COMPUTERIZATION OF DRUG SUPPLY INVENTORY (A CASE STUDY OF PHARMACY DEPARTMENT GENERAL HOSPITAL, MINNA)

BY

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CERTIFICATION

This research work by Ndagi Umaru has been read through and been approved as meeting the requirement for the award of post graduate Diploma in Computer Science of the Federal University of Technology, Minna.

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DECLARATION

I hereby declare that this project work was carried out by me under the supervision of Dr. Akinwande.

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DEDICATION

This project is dedicated to my old mother Hajiya Aishatu Usman Ndagi for her consistent words of prayers and encouragement.

ACKNOWLEDGEMENT

All thanks be to Allah the Lord of the world for granting me the ability to go through the programme without a hitch.

I wish to acknowledge with thanks and high sense of appreciation the unquantifiable, timely and valuable contributions my supervisor Dr. Akinwande for his constructive criticism, valuable achievement and consistent words of encouragement, which led to the successful completion of this research within the time limit.

Although any attempt to express my appreciation to any single individual lecturer or group of lecturers for their contribution tuns the risk of offending those that were omitted. There are however those that are of significant help to me notable among them are:- Dr. Akinwande, Prince R.O Badmus, Mr. L.N Ezeako, Mall. Adamu A.Muh'd, Mall. Danladi Hakimi, Mall. Jiya Muh'd, Dr. Ayesami, Mallam Abdullrahaman, Mallam Salihu, to mention but few.

Also deserving acknowledgement and demonstrative gratitude are my brothers, friends and colleagues such as Alhaji Ibrahim, Mr. Zakariya, Mall. Isah Muh'd, Mall. Yahaya Ndace, Mall. Musa M. Isah, Mall. Abdulhakeem Moh'd.

v

TABLE OF CONTENTS

CONTENTS	PAGE
TITLE PAGE	I I
CERTIFICATION	11
DEDICATION	111
ACKNOWLEDGEMENT	IV
TABLE OF CONTENTS	V
ABSTRACT	VI

CHAPTER ONE

1.1	Preamble	1
1.2	Way in Which Inventory of Drugs Can Be Then	2
1.3	Short Comings of Old Method	2
1.4	Objective of Study	3
1.5	Scope and Limitation of Study	3-4
CHA	PTER TWO	
2.1.0	Lay out of Pharmacy Department	5
2.1.1	Cubicles	5-6
2.1.2	Store	6-7
2.1.3	Office of the Chief Pharmacist	8
2.1.4	Drug Information Room	8
2.1.5	Common Room	8
2.1.6	Cashier Office	8
2.1.7	Formulation Room	8
2.2.0	The Evolution of Drug Supply Inventory	9

CHAPTER THREE: SYSTEM ANALYSIS AND DESIGN	
3.1.0 System Analysis	11
3.1.1 Analysis of Input	13
3.1.2 Analysis of Output	13
3.1.3 Existing System Procedure	14
3.1.4 Files Maintained	14
3.1.5 The System Problems	15
3.2.0 System Design	15
3.2.1 New System Procedure	16
3.3.0 Equipment Required	17
3.4.0 Human Element	18
3.5.0 Change over	18-20
CHAPTER FOUR: SOFTWARE DESIGN AND IMPLEME	NTATION
4.1.0 Program Feature	21
4.2.0 Operation Procedures	21
4.3.0 Program Implementation	22-23
CHAPTER FIVE : CONCLUSION AND RECOMMENDAT	ION
5.1.0 Conclusion	25
5.2.0 Recommendation	25-26
Reference	

Appendices

ABSTRACT

Drug supply inventory, of a Pharmaceutical Firm is tedious to prepare especially, when processed manually. In this research, an attempt has been at computerizing the drug supply inventory in pharmacy Department of General Hospital Minna. Using D-base 6.0 programming language. The result obtained prove effective since does not only generates all the needed reports but also provide a highly secured program accessible to eligible users only.

CHAPTER ONE

1.1 PREAMBLE

Computerization of drug supply inventory:- to be able to have proper records of drug and other pharmaceuticals issued to each hospital, an inventory of drug has to be maintained either in weekly basis or monthly basis depending on the way it is designed.

An inventory is a process by which a record of goods or material in question is been taken timely to ascertained the quantity that has been issued and balance in the stock, this is done to check or safeguard irregularities that might arise or determine the stock balance.

Computerization of drug supply inventory:- is a process by which inventory of each drug supply to particular hospital or health institution is been computerized.

There are various ways in which an inventory of pharmaceutical can be taken, but most common one is by a process called "stock taken", most pharmaceutical shops or pharmacy department of health institution uses this method. Since drugs or pharmaceutical are arranged in this shelve base on their pharmacological properties or their pharmaceutical dosage form.

The stock of each drug or pharmaceuticals is taken at the time of issuing the value of each drug is noted and stored in computer memory either in floppy disk or stored in computer hard disk, as soon as the drug is exhausted the stock taken is repeated and the value is then store again, the balance is computed and stored, this allow for re updating of quantity of drugs or pharmaceutical remain in the stock.

