Design Of Transaction Information System And Data Storage At Ahza Abadi Pharmacy In Makassar

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ABSTRACT

Ahza Abadi Pharmacy Makassar is one of the businesses in the field of drug sales. In some data processing processes, there are problems due to manual recording of data into an archive book so that unwanted things often happen, such as what happened in the record book or damage to the book, while selling and buying transactions carried out without evidence. transactions thatoften occur between employees and buyers. This study aims to create an information system design to overcome problems in conducting transactions and storing data so that employees can easily input data and print receipts for buyers as proof of transactions. This research uses the prototype method in designing information systems that focus on the presentation of input and output in the form of use case diagrams and activity diagrams. The results of this study are the design of a transaction information system and data storage into a transaction information system and data storage.

1. INTRODUCTION

Information and communication technology is developing very rapidly in various aspects of life. One of them is in the health aspect, especially in the field of selling and purchasing drugs at pharmacies that have used information technology to improve the performance of pharmacies both in transaction processing and data processing.[1][2] Pharmacy is one type of business in the field of medicine that requires a data processing information system to simplify and expedite its performance. Currently, there is still a lot of writing and recording of drug data in pharmacies that are done conventionally. Quite a several pharmacies still use human resources to process existing data to facilitate their business[3][4].

The use of computers is very much needed in matters relating to the processing of available drug inventory data, data processing that is a supplier to pharmacies processing employee data at pharmacies with active and inactive status at pharmacies, and also transaction processing without evidence in the form of receipts[5][6]. at the Ahza Abadi Pharmacy, which is a type of business in the medical field in Makassar where the problem is that activities are still being recorded, be it sales or purchase transactions into a book and recording supplier data and employee data, thus making things easier[7][8]. it is not wanted to happen such as the loss of a record book so that the performance of the pharmacy becomes less effective and efficient, and the purchase of drugs at the pharmacy is still done without any proof of transactions that make the drug sales transaction process between the pharmacy and the buyer experienced misunderstandings such as problems with returning drugs that were carried out by buyers without evidence that they had made transactions at the Ahza Abadi pharmacy[9][10]. Therefore, we need a system that can overcome this. The author is interested in making a system design to conduct sales and purchase transactions of drugs and data storage using an information system design. The system is felt to be very needed at this time because it can provide convenience for pharmacists in conducting transactions and storing data and providing relief in searching for the data you want to find. From the buyer's side, it is easy to get proof of transaction at the Ahza Abadi pharmacy so that buyers get convenience in making complaints or

doing the drug return process. Therefore, proper planning is necessary to achieve success in making an information system. This study aims to design an information system based on the above problems[11][7]. Overcoming the process of recording transactions and storing data from manuals into information system designs so that pharmacies can do their work effectively and efficiently[12][13]. Overcoming the absence of printed evidence for buyers, in this system design, a transaction receipt is printed so that buyers who experience problems can show receipts to the pharmacy as evidence held by buyers who have made drug purchases at the pharmacy[14][15]. The results of this study are the design of a transaction information system and data storage into a transaction information system and data storage that makes it easy to process and store data into an information system and provides convenience for printing transaction receipts for buyers[16].

2. RESEARCH METHODS

2.1 Research Time and Place

The time of study was carried out for one month. The place and object of this research are at Apotek Ahza Abadi Jl. Ance with ngoyo No. 6 Makassar.

2.2 Data Collection

2.1.1 Field Research

Field research is a form of data collection that is carried out through direct research on the object of research using several data collection techniques, including:

a. Observation is research by observing directly the object of research such as data from archive books at Ahza Abadi Pharmacy in the form of archive books regarding drug data and drug suppliers as well as invoice books containing recordings of transaction processes on sales every month.

b. Interview is research conducted by conducting a direct question and answer with Apt. Fitriani, S.Farm as a data processor at the pharmacy as well as a pharmacist at the Ahza Abadi Pharmacy.

