WEB BASED INCOMING GOODS AND STUFF OUT INFORMATION SYSTEM AT SUGARINDO STORE GARUT

Sintya Sukarta, Restu Rovi Achdini
Universitas Komputer Indonesia
E-mail: see.shinty@gmail.com

Abstract

Sugarindo Stores is a company engaged in selling high-end goods from raw material leather. It has some part in the organization, one of which is part of the sales and purchase. The sales charge of the sale transaction, data recording sales transactions, and report daily sales transactions. The Problems that occur in the sale is the process of selling and processing sales transaction data is still done manually, which is the process of recording the transaction data in the memorandum of sale and registration statements in the sales ledger. This has led to a number of problems in the management of the sales transaction data such as the memorandum of sales lost archives, and the difficulty of finding the file in the manufacturing sales report, sales miscalculation because they still use the calculator, as well as the sales and reservations must be made directly at the store resulted in a lack of sales productivity. Based on the above, he built a web-based information system sales, this application was built to help the process contained in the sale such as processing sales transaction data, calculation of sales of goods, sales processing, customer data management, data management of goods, and processing sales reports, the purpose of making this application that the user or the customer can make the sales transaction process in any network connected to the Internet.

Research methodology in Stores Sugarindo using the structured approach for the system approach method that is consist of Data Flow Diagram and Entity Relationship Diagram, as for the system development method used in this research is the paradigm of a prototype model.

Based on the implementation and tests performed on the user, with the construction of a web-based information system Sales, it can assist the user in the data processing, which can lead to information quickly and simplify the processing of data in each section that are involved in the sale of information systems.

Keywords: Information Systems, Web-based sales systems, e-commerce.

1. Introduction

A. Background Research

Current technological developments greatly assist a variety of human activities, primarily helps people to obtain various information quickly and easily. Information received must be qualified, i.e. information that is relevant, accurate and timely, which can provide useful knowledge for humans in the decision making process.

Information systems are now widely use the internet as a medium to convey information effectively and efficiently. Internet is one of the most widely used technology and has grown so extensive, many people who had known the Internet and used it for variety purposes for both business and pleasure. In business, the internet is used as a medium to conduct trade / commerce that is often referred to e-commerce.

Electronic commerce (e-commerce) is a new method of doing business over the Internet in the field of information technology. E-commerce is a dynamic set of technology, applications and business processes that connect businesses, consumers and the community through electronic transactions and trade in goods, services and information that will be conducted electronically. E-Commerce (Electronic Commerce) provides a huge market opportunity, especially for a company or business entity who has the desire to market (sell) products globally, not just in one particular area. E-commerce can connect sellers and buyers of different places and it will not be a constraint in the transaction process.

One of many profits that can be earned from the using of the internet is that it will be easier for the enterprise to provide information, so that users will more easily accept it. It is a business strategy that multimedia can be given in order to improve the quality of service, comfort, effectiveness and efficiency of information provided to consumers.

Sugarindo store is one of the companies engaged in the sale of goods such as jackets, bags, footwear and sandals and other shoes that are made from leather. This store is located on Jl. Crow Lumayung1

SukaregangGarut. Nowadays, the consumers are also from outside the city.

Sugarindo store has some part in the organization, including Sales section. Sales Department has a duty to handle the sale of goods to consumers, recording sales transactions reporting of sales transactions and record keeping stuff out of the sales process. Issues raised in this section is on the sales process that is still done manually. It's mean that the system is still operated by writing the sales data such as transaction data recording using a bill of sale, sales data calculations using a calculator, making daily reports are recorded in the general ledger and data recording stuff out into the paper. Besides the sales activities of goods to consumers, Sugarindo still applying the conventional system, where consumers have to come to the store to order and purchase the desired items, or over the phone. It's also have the same way to record the transaction data of goods procurement process, they still use paper/documents such as purchase orders bill from suppliers and the inventory books.