1.2 WAYS IN WHICH INVENTORY OF DRUGS CAN BE TAKEN.

- i. Use of tally cards:- this is one of the early method use to check stock balance and keeping the records of drugs in the stock. In this method each drug has its own tally card, the quantity of each drug at any particular time can be verified because it composed of columns and rows where the "name of drug", "Date supply" "Date issued to patient", "Quantity issued to the patient" "balance" can be found.
- ii. Computerization:- this is made possible by using a particular type of application software which is designed by a programmers depending on the way the health institution wants it to be designed, it is arrived on because of short comings of former method.

1.3 SHORT COMING OF FORMER METHOD.

Tally card or bin card can be lost; personnel can tear it out when there is intention for fraud.

There can be miscalculation of stock balance giving false result. In deed all this short comings is been swept out by the use of computerization.

1.4 OBJECTIVE OF STUDY.

The objective of this research work is to provide solution to the problems resulting from the existing manual system being operated upon by Niger State Ministry of Health i.e Department of Pharmaceutical Services, some of the objectives to consider are:-

- To design a computer programme which can produce accurate and correct stock balance for the pharmacy department General Hospital Minna.
- ii. To design a programme that is timely.
- iii. To produce a programme that is cost effective by reducing number of personnel used in stock taken activity.
- iv. To design a programme which is beneficiary to the patients.
- v. To have a programme that offers standard method of drug storage and record keeping.
- vi. To produce a programme with single file for all drugs supply to the Pharmacy Department, General Hospital Minna.
- 1.5 SCOPE AND LIMITATION OF THE STUDY

The Pharmacy Department General Hospital Minna is the only department that generates the highest revenue to the government. As such much focus is placed on the department, although there are other department e.g Surgery department O&G department, Pathology department etc. Therefore a department like pharmacy needs to be computerized in order to enhance the efficiency.

The scope of this study is however, only limited to the computerization of drug supply inventory.

The limitation is mainly the short time frame for the study as well as finance.

CHAPTER TWO

LITERATURE REVIEW

2.1 LAYOUT OF PHARMACY DEPARTMENT

Pharmacy department General Hospital Minna, is sited at the center of the hospital directly opposite Hospital mosque. It has one of the best layout of pharmacy department in the country.

The design was brought about by the then Chief Pharmacist of the state, who was later made the Commissioner of Works and Housing and presently serves as the Deputy Governor of Niger State. The objective of this layout was to:

- i. Allow the Pharmacist interact with patients. Just the way the medical doctors do.
- ii. Allow the Pharmacist to counsel the patient on his or her medication.
- iii. Allow the Pharmacist to counsel the patient on his or her dietary management.
- iv. Allow the pharmacist to be able to formulate simple preparations.
- v. Update the Pharmacists and Medical Doctors on recent discoveries and general knowledge on drugs.

2.1.1 CUBICLE

This is like an office design to host drugs. It is label from 1 - 6. each cubicle has 3 seats of which the center seat is for the pharmacist while the

other 2 seat, one is for the Pharmacist technician and beside that is the seat for the patient.

The Pharmacist role is to scrutinize the prescription made by the Medical Doctor and fish out the mistakes where necessary as well as the appropriate correction where necessary. The most important thing the Pharmacist is looking for include:

- (a) Drug interaction
- (b) Incompatibility
- (c) Dosage
- (d) Side effect of drugs as it correlate with disease condition.

The prescription when validated by the Pharmacist is then costed where the patient is expected to go to cashier office for the payment. After the payment has been made by the patient, the payment receipt and prescription booklet is taken back to the Pharmacist for appropriate dispensing.

Drugs when properly dispensed by Pharmacist is then given to the patient, following an appropriate counseling about drug usage and possible side effect that might arise during the course of medication.

2.1.2 THE STORE

Here the drugs are kept in schedule base on their pharmaceutical dosage form or pharmacological activity. In this way:-

- Anti hypertensive
- Anti Ulcer drugs

- Anti Malaria
- Anti Allergines
- Ophthalmic Preparation
- Heamatimics
- Analgesics
- Antivetroviral
- Antiasthamtics
- Ointments
- Antifungals
- Intravenous Fluids
- Antibiotics
- Diuretics
- Purgatives and Cathertics
- Antiseptics
- Othe Pharmaceuticals

Within the store we have the Refrigerator were vaccines are kept, other drugs that are refrigerated include Tetanus toxoid, Rabbies vaccine, Anti snake venom Suppositories etc.

Air conditions is also provided in the store to make sure that temperature of the environment is kept at the range required by the drugs in order to prevent drug degradation.

2.1.3 OFFICE OF THE CHIEF PHARMACIST

His duty is mainly administrative even though at times he enters the cubicle to work whenever the pharmacists are few in number and patient are stranded. His job is to coordinate the activity of this department through the Director of pharmaceutical services.

