

Design and Development of a Web Based Accounting Information System at TB Alam Lestari

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Abstract— TB Alam Lestari is a store that selling some building material. In this store, there are some problems, such as missing invoice, don't have financial statement, and different quantities during stock opname. Objective of this research is to design and implement accounting information system at TB Alam Lestari. To achieve the objective, researcher made accounting information system with RAD method. The result of this research is the owner of TB Alam Lestari starts to record transaction digitally, save the invoice automatically, have product quantity reference when stock opname, and have financial statement.

Keywords— accounting information system, financial statement, mysql, php, website

I. INTRODUCTION

Technology always develops over time. The development's process is very fast. If we do not follow the flow of technology development, the we will feel troubled. If a store does not immediately implement the existing technology, there will be confusion to several things. In a store, the application of technology that can be done is the use of accounting information system. Accounting information system is a system that will store and process data, so it become information that can be used to help someone make decisions [1]. There is other source that interprets accounting information system as a system for record data that combine accounting principles and

concept of accounting to gain information system and will be used to analyze and record the business transaction [2]. Accounting information system has many benefit to business, some of them are produce flexible and actual information, assisting the planning of many activities, and assisting in decision making [3].

This research will discuss about transaction record at TB Alam Lestari. This store does not have an information system that can help to record the transaction well. The purpose of this research is to make accounting information system for TB Alam Lestari. The system use PHP for the programming language, supported with HTML as markup language and CSS. The advantages of PHP language is that it is open source, easy to understand, and easy to develop. Beside of that, PHP don't need to compile in use. There are also many web server that support this programming language [4].

II. METHOD

The first step of this research is conduct interviews with the owner of the store. Interview is one of technique that use to collect data by meet face to face and discuss with informant [5]. After that, researcher observe the store. Observation is data collection technique that done by observing the event that occur [6].

This research will produce an accounting information system that web basis. Because of that, software development method is

needed. In this research, we will use Rapid Application Development or shortened as RAD. Researcher using RAD method because the process of creating system can done more quick, and the quality meets user requirements [7]. Moreover, RAD focus to speed in software development to fulfill user requirement [8]. The following is a step in RAD method.

1. Planning the requirements
In this step, user and researcher identifying the purpose of system.
2. Make system's design
In this step, researcher make the system's design and improve it if user feels not suitable with the design.
3. Implement system's design
In this step, researcher will implement agreed system's design. [9].

Researcher make two diagrams and one flowchart for knowing the flow of the system. The diagrams are use case diagram and activity diagram. Use case diagram is a diagram that describe interaction between user with the system [10]. Use case diagram shows functional that expected from the system [11]. Activity diagram shows the flow of activities from a system or business process that exist in software [12]. Activity diagram used to know explanation from program's activity without look at the coding or software's user interface [13]. Flowchart is representation of steps and procedure of program by graph [14]. In other source, flowchart is chart that show system's plot logically [15]. Below is flowchart of the system created.

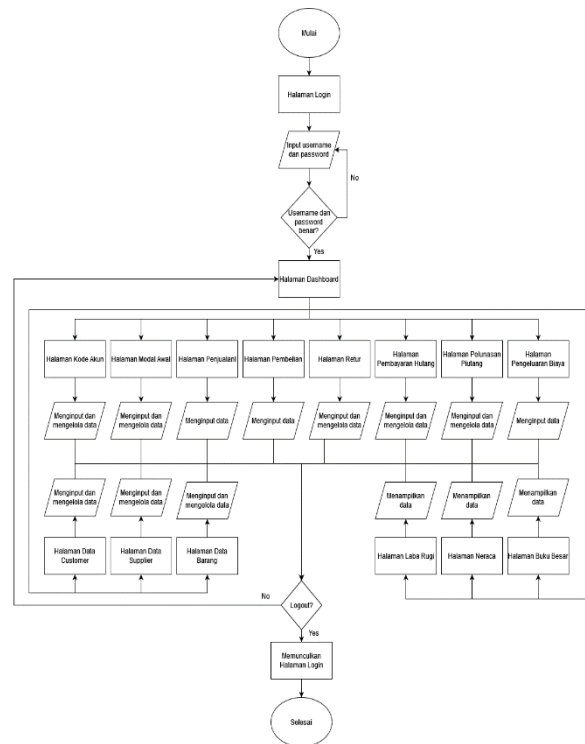


Figure 1. System Flowchart

III. RESULTS AND DISCUSSION

A. RESULT

Sometimes there are a problem in this store. In here, usually stock opname does not happen. When there are difference between physical stock with stock record, the store don't know which one have the real quantity. Beside of that, sometimes the invoice lost and the store still not have financial statement yet.

