COMPANY EXPENSES MANAGEMENT SYSTEM
(A CASE STUDY OF BELUS ENTERPRISES LIMITED)
KANO

BY

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PGD/MCS/415/97

A PROJECT SUBMITTED TO THE DEPARTMENT OF MATHS AND COMPUTER SCIENCE, SCHOOL OF SCIENCE AND SCIENCE EDUCATION FEDERAL UNIVERSITY OF TECHNOLOGY MINNA.

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DEDICATION

This Project work is dedicated to Almighty Allah (SWT) the God of the Universe.

ACKNOWLEDGEMENT

My acknowledgement goes to the Almighty God Allah for making it possible for me to have gone through this Course Post Graduate Diploma in Computer Science, successfully, and also for choosing and maintain this course of study for me.

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ABSTRACT

Effective and efficient computerization of any system is based on deep feasibility studies of the old system or of the existing system. Therefore the feasibility study was conducted on the possibility of designing Company Expenses Management System for Belus Enterprises Limited.

Consultation, interview and record inspection was adopted as the fact finding technique of the research work. Visual Foxpro 5.0, relational data base an object oriented programming language was used in the application development in Windows base environment.

The entire package is menu driven, user friendly for a minimal computer literate personnel. The system does not require purchasing Visual Foxpro 5.0 package before it can run. It therefore runs on any Windows environment such as Windows 3.x, 95, 98 and Windows 2000.

The implementation of this project work will not only enhance productivity on the part of the officer in charge, also it provides accuracy, security of data, and production of on the spot information for management decision making.

CHAPTER ONE

INTRODUCTION

1.0   The management of Organisational Expenses is one of the day-to-day activity of any firm. For this, a lot of advantages are derived being one of the aspect required for decision making from financial perspectives.

Hence it is very obvious that the growth of any organisation is based on efficient financial management through the monitoring of various expenses taken up by the firm. It is then essential also to put in place providence Expenses monitoring and management system to boost the life and growth of the firm in question.

The advent of computer blew a breeze of change across all human endeavours thereby promoting potentialities and self confidence in managing both financial and human resources and the rest of operational activities in management. This in the end alleviating the cumbersome procedures involved in carrying out these tasks.

Definition: Computer is an electronic device that accepts data as input and process the data in a prescribed manner (program) to produce an output of the processed data at an electronic speed.

1.1   CATEGORIES OF COMPUTERS

Computers are categories according to the nature of operation they are been applied or to handle i.e purpose, Types and Capacity. There are

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three main types of computers, namely, digital, Analog and Hybrid.

(i) **DIGITAL COMPUTER**

Are basically electronic calculating and data processing machine that handle operation that are of discrete value. The work on instruction that are coded in simple binary digit form - hence the characterization "digital". They handle both numeric and alphanumeric characters with precession and speed.

(ii) **ANALOG COMPUTERS**

Are the type of computer system that operates by measuring and converting the physical changes of a quantity, eg Pressure, temperature and voltage measurement in a processing industry.

The analog computers accept data directory from measuring instrument without the need for intermediate conversion to/fro some symbols it code and it has a high speed of data collection. This kind of system are bound in industries like paper mills, Oil refinery, etc. It does not contain memory since it measure or compare data/value.

(iii) **HYBRID COMPUTER**

Are computers which combine the features of both digital and analog computers. That is they can be use for the processing of Digital data processing and analog data handling with a desirable result. This kind of computer systems are known to have found

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much application in control and feedback process.

1.2 CLASSIFICATION BY CAPACITY

Digital computer system may be loosely classified according to the cost and degrees of sophistication into: micro, mini, and mainframe computers.

(i) MICRO COMPUTER

Popularly known as personal computer (PC) are stand alone system which has it central processing unit as a micro processor. The micro processor is an integrated circuitry in a single silicon chip to the heart or the brain of the system. Micro computers are presently the most popular system in the market today. They are cheaper, consume less power, generate less heat and have a better software support and much more easier to program than larger computer system.