2.1.4 DRUG INFORMATION ROOM

It is like a library where information are made available about the drugs, recent discoveries, adverse effect of drugs, ways in which drugs can be formulated etc. in this drug information center, computers are made available which is connected to the Internet. So pharmacist can confidently go to websites to find out information about particular drug.

2.1.5 COMMON ROOM

This is made comfortable for the Pharmacist, it is well furnished and Pharmacist normally have their meeting here, so also the pharmacist on call (duty) sleep or relax here.

2.1.6 CASHIER OFFICE

This is were the payment is been done after prescription validation.

2.1.7 FORMULATION ROOM

In formulation room, simple preparation like ORS, (Oral Dehydration Salt), Antalid, Intramenous fluid, paediatric formulation like paediatric antitube reulosis etc.

2.2.0 THE EVOLUTION OF DRUG SUPPLY INVENTORY

In olden days, records of drugs supply to particular organization or hospital are normally kept inform of invoices which are serially arranged in files. The record of each drug dispensed per day are also kept and stock taken is then made at the end of a particular period of time, in order to check to stock balance.

This method is highly stressful and record are liable to miss, and this lead to the level of opening a card for drug supply to an organization with the "Date of Supply", No drugs supply", Balance, Date issued all this information are contained in the card.

With the advent of computer technology many organizations and pharmaceutical companies consider the former method has been tedious programming language to use in writing the program. Some commonly used programming languages for application data manipulation and or processing activities such as Inventory control, payroll processing library management, etc includes:

i.	D-base		
ii.	Fox pro		
III.	Fortran		
iv.	Basic		
v.	Oracle		

In this present day most of the developed countries used computer program for their inventories, it can be said that drug supply inventories most note worthy generic accomplishment during the 20th century has been it ability to deliver accurate and timely products and services consistently day in day out, under the pressure of change and time.

CHAPTER THREE

SYSTEM ANALYSIS AND DESIGN

3.10 SYSTEM ANALYSIS

System analysis is mainly a procedural study of system's operation, with view to discover it's basic problems w the method of determining how best to use computers with other

Resources to perform task, which meet the information needs of an organization (Badmus, 2004). This section gives an overview of the process involved in the existing manual Tallycard system, with weakness and problems highlighted. The analysis was achieved through interview and forms Inspection.

3.1.1 ANALYSIS OF INPUT

During input analysis, the writer was able to analyzed the following

i Tally cards

ii Inventory of thermo labile substances

a. TALLY CARDS.

The tally card is divided into rows and columns. With head ding carrying the name of the drug and strength of the drug. We have sub columns with the date which drug was supplied, quantity supplied, expiring date, Quantity dispensed, date dispensed and stock balance. In this tally

card at the end of the day the quantity of each drug remain in the stock can be verified and expiring date noted. In this way drug, which it's expiring, is close is fist disposed in other not allow it expired so as devoid lost of financial commciet of the government or organization.

b. INVENTORY OF THERMOLABILE

Themolabile substances are substances, which cannot withstand temperature of certain degree. At temperature higher than normal, they begin to degrade. Such substance are kept in Refrigerator with different compartment, example this substance include

- (i) Vaccines
- (ii) Suppositories
- (iii) Insulin preparation

- VACCINES are refrigerated at freezing point, this is because vaccines are atennated organism such as when expose to temperature above freezing point they begin to loss there structure and consequently pontency.

- Suppositories are refrigerated at temperature slightly above freezing point. This is to keep it at temperature below body temperature because at body temperature it begins to melt.

- Insulin preparation are also refrigerated at temperature above freezing point, any temperature above this temperature will make it to loss it potency.

Since these substances or drugs are always in the fridge at each time their inventory is to be taken, the condition of refrigerator is also stated, the condition say he temperature ate which one vaccine of tuberculosis was dispensed is 5°c at this temperature the vaccine is still very potent.

This inventory tells the pharmacist on how many impotent vaccines were dispensed.

3.1.2 ANALYSIS OF OUTPUT

Analysis of output simply refers to the analysis of report generated after inventory of drugs is processed. It is the end result of computing inventory of drugs or in nutshell, out put in drug inventory system refers to figures generated for each drug at the end inventory processing.

As part of output, the stock balance expiring sate are also noted.

3.1.3 EXISTING SYSTEM PROCEDURE

Pharmacy Department of General Hospital Minna is currently using Manual system of drug inventory which is processed by staff in the department most a time pharmacy technicians, the technicians runs:

- i. entering of record of drugs dispensed into Tally card.
- ii. Calculating the stock balance at the end of the week.
- iii. Checking the expiring of drug on the daily basis.
- Remove the expired drugs from the shelves with the instruction from Pharmacist.

3.1.4 FILES MAINTAINED

The department of Pharmacy, General Hospital Minna maintains a file for each drug, which contain useful information about that drug such information are contained in the official pharmaceutical textbooks which are normally found in the drug information room. Anything that relates drug usage dosage forms, side effect, method of preparation and interaction are all found in this textbooks.