In the introduction section, it has been explained that researcher will make accounting information system for TB Alam Lestari. Below is the user interface and explanation of accounting information system that researcher made for TB Alam Lestari.

A. Login Page

Below is user interface of login page. User should login before access the website.

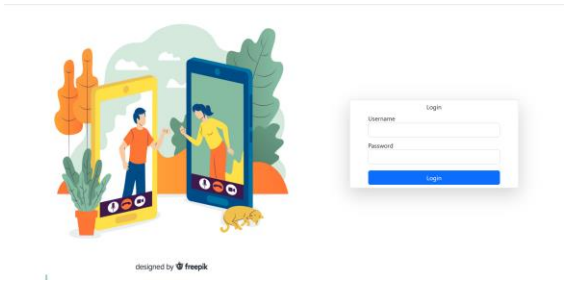


Figure 2. Login Page

B. Dashboard

Below is user interface of dashboard on the website. It shows the history of today's sales and stock that is about to run out. Below of the table, there is a button for log out.

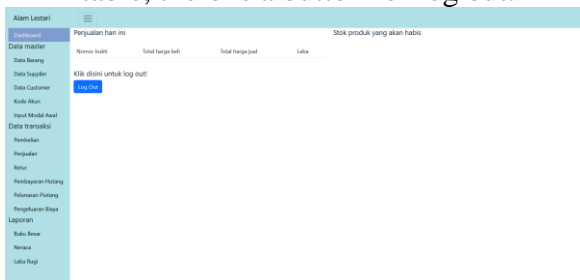


Figure 3. Dashboard

C. Product Data

Below is user interface of product data. There is a form to add new product, and there is a table that shows product data from database.

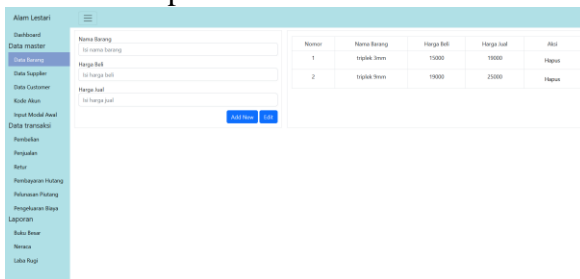


Figure 4. Product Data

D. Supplier Data

Below is user interface of supplier data. There is a form to add new supplier and there is a table that shows supplier data from database.

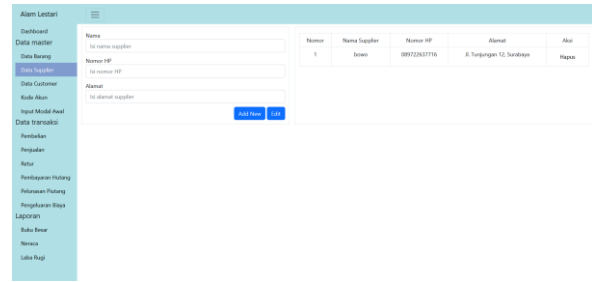


Figure 5. Supplier Data

E. Customer Data

Below is user interface of customer data. There is a form to add new customer and there is a table that shows customer data from database.

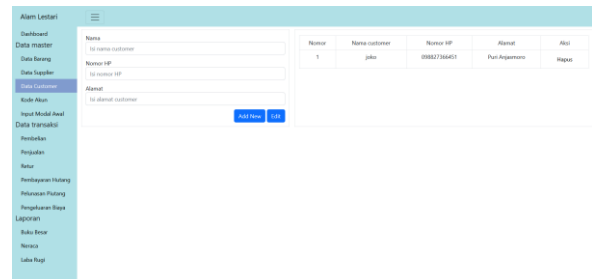


Figure 6. Customer Data

F. Account Code

Below is user interface of account code. There is a form to add new account code, and there is a table that shows account code from database.

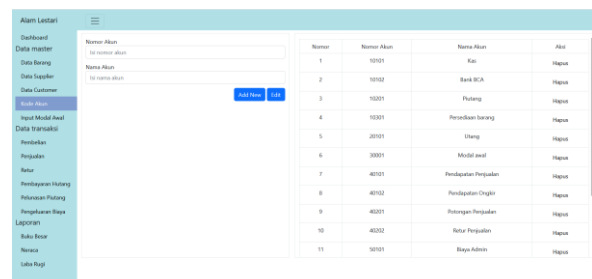


Figure 7. Account Code

G. Beginning Capital

Below is user interface of beginning capital. There are four option. If the option is selected, it shows data from database, a form to input beginning capital, and table that shows beginning capital data.

