### TITLE PAGE

## AUTOMATED STAFF TRAINING AND DEVELOPMENT DATABASE

A CASE STUDY OF HABIB NIGERIA BANK LIMITED STAFF DEVELOPMENT CENTRE, KADUNA

By

## Abubakar Sanusi

PGD/MCS/2003/2004/1120

A PROJECT SUBMITED TO THE DEPARTMENT OF MATHEMATICS/ COMPUTER SCIENCE.

THE AWARD OF A POSTGRADUATE DIPLOMA IN

COMPUTER SCEINCE.

FEDERAL UNIVERSITY OF TECHNOLOGY,

MINNA, NIGER STATE

November 2004

### **DECLARATION**

I hereby declare that this project has been conducted solely by me under the able supervision of **Prince R.O. Badmus** of the Department of Mathematics and Computer Science, Federal University of Technology, Minna. And I have neither copied someone's work nor has someone else done it for me. In accordance with the ethics of Project/research work all materials used has been adequately referenced.

Abubalcar Sommi Student Name

Signature

29 - 11. - 250 H

## **CERTIFICATION**

I hereby certify that this project is the original work of MR.

ABUBAKAR SANUSI. PGD/MCS/2003/2004/1120. Submitted for the award of POSTGRADUATE DIPLOMA IN COMPUTER SCIENCE OF FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA.

MR. R.O.BADMUS PROJECT SUPERVISOR	DATE
MR L.N EZEAKO HEAD OF DEPARTMENT	DATE
EXTERNAL EXAMINER	DATE

## **DEDICATION**

This Project work is dedicated to my affectionate parents, *Late Mallam Abubakar Imam* and *Mallama Hafsat Imam*, whose upbringing and parental guidance made me what I am today. May Allah (S.W.T) reward them with *Aljannah Firdausi*, *Amin* and I seek their continuous blessing throughout my life.

Also, I dedicate this Project work to Late Alhaji Adamu whose moral and financial support cannot be quantified, May Almighty Allah reward him with *Aljannah Firdausi*, *Amin*.

## **ACKNOWLEDGEMENT**

My profound gratitude goes to Allah (*S.W.T*) whose magnificent and merciful powers enables me pass through the difficulties right from the beginning down to the end of this programme.

I will like to acknowledge with gratitude the helpful suggestions, stimulation, discussions and the positive criticisms by my able supervisor **Prince R.O.Badmus** May Almighty God protect him and his family.

I also wish to acknowledge the contributions of my able HOD – Mr. L.N. Ezeako and other lecturers of the Department who are too numerous to mention.

I wish to acknowledge the understanding and sempiternal love of my darling hearthrob *Hadiza* .*M. S* (*Mammy*) for her prayers and encouragement.

May I also acknowledge the contributions of my colleagues in Seagul and my PGD Classmates for their assistance and advices. To them I am most grateful.

And finally to my entire friends in Minna, Kaduna, Abuja, Adamawa and all over for their prayers and encouragement, to them I am most grateful.

## **ABSTRACT**

This Project work is designed to develop an *Automated Staff Training* and *Development Database* that will determine the basic criteria used in enrolling staff in training, the best methods to be implied in keeping trainees records, the types of training and the effects of the training on the performance of the staff and the entire bank in general and also to serve as a decision making tool with respect to staff promotions and redeployments.

The automated system further proffers solutions to the problems encountered in using the manual system.

## **TABLE OF CONTENTS**

Title	Page	
Decl	aration	ii
Appr	oval page	iii
Dedi	cation	iv
Ackr	nowledgement	v
Abst	ract	vii
Tabl	e of Contents	viii
СНА	PTER ONE	
1.0	Introduction	1
1.2	Purposes of the Study	2
1.3	Why Computerization?	3
1.4	Limitation of the Study	4
1.5	Delimitation of the Study	5
1.6	Definitions of Terms	6
CHA	APTER TWO	
-1	Literature Review	8
2.1	Habib Bank in Perspective	9
2.2	Staff Training & Development	9

2.3	Staff Training in Habib Nig. Bank Ltd	10
	Organisational Chart of Habib Bank	
,		
СНА	PTER THREE	
	Preliminary Survey	16
3.1	Feasibility Study	16
3.2	Systems Analysis	17
3.3	Investigation and fact recording	17
3.4	Analysis of facts	17
3.5	System Design	18
3.6	System Analysis	18
3.7	System Documentation	18
3.8	Cost Analysis of the system	19
3.9	Computer System requirements	20
(	CHAPTER FOUR	
	Choice of Programming Language	23
4.1	Structure of Visual Basic	23
4.2	Security Measures	25
4.3	Record Specification	25

4.4	Field Specification	26
4.5	Design of the New System	27
4.6	Input Specification	29
4.7	Output Specification	30
4.8	Menu Specification	31
4.9	Manual Operational System	32
	CHAPTER FIVE	
:	Findings	33
5.1	Summary	34
5.2	Conclusion	35
5.3	Recommendations	36
Syst	em Flow Chart	
Prog	gram Listing	
Sam	pple Output	
Sam	ples of forms Used in the Program	
Refe	erences	

#### **CHAPTER ONE**

#### GENERAL INTRODUCTION

#### 1.1 PRELIMINARY

STAFF Training and Development in any organization is a crucial factor if the organization is to meet its set aims and objectives.

Most organizations enroll staff for training and keep the records of their staff using the different Manual System depending on the nature of their work and the organizational goal.

Habib Bank Nigeria limited is a leading organization in the Banking sector of the economy and hence the need for an efficient and effective record keeping of its Manpower development cannot be overemphasized. The project tends to find out among others the desirability and use of an alternative automated or computerized system to aid replace the manual system.

## 1.1 PURPOSE OF THE STUDY

- To determine the basic criteria need to be met by each staff before being recommended to undergo any Staff Training exercise.
- To critically examine and clearly state the basic problems associated with the existing system and provide adequate solution to these problems.
- To determine effects of the Staff Training exercise on the activities of the organization.
- To determine the best methods of Staff Training to ensure that they have obtained sound knowledge and skill in the area of their specialization.

#### 1.2 WHY COMPUTERISATION

The benefits of the automated system are stated below:

- ➤ High degree of accuracy: The automated system is characterized by high degree of accuracy. The percentage error even if there is will be of negligible figure.
- Long term storage: Automated system can store data or information on long term basis.
- Data and information sharing: The database file under the new system can be shared and used by several users for the purpose of decision making.
- ➤ High Speed: The speed of the processing of data into information will be faster than the existing system (manual) this is aimed at bringing about quick implementation of promotions for the staff trained.
- Consistency: The new system will be more consistent than the manual system. The mathematical analysis stated in the program will always carry out its operation in a consistent manner, no matter the number of time the program is being run.

#### 1.3 **LIMITATION OF THE STUDY**

Staff Training and Development procedures being an internal affair of the Bank in which information about it is restricted to the Personnel department and the management of the bank, The major limitations experienced are as follows:

- Lack of having first hand information in time due to the confidentiality of such information.
- ii. Time Constraint: Due to the time constraints coupled with the tedious academic activities, the time is too short for the project work.
- iii. Finance Constraints: Taking into consideration, the economic condition of the country affected the smooth execution of the project.

#### 1.4 DELIMITATIONS OF THE STUDY

The research work is limited to finding an *automated* method of determining who is due for training, when is he/she due and what type of training and most importantly to keep a comprehensive database of the training activities.