3.1.4 THE SYSTEM'S PROBLEMS

In the existing manual system, as being operated in the Pharmacy department, the following problems were discovered to inhibit its usefulness, hence the need for system's computerization.

A TIME WASTE

In manual inventory taking, using Tallycards it was discovered to be consuming in its processing due to the numerous columns which are to be filled with different figures with addition and subtractions made before obtaining stock balance.

B DATA INSECURITY

The processing of inventory taken using manual tally card system involves using more than one staff, as such the system prone to that insecurity since a staff may choose to act fraudulently with little chance of being detected by supervisory officers.

C. DATA MISPLACEMENT

In the current manual system as operated in the Pharmacy department each drug has its own tall card, which is use in all entries that relate to a particular drug, it is therefore easier to misplace records than the case would be when a single file is provided for the whole drugs as in a computerized system.

3.2.0 SYSTEM DESIGN

The analysis of the existing problem is used at the beginning of system design in developing the objective of the proposed new system. In section one of the chapter, analysis of this existing manual Tally card system of inventory operated in the department of Pharmacy General Hospital Minna was made and some of the problems associated with it were identified and were brought to light. This is the objective of this section (system Design) is to design a computer based system capable of implementing the manual system of computing dug inventory of Pharmacy department, General Hospital Minna, with the view to overcome the identified problems as effectively and as effectively as is possible.

In this section, a new system procedure is explained as regard the analysis of the new system component, procedure used to process document and the files to be maintained.

In other to replace the existing system with the new system for processing Drug Inventory, a computerized system for data obtained form

drug supply Inventory processing being proposed to facilitate data entry, processing, storage and retrieved. This will ensure efficient maintenance of data and production of timely reports at minimum cost. The system is expected to be flexible to allow for the retrieve of relevant information when require. The proposed new system requires the use of computer facilities.

In Drug Information Room of the Pharmacy Department General Hospital Minna.

3.2.1 NEW SYSTEM PROCEDURE

In this section, a discussion is offered regarding the operational procedure for the proposed new computerized system. The discussion made covers the following:

(i) procedure to input data

(ii) output data

(iv) files to be maintained

A. PROCEDURE TO INPUT DATA

The new system is designed in such a way that it can accept valid data which have been entered into the computer. All valid information concerning each drug in the Pharmacy department are entered into a new file called "drug document". When the computer operator enters all the pertinent information needed about each drug the system will automatically receive and store the information in this file – "drug document".

B. OUTPUT PROCEDURE

The new system employs this procedure in order to produce about the drug inventory generated by the system after processing the data entered into the system. The reports are also produced in the format required.

C FILE TO BE MAINTAINED

The new system maintained a drug document file with relevant information about each drug in the Pharmacy department, the file format is as shown below:

Name	Quantity	Quantity	Date	Date	Expiring	Stock
of drug	supplied	dispensed	supplied	dispensed	date	balance
					in the second	

3.3.0 EQUIPMENT REQUIRED

this refers to the equipment needed in order to put the new system into operation. For successful implementation of the new system, four computer systems together with four peripheral devices would be required. The four computer system are to be connected in LAN. The central or host computer is to be installed in the chief pharmacist office, with which he can use to process and update drug inventory when needed. The other three computers should be fully connected to the central computer. These computers are to be installed in the Drug Information room, so that all three can have access to cross-check the drug inventory for incorrect or irregular data if any as demanded by their respective schedule.

HUMAN ELEMENT

Human element denotes the manpower required to manage the new computerized Drug Inventory System. The new system requires the following staff to process, update and or to access.

- i. A computer literate Pharmacist
- ii. Head of Pharmacy i.e Pharmacist in charge should be computer literate so that he can access and cross-check Drug Inventory as processed by Pharmacy Technicians.
- iii. All the Pharmacist in the department should be computer literate so that they can browse through the internet by doing so they will be exposed to drug information from various schools of the world through the World Wide Web.

3.5.0 CHANGE OVER

System change over is usually carried out when the new designed system is tested and that the test results reflect the organization's requirements.

Generally there are four (4) methods of change over worthy of utilization depending on their individual merit and needs of the user organization. They include:

- i. Direct Changeover: this method requires absolute replacement of the old system with the new designed system at a blow. It is usually best adopted after thorough tests about the effectiveness of the new system were conducted, personnel training made and detailed changeover well planned.
- ii. Parallel Changeover: this type of changeover requires running of the two systems, i.e the new and old simultaneously yet independently using current data with the view to cross-check the result generated by the new system when compared with those generated by the old system. It main attractive feature being that the old system is kept operational until the new system's ability to produce required results has been ascertained. This system therefore, promotes user confidence.
 - Staged changeover: this method tends to prolong the implementation period, reduces the risk associated with the direct changeover, in case of new system failure and therefore enables both the analyst and users learn the mistakes committed and design corrective measures to remedy same as the changeover progresses. The method requires a series of limited size direct

iii.

changeovers (new system being introduced in piece meal) that is to say a complete section of the whole is fairly committed to the new system while the remaining sections are processed by the old existing system. It is only when required result in the test section are obtained that the remainder of the sections are transferred to the new system.

iv. Pilot running changeover: this is an alternative to the parallel changeover where data from one or a number of periods for a part or whole system is run on the new system after results have been obtained from the old system.

