

INFORMATION SYSTEM OF GOODS IN AND OUT USING FIFO METHOD

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Abstract

Information system in and out of inventory using the FIFO method is an information system to determine the inventory inventory in a company using the First In First Out method. FIFO itself is a sales method by selling incoming goods that are issued first to prevent a decline in the quality of goods due to expiration. FIFO inventory information systems have been widely used or developed in companies with various technologies and systems. The problem with EKO PS (Poultry Shop) Shop is that there is no information system available to manage inventory, so it cannot control the available inventory. Therefore, this study will analyze an information system in the form of a web-based FIFO inventory information system, so that inventory information can be known clearly and in detail and sales can be controlled using the FIFO method so that the FIFO inventory information system can be checked or viewed by admin as a user on the system.

Keywords: determination system, inventory, FIFO, EKO PS

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1. INTRODUCTION

In this modern era, developments in various aspects are increasingly advanced and modern. The need for information technology is one of the factors that support the growth of the business world. However, in fact, there are still many companies that use systems that are not well computerized. Information systems play a very important role in a company or information institution related from one part to another. So that the information provided in this section will affect the activities of other parts more quickly, precisely and integrated.

This information determination system was designed at EKO PS because previously the data recording system for incoming and outgoing goods was done manually, and there were frequent errors in recording or miscalculating. With the support of a computerized system, the workings of a system that was previously manual can be transformed into a more efficient,

efficient and efficient way of working and guaranteed the quality and quality of its work procedures.

With the development of better modern technological facilities today, a more productive work system environment will be created. At EKO PS there are often cases of expired goods due to a lack of routine when collecting inventory and also accumulating new stock from suppliers. Therefore, it is necessary to design a system that can be used to process data that will be classified according to the date of entry, type, quantity and supplier so that it becomes complete and detailed information.

2. DISCUSSION

2.1. First In First Out (FIFO)

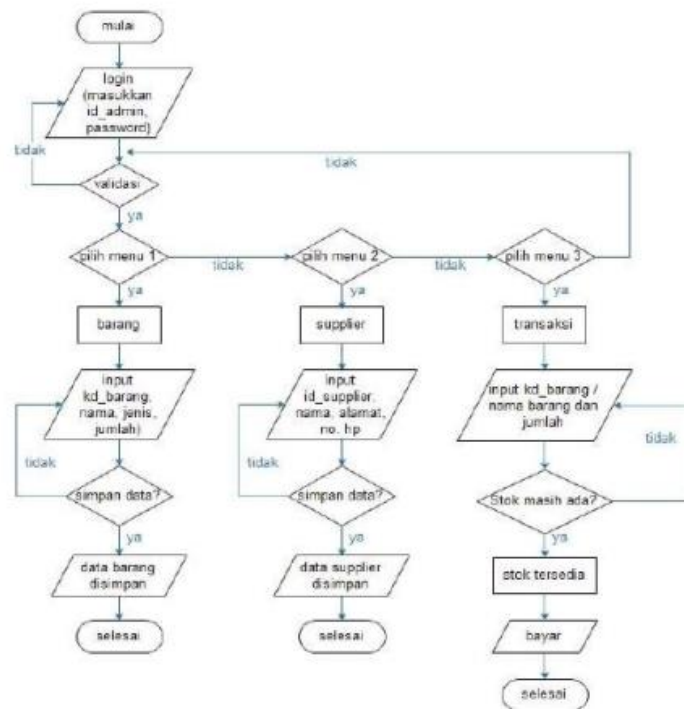
According to Jusup (2005: 120), the FIFO or first-in-out method assumes that the goods purchased early will be sold or used earlier, and the cost of goods purchased earlier will be charged first as the cost of goods sold. In physical recording, this method assumes that the items that were there at the beginning are sold as well. The difference is in the continuous recording using the FIFO (First In First Out) method, the calculation of the cost of goods sold is carried out at the time of the sale.

According to Mulyadi (2001) First-in, the First-Out method (FIFO) is a method of assessment which assumes that the first incoming goods are assumed to come out first. If it is removed from the warehouse, it will pay the first acquisition price. This method is in line with the physical flow flow where it is appropriate that the first goods are issued for the first time.

2.2. Flowchart

a) Admin Flowchart

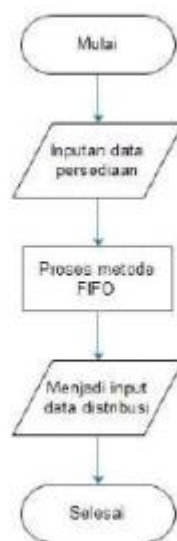
The admin flowchart is the flow system used by the EKO PS store admin. For the first time, the admin goes to the front page to fill in the specified username and password. After the admin is successful, the admin will go to the next page for the input and editing process regarding goods data, supplier data, and transaction data. If when entering the wrong username and password, the admin will return to the start page until the user name and password are entered correctly. Then the data that has been saved will go directly to the database on that day. After finishing checking and editing, the admin can leave the page.