#### 1.5 **DEFINITIONS OF TERMS**

**Training:** This is the process of coaching or accustoming to a mode of behavior or performance, or to make or become proficient with specialized instruction and practice.

**Trainee(s):** This is an individual or group of individuals receiving training.

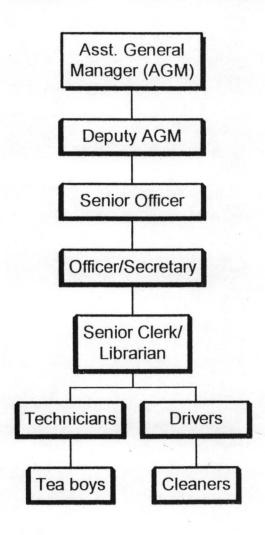
**Trainer(s):** An individual or group of individuals task with the responsibilities of the training.

Record: A usually written account of events or facts. Or Information on a particular subject collected and preserved. It can also be explained as collection of related information.

**Trainee Form:** This is the kind of form giving to the trainee(s) to fill when enrolled in the Training School.

**Processing:** The Performance of logical operations and calculations on data including the temporary retention of data in processor storage while it is being operated upon.

# ADAMU BELLO CENTRE ORGANISATIONAL CHART



#### **CHAPTER TWO**

#### LITERATURE REVIEW

Staff Training and Development in any organization is a crucial factor if the organization is to meet its set aims and objectives.

Staff Training and Development paves way through which any organization can help its employees develop their career path and be productive. The act is a standard i.e. already laid down procedure which varies from one organization to another each operating its own predefined standard.

Habib Nigeria Bank Limited has been conducting Staff
Training and Development for its employees as far back as
1988 and the training is conducted based on the
recommendations of the Administration Department.

Below is the detail review of the manual system of *Staff Training and Development* otherwise referred to as "The Existing System".

#### 2.1 HABIB BANK IN PERSPECTIVE

Habib Nigeria Bank Limited was established on the 13<sup>th</sup> March, 1983 and starts banking operations on May 16<sup>th</sup>, 1983 with Late General Shehu Musa Yar'adua (rtd) as the founding Chairman. The bank operates under equity participation i.e. 50% of the shares are owned by Nigerian Promoters while the remaining 50% is solely owned by Pakistans.

Presently, Habib Nigeria Bank Limited has 51 branches and 3 cash centres nationwide. The head office of the Bank is located in Kaduna. The head office runs a Training School known as Adamu Bello Centre in Kaduna.

#### 2.2 STAFF TRAINING AND DEVELOPMENT

The continual success of any organisation depends mainly on it's employees who, indeed, are it's primary resource and so the development of an organization's employee is crucial if it will continue to meet both current and future needs.

Staff Training and Development is an act of teaching and giving staff the necessary practice in order to bring to a desired standard of behaviour, efficiency and physical condition and to improve their productivity.

#### 2.3 STAFF TRAINING IN HABIB NIGERIA BANK LIMITED

The bank started operations in 1983 but did not have a coherent Staff Training policy of its own until about 1987 when the Training Division was created within the Administration Department of the Bank. The division then was essentially an administrative outfit saddled with the coordination of staff attendance to short and long term courses as well as the organisation of In-plant courses for officers of the Bank. There was no definite training policy to guide the activities of the unit. It was then realized that the corporate training needs of the Bank were far from being met with the above arrangement. Consequently, in 1988, the management of Habib Nigeria Bank Limited decided to establish the Staff Training and Development Centre known as Adamu Bello Centre to cater for the perceived training needs of the Bank.

The concept of the Training Centre is, therefore, to train staff in all aspects of the Bank's operations. The idea is to ensure that all categories of staff will at one time or the other pass through the Training Centre either for Induction Courses, In-house training, In-planned courses and General Behavioural Courses.

#### 2.1 THE EXISTING SYSTEM

The existing system of Staff Training and Development

Database in ABTC, Habib Nigeria Bank Limited is Manual

System.

Presently, ABTC undertake three types of training.

These are:

#### (a). INDUCTION TRAINING

The bank places considerable emphasis on the induction of the new employees into the organisation. Each induction is tailored to meet individual needs as appropriate,

but all employees shall be required to undergo a formal induction course soon after joining the Bank.

#### (b). ON-THE-JOB TRAINING

This is the type of training for employees that are not new employees. It shall be the responsibility of every supervising officer to ensure that all employees under him receive adequate on-the-job training.

#### (c). GENERAL BEHAVIOURAL

This is the type of training where each and every junior staff is to undergo once or twice in a stipulated period of time.

Manual system here implies the type of the training being conducted by the system, determining the methods of keeping record or database and so on are done manually. The manual system requires a lot of expertise who perform the task of keeping complete records of trainees, assessing their performance at the end of a stipulated time. It can be seen that the manual system purely depends on human

efforts and his degree of accuracy and therefore, it is error prone and not so reliable.

The manual system is not cost efficient, it involves a lot of expertise in keeping records, assessing and selecting the trainees, it also involves procurement of stationeries, erasers etc. and the unfortunate is the frequent misplacement and disappearance of trainees records.

Other problems associated with the manual system of operation in the Training Centre includes among others:

- The slow pattern of the existing system with regard to information retrieval.
- The existing system is unprotected from dubious actions
   of fraudulent persons.
- It is inefficient as it fails to meet all the information needs of the management.
- The system currently in use i.e. the manual system is unreliable.
- The existing system is also open to human errors. An example is the case of finding a wrong document in a file

after losing hopes of getting such a document for its correct owner again.

In summary, the overall objectives of this research work is to develop automated package on *Staff Training and Development* that will take care of records or database of the trainees and the activities of the Centre through the production and analysis of data relating to Staff Training through the provision of better and more information on the size, criteria and cost of the training.

Staff Training and Development Database automation is aimed to equip Habib Nigeria Bank Limited and Adamu Bello Training Centre (ABTC) in particular to take better informed decisions, with the resource constraints that will obtain.

The automated *Staff Training and Development* in **ABTC** will also perform the following tasks:

- Provide management with key information/processed data, compiled and abstracted.
- · Facilitate decision-making

 Improve efficiency and effectiveness of management functions.

## **CHAPTER THREE**

#### PRELIMINARY SURVEY

The purpose of this survey is to establish whether there is need for a new system. The preliminary survey gives an insight into the report being sent to the user of the new system.

#### 3.1 FEASIBILITY STUDY

Feasibility study stage involves a broad study of a system to ascertain:

- ✓ The cost of the problem to be solved
- ✓ To carry out a comprehensive investigation so as to provide necessary information that will justify the new system.
- ✓ To outline on one more solution to the problem.

#### 3.2 SYSTEM ANALYSIS

System analysis is simply defined as methods of determining how best to use computers with other resources to perform tasks, which meet the information needs of an organisation. System analysis consists of different stages. Some of the stages are as follows:

#### 3.3 INVESTIGATION AND FACT RECORDING

The following tools were employed in the process of fact finding, namely:

- Documentation
- Observation
- Interviewing

#### 3.4 ANALYSIS OF FACTS

It is pertinent to note that analyzing the facts is the bedrock or foundation towards designing a cost-effective system. So thorough analysis of the facts cannot be over-emphasized.

In view of the above, the information received was analyzed in order to come out with reliable and tangible facts.