Comparison is then made between the results generated by the two systems. Pilot running is not as disruptive as the parallel changeover since timing is less critical. In essence pilot running changeover is more like an extended system test.

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CHAPTER FOUR

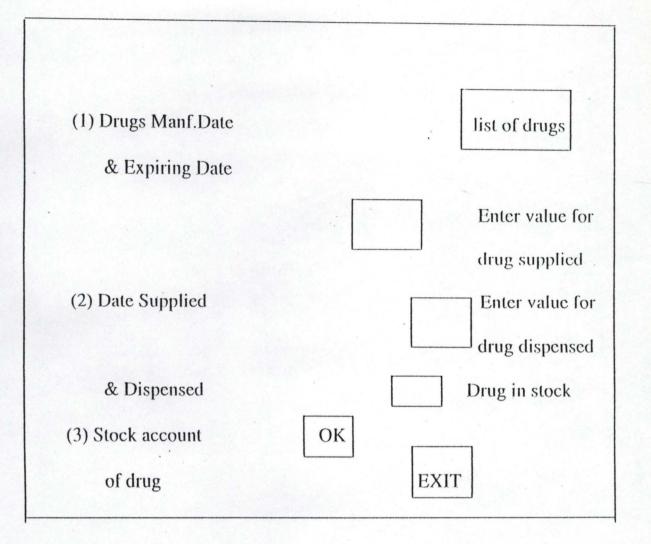
4.1.0 Program features

The program is written using visual basic programming language because it provides full relational data base environment to users.

Using control center and without the use of command language you can design database, generate reports, perform data base query and browse database. Similarly, with it programs and procedures can be compiled and saved as object codes for faster execution. Additional with database IV, users designable functions up to 99 files can be opened at one time

4.2.0 Operational Procedure

The program has been compiled to an executable one when the program is loaded; it first takes the user into an interactive window for the user to enter his name and password. Correct user name and password will automatically take the user to main menu of the program. The main menu of the program is as shown in the table below



1) Drug manufacturing dates and expiring date

The menu allow the user to get the manufacturing and expiring date of the drug, to get this you choose the drug names by click a the box with list of the drug this will allow you to choose the drug and then click at drug manufacturing date the out will be the manufacturing date of the drug choose.

2) Date supplied and dispensed

Choose the drug from the drug list box and click at date supplied and date dispensed, the output is the date in which the drug was supplied and date in which it was dispensed.

3) stock account of drug

this gives you the stock balance of the drug, choose a particular drug, enter the quantity which as supplied in the box (enter value for drug) and enter the value that was dispensed in the box (enter value for drug dispensed) then click ok .the stock balance will appear in the box drug in stock. EXIT-: clicking at exit will take you out of the program. Generally, in order to run the program, the following steps are needed to be observed.

• go to start, click program, click Microsoft visual studio 6.0

Then click Microsoft visual studio 6.0-dialog box appears. Click file menu and select open project ctrl, files appear. Double click file name drug. The programs comes out, click run, the dialog box appears as design above

CHAPTER FIVE

5.1.0 Conclusion

Based on this study problems associated with the old system were identified and a new system has been designed to address those problems, where the recommendations which follow shortly are observed, the new system will generate drug inventory report as efficiently and as accurately as would be required.