(ii) MINI COMPUTER

These are use for more extensive application where, for example, greater speed is needed. Though presently we have a faster micro computers with a very reasonable speed of processing. The mini computer are more diverse in control function compare to the micros.

(iii) MAIN FRAME

This types of computer are used for highly sophisticated problem,

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and they find application in very large scale of commercial data processing. They have a very large memory capacity, high speed and generate a lot of heat.

1.3 OBJECTIVES OF THE STUDY

Before any system is designed, its objectives must be clearly defined. These objectives will reflect goals established by management for the entire organisation the system will therefore be designed to meet the needs of the organisation or else it will be of little or no value.

Objectives are the short and long term plans used by an organisation to achieve management stated goals. They are the operational measures use to run the organisation. The goals from which these objectives are derived represent the result of the management future projection.

The general objective of the project work, are:

1. To handle financial expenses data efficiency and provide management with timely information.
2. To establish the most desirable way keeping of expense record in the organisation.
3. To meet the employee and management expenses record needs.
4. To minimize operation cost and maximize same.
5. To ease method of taken financial status as regards expenses incurred.
6. To smooth the flow of data and information through all levels of the

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organisation.

7.   To speed up access to and availability of reliable data in the system.

1.4   PURPOSE OF THE STUDY

The purpose of the study are:

1.   To examine the process of taking record of expenses in the organisation

2.   bring to limelight the problem associated with expenses management style of the organisation. i.e the manual system.

3.   A computerized approach is preferred as a solution to the problem of the existing system in order to harness the advancement in information technology.

4.   Identify the software requirement.

5.   Listing the benefits the organisation stands to gain if it is computerized using the current object oriented programming language e.g visual Fox Pro.5.0

1.5   DEFINITION OF TERMS

COMPANY, according to the Advance Learners Dictionary state that a company comprises a number of persons united for business or commerce. i.e having to work together to achieve an objective peculiar to an organisation.

EXPENSES this mains spending of money that is cost of doing things. e.g record of expenses incurred and either paid out of money supplied by, or to be refunded by the employer e.g in Business.

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MANAGEMENT is a science of act of handling a particular affairs by coordination.

SYSTEM according to Advance learners dictionary a system is a group of things or parts working together in a regular relation to perform a particular task.

ENTERPRISES

Means to plan to risk a difficult task. Also to an organisation that come to exist to do business. e.g public enterprise and private enterprise.

COMPUTERIZED

This according to longman dictionary of contemporary English mean to begin or to use a computer to control an operation or system. There after the system is said to be computerized.

1.6 SCOPE OF THE STUDY

This project is limited to the handling of expenses incurred in the following areas, utilities e.g NEPA, NIPOST, NITEL, WATER BOARD expenses, medical expenses, vehicle maintenance expenses, other miscellaneous expenses. This project work does not include expenses incurred on wages and capital project.

1.7 LIMITATION OF THE STUDY

The project is limited to the handling of all expenses incurred by the organisation except the expenses incurred in respect to wages i.e salaries

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and capital project. This is because the study is not design to handle project evaluation and monitoring, payroll system of the firm.

CHAPTER TWO

2.0 BRIEF HISTORY OF THE COMPANY

Belus Enterprises Limited is a limited liability company incorporated in Nigeria in 1985. The company has its head office in Kano and branches in Abuja, Kaduna, Ilorin and Lokoja. They handle jobs in building and Civil construction, supplies, and manufactural representation.

The company is divided into four units that handle specific area of their operations.

1. Administration
2. Engineering
3. Finance
4. Marketing

Each of the unit is headed by a director that export directly to the Chairman/ Managing Director of the company.

2.1 THE ADMINISTRATIVE DEPARTMENT

This unit of the firm is headed by the Director of Administration, follow by the personnel manager, Clerk/Secretary, office assistant in that hierarchy. This unit handles the administrative procedure of the firm e.g keeping, writing of memo. The head of this unit does this with the collaboration of the personnel manager, the secretary and the office assistant to run the day-to-day activities of the department.

