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# Design of A Web-Based Goods Recording Application at PT. Cahaya Cutter Prima

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### Abstract

Today, the progress and development of Information Technology has penetrated into various aspects of human life. The recording of incoming goods and outgoing goods is an activity carried out by a company to control and track the amount of goods available in the company. The system used by PT. Cahaya Cutter Prima still uses a manual process. The concept of a manual goods recording system causes incorrect information from the warehouse. As a end result of the misinformation, ensuing in a discrepancy among the facts entered with the present goods. This system to help personnel in calculating the quantity of products to be effective and efficient to decide the quantity of inventory. As a basis for reference to create an information system for recording incoming and outgoing goods, a literature study was conducted using the Waterfall method as a reference in the design of this information system, starting with the design of a database using ERD. The programming language used is PHP with Bootstrap framework and MySQL as the database. It can be concluded that the results of the implementation of this new system can help companies more easily, efficiently, and effectively. It is expected that the efficiency of the company will increase and the work done will become easier. The information needed by the company is also qualified so that the decisions taken can have a positive impact on the company.

# I. INTRODUCTION

As is the case in the system of recording incoming goods receipts and goods expenditures made at PT. Cahaya Cutter Prima is engaged in the sale of tools for factory needs. Until now, the recording of incoming goods and outgoing goods is not carried out through the information system. In the current system, receipts of incoming goods and outgoing goods are still recorded by warehouse staff in the inventory ledger and then transferred to Microsoft Excel, so errors and discrepancies often occur when recording goods.

Based on this background, the authors propose a "Design of an application for recording goods using PHP and MYSQL at PT. Cahaya Cutter Prima" which can simplify the process of recording incoming goods receipts and outgoing goods, to build a system that is expected to facilitate work at PT. Cahaya Cutter Prima in recording goods.

According to Munthe<sup>[1]</sup> PHP is a programming language for creating web-based applications. In terms of processing PHP is classified as server-side, ie processing is done on the server.

Based on the background above, there are identification problems that can be identified as follows, Recording of incoming and outgoing goods is still using a manual process. The process of taking warehouse goods through manual calculations. How to build a system that can provide fast, concise, and accurate information with a PHP framework with MYSQL.

The framework is a flow that is used as a plan of thought to improve the indicators behind the making of this application. In this framework, the explanation will be formed in the following diagram:

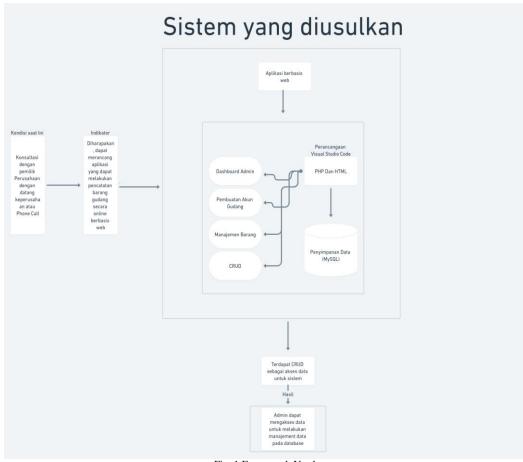


Fig. 1 Framework Used

# II. RELATED WORKS/LITERATURE REVIEW (OPTIONAL)

The following table reviews literature from 3 journals used in related research. The components used in the literature review are the name of the researcher, the name of the journal along with the ISSN, the year of publication of the journal, the institution, the title and method used and the conclusion.

