

Design Of Monitoring Information System Stock Items At Partner Stores In Web-Based Semarang

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Abstract— Toko Mitra is a grocery or retail store that is engaged to meet daily needs. Monitoring stock and transaction financial reports at Partner Stores in Semarang often experience problems. This is because the shop owner still uses a manual system, so that the recording of incoming and outgoing goods still does not match the last stock. Therefore, I want to provide a solution to Partner Shop owners by creating a web-based stock monitoring program. In building a stock monitoring system, I use programming languages PHP and JavaScript, MySQL as a database, and the CodeIgniter framework. The existence of a web-based stock monitoring system at Partner Stores is expected to help monitor activities that occur in the store to make it faster and more efficient.

Keywords— JavaScript, Monitoring, MySQL, PHP, CodeIgniter.

I. INTRODUCTION

The development of Information Technology in Indonesia has made many advances, especially in the goods management system. The existence of computerization helps the owner control the goods in the warehouse easily, quickly and accurately. One of the retail stores in Semarang, namely Mitra Shop, still uses a manual system when registering stock items in the warehouse. This causes miscommunication regarding expenditure data and data on the entry of goods, so that the owner has to recalculate to get data on goods available in the warehouse and takes a long time. Based on the above problems, I tried to design a simple web-based program

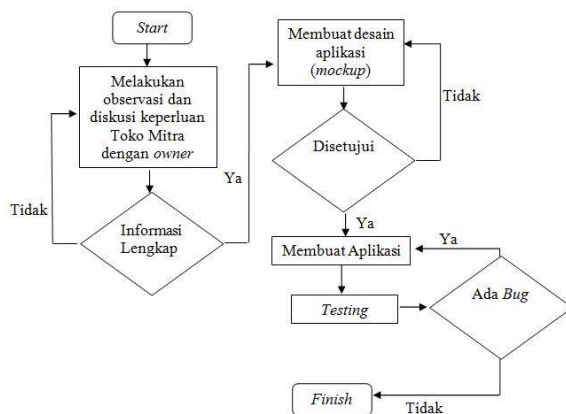
tailored to the needs of Partner Stores. I use this program to become the topic of my thesis with the title "Designing a Web-Based Goods Stock Monitoring Information System in Semarang Stores". This program uses language

PHP and JavaScript programming, with MySQL as database. and use the CodeIgniter framework. One of the ways to increase security in the Partner Stores stock monitoring system is to use MD5 security (message-digest algorithm 5). MD5 database security is placed when logging in to the stock monitoring system. MD5, so that it can disguise the password stored in the database and increase the secure value on the system. Web-based stock monitoring program for Mitra Stores, because in the operational process you can use all devices (laptops, PCs, mobile, etc.) which must be connected to the internet. When compared to a desktop, the program can only run on a PC if the stock monitoring application has been installed. Desktop does not require an internet connection. The stock monitoring program uses the PHP framework, this is because the PHP framework can help the process of developing web applications that use the PHP programming language by providing a basic structure for building a web. When compared to procedural PHP, this type of PHP has a simple algorithm with easy-to-understand program code..

II. METHOD

The design of a web-based stock monitoring system uses a qualitative approach, which begins with observation and

interviews. The target of this web-based monitoring program is limited, so that the data obtained is large and there is no target widening. After making observations at the Partner Shop through interviews with the owner regarding what is expected in this stock monitoring program, a design of this program is made. The existence of testing is required to find bugs and improve the finished program. Figure 2.1 shows the framework for developing a web-based stock monitoring program at Partner Stores.



The framework for creating a web-based stock monitoring program at Mitra Stores in Semarang is shown in Figure 2.2.