2.2 THE ENGINEERING DEPARTMENT

The engineering unit of the organisation is charged with responsibility of handling all the engineering job of the firm. This unit is headed by the Director of Engineering and the unit is subdivided into Civil and building section each section has a Civil and building engineer specialist that work with the director of engineering including the technician of the department in that hierarchy. The civil section handle the civil related job through Design Analysis and costing. He equally supervises the related job while building engineer handles all building structural related job with the technician in his unit and report to the director of engineering department.

2.3 THE FINANCE DEPARTMENT

This unit of the firm is charged in the responsibility of handling the financial management of the company and it is headed by the director of finance. The director works hand in hand with the Accountant, the Account clerk and office assistant of this unit to achieve the set objective e.g project financing, loans and advance, planning and budgeting, salaries.

2.4 SALES AND MARKETING DEPARTMENT

This unit of the firm is charged with the responsibility of marketing product of the represented company hence they are manufactural representative. This is done through advertisement and sales promotion. The sales officer and the sales clerk work hand in hand in this respect and report back to the head of the unit i.e the Director of marketing.

The Directors of the these units form the management team of the organisation that meets time-to-time and report to the managing Director where issue are discussed for management decision making.

Managing Director			
↓	↓	↓	↓
Director of Administration	Director of Finance	Director of Engineering	Director of Sales/Marketing
↓	↓	↓ ↓	↓
Personnel Manager	Accountant	Civil Engineer / Building Engineer	Sales Officer
↓	↓	↓ ↓	↓
Clerk/Secretary	Account Clerk	Civil Technician / Building Technician	Sales Clerk
↓	↓		
Office Assistant	Office Assistant		
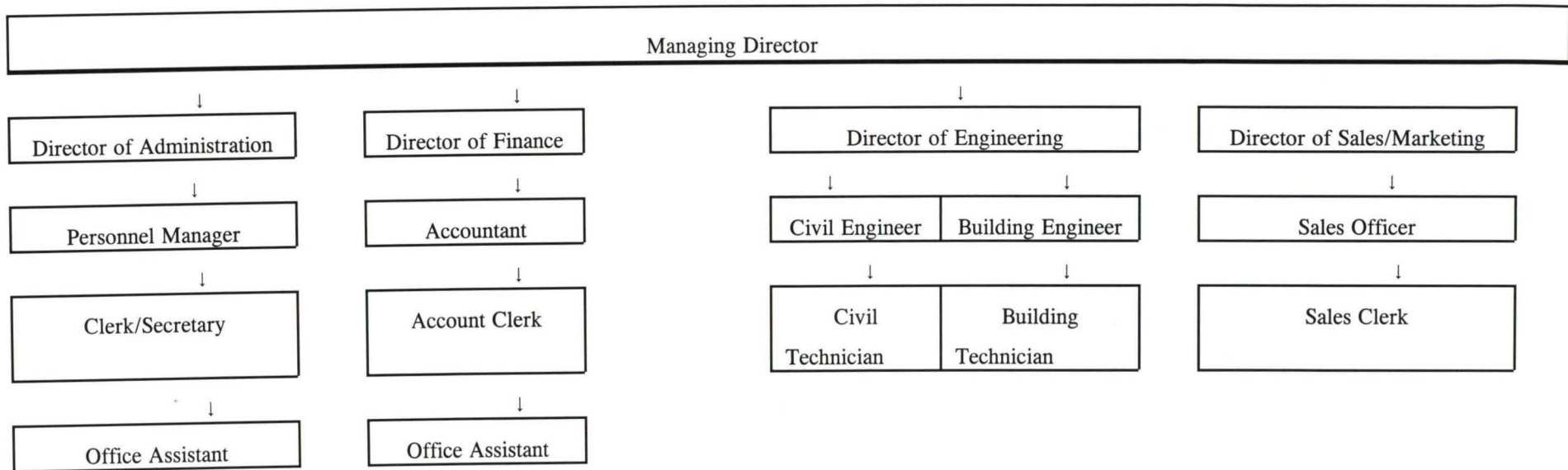
ORGANIZATIONAL CHART OF BELUS ENTERPRISES LIMITED.