TABLE 1 Literatur review

|             |  | Literatur review   |   |
|-------------|--|--|---|
| Researcher  | <ol> <li>Hanna Prillysca Chernovita<sup>[2]</sup></li> <li>Ghavinkson Enstayn Abednego<br/>Kustanto</li> </ol> | <ol> <li>Eva Novianti<sup>[3]</sup></li> <li>Ferbyansah Adi Putra</li> </ol> | 1. Agustiranda Bagaskara Putra <sup>[4]</sup> |
| Journal     | Journal of Information Technology and  | Journal of Engineering, Dharma   | National Seminar on Information and           |
| Name        | Computer Science p-ISSN 2355-7699 e-   | Persada University   | Communication Technologye-ISSN                |
|             | ISSN 2528-6579   | ISSN 2088-060X   | 2685-5615                                     |
| Year        | 2021   | 2021   | 2019  |
| Institution | PT.Unicorn Intertranz  | PT.Sahabat Langit Indonesia  | Madrasah Aliyah Kare                          |
| Title and   | Web-Based Management Information   | Design and Build Information System  | Design and Build a Web-Based E-               |
| Method      | System Design (Case Study: PT.Unicorn  | for Incoming and Outgoing Goods  | Learning Information System Using             |
|             | Intertranz)  | Recording (Case Study: PT. Sahabat   | PHP and MySQL Frameworks                      |
|             |  | Langit Indonesia)  |   |
| Conclusion  | The successful creation of a Web-based   | Information System Application for   | The results of the system test show that      |
|             | Management Information system.   | recording goods for use by PT. Sahabat                                       | the E-Learning Information System has         |
|             |  | Langit Indonesia and can help  |   |

|  | facilitate work, especially warehouses, | been able to produce output that is in |
|--|---|--|
|  | to record and manage warehouse          | accordance with the design             |
|  | goods effectively.                      |  |

# III. METHODS

According to Kadir<sup>[5]</sup> that waterfall is a form of sequential classical model in the manufacture of dynamic software. Illustrated in the form of a stacked diagram that describes a particular step or process.

XAMPP is free software that supports multiple operating systems, which is a collection of several programs. According to Mawaddah<sup>[6]</sup> explained that XAMPP is a server software in which there is a MySQL server and is supported by PHP as a programming language to create dynamic websites and there is an Apache web server that can run on several platforms such as OS X, Windows, Linux, Mac and Linux. solaris.

At PT. Cahaya Cutter Prima has a system requirement that can be used for staff to be able to check information about the amount of stock items or provide solutions to goods management problems or goods ordering decisions. How to make a section able to consult with a consultant with the director about the company's raw material problems experienced by staff is to create a Web-based stock management application using PHP and MySQL at PT. Cahaya Cutter Prima through a web-based application.

TABLE 2
Requirement Elicitation

|   | requirement Environ                  |  |  |  |  |
|---|--------------------------------------|--|--|--|--|
|   | Requirement Elicitation              |  |  |  |  |
| 1 | Easy to understand display           |  |  |  |  |
| 2 | Displays all item data information   |  |  |  |  |
| 3 | Displays out of stock on stock items |  |  |  |  |
| 4 | Add new product                      |  |  |  |  |
| 5 | Creating a login system              |  |  |  |  |
| 6 | Added edit and delete features       |  |  |  |  |
| 7 | View reports                         |  |  |  |  |
| 8 | Creating tax features                |  |  |  |  |

Based on the results of a survey that has been conducted by the author, the authors make an analysis of system requirements that will be used as a reference in the formation of applications, the following system analysis can be made:

TABLE 3
Application Needs

| No | User Needs                         | Information |
|----|------------------------------------|-------------|
| 1  | Easy to understand display         | <b>✓</b>    |
| 2  | Displays all item data information | ~           |
| 3  | Displays out of stock information  | ~           |
| 4  | Add new product                    | ~           |
| 5  | Creating a login system            | ~           |
| 6  | Added edit and delete features     | ~           |
| 7  | View reports                       | V           |
| 8  | Creating tax features              | ×           |

The following is a procedure carried out in procuring goods from suppliers to entering manual reports by PT. Cahaya Cutter Prima are as follows:

- 1. Warehouse department checks inventory.
- 2. If the stock is close to the minimum amount of stock, the warehouse department records this in the inventory ledger.
- 3. Warehouse staff make a report on ordering goods to the purchasing department for processing.
- 4. The purchasing department receives a list of orders (reports of purchasing goods) from the warehouse.
- 5. Purchase section for PO (Purchase Order) and given to suppliers.
- 6. After receiving the PO (Purchase Order), the supplier will send the goods to the warehouse with the order invoice.
- 7. The warehouse department receives goods from suppliers and checks whether the PO (Purchase Order) and the order invoice are matched sent by the supplier.
- 8. If there is an order error or it is damaged, the warehouse will separate the goods and request a return to the supplier and send a replacement.
- 9. If the order of goods is in good condition and appropriate, the warehouse section carries out the process of arranging incoming goods and making a report based on the purchase invoice in the general ledger.
- 10. Warehouse staff will provide a copy of the PO (Purchase Order) and purchase invoice to the purchasing department for a report.
- 11. Purchasing department archives purchase records and receipts in the file book.
- 12. A report on the purchase of goods will be compiled and then submitted to the director.

The following is an Activity Diagram that is carried out in ordering goods from suppliers to making reports carried out at PT. Cahaya Cutter Prima are as follows:

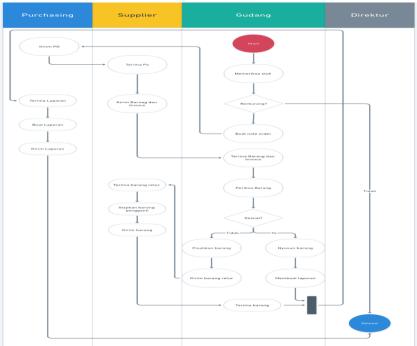


Fig. 2 Activity Diagram System

# IV. RESULTS

After analyzing and understanding the problems that exist in PT. PRIMA CUTTER LIGHT. The author tries to make a web-based application that can record goods. In order to be in accordance with the aims and objectives that have been planned by the author, the proposed program can facilitate the processing of warehouse stock data and minimize errors in recording. And can help employees to make it easier to record stock of goods.

Inventory recording that was previously run manually has several vulnerabilities and will have an impact on the company's system. It is hoped that this application can improve performance and minimize errors to create a more effective and efficient system, after the author has observed the entire existing system, the proposed system procedure

is that the admin logs into the new system, can do data entry, create reports stock, make travel documents. The warehouse section will check product stock, the director will get a report. Thus, the author proposes making an application using PHP and MYSQL using the Waterfall method, which can be operated via a web browser.

Use Case The diagram used in this proposed application is to explain and describe the application that will be made easy to understand. The use case diagram for the stock recording application to be built is as follows:

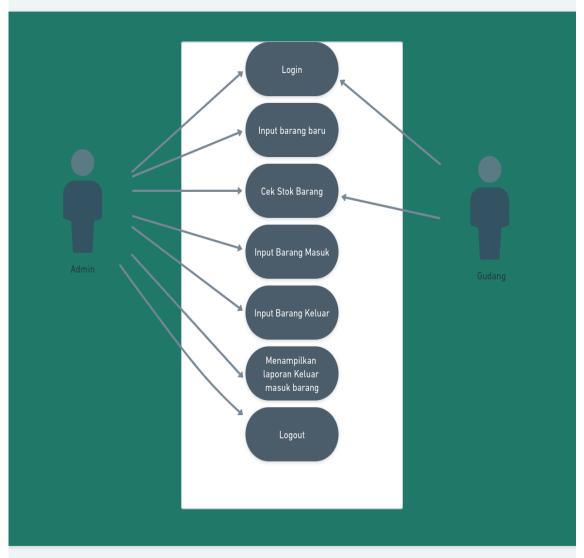


Fig. 4 Proposed Use Case Diagram

The following is a view of the application design that the author proposes:

The main display design is useful for being a dashboard, where the main display will provide information about the stock of goods that have entered the minimum stock limit, logos and other menus.