5.20 RECOMMENDATION

After due research work, the following recommendation were made

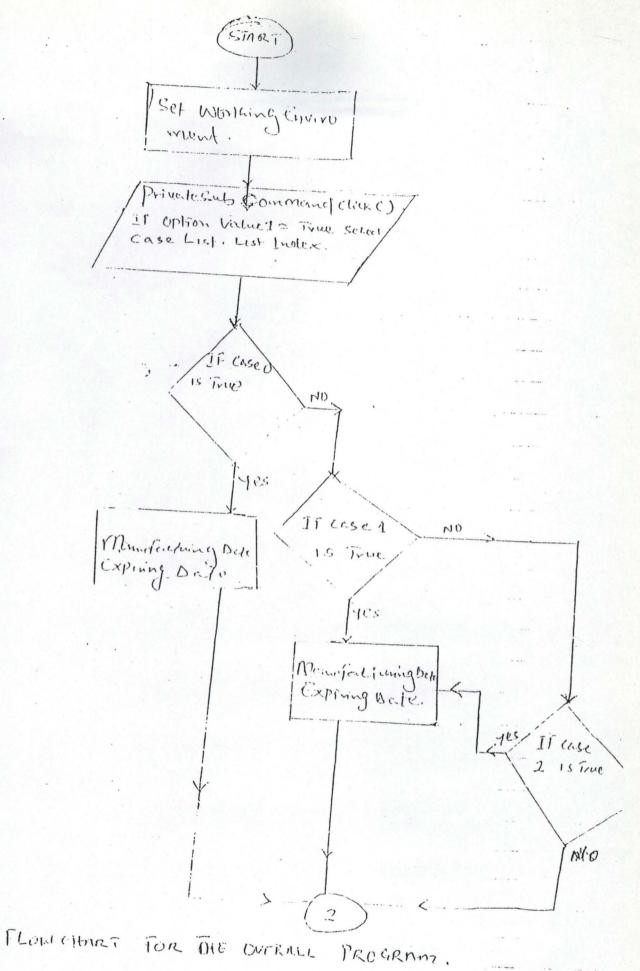
- (i) The new system should be implemented with four computers, one at the chief pharmacists office and other three should be in drug information room. The computer should be connected to each other using local area network.
- (ii) The user should be trained on how to use and operate the new system with proficiency. Until such comprehensive training is acquired, parallel change over is hereby advocated.
- (iii) The maintenance of hardware and software should be done properly. For software maintenance, continuous software should be provided to guard against any viral attack.

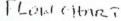
- (iv) For hardware, both preventive and corrective maintenance should be carried out regularly, with equipment such as peripheral devices, system unit and other components of the computer system should be properly maintained.
- (v) Adequate security should be provided especially to the central computer room with access privileges denied to unauthorized persons

REFERENCES

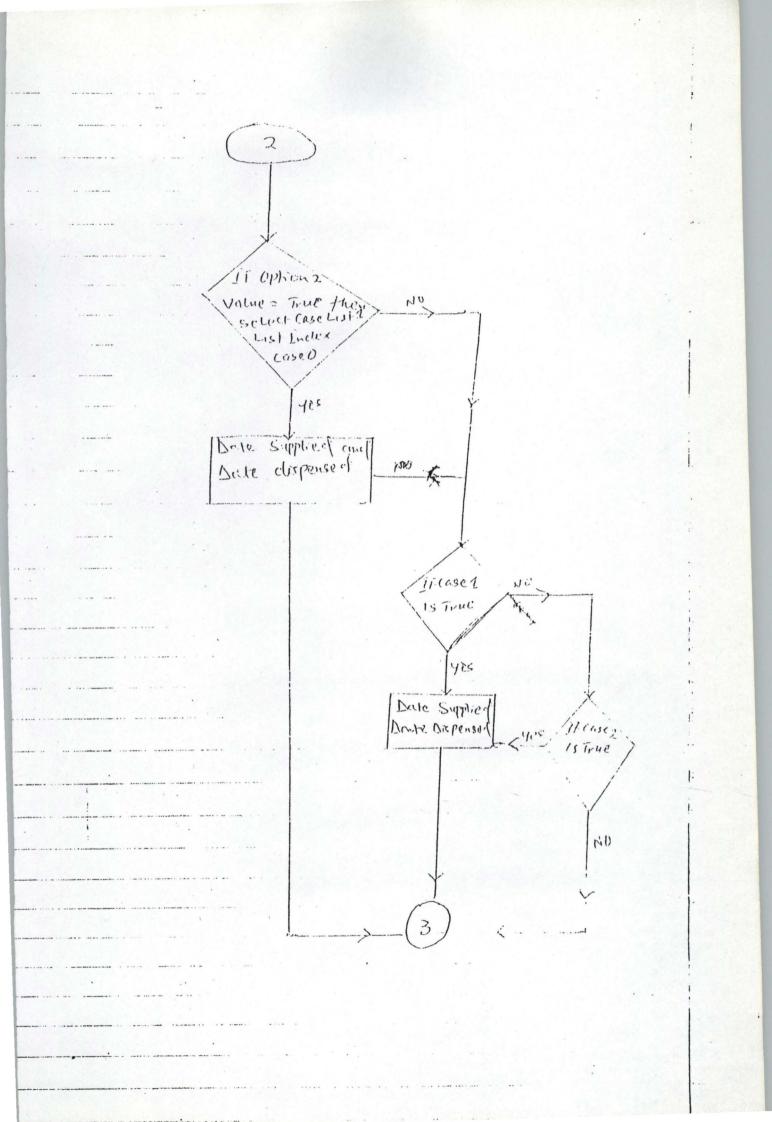
A.T. Mora(2000): PHARMACY MANAGEMENT Unpublished Work. Ahmadu Bello University, Zaria. Ahmed Ndagi (2000): PHARMACY PRACTICE IN DEVELOPED WORLD Unpublished Work. Pharmacy department, General Hospital, Minna. SYSTEM ANALYSISAND DESIGN Badmus, R.O.P (2004): Unpublished Work, Federal University, of Technology, Minna. Danladi .H (2004): DATABASE MANAGEMENT SYSTEM Unpublished Work, Federal University of Technology, Minna. SHEM N. ZAGBAYI (1996): PHARMACY LAYOUT Unpublished Work. Niger State Ministry of Health, Minna.