These conditions resulted in the sales activity that is not effective and efficient, such as a time-consuming in searching certain item or the archives bill of sale, purchase orders and record incoming goods from the warehouse, data recording sales transactions, sales data and the calculation error reporting and sales of goods out time-consuming. This is affects the services to consumers, such as the frequent occurrence of error in delivery of goods ordered by the consumer. Sugarindo also still not has alternative fasility for the consumer to the transaction process so that they don't need to come to the store to make the transaction process. Based on the background mentioned earlier, it is necessary to develop a web-based system that can help overcome these problems..

B. Problem Identification

i. Data processing and data recording sales transactions of purchase of goods is done manually which is recorded in the transaction, so it can happen very susceptible recording errors and the loss of paper records before the transaction is recorded in the transaction book.
ii. Calculation of sales data still use a calculator, this can lead to miscalculations in terms of sales.
iii. Preparation of Reports Sales and Purchasing is still done manually by looking at data on a book deal.
iv. Process sales transactions are still done manually, which mean that consumers should immediately go to the store in order to buy the product and do the transaction. This condition have resulted in the lack of efficiency in sales activity between the consumer and the company

C. Research Objectives

i. To analyse the system of Goods Entry and Exit of Goods and management of data items that are currently running on Sugarindo Store.
ii. To design the Information Systems Goods Entry and Exit of Goods which can help solve those problem that is currently occure in the store
iii. To test the information system of Goods Entry and Exit of Goods to the store Sugarindo.
iv. To implement the information system of Goods Entry and Exit of Goods to the store Sugarindo.

D. Research Method

Method that is used in this research consist of two method. System approach method used in this study is the structured method using some of these diagram: data flow diagrams (Data Flow Diagram) and entity relational diagram (ERD). As for the development method it is using the prototype method with the following stages:

i. The author will identify user needs, so that the author can design a system that will be built according to the user expectation. Before the design phase, the authors analyze the system by collecting the data by doing such technique like observation, interviews, and the literature by documenting the requirements of users, both in the interface models, techniques, procedural as well as the technology to be used.
ii. In the second stage, the authors will make a prototype system to demonstrate the model of the system to be designed.
iii. In the third stage, the authors will test the system that has been designed to ensure that the system can be used properly and correctly, according to the user's needs.
iv. In the fourth stage, the authors will determine whether the system can be accepted by the user, or to do some repair or even unloaded everything and start from scratch again, and after repair of the system is completed, the author will be back again in the third stage by testing prototype back.
v. In the fifth stage, the author will be completed in accordance with the latest input from the user and gives an overview of how to use the system to the user after the system is approved.

2. Theoretical Reference

A. Definition of System

There are two groups of approaches in defining the system, which is pressed to the procedure and reduce the components and elements. System approach is more pressure on the procedure defined as:

A system is a network of procedures that are interconnected, gathered together to perform an activity or completing a particular target. (Jogiyanto, H.M., 2005:1). While the systems approach that emphasizes the components or elements defined as follows: The system is elements that interact to achieve a certain goal (Jogiyanto, HM, 2005:2).

B. Definition of Information

Understanding information in the most general sense is the knowledge gained from learning, experience, or instruction.

Information itself is the data that is processed into a form that is more usefull and more meaningful for those who receive (Jogiyanto, HM, 2005:8)

C. Definition of Information Systems

Information systems in general is a man-made system consisting of components within the organization to achieve a goal of presenting information.

Information system is the information organized to achieve goals within an organization (Jogiyanto, HM, 2005:3)

D. Web and Web server

According to M. Rudyanto Arief (2011:7)web is one of the Web application that contains multimedia documents (text, images, sound, animation, video) in it that uses protocol http (hypertext transfer protocol) to access and use the software called a browser.

Web server is an application program which has a function as a place to store the web documents. So all good web document written using client side scripting and server side scripting stored in the web server's root directory (document root).

