Designing a Web-Based Raw Material Purchase Accounting Information System

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Abstract. Kerupuk Pangsit Adem Ayem is one of the manufacturing companies engaged in snacks. To meet the inventory, the company must make purchases of raw materials. Purchasing is a continuous activity for the company and is the main proposal in production. The design of an accounting information system for purchasing raw materials on Kerupuk Pangsit Adem Ayem can facilitate the process of purchasing raw materials via the web and can produce financial report information easily and quickly. The system design method used in this study used survey methods and descriptive methods. The data collected in conducting this study is in the form of qualitative data. The raw material purchase accounting information system can be used as a means of facilitating the determination of raw material purchases for production and financial reporting in the form of reports on cost of goods produced, so that the information produced is more precise and accurate.

1. Introduction

The importance of information technology is needed for human life. The need for information technology is increasing due to the need to obtain accurate and efficient data and information [1]. In addition, information technology provides an advantage for the company's business activities because it makes work in the company more productive and efficient [2]. Accounting information system is a digital information technology that can help the continuity of the existing activity process in the company [3]. Accounting information system is a system that

manages finances to be faster and more accurate [4]. The existence of an accounting information system can provide benefits to companies in terms of making decisions, besides that it can minimize incorrect or inaccurate data [5].

Purchasing is one of the activities of choosing suppliers and ordering and obtaining goods and services. A purchase accounting information system is a system designed to facilitate the execution of purchases by automating or computerizing all or part of the purchasing process [6]. The function of this purchase is also to ensure that the level of materials and supplies is balanced. Inventory levels that allow the company to maintain the profitability of material costs in order to continue working [7]. The main factor in a production process at a manufacturing company is buying raw materials to suppliers because raw materials are suppliers of materials in the production process [8]. Therefore, every good company must have a good raw material purchase system so that there is no delay in raw material inventory for its operational activities [9]. Kerupuk Pangsit Adem Ayem is a snack company. The process of purchasing raw materials in Kerupuk Pangsit Adem Ayem has not been computerized, resulting in inaccurate inventory level data, inaccurate raw material orders, longer information searches, and unsecured safety [10].

There is a study discussing the raw material purchase system that has been carried out at PT. Harimau Jaya Cemerlang Klaten he argued that the raw material purchase system has a dual function carried out by the purchasing function to buy and receive goods. This gives rise to double responsibility. Similar to the research conducted by Winasis, Yulianto proposed the separation of receipts and storage functions of goods. In addition, companies also need to create a flowchart of the raw material purchase system to make the steps taken more efficiently and easily understood by the parties involved in the purchase transaction.

The analysis research conducted by Septyansari & Dzulkirom regarding the system and procedure for purchasing local goods and paying cash at PT. Rajawari I unit of PG Klebet Balmaran he argued that the related functions performed were in accordance with the procedure but nevertheless there were some weaknesses including that there was no accounting department in charge of recording the purchase transactions of the company, incomplete documents, duplicate documents, no purchase journals to record transactions, etc.

There is research on the results of internships conducted at PT. Phillips Seafood Indonesia, he argues that the documents used in the accounting system for the purchase of raw materials at PT. Phillips Seafood Indonesia is a letter of receipt of goods. Meanwhile, purchase requests and purchase orders at PT. Phillips Seafood Indonesia is done only using a telephone not using documents. The authors of the study gave better advice if a purchase request and purchase order document was made [11].

To overcome the various problems that exist in Kerupuk Pangsit Adem Ayem and the conclusions of some of the studies mentioned above, it is necessary to design an information system that can accommodate large amounts of data so that it is easy to access and retrieve when you need the data. The creation of reports will be more accurate without any problems. The system created is expected to be able to answer existing problems.

2. Method

The method used in this study is a descriptive method using a qualitative approach. We use a website-based information system with a Waterfall system development method. The waterfall system development method starts from the process of designing, analysing, designing, and implementing the system. This method uses the process of developing a one-

by-one phase model, thus minimizing errors that may occur [12]. The development method of the Waterfall system is shown in figure 1 below.
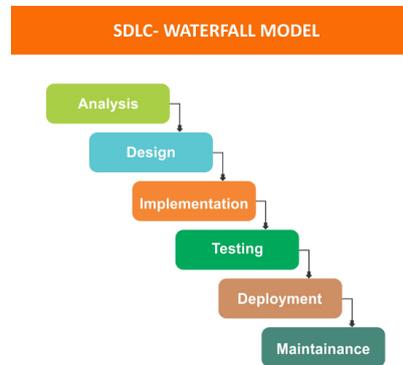

Figure 1. SDLC-Waterfall Model

The needs analysis is carried out as the first step of the Waterfall system. At this stage, user interviews are conducted to obtain information regarding things that will be entered into the system. After that, the overall design stages involved identifying and describing the basic system of the software and its relationships. After the design stage is carried out, the next step of implementation is to realize the program by involving verification that each unit meets its specifications. After the implementation stage, test a system to ascertain whether it fits the required software needs or not. After testing, the software can be used for real by customers. Then the last maintenance is to correct errors that occurred during the previous stage, then improve the implementation of the system unit, and system services as a new need.