2.3 Data Processing

Many kinds of methods can be used in designing management information systems, one of which is the Prototype method. This data processing uses the prototype method (1) Strategic / Project Planning SIM (2) Conceptual System Design (3) Detailed Design (4) Information System Design. This method aims to carry out the

design from start to finish so that it meets user needs.

2.4 Prototype Method

The system design method used is a prototype approach, which functions as a mechanism to identify user needs.

The stages are:

1. Identifying Users

At this stage, direct observations were made at pharmacies, and conducted interviews with pharmacists were to find out about existing problems related to the transaction process and data storage.

2. Designing the Prototype

Build a prototype by making a temporary design that focuses on presentation, namely making input and output in the form of use case diagrams, sequence diagrams, activity diagrams, and interface design.

3. Determining whether the prototype is acceptable to Evaluate the system designed and whether the system is the desired if so, the next step will be to create the system if not, a revision will be made to the system that has been designed.

4. Using Prototype

The prototype is completed in the system and the system is ready for use. The following are the stages in designing a prototype.

Figure 1. System Design Using Prototype

3. RESULTS AND DISCUSSION

Based on the data processing that has been done at the Ahza Abadi Pharmacy in Makassar which is still limited by using conventional methods with manual transaction processing and storage. So that the transaction process is carried out without a receipt as evidence and often causes problems between the pharmacy and the buyer who wants to complain at the pharmacy, in terms of data storage the pharmacy has difficulties in recording data both employee data, drug data, data transactions, as well as supplier data, errors often occur in terms of entering data and searching data into archive books. And the risk that may occur is damage or loss of the archive data recording book. By using the design of the transaction information system and data storage, it makes it easier for the pharmacy to complete its work, whether it's in terms of transactions and storage of employee data, drug data, transaction data, and also supplier data at the pharmacy. In the design of this system, it makes it easier for the pharmacy to input drug data, supplier data, purchase transaction data that can print receipts, as well as in terms of inputting employee personal data so that the manual method is replaced with an information system designed so that pharmacy data is stored in the database on the system. From the results of processing and designing this information system, there are two actors involved who support the process of running a system design, namely employees or pharmacists (admin) and buyers. Employees in this case input and process transaction data, employee data, drug data, and supplier data. And can print transaction receipts for buyers. while from the buyer's side, they receive a receipt for the purchase of drugs so they can file a complaint at the pharmacy if something goes wrong.

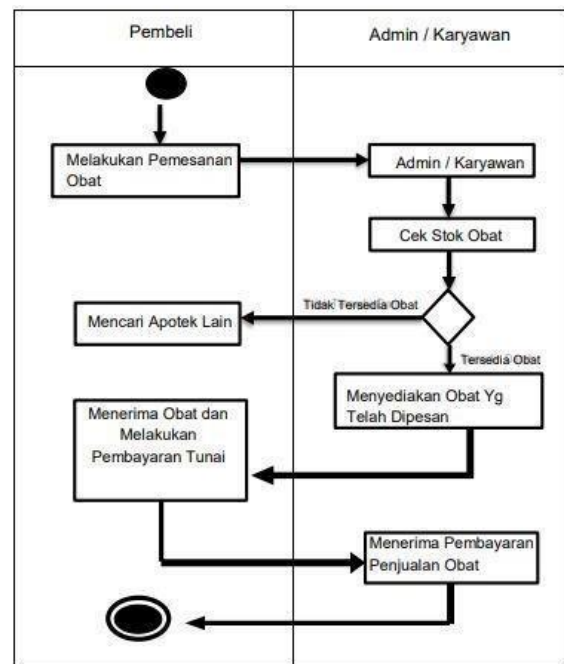## 3.1 Initial System Condition Design

Figure 2. Initial System Condition

3.2 User Identification

Tabel 1. User Identification

No	Aktor	Type Aktor	Aktivity Aktor
1	Admin (Apoteker)	PSA (*Primary System Actor*)	Manage Data
2	Buyer (Masyarakat)	PSA (*Primary System Actor*)	Make transactions purchase medicine and receive receipts