e. Input specification for month Database file

Month code:-   -   -   -   -   -   -

Month Name:-   -   -   -   -   -   -

3.9 OUTPUT SPECIFICATION

The required output form the database after operation are as shown below.

a. Output Specification of Vehicle Maintenance Dbf

S/N	VEH TYPE	REG. NUMBER	DRIVER NAME	FAULT TYPE	AMOUNT CHARGED	RECEIPT NO	DEPT

TOTAL EXPENSES INCURRED:_____

b. Output Specification of Staff Medical Record Dbf

S/N	STAFF	DEPARTMENT	TYPE OF AILMENT	HOSPITAL NAME	AMOUNT CHARGED

TOTAL EXPENSES INCURRED:_____

c. Output Specification of Utility Expenses Dbf

S/N	TYPE OF BILL	MONTH	DATE	AMOUNT CHARGED	RECEIPT NUMBER

TOTAL EXPENSES INCURRED:_____

d. Output Specification on miscellaneous Expenses Dbf

S/N	TYPE OF EXPENSES	DATE OF EXPENSES	MONTH	NAME OF UNCURRER	AMOUNT PAID	RECEIPT NUMBER

TOTAL EXPENSES INCURRED:_____--

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CHAPTER FOUR

4.0 SOFTWARE DEVELOPMENT, IMPLEMENTATION AND DOCUMENTATION

4.1 INTRODUCTION

This chapter intends to discuss the reasons for the choice of the language in developing the proposed system. The implementation plan is also stated, lastly, the documentation of the system, for the understanding of the user.

4.2 CHOICE OF LANGUAGE

In developing this system, visual Foxpro 5.0 is the language used, this is because it has some advantages over other Dbase families.

1. It has capability of producing an executable files, that can be setup and run in any window environment.
2. It is independent of other families
3. It has tool to design user interface
4. It has simplified operation.

4.3 FEATURES OF THE LANGUAGE

Visual Foxpro 5.0 is a professional version visual foxpro family for managing Database. It is a menu driven database application that support linking and indexing different tables for referencing any quality. It is a window base program completely runs on window 3.1 - window 98 operating system as the case may be.

4.4 WORK STATION REQUIREMENTS

a. HARDWARE REQUIREMENT

Personal computer(s) PC/XT. Micro Computer with the following configuration: 80386, 80486 → and above processor

At least 4MB RAM

At least 3.5" floppy disk drive

A color monitor

Printer Laser Family

Stabilizer 500VA

UPS 600VA

b. SOFT WARE REQUIREMENT

WINDOWS Operating System (3.X - WINDOWS 98)

4.5 FILE CONVERSION

All the existing file accrue to the manual system were converted to electronic form. The changeover procedure therefore will be parallel as that will provide the opportunity of comparing the result of the new system with the manual before final shift to the computerized systems.

4.6 MAIN MENU STRUCTURE

The structure of the main menu for the system comprises of four main object with pull-down menu attached. Viz: Forms, Report, Quit, Help.

The Forms menu consist of the Entry programs for the respective entries that send all these data to the data base from that menu.

The Report Menu consist of the reports that could be generated from the programs base on the structure and the result of data been processed and stored in the database.

The Quit menu takes you out of the system completely back to windows. The Help menu gives the story of the application and the author respectively.

4.7 RUNNING THE SYSTEM

The system application is complied and build in to an executable form that you can setup in any windows environment. The system is also design in a menu driven form and user friendly.

In a normal windows desktop the Icon of the application Expenses management system appears on the screen. This needs to be double clicked to activate the application. You can now chose from the menu which ever option you want to work on.

4.8 FILE MAINTENANCE

Foxpro is a relational database an object oriented programming language. Therefore the DBA can once in a while achieve the history of all the file if required. Also backup procedure will be employed for at least three times in a year i.e quarterly. Hence all files are to be stored electronically.