3. Discussion of the System

A. Analysis of Current System

Analysis of the current system aims to determine more clearly how the system works and the problems facing the system can serve as the basis for the proposed design. Analysis of the current system which is based on the sequence of events there. The following is an analysis of the current procedures of goods in and goods out in the store Sugarindo namely:

i. Consumers come to visit the store and find the desired item, then consumer give the goods to the Sales department.
ii. Employees of the sales will be looking for the goods ordered in warehouses Consumer (type, color of goods, the number of items in the message).
iii. If the requested item does not exist then it will inform employees of the sales that goods is not exist and the employees will reinform it to the consumer, if the goods are exist then employees will inform it to the consumer.
iv. After the consumer agree to purchase goods and finished goods ordering, Sales Department will inform the total payments to consumers and create a bill of sale as proof of transaction as much as 2 copies. 1 copies to be given to the consumers and 1 duplicate archived.
v. Daily, The sales department will make a record of daily sales transactions into the sales transactions ledger by filing it from the bill. Then the ledger is given to store owners to be reported.
vi. The sales department will record the list of items taken from the warehouse in the process of the sale by filing a bill of sale of goods and gave it to the warehouse.
vii. Every weekend the warehouse will inspect and calculate the final inventory in the warehouse and inventory records to books based inventory data info stuff out and record the results of the examination of goods in warehouse goods.
viii. The warehouse makes a list of purchase goods to be given to the supplier after the list has been approved by the shop owners.
ix. The warehouse receives goods purchased from suppliers and then record the entry of goods into inventory book and make purchase orders as proof of purchase of goods as much as 2 copies. One copy is given to the supplier and 1 duplicate archived.
x. The warehouse makes the inventory information in the warehouse based on the book inventory and give it to the sales department.

Data Flow Diagram of goods in and goods out of current system are shown in **Figure 1**.

B. Design The New System

System design is a process of development and improvement of the existing system to improve the efficiency and effectiveness of the work. The procedures of goods in and goods out proposed are as follows:

i. Consumers that will make purchases in the stores Sugarindo must firstly register to the system. Consumers who have registered must login to the process of ordering goods.
ii. Consumers can see a variety of products that are sold with a detail description of the product and stock information in store sugarindo.