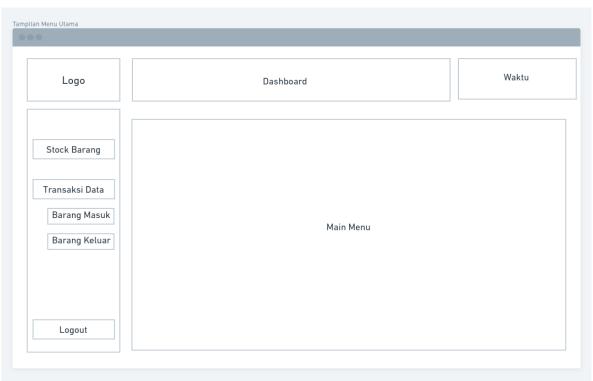


Fig. 3 Main Display Design

In the design of the incoming goods display, it will provide information about the goods that have been successfully purchased from suppliers.

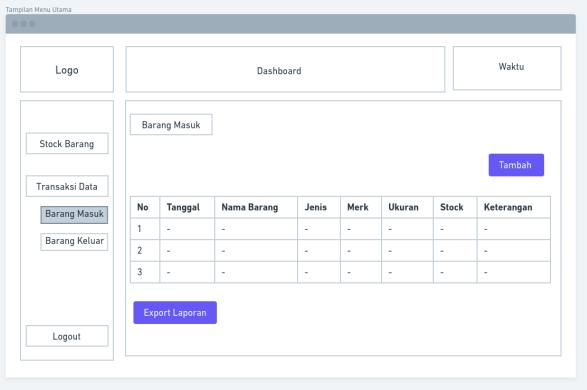


Fig. 4 Incoming Item Display Design

The main screen display is useful for being a dashboard, where the main display will provide information about the stock of goods that have entered the minimum stock limit, logos and other menus.

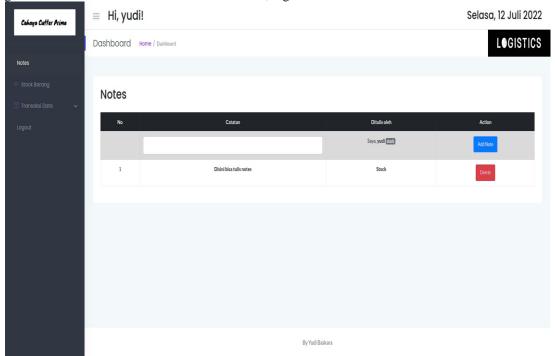


Figure 5 Main Page View

On the incoming goods screen display will provide information about the goods that have been successfully purchased from the suppliers.

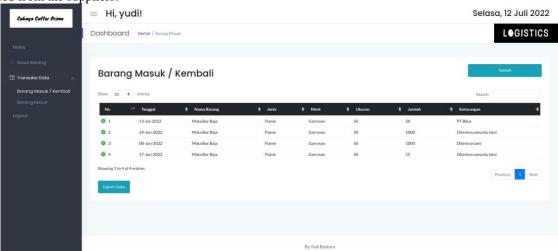


Figure 6 Incoming Item Menu Display

The hardware specifications required for the execution of this application are:

- 1. Personal Computer or Laptop.
- 2. Processor: Intel Core I7.
- 3. Memory: 4GB.
- 4. Hard disk: 500GB.

The software specifications required for the execution of this application are:

- 1. Operating System Windows 7
- 2. Browser Chrome

# V. CONCLUSIONS

Building a company inventory information system application aims to improve user performance and assist in decision making. Based on the results of the design of an inventory information system at PT. Cahaya Cutter Prima, the following conclusions can be drawn: (1) With this web-based goods recording application, it can help facilitate work, especially warehouse admins in evaluating stock in the warehouse. (2) This application minimizes the possibility of stock evaluation errors in evaluating goods in the warehouse. (3) With this application, the warehouse admin makes it very easy to evaluate stock and warehouse stock management and increase efficiency and effectiveness in company performance.

In the application of this application system is still far from perfect and still has many shortcomings. The author provides several suggestions so that this application can be used optimally, namely: (1) Adding the Delivery Order print out feature on the outgoing goods menu. (2) Add a good security system to protect company data. (3) Adding features that do not yet exist in the inventory information system.

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