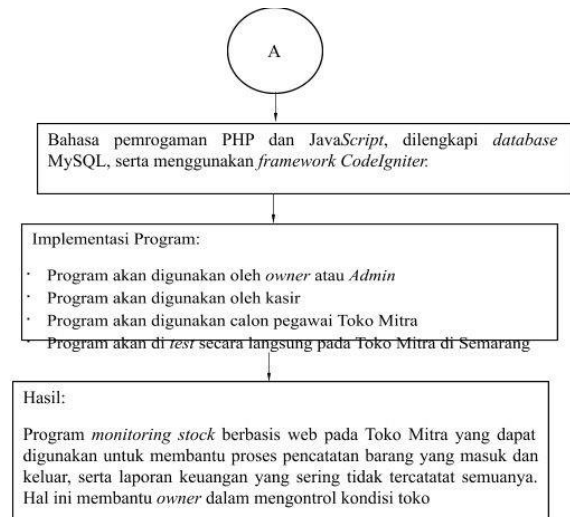
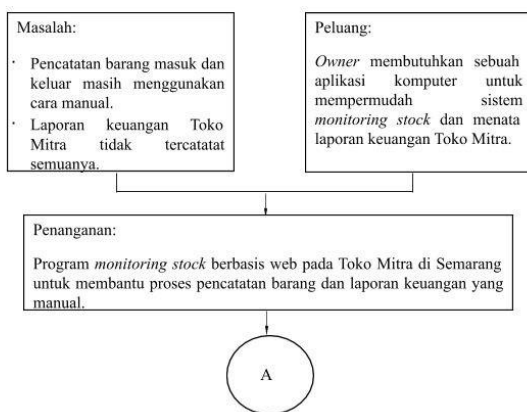


Figure 2.2 Thinking Framework

III. RESULTS AND DISCUSSION

The web-based store stock monitoring program has the function of making it easier for employees and owners to record goods entering and leaving the store and helping to recap financial reports and goods in the store. The monitoring program is created using the PHP and JavaScript programming languages, MySQL database, and the CodeIgniter framework which is operated by the admin and cashier. The monitoring program can be accessed anywhere if you have received permission from the Partner Shop owner. An understanding of each menu function (use case diagram) in the Partner Store monitoring program is shown in Figure 2.3.

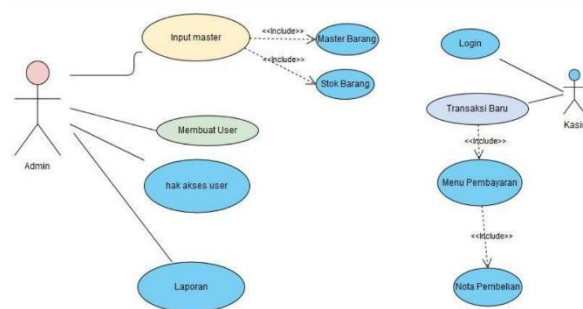


Figure 2.3 Use Case Diagram

Based on Figure 2.3, it is shown that the admin has an important role in the monitoring program. The existence of an admin has a role which is described as follows:

Input the master of the
 newly supplied goods to
 the Partner Shop,
Input stock of newly
 supplied goods to
 Partner Stores,
Create a new user and access rights,
Control or recap reports that occur in
 Partner Stores. Meanwhile, the cashier
 has a role which is described as follows:
 Make sales transactions for Partner
 Stores,
 Create Partner Stores shopping notes.

The existence of a flowchart serves to explain the workflow of the application in a simple way so that it is easier to understand. In Figure 2.4, the admin system flowchart is shown

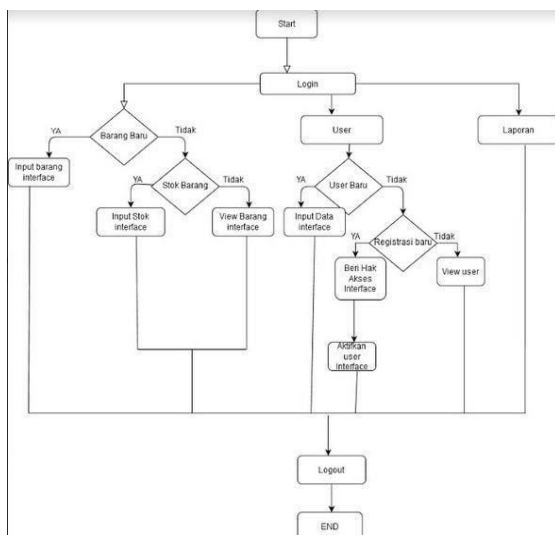


Figure 2.4 Administration System Flowchart

The flowchart of the Mitra Stores stock monitoring cashier system is shown in Figure 2.5.