#### 3.5 SYSTEM DESIGN

In order to develop objectives for the proposed system (new system), we are obliged to analyse the current problem at the beginning of the system design.

The analysis may lead to number of possible alternative designs. For example, different combinations of manual and computerised elements may be considered. Once one alternative has been selected the purpose of the design stage is to work from the requirements specification to produce a system specification. The system specification will be a detailed set of input documents, forms, report layouts, which provide details of all features of the system.

#### 3.6 SYSTEM DOCUMENTATION & MAINTENANCE

The system documentation & maintenance stage usually encompasses whatever changes and enhancements

need to be made after the system is up and running and to carefully manage the software (Staff Training and Development) in an effective way.

#### 3.7 COST ANALYSIS OF THE SYSTEM

Some of the costs taken into consideration under this research work which has been completed with cost of continuing with the existing system and has proven effective and economical are as follows:

- Equipment cost: It is obvious that a project of such a magnitude will require some computing equipment and that prompted the purchase of the following equipments:
  - (1). Computer Set
  - (2). A laserjet printer
  - (3). A4 Papers
  - (4). Pack of Diskettes

In a nutshell, the equipment cost around N200,000.00

 Installation cost: The installation of the software (Visual Basic 6.0) was done solely by me the researcher though the cost of the purchase of the software is around N3,500.

#### Development cost

Though the development cost is unquantifiable in terms of Naira as it involves the time the researcher spends coding and testing the program as well as making amendments when the need arises, the cost may be put approximately N100,000.

Software consultancy and future upgrading when necessary

- Software organisation cost
- Operation cost
- > Maintenance cost
- Cost of consumables e.g. tapes, disks etc.

#### 3.8 COMPUTER SYSTEM REQUIREMENTS

Computer system requirement can be categorized into two namely: Software and Hardware.

#### (a). SOFTWARE

These are of instructions, which tell the computer how to accomplish or perform a given task. These instruction are coded in computer understandable form called Program.

Computer software can also be categorized into two namely: System and application software.

System Software: These are programs written by computer manufacturers. These programs are designed to manage the computing resources. With regard to this project work, the program is designed to run on Windows operating system.

Application Software: These are programs written to solve user's problem. They do not have any effect on the efficiency of the Computer system. For example, Microsoft Visual Basic 6.0.

#### (b). HARDWARES

These refer to those physical components or devices that we can see, feel and touch around a computer system. They are made up of electronic parts and some smaller mechanical

parts. Some of these hardware devices are CPU, Storage Unit, Control Unit, Input and Output Devices.

#### **CHAPTER FOUR**

#### **CHOICE OF PROGRAMMING LANGUAGE**

The programming language chosen for this project work is *Visual Basic 6.0* developed by Microsoft Corporation.

#### 4.1 THE STRUCTURE OF VISUAL BASIC

Microsoft Visual Basic is an Object-Oriented

Programming Language by Microsoft Cooperation, is a type of high-level computer language that uses self-contained, modular instruction sets for defining and manipulating aspects of a computer program. These discrete, pre-defined instruction sets are called *Objects* and may be used to define variables, data structures, and procedures for executing data operations. In Microsoft Visual Basic, objects have built-in rules for communicating with one another. They can also be manipulated or combined in various ways to modify existing programs and to create entirely new ones from parts of other programs.

One especially powerful feature of Microsoft Visual Basic is a property known as *Inheritance*. Inheritance allows an object to take on the characteristics and functions of other objects to which it is functionally connected. Programmers connect objects by grouping them together in different classes and by grouping the classes into hierarchies. These classes and hierarchies allow programmers to define the characteristics and functions of objects without repeating source code, the coded instructions in a program. Thus, using Microsoft Visual Basic can greatly reduce the time it takes for a programmer to write an application. And also reduce the size of the program. Visual Basic and other OOP Languages are flexible and adaptable, so programs or parts of programs can be used for more than one task. Programs written with Visual Basic are generally shorter in length and contain fewer bugs or mistakes, than those written with other languages that are non-OOP languages.

#### 4.2 **SECURITY MEASURES**

Security is very important in every data processing environment to protect the software (data, programs, and information) hardware and other data processing equipment from damage, theft and most importantly unauthorized access to them.

The following security measures were put into consideration in this project work. They are:

- ✓ A password is incorporated into the program, so that only authorized persons get access to the program.
- ✓ Backing up of Training Database files and programs.
- ✓ Provision of fire extinguisher in the Computer room was recommended to the management of the Staff Training and Development Centre.

#### 4.3 RECORD SPECIFICATION

The record keeping in this field of study involves *Batch* processing which is the accumulation of records in batches before processing them. It is faster to use sequential data

organisation than random access organisation with keys and transformation algorithms when presenting a large amount of data in sequence. In Index Sequential, records are stored in sequence with one important difference – an index is provided to enable individual records to be located.

An index sequential file organisation method has therefore been adapted to cater for storage/retrieval of data.

#### 4.4 FIELD SPECIFICATION

Field is collections of related characters e.g, class. The fields used in the program are of variable length and are either numeric, alphabetic and/or alphanumeric.

It is pertinent to note that the variable assigned to numerical fields must be of 'numeric properties, while the variables for alphanumeric and alphabetic fields should be are assigned to 'text'. Likewise the date should be assigned 'date string'.

#### 4.5 DESIGN OF THE NEW SYSTEM

This is another sensitive task, because the researcher makes use of his initiatives to design a layout of the proposed system based on the data and information he collected in Chapter Three. The following is the breakdown of the steps followed towards the successful design of the new system.

#### **FILE LAYOUT**

This program contains three (3) different files holding different database altogether and each file consists field names, variable names, variable type and width of each record in the file were stipulated appropriately.

#### 1. INDUCTION (New Intake) File Layout

Field Name	Data Type	Field Size
ID No.	Number	Long Integer
Name	Text	30
Date of Employment	Date/Time	
Branch	Text	20
Designation	Text	20
Course	Text	25
Duration	Text	14
Sex	Text	8

# 2. On-The- Job File Layout

Field Name	Data Type	Field Size
ID No.	Number	Long Integer
Name	Text	30
Date of Employment	Date/Time	
Branch	Text	20
Designation	Text	20
Course	Text	25
Duration	Text	14
Sex	Text	8

# 3. General Behavioural File Layout

Field Name	Data Type	Field Size
ID No.	Number	Long Integer
Name	Text	30
Date of Employment	Date/Time	
Branch	Text	20
Designation	Text	20
Course	Text	25
Duration	Text	14
Sex	Text	8

#### 4.6 INPUT SPECIFICATION

This section defines and illustrate how data can be entered (i.e. data entry) during program execution.

The input specification comprises of the form design, tables with which data is entered in the system

#### INPUT FORM DESIGN

This term can be expressed as the techniques or process of transferring human reliable data such as *Trainee Record* into a complete system. In addition, the processes are further divided into two stages; they are:

- The human understandable data are converted into machine code, this stage is known as data entry.
- The second stage has to do with the transfer of the machine-readable data directly to tape or disks or to the system for processing.

It is pertinent to note that all entries are via keyboard and mouse.

#### 4.7 OUTPUT SPECIFICATION

At this stage, all the data entered during the *Input* Specification will be processed, the computer will processed such data based on the instructions given (i.e. in the program) and will generate the required output either as a soft copy (i.e. on the screen or monitor), and/or as a hard copy (i.e. through the printer).