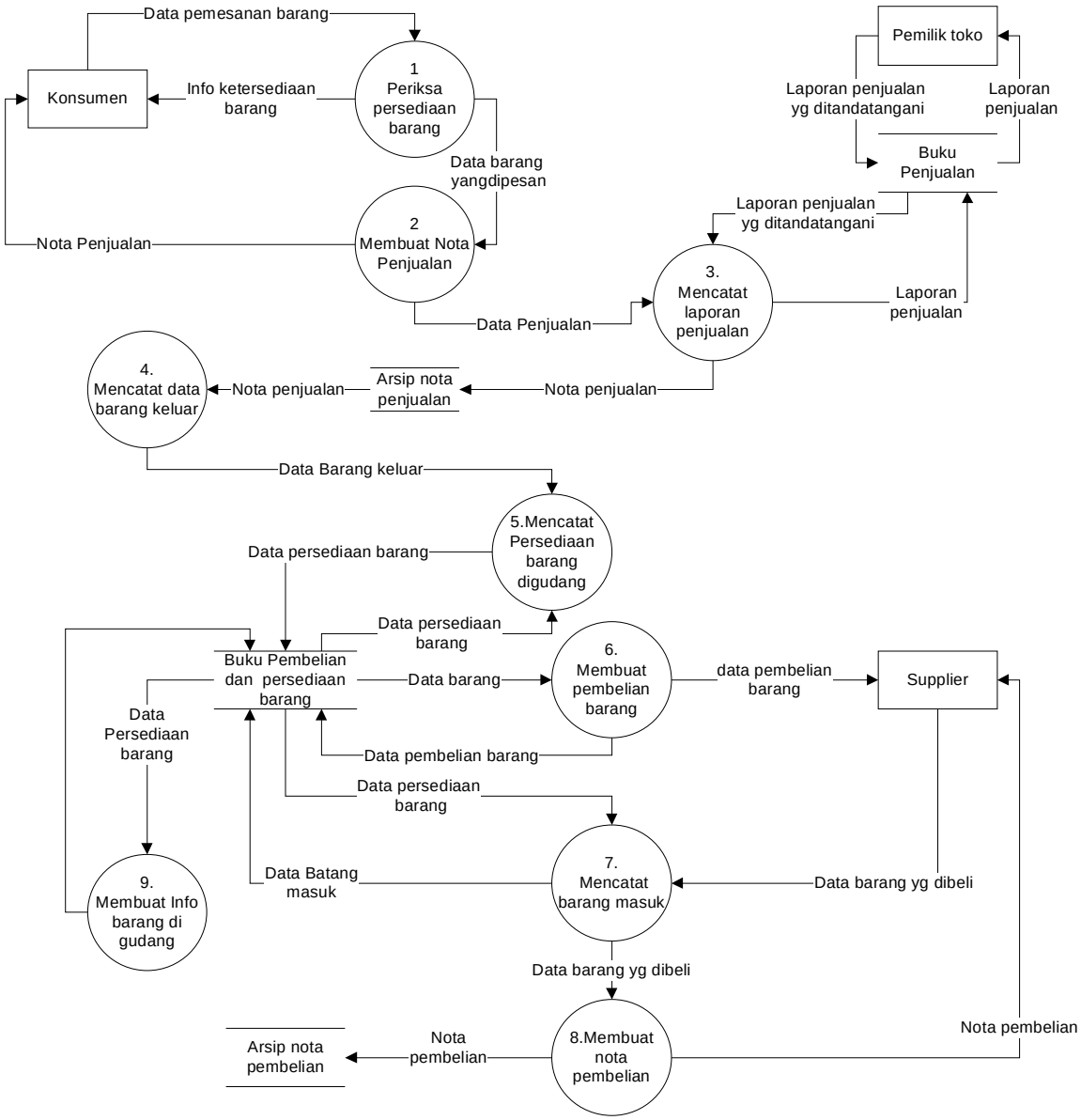

Figure 1.Data Flow Diagram of goods in and goods out of current system

iii. Consumers can conduct transactions simply by clicking on the desired product only, starting from selecting items and how many items to be purchased, as well as process payments via bank transfer.

iv. When finished selecting items consumers can see what data items that have been bought and the total payment for goods.

v. Consumers who want to continue the process of buying goods then store data ordering and payment process.

vi. Consumers who already make a payment via bank account must confirm the payment information to the system.

vii. After receive the payment confirmation from the consumer, The sales clerk validates the payment confirmation and change the status of the sale.

viii. The sales clerk record transaction data online based on the Information System database of goods in and goods out of the shop and then report it to the store owner.

ix. Warehouse clerk will enter the data into the information system of goods in and goods out after procuring goods to the supplier.

Data Flow Diagram of the new systemare shown in**Figure 2**.

C. Entity Relationship Diagram (ERD)

ERD is a way to organize data, where the diagram will show that there is a relationship entity in the system. The diagram below show the ERD diagram constructed for the new system.