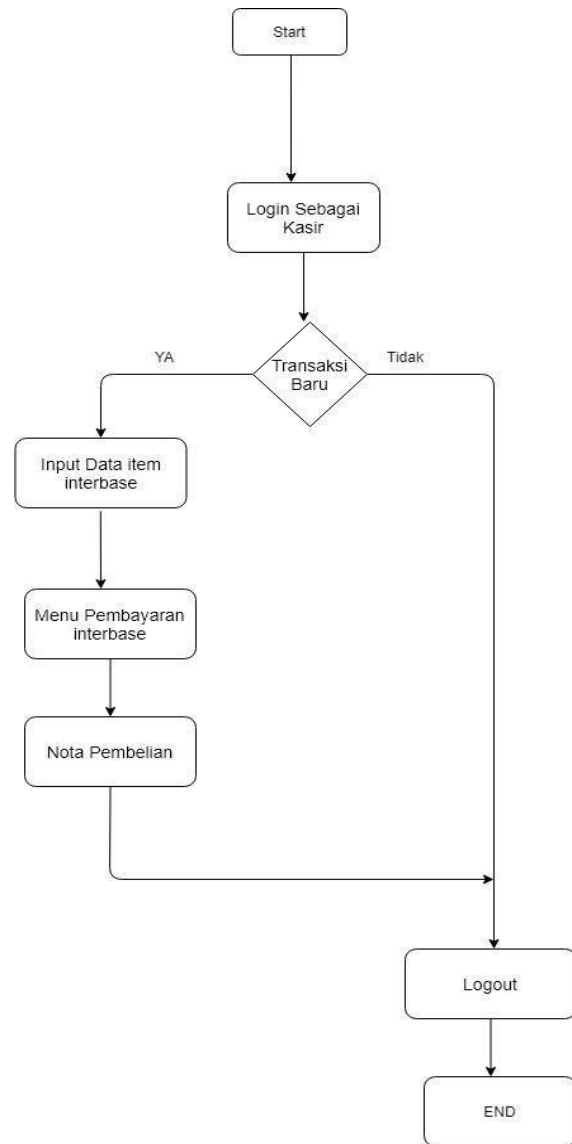
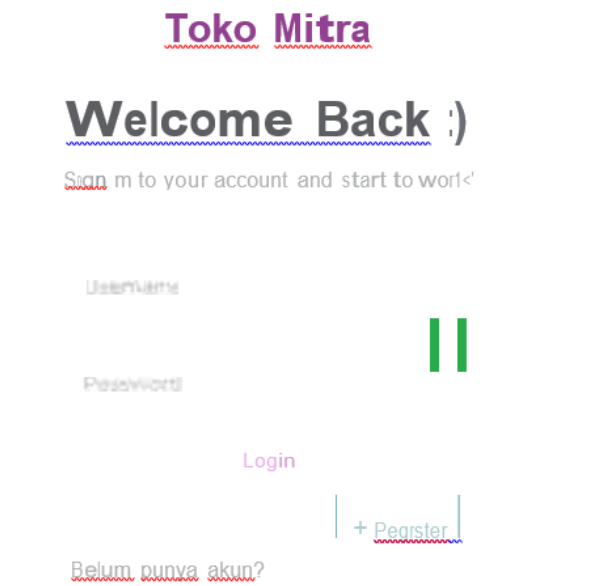
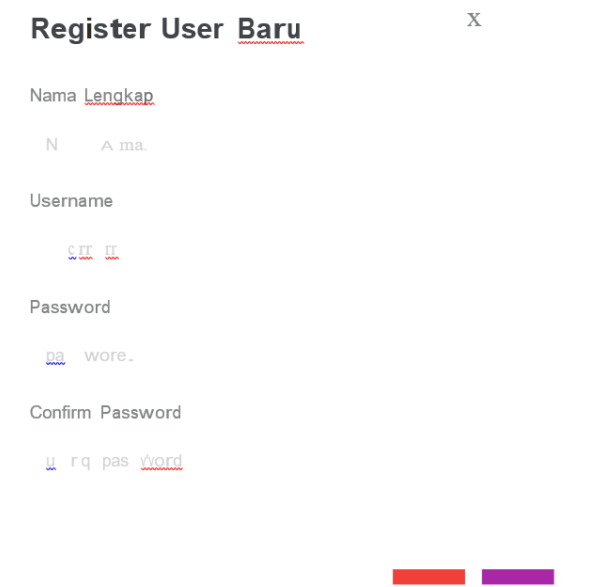