3. Results and Discussion
3.1. Data collection

The web-based raw material purchase accounting information system is designed to facilitate the recording of raw material purchases made by the company in accordance with accounting standards from recording transactions, general journals, general ledgers, balance sheets and equipped with a reporting feature for cost of goods produced. The menu structure of this system is shown in figure 2.
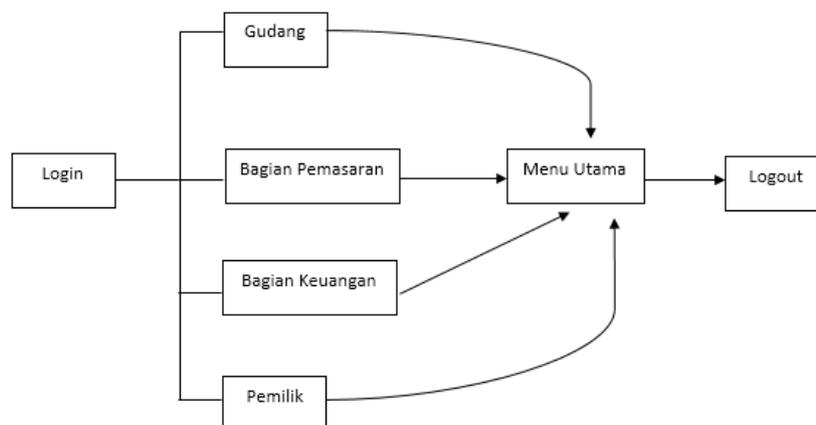

Figure 2. Menu Structure

Figure 2 shows the design of the system menu structure. The login menu which is the main display as access rights for each user. Each user when they have logged in will have a different sub menu according to their respective functions.

3.2. Design Workshop

In the early stages of designing, it is to design the appearance of the login menu for security access to the system. At this stage, it is required that the user registers for the most flexible account first and then can fill in the username and password on the login page. The following design of the login interface can be seen in Figure 3.
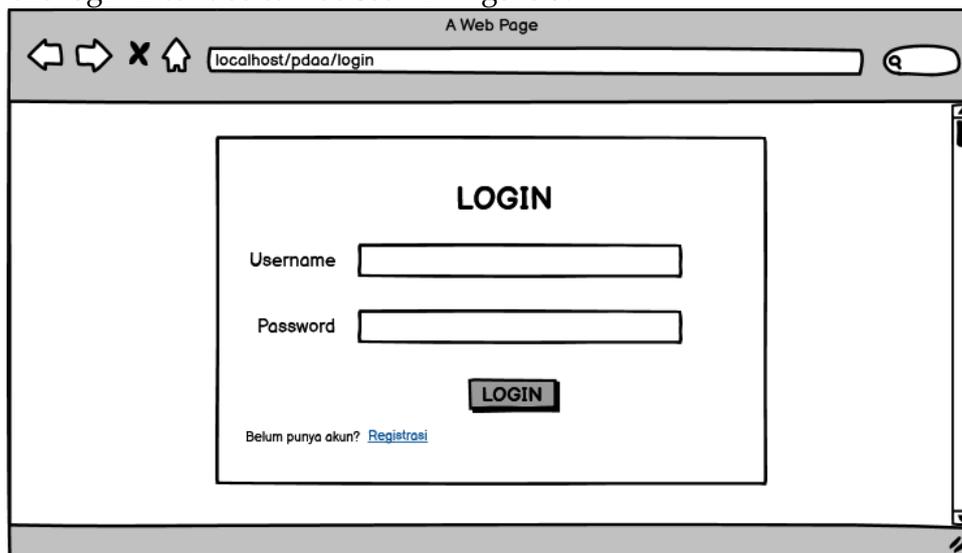