Expenses

Forms Reports Quit Help

About

Company Expenses Management System

Version 1.0

Designed by: Bello Abdulrazaq

Mat. No.: PGD / MCS / 97 / 415

OK

UTILITY EXPENSES FORM

Bill Type: NEPA

Month: MAR

Bill Date:

Amount Charged:

Amount Paid:

Receipt No:

Date Paid:

MEDICAL EXPENSES FORM

Staff No. [____]   **Staff Name** [_____]

Dept: [_____]   **Illness Type** [_____]

Hospital [_____]   **Amount Charged** [_____]

Receipt No: [____]   **Date Paid:** [_____]

Months: [JUN ▾]

MAINTENANCE EXPENSES FORM

Vehicle Type:

Reg_no:

Driver's Name:

Fault Type:

Amount Charged

Amount Paid

Receipt no

Date paid:

Month JUL
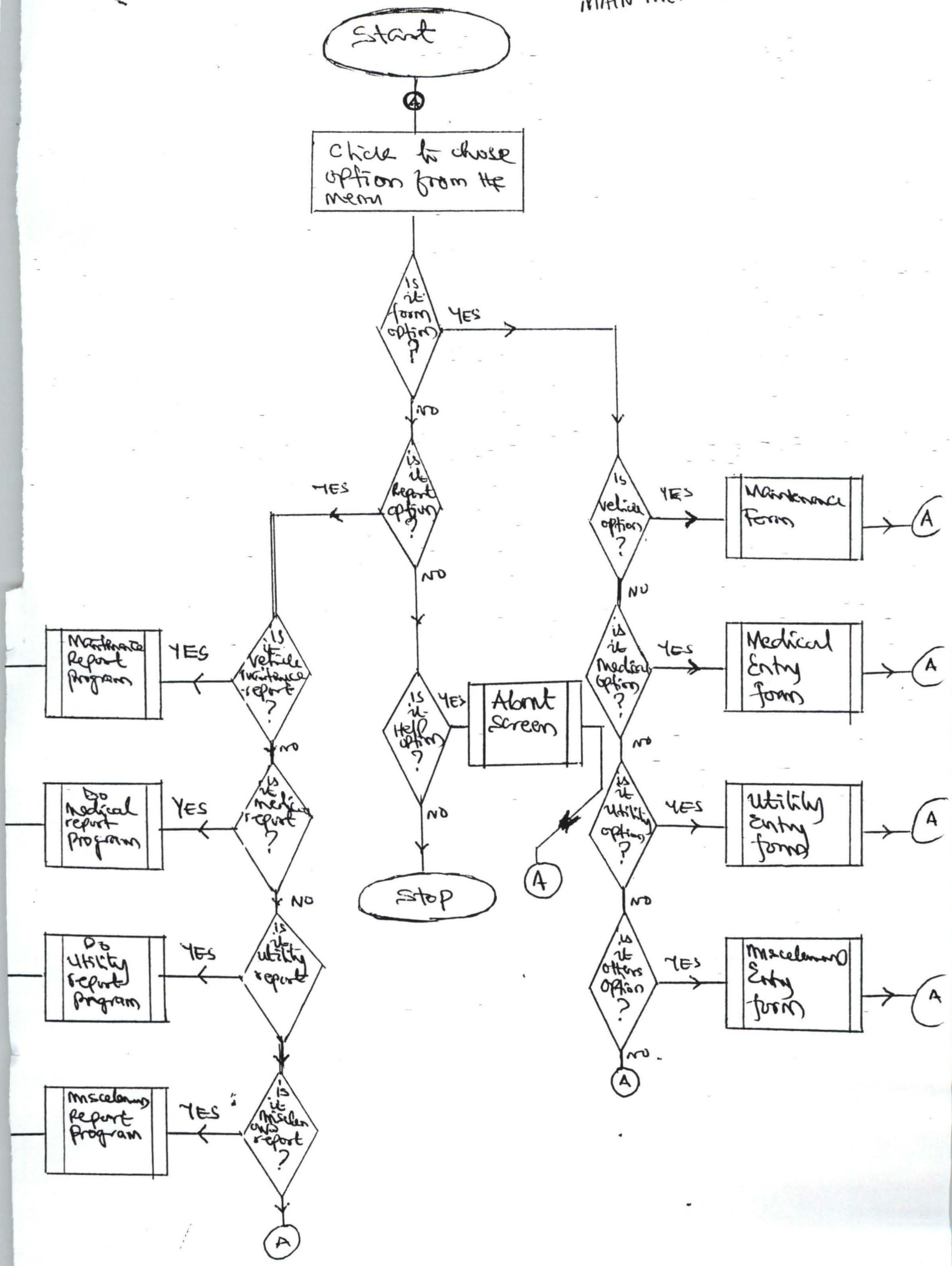
ENTRY PROGRAMM FLOWCHART

Start

Enter all Variable through Entry form screen

Store all variable entered to file

Do You wish to Continue ?