Img 2.1 Admin Flowchart

b) FIFO Method Flowchart

Flowchart of the FIFO method with the following explanation. First the program starts with the beginning, then input the incoming goods data. After that, the data that has been entered will be processed in accordance with the order, the items that have been inputted for the first time will be the items that are distributed for the first time as well. Then the program ends with the end.



Img 2.2 FIFO Method Flowchart

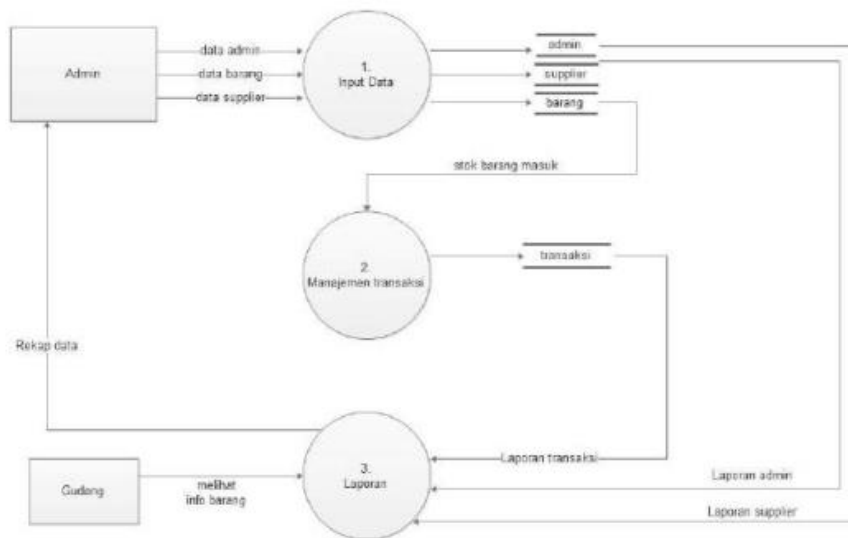
2.3. Data Flow Diagram (DFD)