3.3 Research Design

In general, object-oriented online design using the Unified Modeling Language (UML) method which consists of use case diagrams as follows.
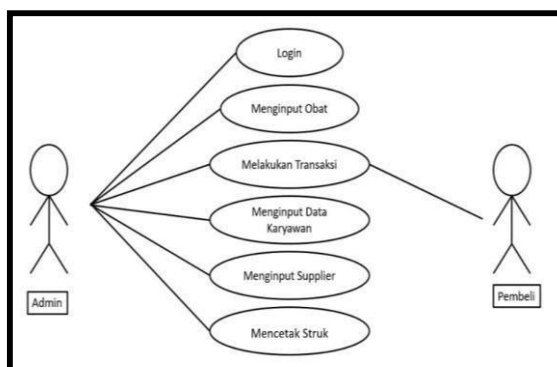
3.4. Pengembangan Sistem
a. Activity Diagram Sistem
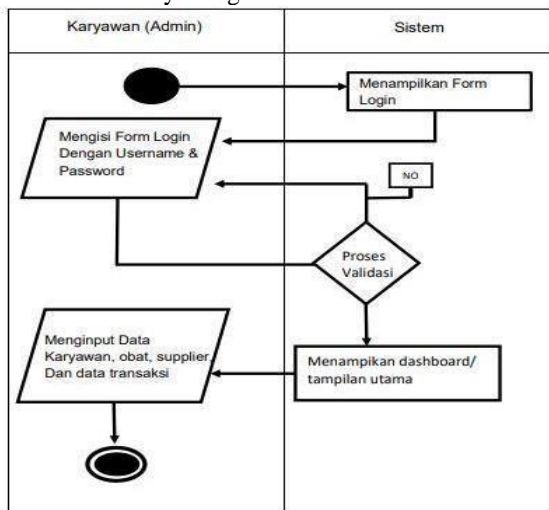
Figure 4. Acivity Diagram Sistem

b. Activity Diagram Transaksi
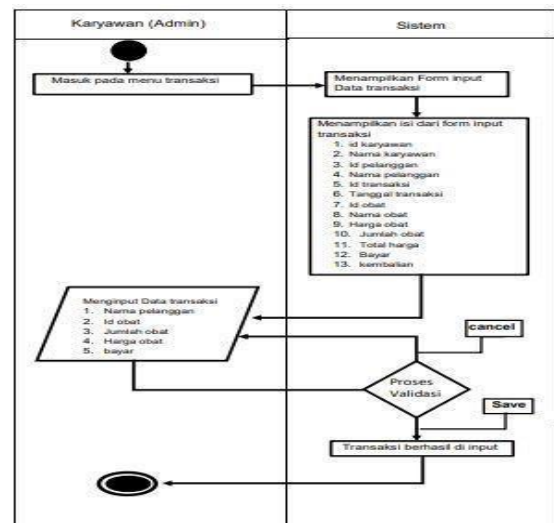
Figure 5. Activity Diagram Transaksi

c. Activity Diagram Obat
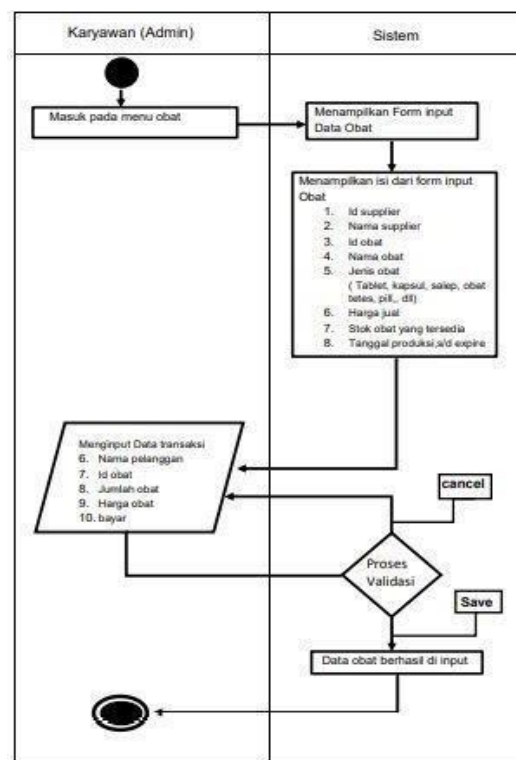
Fugure 6. Activity Diagram Obat