YES

NO

Close all database

Stop
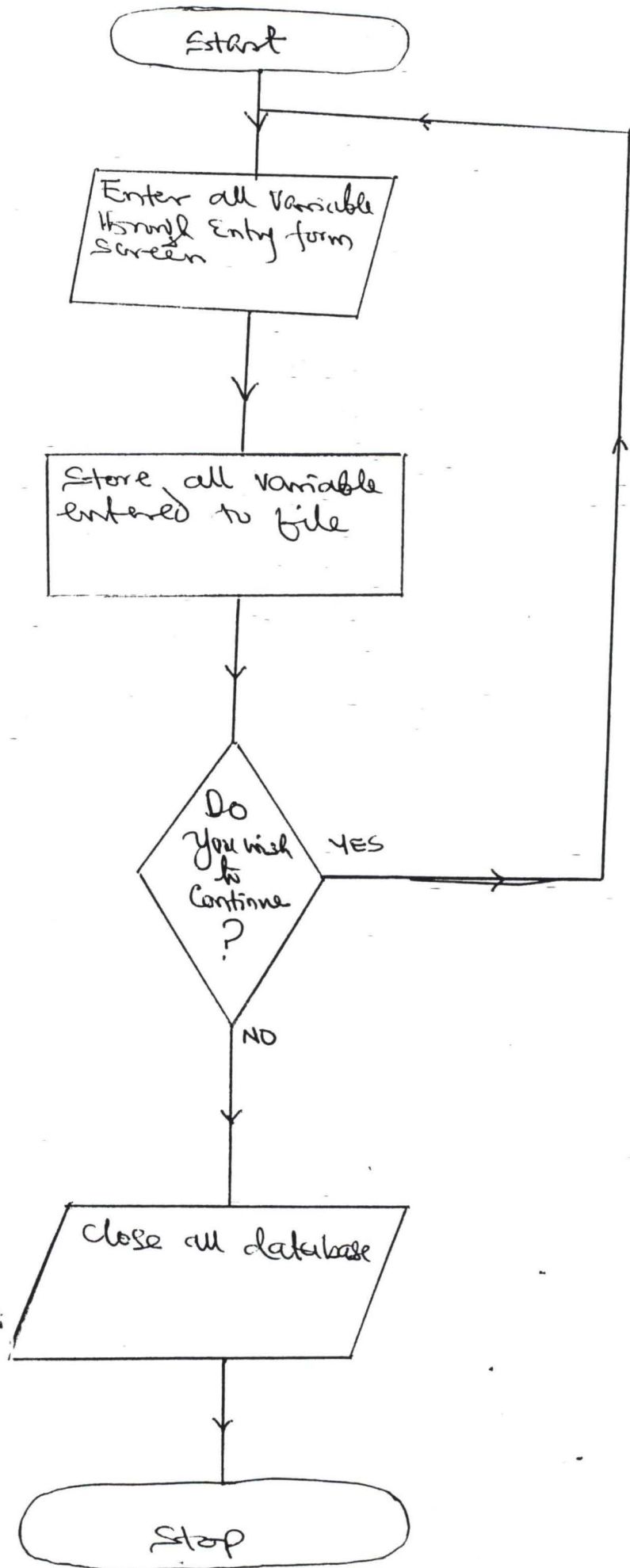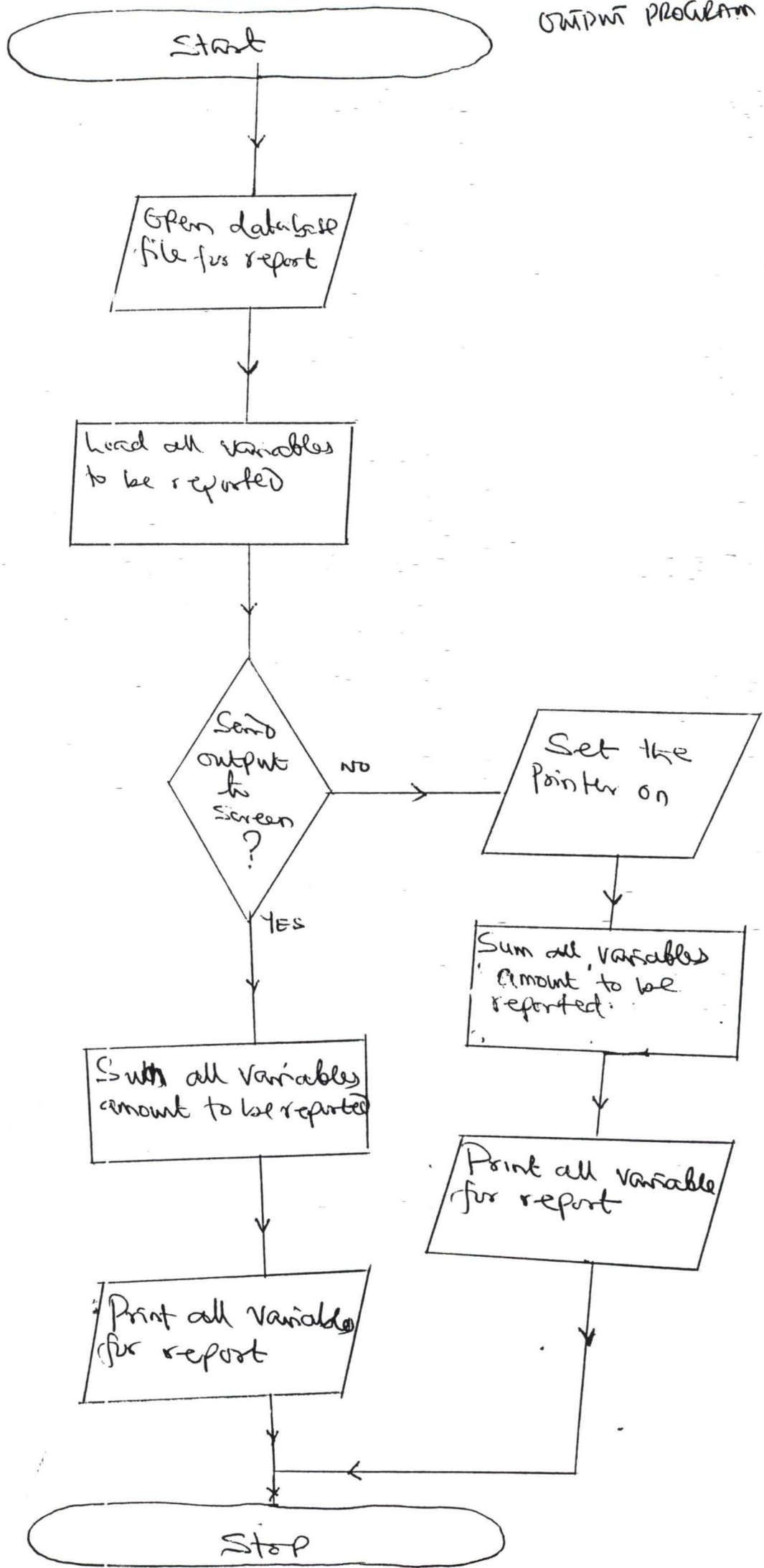
```
                    ( Start )
                        │
                        ▼
              ╱ Open database    ╱
             ╱  file for report ╱
                        │
                        ▼
             ┌──────────────────┐
             │ Load all variables│
             │ to be reported   │
             └──────────────────┘
                        │
                        ▼
                      ╱╲
                    ╱    ╲
                  ╱  Send  ╲
                 ╱ output   ╲   NO        ╱ Set the      ╱
                ╲   to      ╱ ─────────▶ ╱  Pointer on  ╱
                 ╲ screen  ╱                    │
                  ╲   ?   ╱                     ▼
                    ╲   ╱              ┌──────────────────┐
                     ╲╱               │ Sum all variables │
                      │ YES           │ amount to be     │
                      ▼               │ reported         │
             ┌──────────────────┐     └──────────────────┘
             │ Sum all variables │             │
             │ amount to be reported│           ▼
             └──────────────────┘     ╱ Print all variable ╱
                      │              ╱  for report        ╱
                      ▼                      │
             ╱ Print all variable ╱          ▼
            ╱  for report        ╱───────────┐
                      │                      │
                      ▼◀─────────────────────┘
                  ( Stop )
```

```
"ABOUT.SCT
Name = "WZABOUTDIALOG"
cmdOK.Name = "cmdOK"

FontName = "Arial"
FontSize = 13
Caption = "Company Expenses Management System"
Height = 24
Left = 26
Top = 24
Width = 336
Name = "Label1'

FontSize = 12
Caption = "Version 1.0"
Height = 20
Left = 132
Top = 72
Width = 120
Name = "Label2"

FontSize = 14
Caption = "Designed by: Bello Abdulrazaq"
Height = 22
Left = 54
Top = 123
Width = 280
Name = "Label3'

FontSize = 14
Caption = "Mat. No.:  PGD / MCS / 97 / 415"
Height = 20
Left = 45
Top = 150
Width = 300
Name = "Label4"
```