It is important to note that the expected output depends largely on the *Output Form Design*. A clear design of the expected output form is as discussed below:

#### **OUTPUT FORM DESIGN**

This is a term used to describe the process of generating reports out of processed input data in format that will be useful to the management either in keeping a comprehensive record and also decision making. The output expected in this process should include mainly the *Trainee record* consisting of comprehensive report on Who the trainee is, The type of training, From which branch did he/she comes, His/her

designation and the rest of other important facts about the Trainee.

#### 4.8 MENU SPECIFICATION

The menu layout in this project work consists of the Main Menu and several sub-menus. After the Opening Screen, then comes the Access or Password Screen, which gives the user access to the Main Menu only when he is authorized i.e. by knowing the Identification No., from the Menu comes the Main Menu which is made up of four options designed in a driven-form. The four options are File, Edit, View, Help and those Menus have Sub-menus under them. For example the File option consist of Training and under Training one come across Induction, On-The-Job, General, when you click any option it takes to the data entry screen of that option. The same process appears to the remaining options.

#### 4.09 MANUAL OPERATIONAL SYSTEM

The system operated by HABIB Bank Nigeria Limited in enrolling staff into the different training programmes and the keeping of the databases and necessary records is manual operational system i.e. where files and papers are used in determining who is due for training and keeping of the database and records.

The system introduced or rather proposed is a computerized system for efficient record keeping and also a fair selection of the trainees towards and effective and efficient service delivery at the Habib Bank Nigeria Limited.

### **CHAPTER FIVE**

FINDINGS, SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### **FINDINGS**

After an exhaustive research on the Manual operational system in enrolling staff for training and the record keeping Habib Bank Nigeria Limited, some lapses which include among others:

- i. Lack of proper documentation
- ii. Lack of efficient method of selection
- iii. Time wastage and loose of valuable information e..t.c

  Were identified and hence the urgent need for a

  computerised or automated system for the smooth

  operation and execution of the said of the operational
  system.

#### 5.1 **SUMMARY**

From the discussions in the foregoing chapters, it can be summarized that:

Chapter One Introduces the topic for the research and it tries to discuss briefly about HABIB Nigeria Bank Limited (Case Study) and also what staff training means.

In chapter two, the researcher was able to review the literature of staff training in HABIB Nigeria Bank Limited i.e. The Manual System.

In chapter three, the methods used in the research were discussed. For example, methods of data collection and the research design were thoroughly discussed.

In chapter Four, the data collected in chapter three were subjected to analysis and the findings were presented.

In Chapter five, summary and conclusions takes the center stage while recommendations were made.

#### 5.2 CONCLUSION

The result and findings of this project work has proven beyond reasonable doubt very satisfactorily and in addition has been able to identify the area of weakness of the existing system such as lack of accuracy, comprehensiveness and integrity employed in keeping records otherwise known as *Database*.

The automated system when fully implemented will in no doubt be a vital tool in decision making to the management of HABIB Nigeria Bank Limited i.e. my case study, and also other organisations who deem it fit to operate the new system

#### 5.3 RECOMMENDATION

After careful Research work, the research was able to identify some lapses in the existing system (*Manual System*) that is why the use of an automated system becomes paramount and requires commitments. Meanwhile the following are some recommendations made with regard to the training. They are as follows:

- The staff working in the Center needs to be trained on the usage of the intended system as this will improve the efficiency and will enhance accuracy in keeping records.
- To motivate the working class of the data entry section, fringe benefits and promotional opportunities should be given to them.
- Considering the confidentiality involved in record keeping generally, the system intended should be complemented with strict security measures so as to check the ugly activities of unauthorized users.

- 4. Apart from the ugly activities of unauthorized users, the center accommodating the proposed package should be equipped with security techniques, For example Fire extinguisher, smoke detectors and their likes so as to arrest the problem that will lead to the disabling of the Computer Center and the equipment from functioning properly.
- 5. Finally, on the part of the Project approval, the researcher wish to appeal to the authorities concerned to hasten the process of approving project topics for students i.e. project topics need to be approve starting from the first week of the first semester HND2 so that students will have enough time to plan and develop workable and presentable packages.

## REFERENCES

Aronu , D.I (1999): Information Systems Techniques,

Ola Jamon Printers and Publishers,

Kaduna.

Couger et al (1972): System Analysis Techniques,

John Wiley & Sons.

Greg Perry et al (1987) Teach Yourself Visual Basic 6 in

24 Hours, Microsoft Corporation

Inc.

Heathcote, et al (1992): Tackling Computer Projects

(DP Publications Ltd., London).

HABIB Nigeria Bank Write Up and Bulletin (1997 – 1998)

# R.O. (2004) Lecture Notes on System Analysis and Design.

## 'Program to allow the User Enter Password

```
Dim count1 As Integer
Private Sub cmdcance Click()
End
End Sub
Private Sub cmdlogin_Click()
Dim usernam As String
Dim pasword As String
Dim certificate As Boolean
count1 = count1 + 1
certificate = True
pasword = LCase(LTrim(RTrim(txtpassword.Text)))
usernam = UCase(LTrim(RTrim(txtusername.Text)))
Select Case usernam
Case Is = "Training Officer"
  If pasword = "SAS" Then
    Unload Me
    Unload Txthabib
    frmmain.Show
  Else
    certificate = False
  End If
Case Else
  Beep
  MsgBox "Unauthorized User", vbOKOnly, "Authorization"
  txtusername.SetFocus
  txtusername.SelStart = 0
```

txtusername.SelLength = Len(txtpassword.Text)

Exit Sub

**End Select** 

#### 'SUB TO SENT INDUCTION RECORDS TO THE PRINTER

Option Explicit

Dim trtable As Database

Dim txt As String

Dim i As Integer

Dim n As Integer

Dim rsdept As Recordset

Private Sub cmdok\_Click()

Unload Me

End Sub

Private Sub cmdcancel\_Click()

End

**End Sub** 

Private Sub Cmddone\_Click()

Unload Me

End Sub

Private Sub Form\_Load()

Set trtable = OpenDatabase("c:\habib\training.mdb")

Set rsdept = trtable.OpenRecordset("select \*from trtable order by [name]")

Printer.Print Tab(5); "INDUCTION REPORT"

Printer.Print " ";

Printer.Print "S/no"; Tab(8); "ID No"; Tab(15); "Name"; Tab(30); "Empl.Date"; Tab(42); "Branch"; \_ Tab(60); "Designation"; Tab(75); "Course"; Tab(105); "Duration"; Tab(120); "Sex" Printer.Print String(125, "~")

With rsdept

n = .RecordCount

For i = 1 To n - 1

Printer.Print i; Tab(8); !idno; Tab(15); !Name; Tab(30); ![date of employment]; Tab(42); !branch; \_

Tab(60); !designation; Tab(75); !course; Tab(105); !duration; Tab(120); !sex

.MoveNext

Next i

**End With** 

Printer.EndDoc

End Sub

Private Sub pRINI\_Change()

Private Sub mnind\_Click() frminduction.Show End Sub

Private Sub mnindi\_Click()
rep.Show
End Sub

Private Sub mnindu\_Click() frminduction.Show End Sub

Private Sub mnuexit\_Click()
End

Private Sub mnuGen\_Click()

frmgen.Show End Sub

**End Sub** 

Private Sub Mnuhepro\_Click()

