Pharmacy Management Integration

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ABSTRACT

A pharmacy is a place for providing pharmaceutical products and services to the public. The business processes carried out in pharmacies are managing data on existing drugs including drug stock, purchasing drugs from distributors, selling drugs to consumers, determining drug selling price policies, as well as reports in the form of a recapitulation of all drug sales and purchase activities that occur at the pharmacy. The business processes carried out by pharmacies today generally still manual controls carried out by humans, so that several times there is a risk of human error, that can cause problems in business processes. This will hinder when making drug sales reports and if you want to check the available drug stock it will take quite a long time. Meanwhile, when the customer/patient is about to return or return a drug, the employee has difficulty in finding the sales data for the drug because they have to find one by one from the many sales notes.

The purpose of this study is to reduce errors and improve the quality of pharmacies such as improving performance and making it easier for process data, so that an integrated information system is needed that can support sales data processing, drug stock inventory, supplier data, purchase data, purchase reports, and sales reports.

The conclusion of this study is the system can improve the quality of pharmacies such as improving employee performance and making it easier to process data; With this system, management can find out drug data, suppliers, purchases, sales, prescription drugs, patients, warehouse and sales returns according to their respective access rights; The existence of a graphic menu to find out the results of sales in a certain period as a decision support that facilitates the owner in making decisions.

KEYWORDS: Pharmacies; Information; Management

INTRODUCTION

The development of technology is increasingly rapid, a lot of technologies have been created with the aim of making it easier for humans to carry out their activities and work. Along with the development of technology, the need for technology is increasing, as technology is needed in all aspects of life. One of them is in managing drug data at drug stores (pharmacies), which includes managing existing drug data including drug stock, purchasing drugs from distributors, selling drugs to consumers, determining drug selling price policies, as well as reports in the form of recapitulation. all sales and purchase activities of drugs that occur at the pharmacy. The business processes carried out by pharmacies today generally still rely on manual controls carried out by humans so that several times there is a risk of human error that can cause problems in ongoing business processes. This will hinder when making drug sales reports and if you want to check the available drug stock it will take quite a long time. Meanwhile, when a customer/patient is about to return or return a drug, the employee has difficulty finding sales data the drug because they have to look for one by one from the many sales notes.

Based on these problems, an application is needed to organize and process drug data so that the transaction process can be carried out properly. The application used must also be well-computed in order to reduce errors in the transaction data collection process. This is due to the large number of drugs and transactions that occur, we need a database that is well integrated so that it will greatly support the performance of employees who interact directly with the system which can support sales data processing, drug stock inventory, supplier data, purchase data, reports. purchase, and sales reports.

RESEARCH METHODOLOGY

1. System Analysis

System analysis is carried out in a process related to the initial stages of the research method. In the research method taken using the waterfall model. In the waterfall model, there are several stages which include the communication stage and the planning stage. At the communication stage, interviews and observations were carried out. The observation process is carried out by direct observation. The interview process was carried out by conducting questions and answers to match the data and information from the observations. After conducting direct observations and interviews, user needs analysis, data requirements analysis and functional requirements analysis can be arranged.

2. Achievement of System Development

The achievements to be achieved are divided into two categories, namely:

A. Informative achievements.

Achievements in making this buying and selling system informative, namely providing information about drug stock inventories, sales, drug purchase data, supplier data, purchase reports, and sales reports in the form of text, as well as sales charts at pharmacies.

B. Functional achievements.

Functional achievements in making this buying and selling system are to make it easier for employees to find out drug stock inventory, drug purchase data, purchase reports and sales reports easily and quickly and find out sales charts at the pharmacy according to what employees input.

3. State of The Art

This research is expected to get a computer system platform designed to be able to support the processing of sales data, drug stock inventory, supplier data, purchase data, purchase reports, and sales reports. This is due to the large number of drugs and transactions that occur, the existence of a database (local host) that is well integrated so that it will support the performance of employees who interact directly with the system.