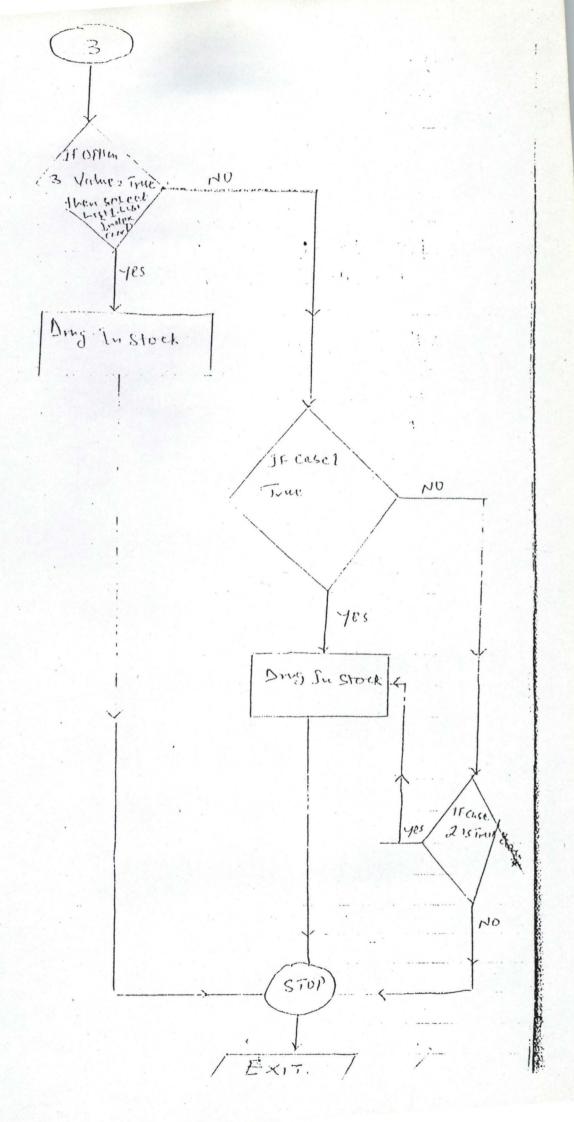






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NPENDIX 2

1 . 1.14

Private Sub Command! Click() If Optioni Value = True Then Select Case List1.ListIndex Case 0 Def = " Mnf Date =12-1 2004 Exp Date = 3-1-2006 " Case 1 Def = " Mnf Date = 3-2-2004 Exp Date = 9-2-2006 " Case 2 Def = " Mnf Date = 6-7-03 Exp Date = 3-5-2005" Case 3 Def = " Mnf Date = 7-9-2003 Exp Date = 4-2-2006" Case 4 Def = "Mnf Date = 1-2-2004 Exp Date = 2-2-2007" Case 5 Def = "Mnf Date = 3-2-2004 Exp Date = 3-2-2007" Case 6 Def = "Mnf Date = 7-9-2003 Exp Date = 8-6-2007" Case 7 Def = " Mnf Date = 6-3-2002 Exp Date = 9-7-2005" Case 0 Def = "Mnf Date = 7-9-2003 Exp Date = 10-11-2007" Case 9 Def = "Mnf Date = 3-7-2004 Exp Date = 3-7-2007 " Case 10 Def = "Mnf Date = 13-2-2003 Exp DAte = 13-3-2007" Case 11 Def = "Mnf DAte 19-3-2004 Exp Date = 20-3-2008" Case 12 Def = "Mnf bate = 3-8-2003 Exp Date = 9-8-2007" Case 13 Def = "Mnf Date = 10-9-2003 Exp Date=29-6-2007" Case 14 Def = " Mnf Date=29-6-2004 Exp Date=30-6-2008" Case 15 Def = " Mnf Date=2-5-2004 Exp Date = 3-6-2008" Case 19 Def = "Eaf Date = 13-7-2002 Exp Date 19-7-2005" Case 17 Def - " Mnf 21-8-2004 Exp Date =23-08-2008" Case 18 Def = " Mnf Date= 29-6-2003 Exp Date = 30-7-2007" Case 19 Def = " Mnf Date = 11-i1-2003 Exp Date 12-11-2006 " End Select MsgBox (Def), , List1. Text End Lf. If Option2.Value = True Then Select Case List1.ListIndex Case 0 Def = " Date Supplied =25-1-2004 Date Dispersed = 29-1-2004" Case 1 Def = " Date Supplied = 7-2-2204 Date Dispersed = 16-2-2004" Case 2 Def = " Date Supplied = 10-12-2003 Date Dispersed= 1-1-2004" Case 3 Def = " Date Supplied = 12-11-2003 Date Dispersed= 2-3-2004" Caro A Def - " Date Supplied =3-4-2004 Date Dispersed = 23-4-2004 " Case 5 Def = " Date supplied = 6-7-2004 Date Dispersed = 27-4-2004" Case 6 Def = " Date supplied = 12-1-2003 Gate Dispersed = 2-1-2003" Case 7 Def = "date Supplied = 22-12-2002 date dispersed = 9-12-2003" Case 8 Def = "date supplied = 23-1-2004 date supplied= 22-2-2004"