Figure 2.5. Partner Store Cashier System Flowchart

Partner Stores stock monitoring program can be accessed via: localhost / warehouse. Before the user logs in, it is shown in Figure 2.6 the initial appearance of the web-based Partner Stores stock monitoring program page.



When the user does not have an account, the user can press the button on the bottom right that says '+ Register' so that the registration page appears as shown in Figure 2.7.



Owner can control online users as administration and cashier. The user control display is shown in Figure 2.8.

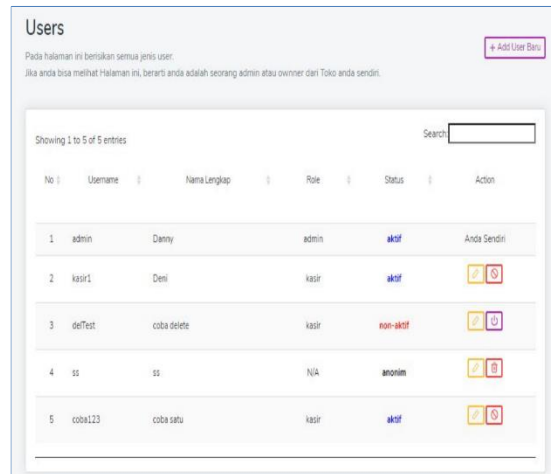
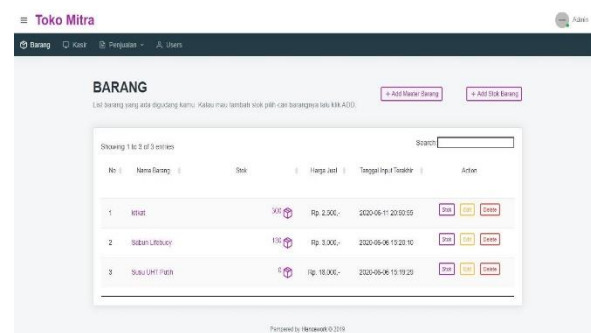


Figure 2.8. User Page



An administrator can add new types of goods to the system without opening the database, the item input page is shown in Figure 2.10.



Figure 2.10. Item Input Page

If there is an additional stock of goods from the supplier, the page display that appears is shown in Figure 2.11.

Figure 2.11 Input Stock Items

When the user logs in as a cashier, the page shown in Figure 2.12 will appear

Figure 2.12. Page As Cashier

The cashier has to press the '+ Add Item' button, when the buyer buys some items at the Partner

Shop. The shopping input page is shown in Figure 2.13.

The cashier can press the 'Save' button to go to the payment page. The payment page is shown in

Figure 2.14.

Figure 2.14 Payment Page

After the cashier has received the purchase money from the buyer, the cashier can press the '\$

Pay' button. Purchase notes at Partner Stores are shown in Figure 2.15.