RESULTS AND DISCUSSION

Conceptual Design

At the conceptual design stage, the components of the information system are designed with the aim of communicating to users. The Context Diagram shows the sequence of activities of the cooperative reporting system which contains one process which is numbered process 0. This process represents the process of the entire system. In the context diagram, the relationship between entities, input and output from the system is illustrated which can be seen in Figure 1.
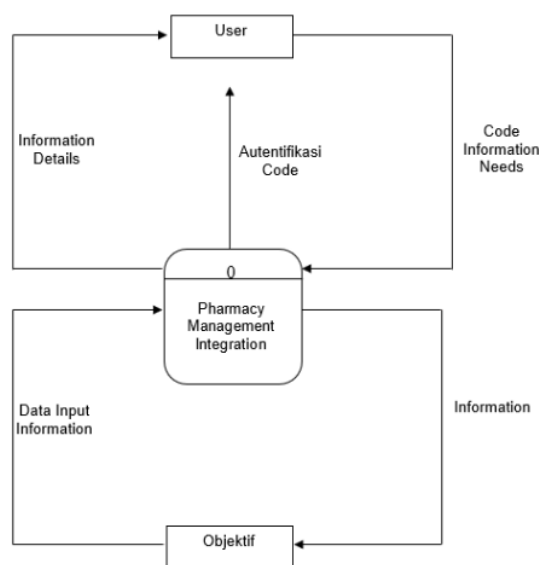

Figure 1 Context Diagram

From Figure 1 it can be explained that the relationship between external entities and the reporting application is as follows:

1. Input relationship between entities outside the User and Information Technology and Cooperative Reporting Applications is a code of information needs. The output relation consists of code authentication and detailed information.
2. Input relationship between entities outside the institution with Information Technology and Cooperative Reporting Applications is the input of a list of information. The output relation consists of a user list report.

Architectural Design

After the system is analyzed and designed in detail, the system implementation stage is the stage of putting the system so that it is ready for operation. System implementation is also a process of making and implementing a complete system, both hardware and software

Here are some views of the android-based savings and loan cooperative service application and its main features.

Main feature:

1. Login Page
Enter the username and password for access to the pharmacy application.

2. Home / Home
On the main page, on the left shows the menu and on the right displays the amount, information, and purchase transactions or sales transactions at the pharmacy.

3. Add Medicine
The Add Drug page is used to enter new drug data, fill in all data and press the save button to save the data.

4. See Medicine
The View Medicine page is used to view the drug data that has been inputted, click the edit button in the action column to change the data, or click the delete button in the action column to delete the data.

5. Expired Drugs
Expired Drugs page displays information on drugs that have expired, and drugs that are almost expired.

6. Out of Drugs
The Out of Drugs page displays information on the stock of drugs that are out of stock and those that are running low / stock is less than 10.

7. Drug Category
This page is used to add a drug category, enter the category name and description of the drug category, then click the save button.

8. View Drug Category
This page displays drug category data, click the edit button icon to change the data, and click the delete button icon to delete the data.

9. Medicine Unit
This page is to add a Drug Unit, Enter the name of the unit / Type of Drug and then click the save button.

10. See Medicine Unit
This page displays drug unit data, click the edit button icon to change the data, and click the delete button icon to delete the data.

11. Add Supplier
The Add Supplier page is used to add drug supplier data, enter supplier data then click the save button.

12. View Supplier
This page is used to view supplier data, click the edit icon button to change the data, and click the delete button icon to delete supplier data.

13. Increase Sales
This page is used to process sales transactions, fill in the buyer's name and transaction date, then select a drug and enter the amount of drug.

14. View Sales
This page is used to view sales transactions, click the invoice button icon to view sales invoices.

15. Sales Chart
This page displays a graph of sales, most sales, least sales, highest revenue and lowest revenue.

16. Add Purchase
This page is used to process the purchase transaction, fill in the name of the supplier and the date of the transaction, then select the drug and enter the amount of the drug, if you want to increase the supply of the drug, or more than one then click the add product button, when the transaction is complete, then click the save button.