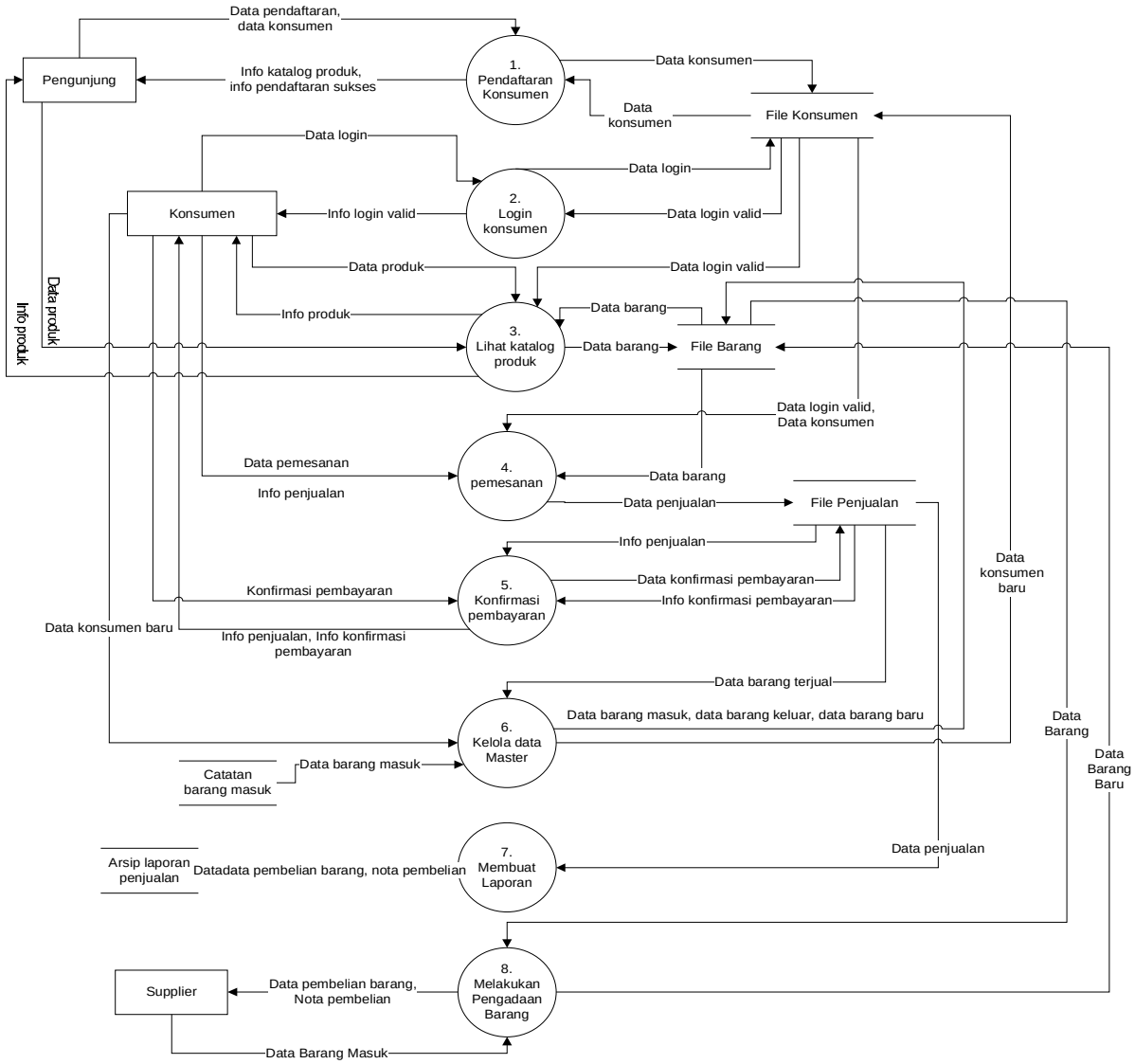

Figure 2.Data Flow Diagram of the new system

D. Implementation

At the user side, the home interface of the application is shown in **Figure 4**.

User can access the product details menu to look at the specific detail of the product, and fulfill the amount of the product they want to buy.**Figure 5**show theproduct details and booking form.

After inputing the amount number of the product, user can choose another product by clicking the buy button, or push the save button if they finish with the order process. **Figure 6** show theshoppingcartform.After finishing the order process, user has to pay the billing and confirm it to the system. **Figure 7**show the payment confirmationform.**Figure 8**show the warehouse clerk interface form. **Figure** 9show the sales officer interface form.

3. Conclusion and Suggestion

A. Conclusion

The conclusion that can be derived from the results of studies that have been made by the author of the Information System of Goods Entry and Exit of Goods Stores web based Sugarindo are:

i. After doing research at the store Sugarindo, the authors noticed that the current system of goods in and goods out is still use the manual method in data processing such as direct sales transaction process in place, write the sales transaction data into the bill of sale, calculate total sales by using the calculator, the sales

transaction data that is not listed on the bill of sale.