Nota Pembelanjaan

Operator : admin
 No. Invoice : WH/2020NIJ729b
 Tanggal : 2020-06-12 15:10:38

Nama Barang	QTY	Harga Satuan (Rp)	Harga Total (Rp)
kitkat	2	2,500	5,000
Total Belanja			5,000
Uang Terbayar			10,000
Uang Kembali			5,000

The owner can check the financial reports from Partner Stores in Semarang every month. The financial reports of Partner Stores on the stock monitoring program are shown in Figure 2.16.

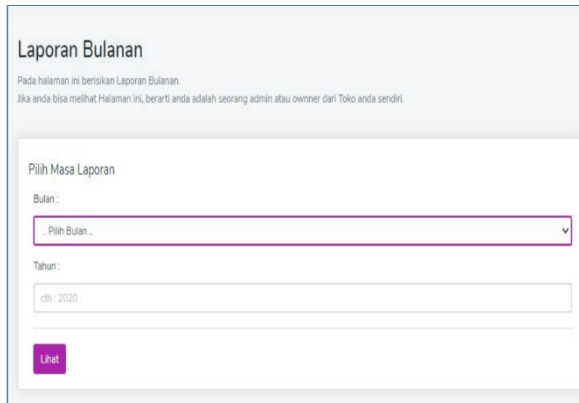


Figure 2.16 Financial Report Page

Financial reports from Partner Stores are divided into four parts:

Sales Note Report

Reports of sales notes from Partner Stores in Semarang are shown in Figure 2.17.

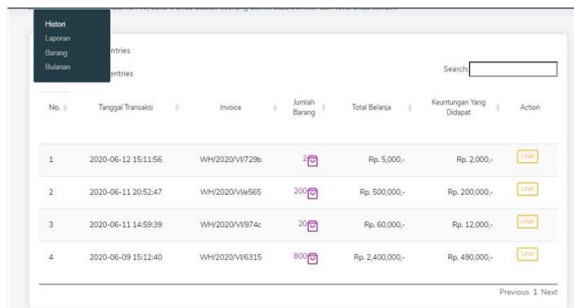


Figure 2.17. Sales Note Report

Sales Result Report

Sales Result Report Reports of sales results from Partner Stores in Semarang are

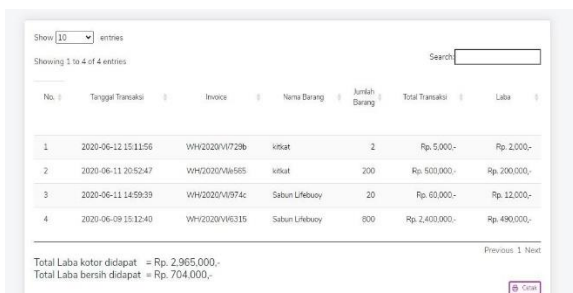


Figure 2.18. Sales Result Report

Stock History Report

Report of stock history from Partner Stores in Semarang, is shown in Figure 2.19

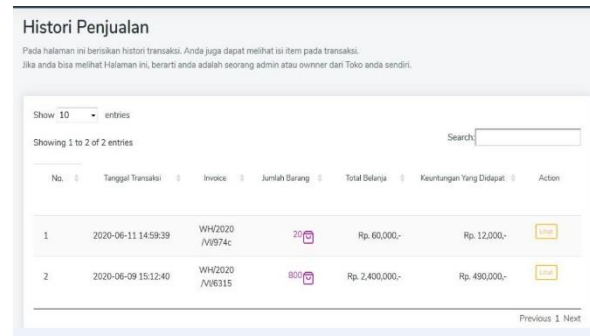


Figure 2.19. Stock History Report

Sales Note Report

Report of goods from Partner Stores in Semarang, is shown in Figure 2.20



Figure 2.20 Goods Report at Mitra Semarang Store

IV. CONCLUSION

The monitoring program minimizes errors in managing stock items that go in and out of Partner Stores.

The monitoring program makes it easy for owners to check financial reports and reports on stock items at Partner Stores.

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