Figure 3. Login menu display

On the user page, this warehouse section can only be accessed by the warehouse section. There are two main contents displayed, namely the list of raw material orders and raw material order data. In the raw material order list, users of the warehouse can add, edit and delete the list of raw material orders to be purchased to suppliers. Meanwhile, raw material order data for warehouse users can display and see order data that has entered the supplier. The following design of the user interface of the warehouse can be seen in Figure 4.
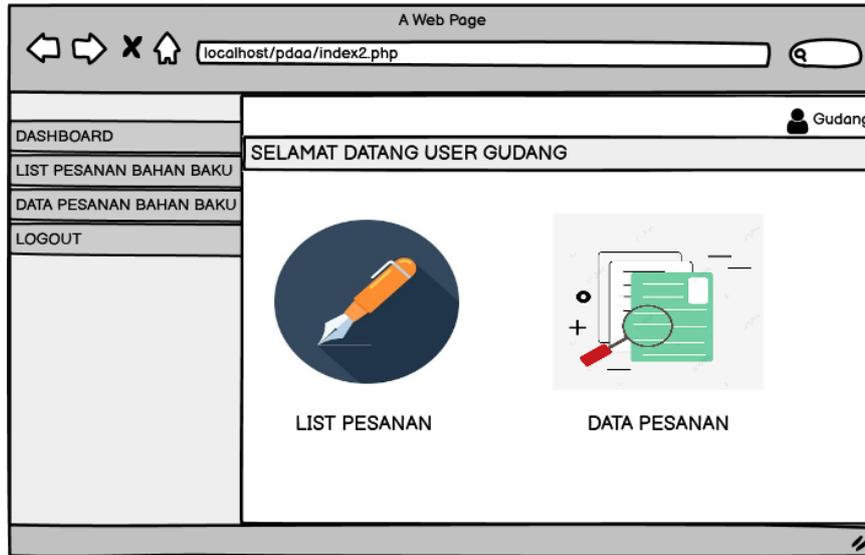
Figure 4. The appearance of the main menu of the warehouse

On the user page, the marketing section can only be accessed by the marketing department. There are three main contents, namely raw material order data, order cards, and purchase invoices. The raw material order data is data that includes the warehouse section. On the card of this order is a document containing the cost of each order. While the purchase invoice is proof of the transaction from the process of purchasing materials. The following design of the user interface of the marketing department can be seen in Figure 5.
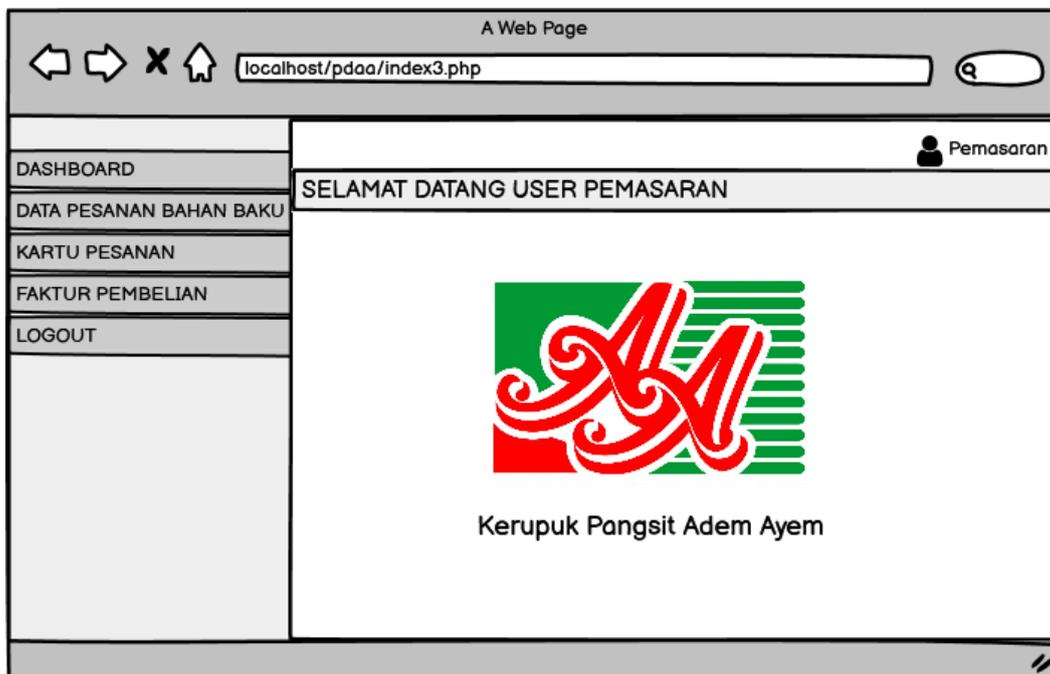

