muhammad Herman, H. M. (2025). Design of a Financial Information Service Management System Application (SLIK) at Bank BPR Nusamba Singaparna Based on a Website. *Jurnal Penelitian Inovatif*, 5(2), 1773-1786.