Form3.Show

**End Sub** 

Private Sub mnuinduct\_Click()

Form1.Show

**End Sub** 

Private Sub mnuonthejo\_Click()

frmonthejo.Show

End Sub

Private Sub cmdadd\_Click()

Combo1.Text = Clear

Combo2.Text = Clear

Combo3.Text = Clear

Data1.Recordset.AddNew

End Sub

Private Sub cmdadd\_KeyPress(KeyAscii As Integer)

If KeyAscii = 65 Then

Data1.Recordset.AddNew

End If

**End Sub** 

Private Sub cmdcancel\_Click()

Me.Hide

End Sub

Private Sub cmddel\_Click()

With Data1.Recordset

.Delete

.MoveNext

If .EOF Then .MoveLast

**End With** 

**End Sub** 

Private Sub cmdgrid\_Click()

On Error GoTo cmdGrid\_ClickErr

'Dim f As New frmDataGrid

Set f.Data1.Recordset = Data1.Recordset

f.Caption = Me.Caption & "Enquiry Panel"

f.Show

Exit Sub

cmdGrid\_ClickErr:

**End Sub** 

Private Sub cmdprint\_Click()

'repfrm.Show

End Sub

Private Sub Combo1\_DropDown()

While Combo1.ListCount 'Delete existing items.

Combo1.RemoveItem 0

Wend

Combo1.AddItem "Yola North", 0

Combo1.AddItem "Mubi South", 1

Combo1.AddItem "Mayo Belwa", 2

Combo1.AddItem "Fufore", 3

Combo1.AddItem "Doka", 4

Combo1.AddItem "Makera", 5

Combo1.AddItem "Kachia", 6

Combo1.AddItem "Zaria", 7

Combo1.AddItem "Sabon Gari", 8

Combo1.AddItem "Bebeji", 9

Combo1.AddItem "Kano Municipal", 10

Combo1.AddItem "Gombe", 11

Combo1.AddItem "Fagge", 12

Combo1.AddItem "Dala", 13

Combo1.AddItem "Gombe", 14

Combo1.AddItem "Akko", 15

Combo1.AddItem "Numan", 16

Combo1.AddItem "Kaltungo", 17

Combo1.AddItem "Hawul", 18

Combo1.AddItem "Biu", 19

Combo1.AddItem "Bama", 20

Combo1.AddItem "Bauchi", 21

Combo1.AddItem "Torro", 22

Combo1.AddItem "Song", 23

End Sub

Private Sub Combo2 DropDown()

While Combo2.ListCount 'Delete existing items.

Combo2.RemoveItem 0

Wend

Combo2.AddItem "Male", 0

Combo2.AddItem "Female", 1

End Sub

Private Sub Combo3 DropDown()

While Combo3.ListCount 'Delete existing items.

Combo3.RemoveItem 0

Wend

Combo3.AddItem "3 months", 0

Combo3.AddItem "2 months", 1

End Sub

Private Sub Data1\_Error(DataErr As Integer, Response As Integer)

MsgBox "Error:" & vbCr & "Illegal operation..." & Error\$(DataErr)

Response = 0

End Sub

Private Sub Data1\_reposition()

Screen.MousePointer = vbDefault

On Error Resume Next

Data1.Caption = "Record:" & (Data1.Recordset.AbsolutePosition + 1)

End Sub

Private Sub cmdrefresh\_Click()

Data1.Refresh

End Sub

Private Sub cmdsave\_Click()

Data1.UpdateRecord

Data1.Recordset.Bookmark = Data1.Recordset.LastModified

End Sub

Private Sub txtbranch\_Change()

End Sub

Private Sub picFields\_Click(Index As Integer)

picFields(Index).InsertObjDlg

**End Sub** 

Private Sub picture2\_Click()

Picture2.InsertObjDlg

Option Explicit

Private Sub Text1\_Change()

End Sub

Private Sub txtok\_Click()
Unload Me
End Sub

Option Explicit

Dim trtable As Database

Dim txt As String

Dim i As Integer

Dim n As Integer

Dim rsdept As Recordset

Private Sub cmdok\_Click()

Unload Me

End Sub

Private Sub cmdcancel\_Click()

End

**End Sub** 

Private Sub Cmddone\_Click()

Unload Me

**End Sub** 

Private Sub Form\_Load()

Set trtable = OpenDatabase("c:\habib\training.mdb")

Set rsdept = trtable.OpenRecordset("select \*from trtable order by [name]")

Printer, Print Tab(5); "INDUCTION REPORT"

Printer.Print " ";

Printer.Print "S/no"; Tab(8); "ID No"; Tab(15); "Name"; Tab(30);

"Empl.Date"; Tab(42); "Branch"; \_

Tab(60); "Designation"; Tab(75); "Course"; Tab(105); "Duration"; Tab(120); "Sex"

Printer.Print String(125, "~")

With rsdept

n = .RecordCount

For i = 1 To n - 1

Printer.Print i; Tab(8); !idno; Tab(15); !Name; Tab(30); ![date of employment]; Tab(42); !Branch; \_

Tab(60); !Designation; Tab(75); !Course; Tab(105); !Duration; Tab(120); !Sex

.MoveNext

Next i

**End With** 

Printer.EndDoc

**End Sub** 

Private Sub pRINI\_Change()

Private Sub cmdadd\_Click()

Combo1.Text = Clear

Combo2.Text = Clear

Combo3.Text = Clear

Data1.Recordset.AddNew

**End Sub** 

Private Sub cmdadd\_KeyPress(KeyAscii As Integer)

If KeyAscii = 65 Then

Data1.Recordset.AddNew

End If

**End Sub** 

Private Sub cmdcancel\_Click()

Me.Hide

End Sub

Private Sub cmddel\_Click()

With Data1.Recordset

.Delete

.MoveNext

If .EOF Then .MoveLast

**End With** 

End Sub.

Private Sub cmdgrid\_Click()

On Error GoTo cmdGrid\_ClickErr

'Dim f As New frmDataGrid

Set f.Data1.Recordset = Data1.Recordset

f.Caption = Me.Caption & "Enquiry Panel"

f.Show

Exit Sub

cmdGrid\_ClickErr:

End Sub

Private Sub cmdprint\_Click()

'repfrm.Show

End Sub

Private Sub Combo1\_DropDown()

While Combo1.ListCount 'Delete existing items.

Combo1.RemoveItem 0

Wend

Combo1.AddItem "Yola North", 0

Combo1.AddItem "Mubi South", 1

Combo1.AddItem "Mayo Belwa", 2

Combo1.AddItem "Fufore", 3

Combo1.AddItem "Doka", 4

Combo1.AddItem "Makera", 5

Combo1.AddItem "Kachia", 6

Combo1.AddItem "Zaria", 7

Combo1.AddItem "Sabon Gari", 8

Combo1.AddItem "Bebeji", 9

Combo1.AddItem "Kano Municipal", 10

Combo1.AddItem "Gombe", 11

Combo1.AddItem "Fagge", 12

Combo1.AddItem "Dala", 13

Combo1.AddItem "Gombe", 14

Combo1.AddItem "Akko", 15

Combo1.AddItem "Numan", 16

Combo1.AddItem "Kaltungo", 17

Combo1.AddItem "Hawul", 18

Combo1.AddItem "Biu", 19

Combo1.AddItem "Bama", 20

Combo1.AddItem "Bauchi", 21

Combo1.AddItem "Torro", 22

Combo1.AddItem "Song", 23

End Sub

Private Sub Combo2\_DropDown()

While Combo2.ListCount 'Delete existing items.