17. View Purchases
This page is used to view Purchase transactions, click the invoice button icon to view purchase invoices.

18. Purchase Chart
This page displays a graph of purchases, most purchases, least purchases, highest spends and lowest spends.

19. Report
The report page displays sales and purchase graphs, sales and purchase amount data, and profit.
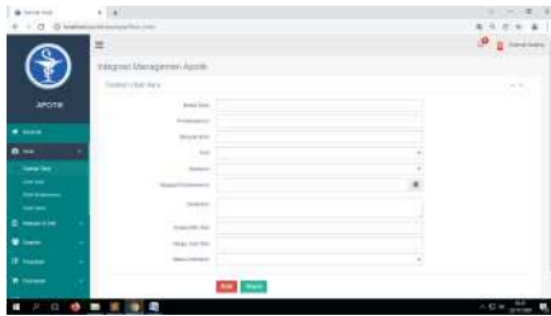

Figure 2. Login Page
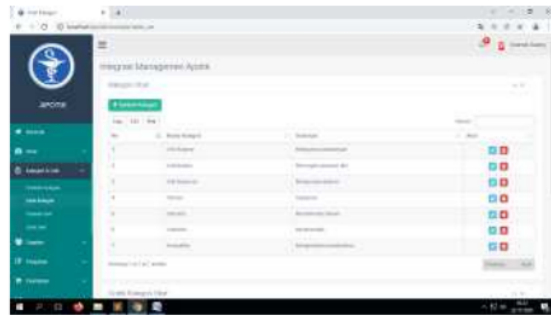

Figure 3. Home Dashboard
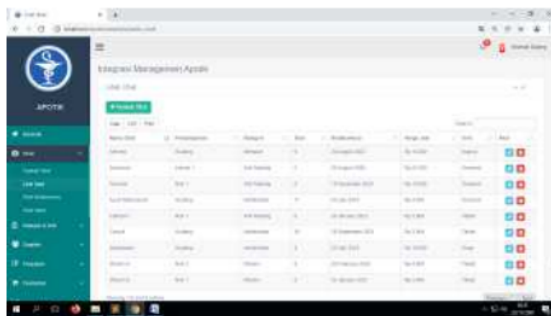
Figure 4. Add MedicineViews