e. Activity Diagram *Supplier*
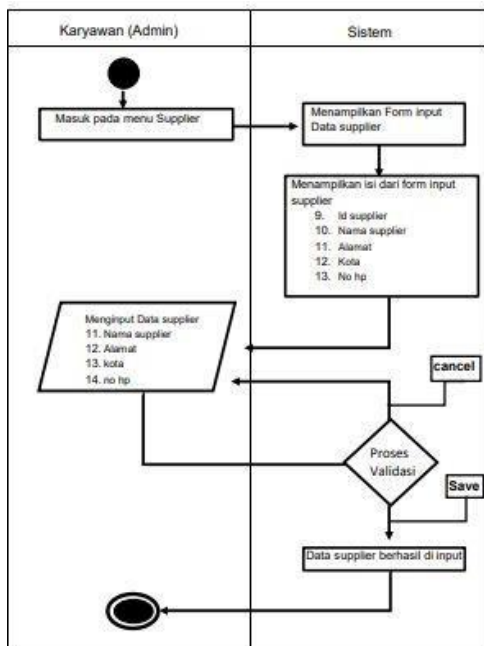
Figure 8. Activity Diagram Supplier

f. Activity Diagram Cetak Struk
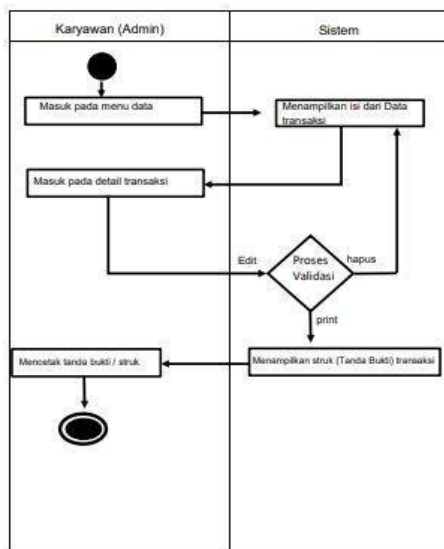
Figure 9. Activity Diagram CetakStruk

g. Data Flow Diagram
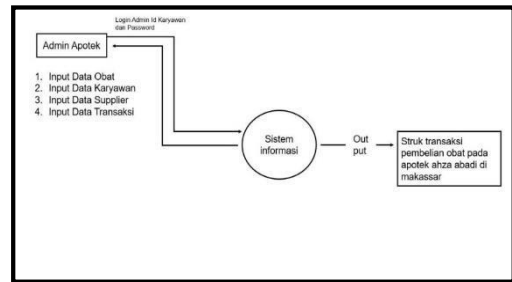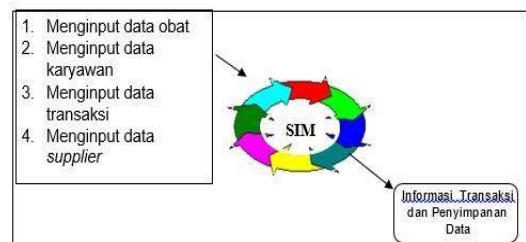