Combo2.RemoveItem 0

Wend

Combo2.AddItem "Male", 0

Combo2.AddItem "Female", 1

End Sub

Private Sub Combo3\_DropDown()

While Combo3.ListCount 'Delete existing items.

Combo3.RemoveItem 0

Wend

Combo3.AddItem "3 months", 0

Combo3.AddItem "2 months", 1

Private Sub Data1\_Error(DataErr As Integer, Response As Integer)

MsgBox "Error:" & vbCr & "Illegal operation..." & Error\$(DataErr)

Response = 0

End Sub

Private Sub Data1\_reposition()

Screen.MousePointer = vbDefault

On Error Resume Next

Data1.Caption = "Record:" & (Data1.Recordset.AbsolutePosition + 1)

End Sub

Private Sub cmdrefresh\_Click()

Data1.Refresh

End Sub

Private Sub cmdsave\_Click()

Data1.UpdateRecord

Data1.Recordset.Bookmark = Data1.Recordset.LastModified

**End Sub** 

Private Sub txtbranch\_Change()

End Sub

Private Sub picFields\_Click(Index As Integer) picFields(Index).InsertObjDlg

End Sub

Private Sub picture2\_Click()
Picture2.InsertObjDlg
End Sub

**Option Explicit** 

Private Sub cmdadd\_Click()

Combo1.Text = Clear

Combo2.Text = Clear

Combo3.Text = Clear

Data1.Recordset.AddNew

End Sub

Private Sub cmdadd\_KeyPress(KeyAscii As Integer)

If KeyAscii = 65 Then

Data1.Recordset.AddNew

End If

End Sub

Private Sub cmdcancel\_Click()

Me.Hide

Private Sub cmddel\_Click()

With Data1.Recordset

.Delete

.MoveNext

If .EOF Then .MoveLast

**End With** 

End Sub

Private Sub cmdprint\_Click()

'repfrm.Show

**End Sub** 

Option Explicit

Private Sub Text1\_Change()

**End Sub** 

Private Sub txtok\_Click()

Unload Me

**End Sub** 

Private Sub cmdok\_Click()

frmabout.Show

**Option Explicit** 

Dim trtable2 As Database

Dim txt As String

Dim i As Integer

Dim n As Integer

Dim rdept As Recordset

Private Sub cmdok\_Click()

Unload Me

End Sub

Private Sub cmdcancel Click()

End

End Sub

Private Sub Cmddone\_Click()

Unload Me

End Sub

Private Sub Form\_Load()

Set trtable2 = OpenDatabase("c:\MY DOCUMENTS\TR2TABLE.mdb")

Set rdept = trtable2.OpenRecordset("select \*from trtable2 order by [name]")

Printer.Print Tab(5); "ON-THE-JOB REPORT"

Printer.Print " ";

Printer.Print "S/no"; Tab(8); "ID No"; Tab(15); "Name"; Tab(30); "Empl.Date"; Tab(42); "Branch"; \_
Tab(60); "Designation"; Tab(75); "Course"; Tab(105); "Duration"; Tab(120); "Sex"

Printer.Print String(125, "~")

With rdept

n = .RecordCount

For i = 1 To n - 1

Printer.Print i; Tab(8); ![Id-NO]; Tab(15); !Name; Tab(30); ![date of empl]; Tab(42); !Branch; Tab(60); !Designation; Tab(75); !Course; Tab(105); !Duration; Tab(120); !Sex

.MoveNext

Next i

**End With** 

Printer.EndDoc

End Sub

Private Sub pRINI\_Change()

End Sub

**Option Explicit** 

Dim trtable2 As Database

```
Dim txt As String
Dim i As Integer
Dim rdept As Recordset
Private Sub cmdok_Click()
Unload Me
End Sub
Private Sub Form_Load()
Set trtable2 = OpenDatabase("c:\MY DOCUMENTS\training.mdb")
Set rdept = trtable2.OpenRecordset("select *from trtable order by
[name]")
grid1.Row = 0
For i = 1 To 8
  If i = 0 Then txt = "S/No"
  If i = 1 Then txt = "ID No:"
  If i = 2 Then txt = "Name:"
  If i = 3 Then txt = "Date Empl."
  If i = 4 Then txt = "Branch"
  If i = 5 Then txt = "Designation"
  If i = 6 Then txt = "Course"
  If i = 7 Then txt = "Duration"
  If i = 8 Then txt = "Sex"
  grid1.Col = i
  grid1.Text = txt
Next i
With rdept
For i = 1 To (.RecordCount)
  grid1.Row = i
```

grid1.Col = 0 grid1.Text = Str(i) Next i

grid1.Row = 1 Call ass

For i = 2 To (.RecordCount)
.MoveNext
grid1.Row = i
Call ass
Next i

End With

**End Sub** 

Public Function ass()

With rdept

grid1.ColWidth(1) = 500

grid1.Col = 1

grid1.Text = ![Id-NO]

grid1.ColWidth(2) = 1000

grid1.Col = 2

grid1.Text = ![Name]

grid1.Col = 3

grid1.Text = ![date of empl]

grid1.ColWidth(4) = 1200

grid1.Col = 4

grid1.Text = ![Branch]

grid1.ColWidth(5) = 1100

grid1.Col = 5

grid1.Text = ![Designation]

grid1.ColWidth(6) = 1600

grid1.Col = 6

grid1.Text = ![Course]

grid1.ColWidth(7) = 900

grid1.Col = 7

grid1.Text = ![Duration]

grid1.ColWidth(8) = 700

grid1.Col = 8

grid1.Text = ![Sex]

**End With** 

**End Function** 

Private Sub grdrep\_Click()

**End Sub** 

**Option Explicit** 

Dim trtable3 As Database

Dim txt As String

Dim i As Integer

Dim n As Integer

Dim rsept As Recordset

Private Sub cmdok\_Click()

Unload Me

End Sub

Private Sub cmdcancel\_Click()

End

```
End Sub
```

Private Sub Cmddone\_Click()
Unload Me
End Sub

Private Sub Form\_Load()

Set trtable3 = OpenDatabase("c:\MY DOCUMENTS\tr3TABLE.mdb")

Set rsept = trtable3.OpenRecordset("select \*from trtable3 order by [name]")

Printer.Print Tab(5); "GENERAL REPORT" Printer.Print " ";

Printer.Print "S/no"; Tab(8); "ID No"; Tab(15); "Name"; Tab(30); "Empl.Date"; Tab(42); "Branch"; \_

Tab(60); "Designation"; Tab(75); "Course"; Tab(105); "Duration";

Tab(120); "Sex"

Printer.Print String(125, "~")

With rsept

n = .RecordCount

For i = 1 To n - 1

Printer.Print i; Tab(8); ![id no]; Tab(15); !Name; Tab(30); ![date of empl]; Tab(42); !Branch; Tab(60); !Designation; Tab(75); !Course; Tab(105); !Duration; Tab(120); !Sex