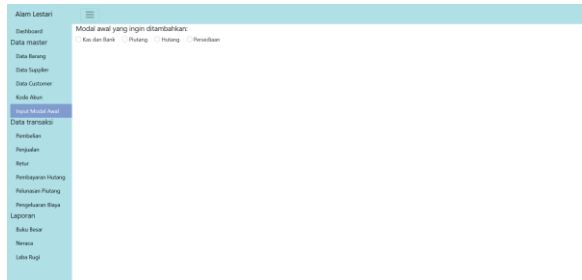


Figure 8. Beginning Capital

H. Purchase

Below is user interface of purchase menu. There is a table that show product and total stock from database and a form to input new purchase transaction. Below the table and form, there is a table that shows history of purchase transaction.

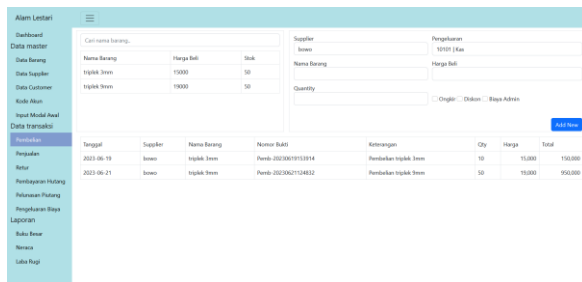


Figure 9. Purchase

I. Sales

Below is user interface from sales menu. There is a table that shows product data from database and form to add new sales transaction. Below of the table and form, there is a table to shows data that inputted into the form. Below of the table, there is a button for save data to database and download invoice.

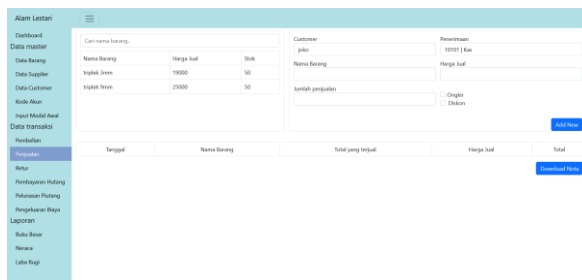


Figure 10. Sales

J. Return

Below is user interface of return menu. There are two options, purchase return or sales return. Each option will show sales or purchase data, form to input return, and return data.

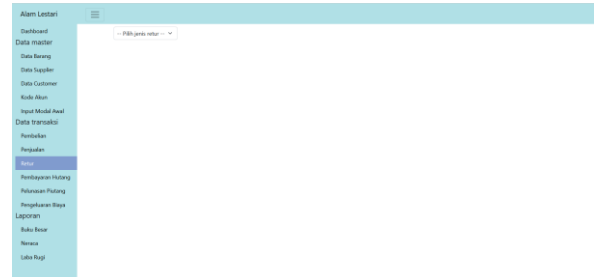


Figure 11. Return

K. Debt Payment

Below is user interface of debt payment. There is a dropdown to choose the supplier. Beside that, there is a button to look the data. After it clicked, table that shows debt data will appear.

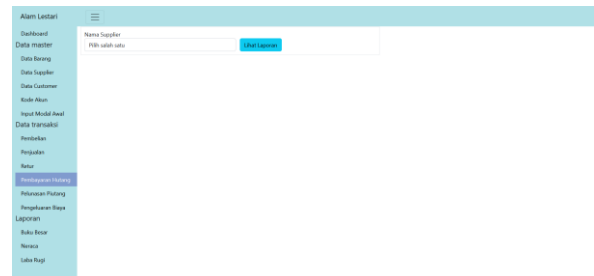


Figure 12. Debt Payment

L. Repayment of Accounts Receivable

Below is user interface of repayment of account receivable. There is a dropdown to choose the customer. Beside that, there is a button to look the data. After it clicked, table that shows account receivable data will appear.

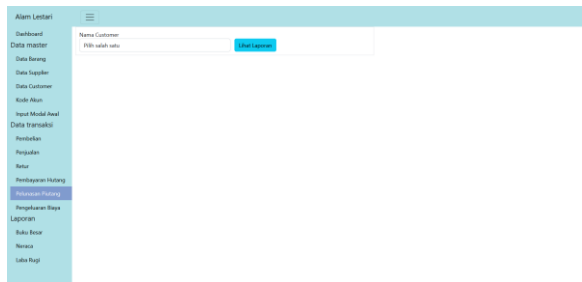


Figure 13. Repayment of Accounts Receivable

M. Expenses

Below is user interface of expenses menu. There is a form to input new expense data. Beside that, there is a table that shows expenses data from database.