Figure 10. Data Flow Diagram

h. General Sistem Flow

Figure 11. General Sistem Flow

i. Form Input
   1. Form Input Login Admin

Tabel 2. Form Input Login Admin

Form Input Login	
ID Karyawan	**Password**

   2. Form Input Data Transaksi

Tabel 3. Form Input Data Transaksi

ID Transaksi	Tanggal	Nama Pelanggan	Nama Obat	Harga Obat	Total Harga

   3. Form Input Data Obat

Tabel 4. Form Input Data Obat

ID Obat	Nama obat	Jenis obat	Harga	Stok	Tanggal Produksi	Tanggal Expire	Action

4. Form Input Data Karyawan

Tabel 5. Form Input Data Karyawan

ID Karyawan	Nama Karyawan	Jenis Kelamin	No.Hp	Status	Action

5. Form Input Data *Supplier*

Tabel 6. Form Input Data *Supplier*

ID Supllier	Nama Supplier	Alamat Kota	No.Hp	Action

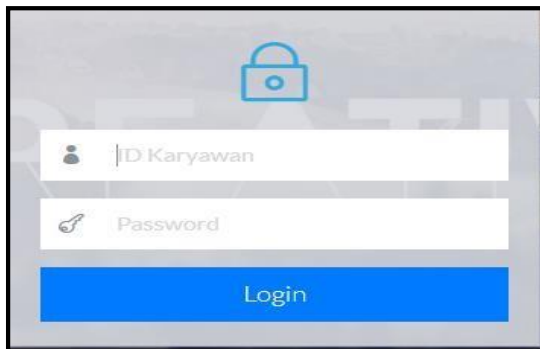3.5 Rancangan Sistem Informasi

a. Halaman Login

Figure 12. Tampilan Halaman Login
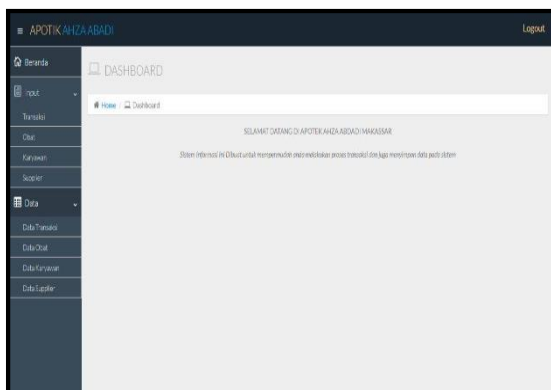
b. Halaman Utama (Beranda)

Figure 13. Tampilan Halaman Utama
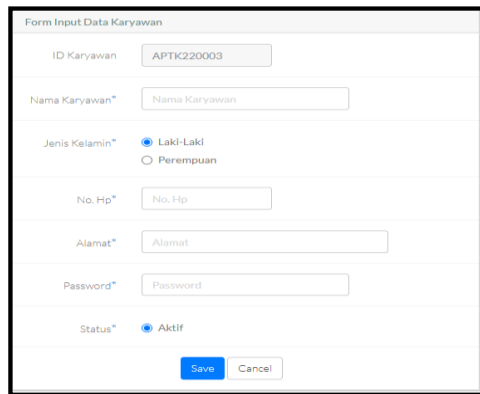
c. Halaman Input Karyawan

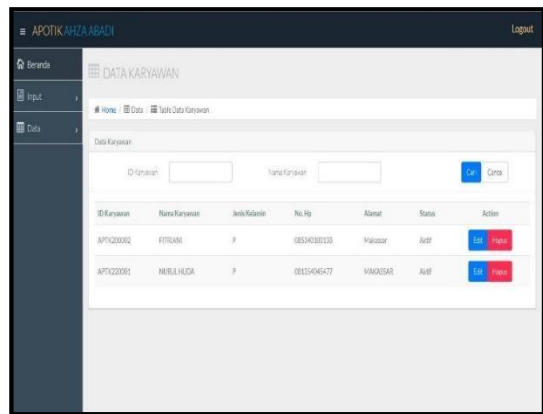Figure 14. Tampilan Halaman Input Karyawan