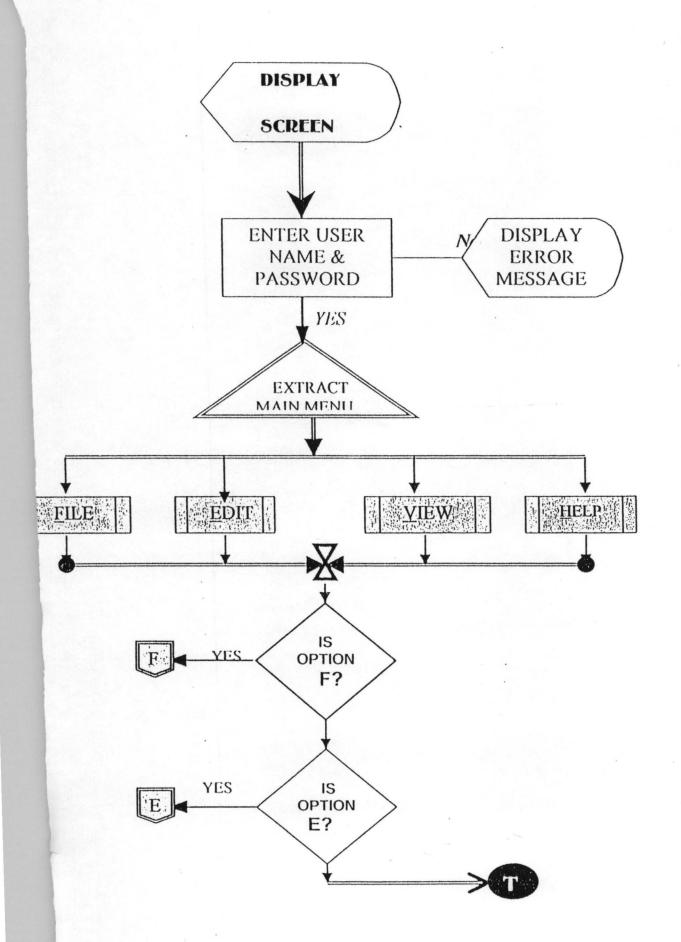
.MoveNext

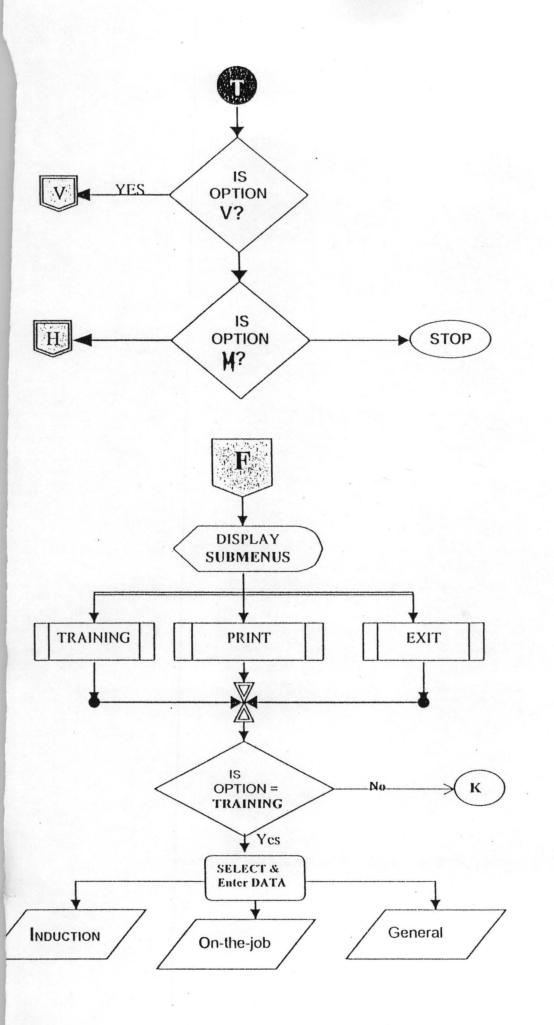
Next i

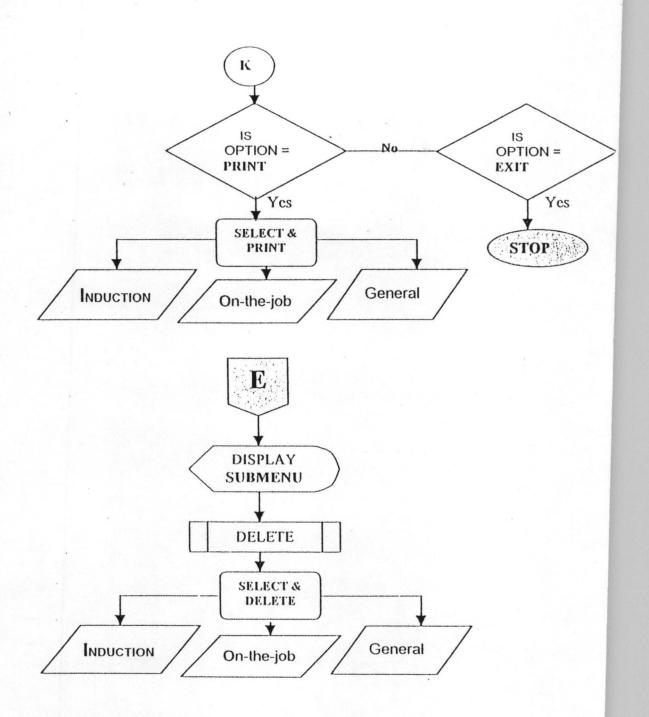
**End With** 

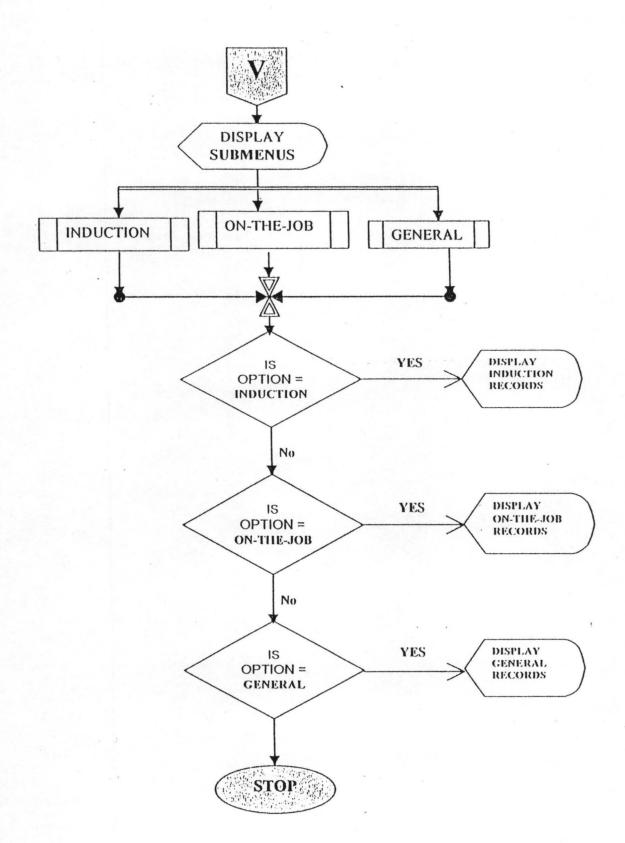
Printer.EndDoc

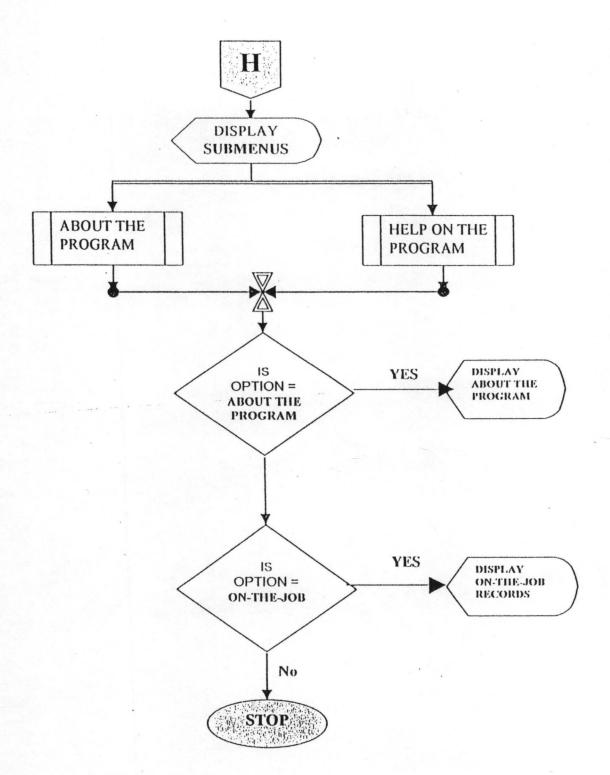
# SYSTEM FLOW CHART











## PROGRAM

## OUTPUTS

IdNo	Name ?	Date of employ	#Branch :	Designation	Course	Duration	Sex
1	Audu Bako	1/3/96	Mayo Belwa	Accountant	Accounts	4 months	Male
2	Hajiya Aliyu	3/4/87	Jalingo	Cashier	Insurance	6 months	Female
7	Aliyu Mohammed	1/2/96	Zing	Manager	Taxalion		
9	ABUBAKAR AUDU	9/2/00		Cashier	Cashing		
9	audu bako	1/2/89		Clerk	Clerical		

trtable2

9/17/01

Id-No	Name:	Date of Empl	Branch	Designation	Course	Duration	Sex
1	Ali Buba	1/2/98	Jalingo	Cashier	Audit	6	Male

trtable3

9/17/01

10	ID No	Name	Date of Empl	Branch	Designation	Course	Duration'	Sex
1	1	Audu Ali	1/2/78	Zaria	Accountant	Accounts	4 months	Male
2	5	Audu Adamu	1/8/96	Sabo	Cashier	Cashing	3 months	Male

12	Duration	Course	Designation	Branch	Date Empl.	Name:	ID Nc
F.	6 months	Accounting	Accountant	ereng	1/2/98	Abdoul	9
-	4months	accountancy	accountant	Mayo Belwa	9/2/98	abdul aliyu	9
	4months	Account	Clerk	Jereng	1/8/00	Audu Buba	9
	6 months	Principle of Accountir	Accountant	Mayo Belwa	1/2/99	Hajiya Aliko	1
	4Months	Maths	Tutor	Mayo Belwa	1/2/92	Lawan Baba	6
	6 months	accountanc	Clerk	Mayo Belwa	9/2/98	Mayo Belwa	10
	6 months	qwe	qwe	ereng	1/3/04	msssk	7
	6 months	Accountant	Cashier	Mayo Belwa	2/2/01	Musa	8
-	4months	retretyu	retret	Mayo Belwa	9/23/98	truuut	9
r	<u>i •</u>	98373					41

CTION REPORT No Name	Empl.Date	Branch	Designation	Course	Duration	Scx
Abdoul	1/2/98	ereng	Accountant	Accounting	6 months	Female
abdul aliyu	9/2/98	Mayo Belwa	accountant	accountancy	4months	Male
Audu Buba	1/8/00	Jereng	Clerk	Account	4months	Male
Hajiya Aliko	1/2/99	Mayo Belwa	Accountant	Principle of Accounting	6 months	Male