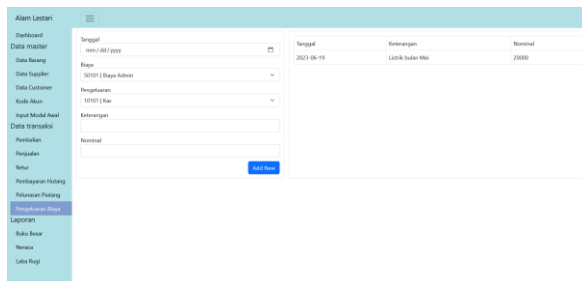


Figure 14. Expenses

N. Ledger

Below is the user interface from ledger menu. There is a dropdown to choose account name. Beside that, there are datepicker to choose start date and end date. And then there is a button that if clicked will make a table that shows transaction history appear.

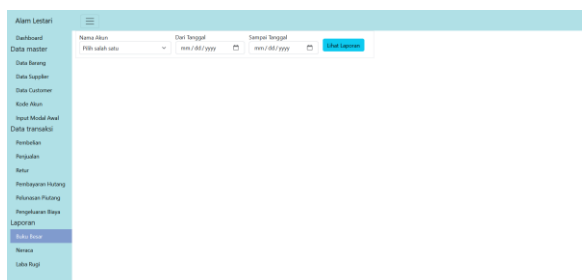


Figure 15. Ledger

O. Balance Sheet

Below is user interface of balance sheet. There are datepicker to choose start date and end date. Beside that, there is a button. If the button clicked,

it will shows table that contains asset, liability, and equity.

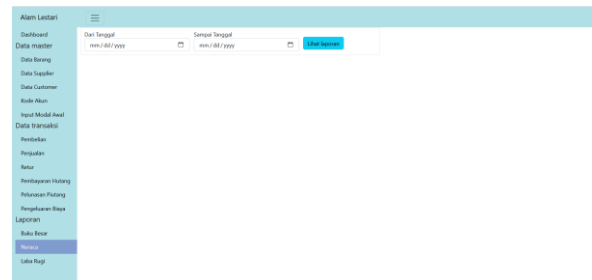


Figure 16. Balance Sheet

P. Income Statement

Below is user interface of income statement. There are datepicker to choose start date and end date. Beside that, there is a button. If it clicked, it will shows table that contains revenue and expense to calculate the profit or loss.

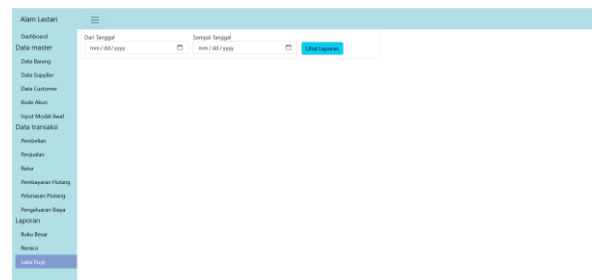


Figure 17. Income Statement

B. DISCUSSION

After all module has done, researcher test the features of system. All module and features, start from login page, modules that exist, until database, had been tested and checked. Below is the explanation of the test results.

The login page, which prohibit users from entering the web before they login, can run well.

The dashboard page, which shows some data about sales history and stocks, can run well.

The product data page, which can add new product data and shows product data, can run well.

The supplier data page, which can add new supplier data and shows supplier data, can run well.

The customer data page, which can add new customer data and shows customer data, can run well.

The account code page, which can add new account code and shows account code, can run well.

The beginning capital page, which can add new beginning capital and shows beginning capital that inputted before, can run well.

The purchase page, which can add new purchase transaction and shows purchase history, can run well.

The sales page, which can add new sales transaction and download invoice, can run well.

The return page, which can add new return transaction and shows return history, can run well.

The debt payment page, which can edit debt data and shows debt data, can run well.

The repayment of account receivable page, which can edit receivables data and shows receivables data, can run well.

The expenses page, which which can add new expenses and shows expenses, can run well.

The ledger page, which show history transaction for each account code, can run well.

The balance sheet page, which show total of each account code of assets, liability, and equity, can run well.

The income statement page, which calculate profit or loss, can run well.

IV. CONCLUSION

Based on discussion that researcher did with the owner of the store and result of the discussion, it can be concluded that accounting information system that made for TB Alam Lestari can help the store to solve the problem faced. Below is the conclusion of the result:

A. Accounting information system that created can help the owner to record the transactions that occurred.

B. Accounting information system that created can save the invoice automatically.

C. Accounting information system that created can become reference of stock quantity.

D. Accounting information system that created can bring up financial statement.

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