a) Data Flow Diagram level 0



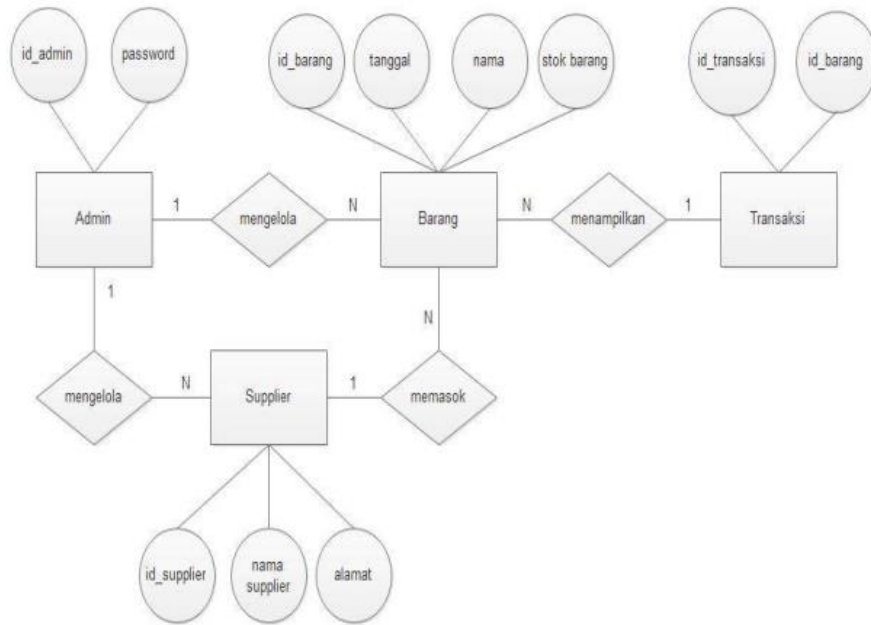
Img 2.3 DFD level 0

b) Data Flow Diagram level 1



Img 2.4 DFD level 1

2.4. Entity Relationship Diagram (ERD)

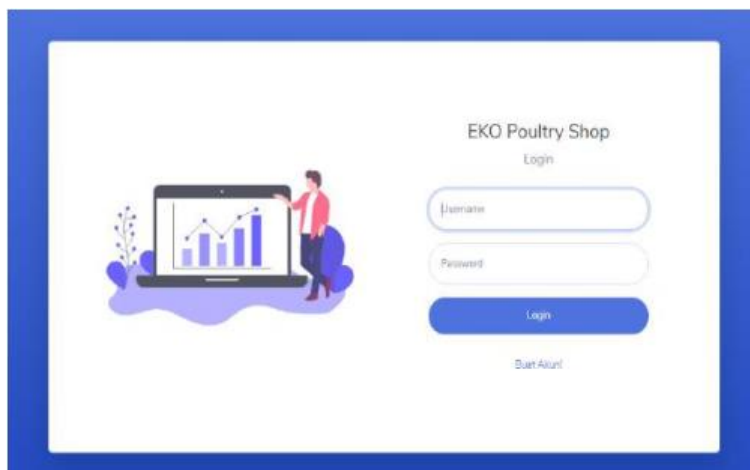


Img 2.5 Entity Relationship Diagram

2.5. User interface design

To make it easier to operate the system, the system will be made web-based with the following user interface design:

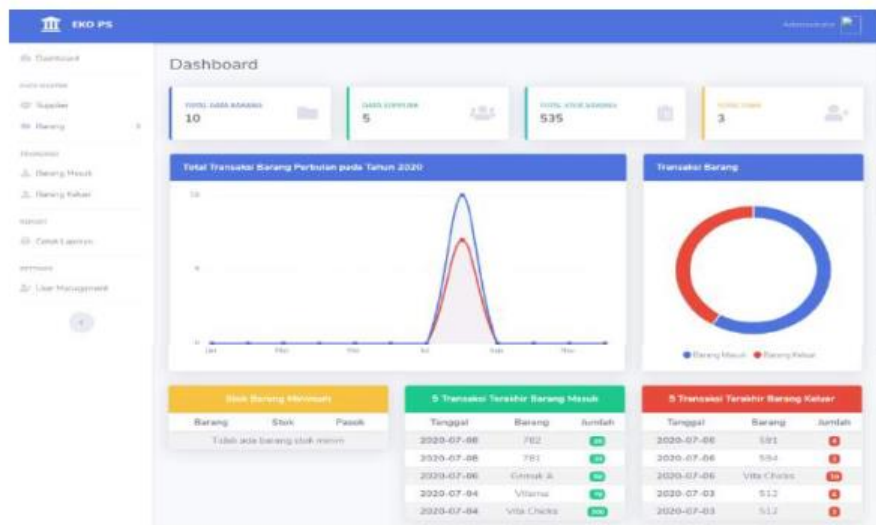
a) Login interface



Img 2.6 login interface

This login view is shown to system users, when they first access this web-based application. The components displayed on the login page are in the form of an image, application name and also a shortcut to the dashboard menu after successfully entering this web-based application.

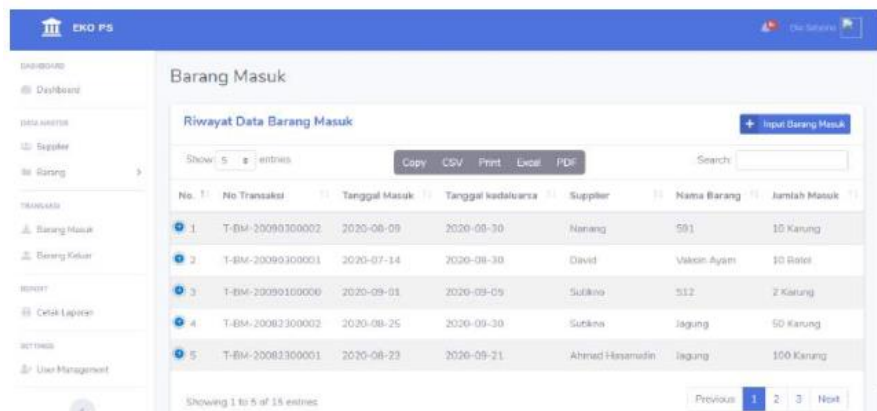
b) Dashboard Interface



Img 2.7 dashboard interface

Dashboard display is shown to system users, when they first access this web-based application. The components displayed on the homepage are a chart of goods transactions, application names, supplies, incoming goods, outgoing goods, printed reports, and user management.