Figure 8. Drug CategoryViews

Figure 5. See MedicineViews
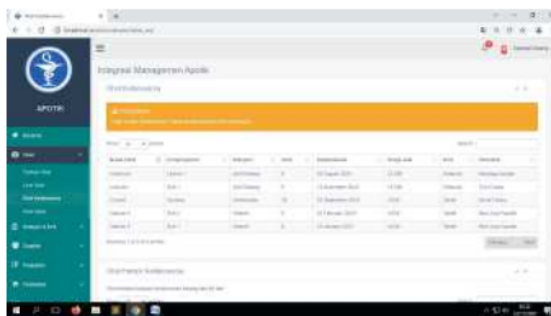

Figure 9. Medicine UnitViews
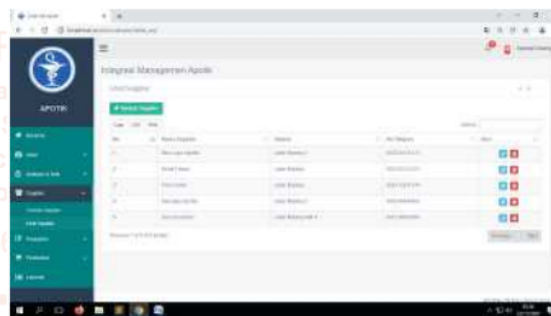

Figure 6. Expired DrugsViews

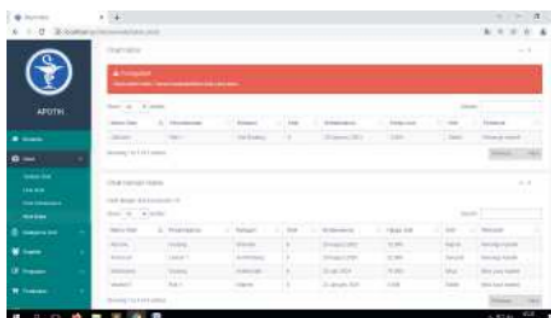
Figure 10. SupplierViews
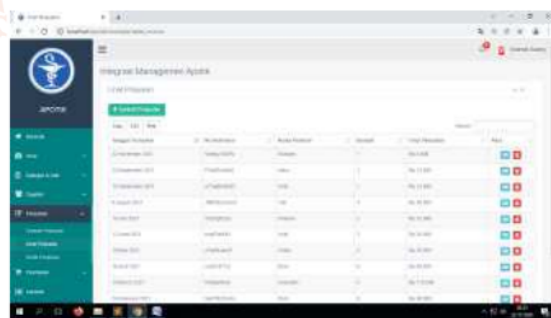

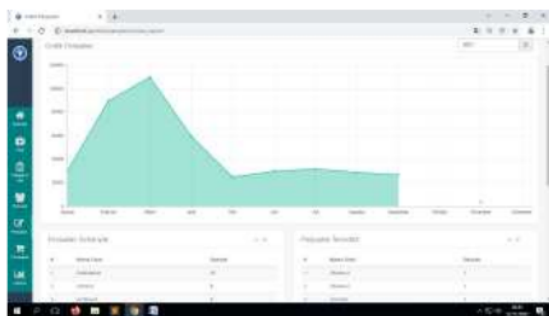**Figure 7. Out of DrugsViews**

Figure 11. Increase SalesViews
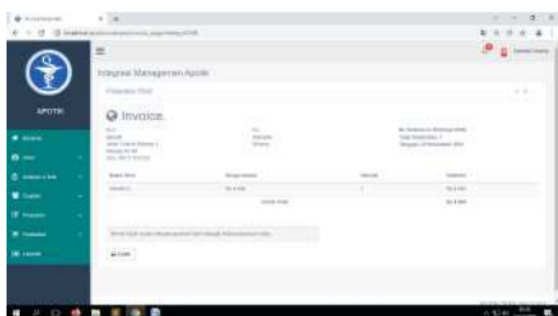
Figure 12. Sales Chart Views

Figure 13. Invoice Views
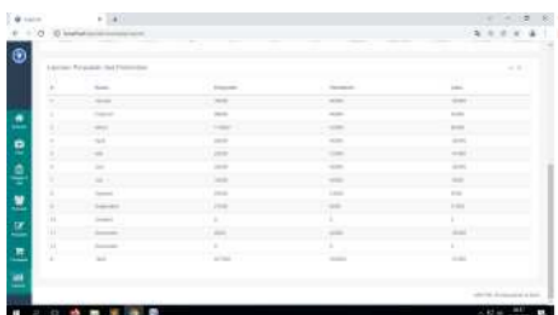

Figure 14. Report Chart

Figure 15. Report Views

CONCLUSION AND SUGGESTIONS

From the results of the stages that have been carried out, it can be concluded that this system can improve the quality of pharmacies such as improving employee performance and making it easier for employees to process data, so that with this system employees can find out drug data, employees, suppliers, purchases, sales, prescription drugs, patients, warehouse drugs, and sales returns according to their respective access rights. The existence of a graphic menu can find out the results of sales in a certain period as a decision support that makes it easier for owners to make decisions.

In making this Pharmacy Management Integration System, the author's suggestion for further development is the need to develop detailed data on drug concoctions and drug stocks so that drug data and ingredients can be produced. In further development, it can also provide a more complete menu function and also display more specific and clear data, such as purchase returns, recipe sales charts, purchase charts, and recipe copies. This system can also be developed based on Android so that patients can use mobile phones to place orders and check drug prices.

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