End Select
MsgBox (Def), , List1.Text
End If
If Option3.Value = True Then
Select Case List1.ListIndex
Case 0
MsgBox (Def), , List1.Text
Text3.Text = Text1.Text - Text2.Text

End Select End If

End Sub

Private Sub Command2_Click() Unload Me

End Sub

Private Sub Command3_Click() Load Form3 Form3.Show

End Sub

Private Sub Form Load() List1. AddItem "Injection Alropine" List1. AddItem "Injection Oxytocin" List1.AddItem "Injection Ergonetrin" List1.AddItem "Injection Hydrocolison" List1.AddItem "Injection Dipyron" List1.AddItem "Taps Orreprozole" List1.AddItem "Tabs Chlorpromazine" List1.AddItem "Tabs Cimedine" List1.AddItem "Tabs Erythromycin" List1.AddItem "Tabs Paracetamol" List1.AddItem "Tabs Parabetamor List1.AddItem "Ranitidine" List1.AddItem "Tabs Methyldepa" List1.AddItem "Tabs Chloroquine" List1.AddItem " Tabs Promothazine" List1.AddItem " Tabs Zinnat" Listl.AddItem "Tabs Tavegyl" Listl.AddItem " Tabs Diabenese" List1.AddItem " Tabs Folic Acid" End Sub

VERSION 5.00 Begin VB. Form Forml "exil" Caption ::: 5520 ClientHeight ----ClientLeft 60 -----375 ClientTop 8700 ClientWidth .. "Forml" LinkTopic -Scalelleight ... 5520 --8700 ScaleWidth -StartUpPosition = 3 'Window: Default Begin VB.CommandButton Command2 "exit" Caption ----195 ::: Height 3480 Left 12 13 TabIndex 5040 : 1 Top 615 Width ---End Begin VB. TextBox Text3 195 Height ----Left 17 5160 10 TabIndex = 1 3960 Top =: Width 1215 End Begin VB. TextBox Text2 Height . 495 ----Left = 5160 9 TabIndex ---3120 Top -----1215 Width End Begin VE. TextBox Text1 615 Height ----.. ... 5160 Left TabIndex \$3 := ---2280 Top 1215 Width ----End Begin VB. OptionButton Option3 "Option3" Caption --------255 lleight Left -120 6 Tabindex -1800 ----Top 255 Width End Begin VB. OptionButton Option2 "Option2" Caption = 195 ----Height Left :: 120 ** 1 TabIndex 1200 Top := 255 Width End Begin VB. OptionBulton Option1 "Option1" Caption -255 Height ----Left 120 27 TabIndex 2 600 Top 212 Width 255 ... End Begin VB. CommandButton Commandl "ok" Caption -=: 195 Height 3360 Left =: TabIndex -1 1110 Top

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Form1 - 2 11 1, 1, Width End Begin VB. ListBox List1 645 Height ----212 4920 Left TabIndex 0. 360 72 Top 2055 = Width End Begin VB.Label Label6 "brug in slock" Caption -375 Height ::: 6720 -Left 11 TabIndex ... 3060 1.1 Top 1215 Width ... End Begin VB.Label Label5 "Enter Value For The Drug Dipersed" Caption . = Height -615 6720 -Left TabIndex 1.1 12 3120 Top Width == 1335 End Begin VB.Label Label2 "Enter Value For Drug Supplied" Caption =: 375 Height Left 6600 21 TabIndex -----11 2400 Top Width 1575 :** End Begin VB.Label Label4 "SLock Account of the Drug" Caption ... 415 Height ---720 Left --.1 TabIndex := .. . == 1800 Top 3615 Width := End Begin VB.Label Label3 "Date Supplied and Date Dispensed" Caption ----375 ---lleight 600 Left 12 TabIndex = 5 1080 Top == 3735 Width -End Begin VB.Label Labell "List of Drugs & Date of Manu and Exp" Caption -255 = lleight 480 Left == == 3 TabIndex Top = 600 Width -3735 End

End

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C. List of Drugs Date of Monu and Exp.

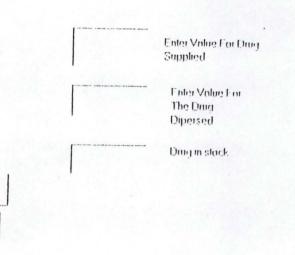
1

C Date Supplied and Date Dispensed

ok

exit

C Stock Account of the Drug



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