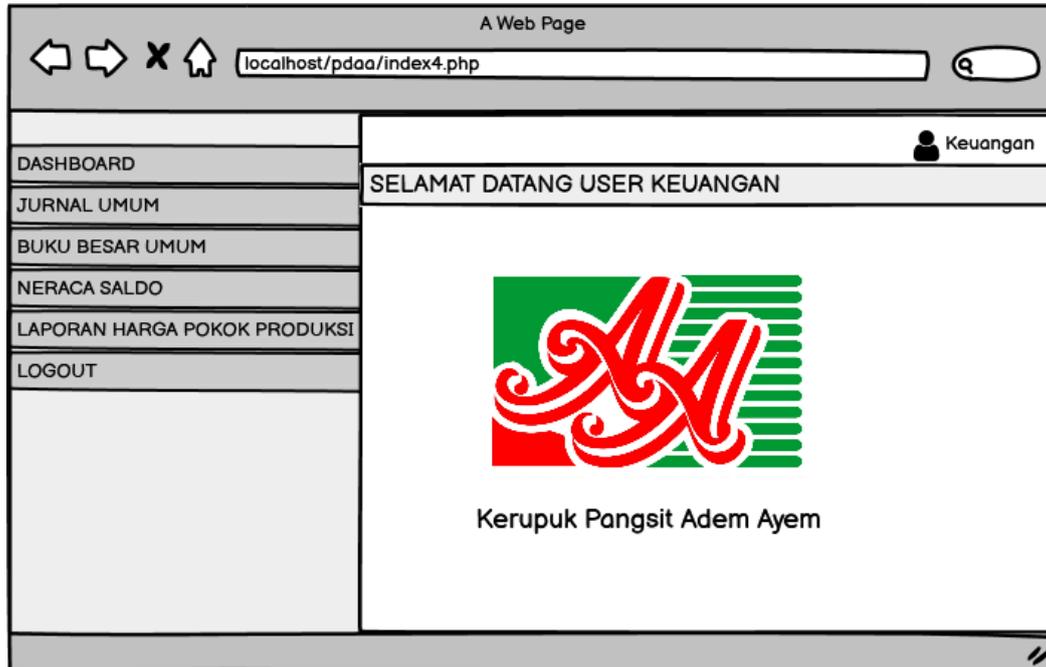**Figure 5.** The main menu view of the marketing section

Figure 6. The appearance of the main menu of the finance section

On the user page, the owner section can only be accessed by the owner section and the owner can only see it. There is one main content, namely this cost of goods produced report contains a final report of costs - outgoing costs that have been made by the finance department. The following design of the user interface of the owner n section can be seen in Figure 7.

On the user page, the finance section can only be accessed by the finance department. There are four main contents, namely general journals, general ledgers, balance sheets and reports on cost of goods produced. The general journal contains all transactions that have been made over a period of one month. The general ledger contains a classification of transaction records in the general journal according to similar accounts. On the balance sheet contains information as an auxiliary component of the final result of the financial statements. Meanwhile, the cost of goods produced report is a report of all costs incurred and as material for a report to the owner. The following design of the user interface of the finance department can be seen in Figure 6.
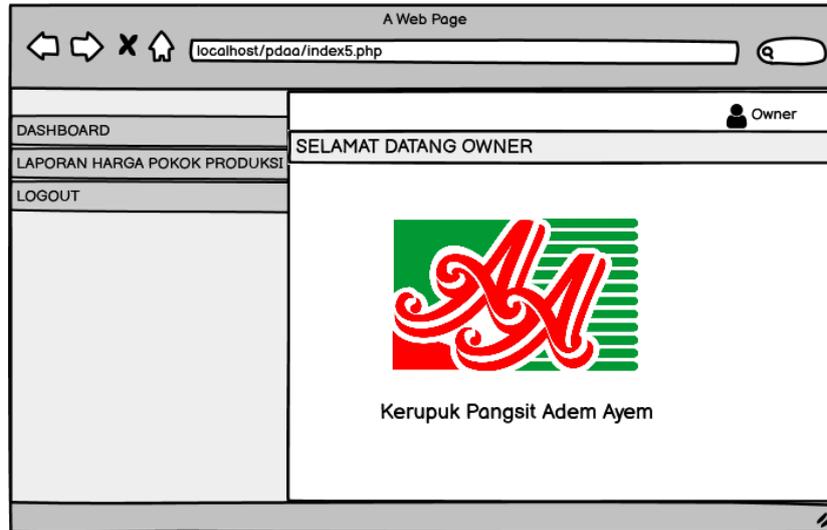
Figure 7. Main menu view of the owner section

4. Conclusion

This system is designed to facilitate the recording of raw material purchases that occur at the Kerpuk Pangsit Adem Ayem company. natural system this there is information about transactions up to reports on cost of goods produced.

Acknowledgement

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