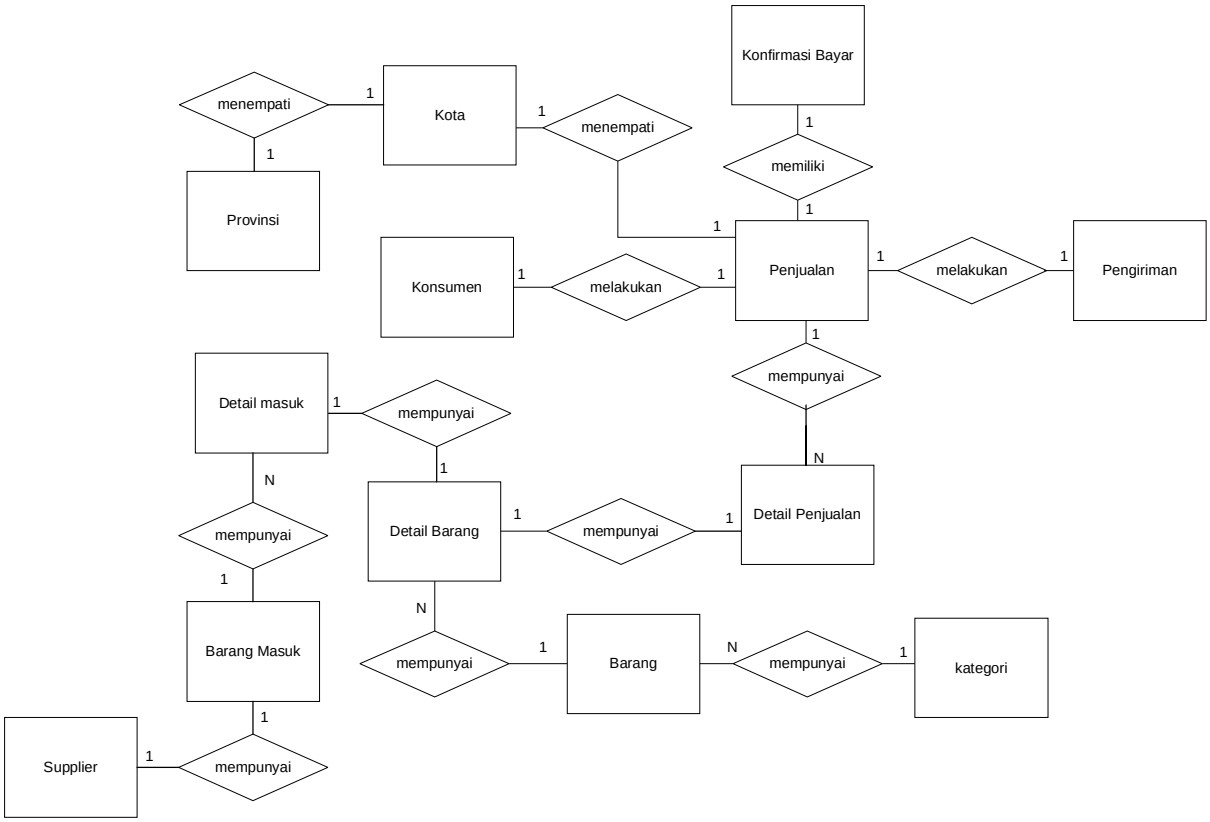

Figure 3.Entity Relationship Diagram

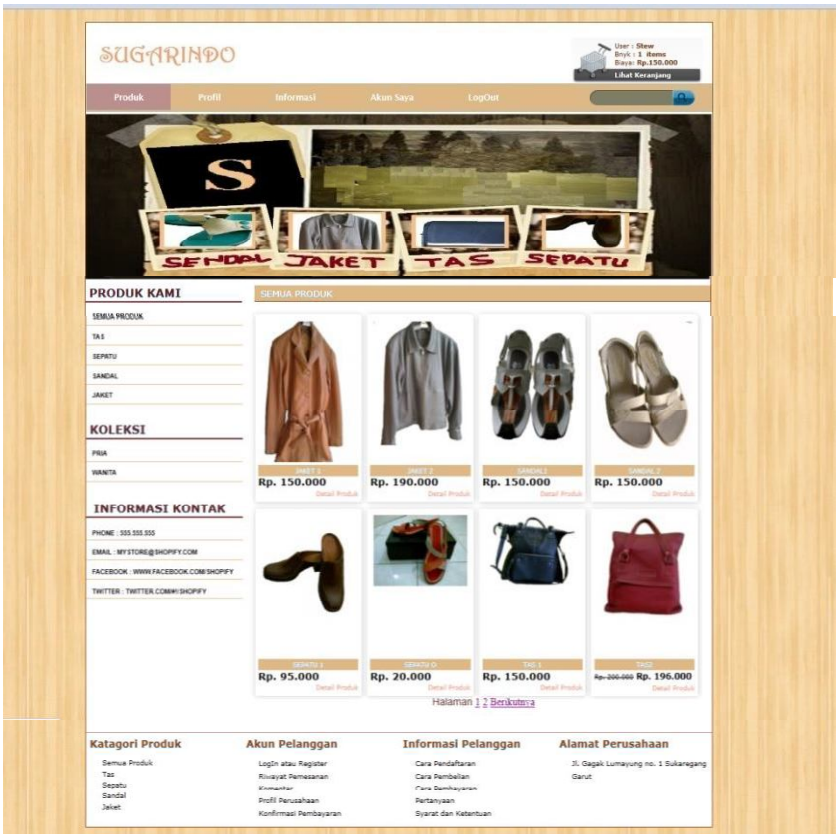

Figure 4.Home Web Sugarindo

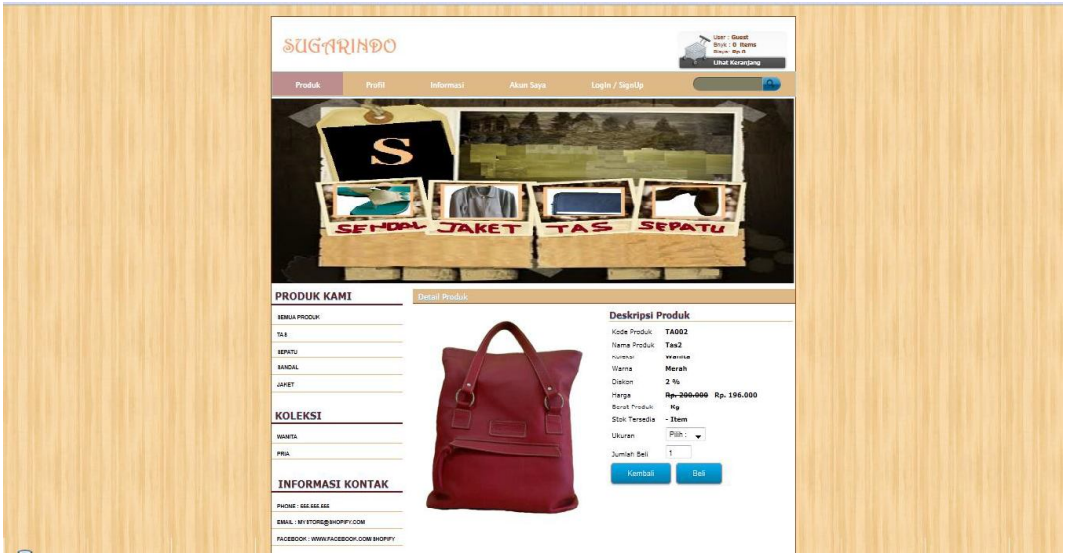

Figure 5.Product Details and Booking Form

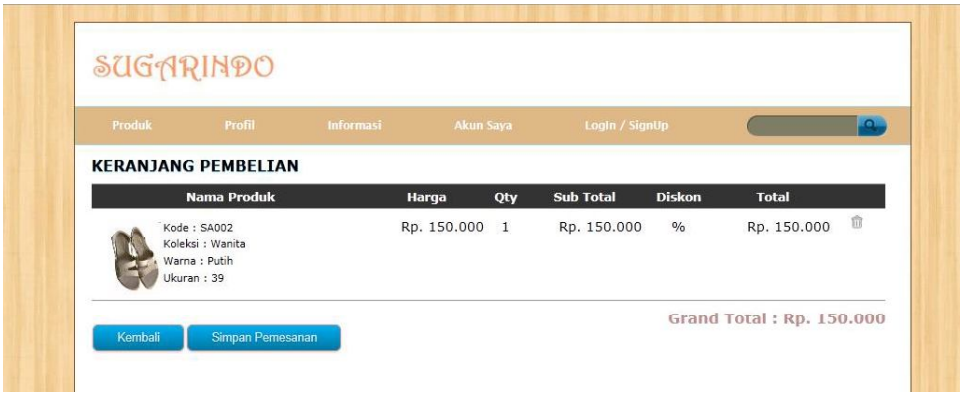

Figure 6.Shopping Cart Form

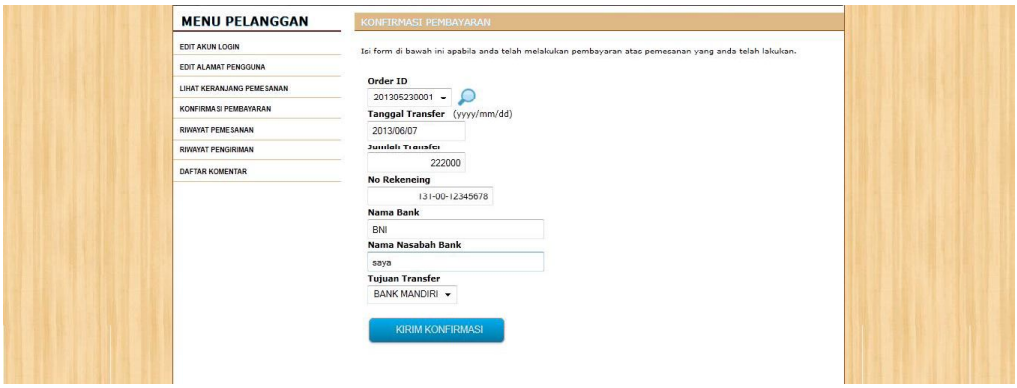

Figure 7.Payment Confirmation Form

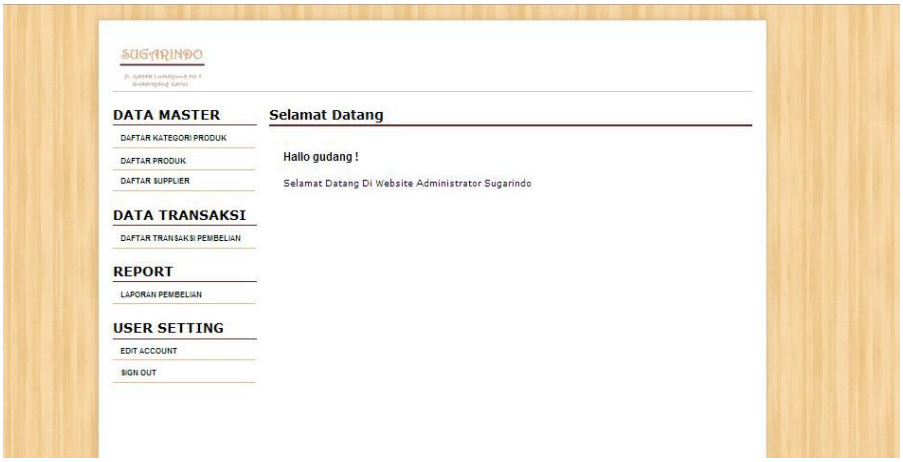

Figure 8.The Warehouse Clerk Interface Form

Figure 9. The Sales Officer Interface Form

ii. By developing the web-basedincoming goods and stuff out information systems in stores Sugarindo, it might be help in improving the effectiveness of sales performance in terms of data processing and service to consumers. This application is made to be capable of handling the sale and purchase activity as well as the various convenience facilities Sugarindo given in making sales reports and reports of sales and purchases by the warehouse.

iii. Tests were conducted on the information systems, and the software functionality has been met the needs of users.

iv. The implementation of this system is focused on the application of the data processing of the sales transactions and purchase of stock items for sale online, the making of sales reports, purchasing reports, delivery reports and the reports of the stocks held in store Sugarindo.

B. Suggestion

To improve the performance of Information System, author tries to give the following advice:

i. In the next phase of development, it is expected to add sales returns facility.

ii. The payment process should be expanded not only through account transfer only.

iii. Store Sugarindo should cooperate with the bank, so that the payment can be done online.

Bibliography

[1] Jogiyanto Hartono.2005.Analisis AndDesain.Andi.Yogyakarta.

[2] M.Rudyanto Arief.2011. Dynamic Web Programming Using PHP AndMySQL.Andi.Yogyakarta.