d. Halaman Data Karyawan

Figure 15. Tampilan Halaman Data Karyawan

e. Halaman Input Obat
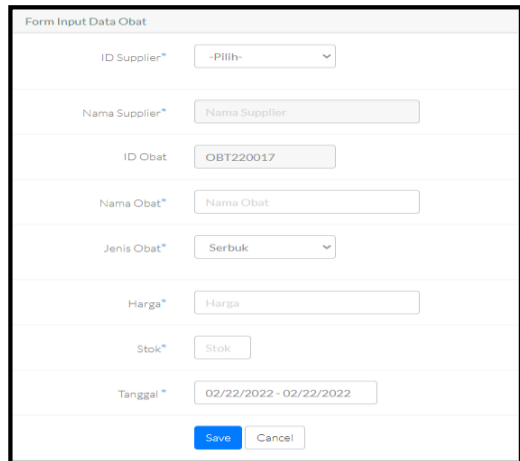
Figure 16. Tampilan Halaman Input Obat

f. Drug data page
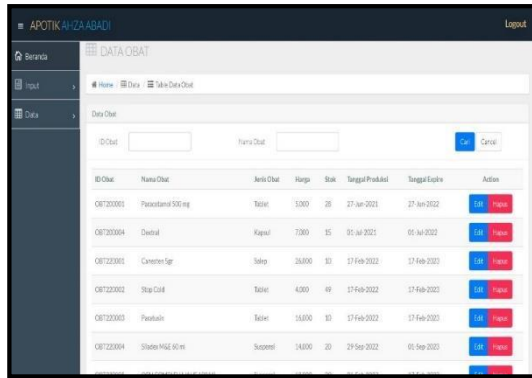

Figure 17. Drug fata page display
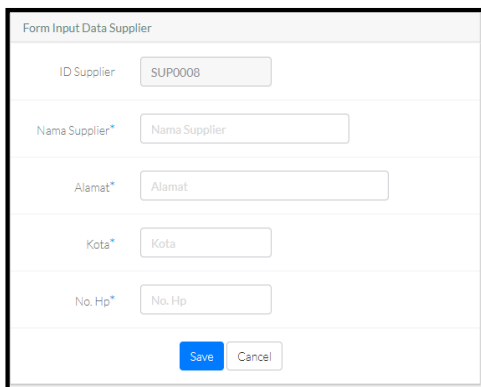
g. Input *Supplier page*