Lawan Baba	1/2/92	Mayo Belwa	Tutor	Maths	4Months	female
Mayo Belwa	9/2/98	Mayo Belwa	Clerk	accountanc	6 months	Female
msssk	1/3/04	ereng	qwe	qwe	6 months	Male
Musa	2/2/01	Mayo Belwa	Cashier	Accountant	6 months	Female

NERAL REPORT

ID No Name Empl.Date Branch Designation Course Duration Sex Audu Adamu 1/8/96 Sabo Cashier Male

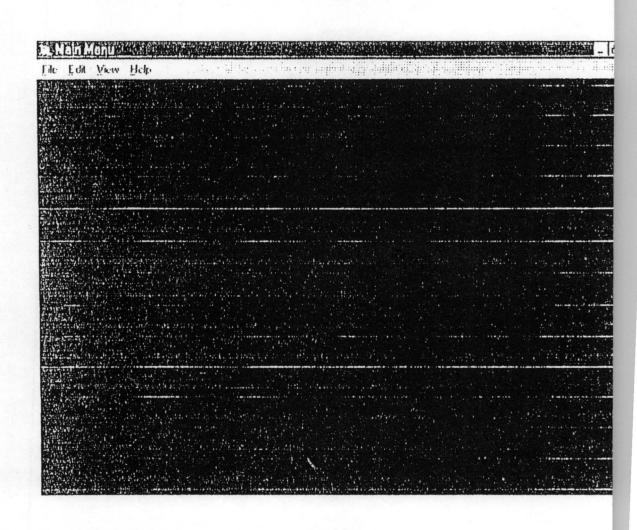
Cashing

3 months

## SAMPLE FORMS

# Welcome to HABIB NIG. BANK LIMITED TRAINING SCHOOL (ADAMV BELLO CENTRE) Click Me to Continue

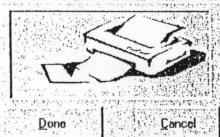
		_	
User Name:			
Password: .	***		

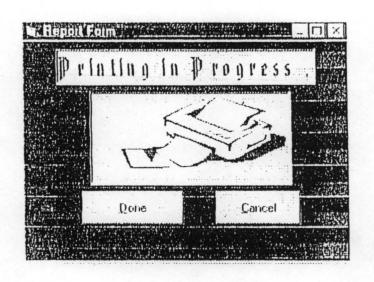


File Edit Yiew Help

[Induction | Print | Print | General | Exit | Commonweal | Print | Print

Printing in Progress





#### HELP ON THE PROGRAM

-HELP

From The Main Menu: Select any of the four options ie. File, Edit, View.

When FILE is selected, Sub-menus will appear underneath. When you choose Training, three options will appear i.e. Induction, On-The-Job and General.

Any of the options allows you to enter data.

After the Training Sub-Menu then comes Print under it. The Print submit allows you options of printing any of the following: Induction, On-The-Job and General.

Lastly, under File Menu is the EXIT to take you back to the Program

On the Menu Bar, Select The EDIT Option, under the EDIT option you select the DELETE option which allows you to Delete records in INDUCTION, ON-THE-IOB and GENERAL

Again on the Menu Bar, Select VIEW to display the records of the TRAINING options stated above

Tinally, On the MENU Bar is the HELP Menu which Contains two options i.e. ABOUT THE PROGRAM and HELP ON THE PROGRAM

OK

B. About the Program

#### AUTOMATED

STAFF TRAINING DATABASE



This Progressia Posterial By

Tournational Saw on Copyright For More Details Cortact:

Alubrar, Barnel

SpeClobe@falroo.Com