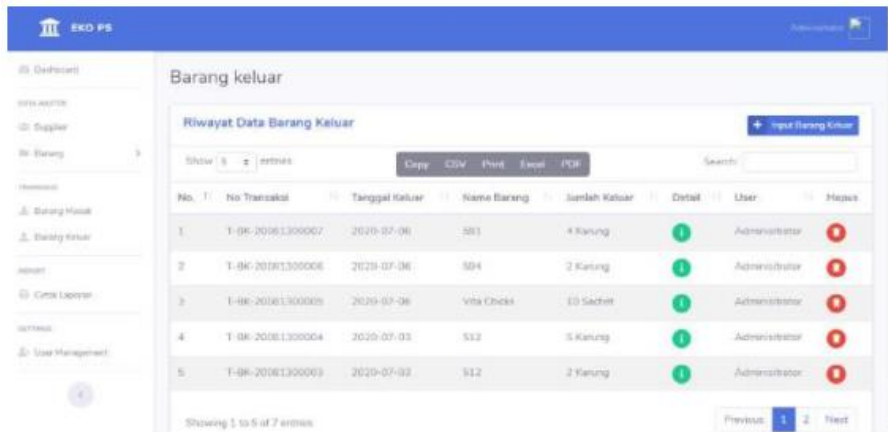
c) Incoming Goods Page



Img 2.8 incoming goods page

This page displays all information of incoming goods, namely transaction number, date of entry, supplier, item name, number of entries, and user.

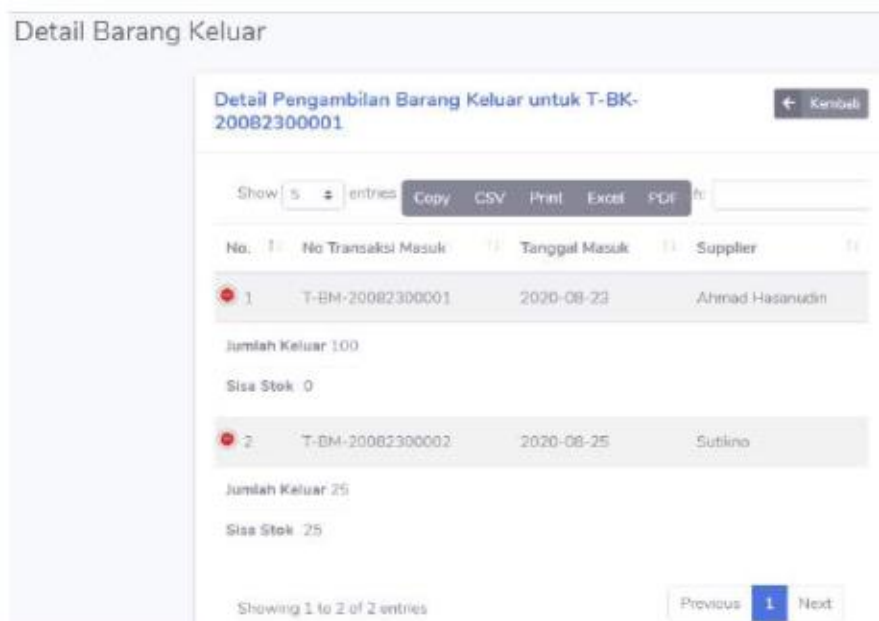
d) Outgoing Goods Page



Img 2.9 outgoing goods page

This page displays all outgoing goods information, namely transaction number, date of exit, name of item, number of items out, details, and user. In the details sub menu, there is information on which items should be issued first.

e) Item Details



Img 2.10 item details

On this detail page it is explained that if there is a large number of transactions, the goods to be released / sold are the first items entered into the warehouse, which can be seen through the date of entry.

3. CONCLUSION

Based on the results of the system design that has been made, it can be stated that the information system for incoming and outgoing goods at EKO PS Lodoyo is running quite

according to its function. But do not rule out if one day this system will experience errors during use, so it will take some time to fix it. So that this information system can run well. With this information system, it will make it easier for users, namely store administrators to control the stock of incoming and outgoing goods so that there is no accumulation of old stock with new stock, as a result if the old item is not sold immediately it will expired.

4. SUGGESTION

Applications can be developed again with other development methods and programming languages. Added features so that consumers can place orders without having to come to the store first.

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REFERENCES

- Yulianto, Agus. 2020. *Perancangan Sistem Informasi Pembuatan EInvoice Pada PT. Hasta Perkasa Graha Berbasis Web*. Jakarta: STMIK Nusa Mandiri.
- Al Haryono, Jusup. 2005. *Dasar-Dasar Akuntansi*, Edisi Keenam. Yogyakarta: Sekolah Tinggi Ilmu Ekonomi YKPN.
- Mulyadi. 2001. *Sistem Akuntansi*, Edisi 3. Jakarta: Sekolah Tinggi Ilmu Ekonomi YKPN.
- Nugroho, Pungky Satrio. 2016. *Sistem Persediaan Jenis Ikan Berdasarkan FIFO Pada Budidaya Ikan Cupang*. Kediri.