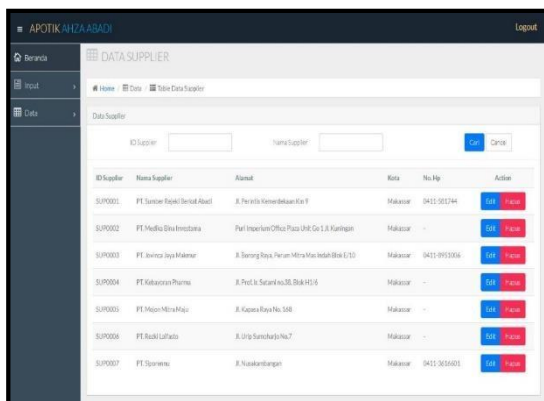Figure 18. Supplier input page display

h. Data *Supplier page*

Figure 19. Data Supplier page display

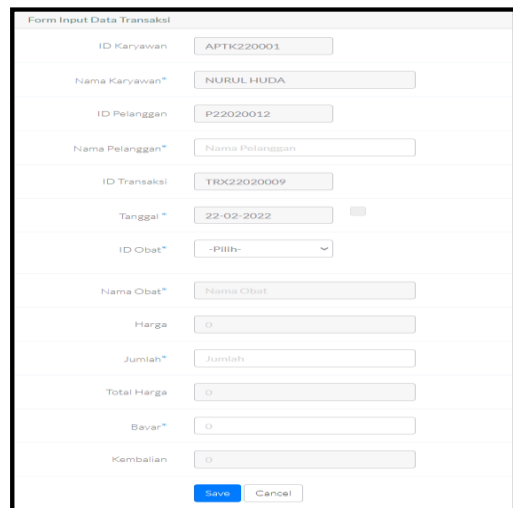i. Transaction input page

Figure 20. transaction input page display
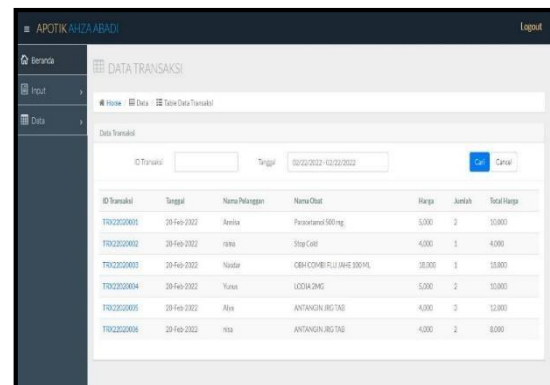
j. Transaction data page

Figure 21. transaction data page display
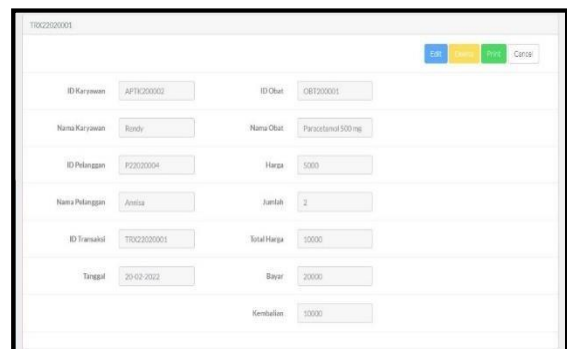
k. Detail transaction page

Figure 22. Detail Transtransaction page display

In the design made there are employees or pharmacists as admins who operate the information system that has been designed. Employees have a username and password to access a system that is designed and acts as data input as well as processing and storing data regarding drugs, suppliers, employees and transactions. After the employee inputs and processes drug data, suppliers, employee data and transaction data, the results of the system designed are in the form of proof of transactions that are given to the buyer in the form of a receipt obtained from the design of the created information system. In the design of information systems there is a data input form, namely:

1. Login Data

This form contains the employee id and password who want to access the system design that has been created.

2. Employee Data

This input form contains employee id, employee name, gender, cellphone number, address, and password as well as active status as an employee in order to access the information system design.

3. Transaction Data

This input form contains employee id, employee name, customer or buyer id, customer or buyer name, transaction id, transaction date, drug id, drug name, drug price, drug amount, total price, pay, and change.

4. Drug Data

This input form contains the Supplier id, name Supplier, drug id, drug name, type of drug, price, stock, and date of production and expiration on the drug.

5. Supplier Data

This input form contains Supplier data in the form of Supplier id, Supplier name, address, city, and Supplier's cellphone number that can be contacted by the pharmacy.

While in the design of the transaction information

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system and data storage at the Ahza Abadi pharmacy, there is an output form that contains data that has been input including employee data, drug data, supplier data, and transaction data. After entering transaction data, employees or admins can print transaction receipts as a guide for buyers who have purchased drugs at the Ahza Abadi pharmacy in Makassar.

4. CONCLUSIONS AND SUGGESTIONS
4.1 Conclusion
From the results of the design of the transaction information system and data storage at the Ahza Abadi pharmacy in Makassar, it can be concluded that:

1. Availability of an information system design that can facilitate the process from recording to inputting data, and the data that has been inputted can be processed and stored into a database system from the design of the information system that has been made to be more effective and efficient.
2. Availability of a receipt for the buyer's hand as proof of having made a transaction at the pharmacy.

4.2 Suggestions
From the design of the transaction information system and data storage, it is inseparable from the shortcomings and weaknesses, so the development of this research is needed, namely:

1. Information systems that are made later can still be developed in design over time, therefore other references are needed that are able to make the design of this information system continue to grow.
2. The design of the information system created can be developed into a web-based information system, making it easier for the pharmacy and the buyer to implement a transaction information system and data storage

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