*maintain sct

□   □VERSION =   3.00   □   □dataenvironment   □   □d
ataenvironment   □   □Dataenvironment   □   JLeft = 1
Top = 220
Width = 520
Height = 200
Name = "Dataenvironment"

BufferModeOverride = 5
Database = ..\expenses\data\belus.dbc
CursorSource = "maintain"
Name = "Cursor1"

Top = 20
Width = 90
Height = 90
Alias = "month_tab"
Database = c:\expenses\data\belus.dbc
CursorSource = "month_tab"
Name = "Cursor2"

Height = 366
DoCreate = .T.
ShowTips = .T.
AutoCenter = .T.
Caption = "MAINTENANCE EXPENSES FORM"
Closable = .T.
Visible = .F.
WindowType = 0
LockScreen = .F.
Name = "form1"
layoutsty.Shape1.Name = "Shape1"
layoutsty.Shape2.Name = "Shape2"
layoutsty.Shape3.Name = "Shape3"
layoutsty.Shape4.Name = "Shape4"
layoutsty.Left = 4004
layoutsty.Visible = .F.
layoutsty.Name = "layoutsty"
Label1.Caption = "MAINTENANCE EXPENSES FORM"
Label1.Width = 446
Label1.Name = "Label1"
Shape1.Name = "Shape1"
Shape2.Name = "Shape2"
Shape3.Top = 310
Shape3.Name = "Shape3"

```
Shape4.Top = 311
Shape4.Name = "Shape4"

FontSize = 10
Caption = "Vehicle Type:"
Height = 25
Left = 10
Top = 61
Visible = .T.
Width = 100
Name = "LBLVEHICLE_TYPE1"

ControlSource = "maintain.vehicle_type"
Enabled = .F.
InputMask = "!!!!!!!!!!!!!!!!!"
Left = 110
Top = 58
Visible = .T.
Width = 115
Name = "VEHICLE_TYPE1"

FontSize = 10
Caption = "Reg_no:"
Height = 25
Left = 260
Top = 59
Visible = .T.
Width = 90
Name = "LBLREG_NO1"
ControlSource = "maintain.reg_no"
Enabled = .F.
InputMask = "XXXXXXXX"
Left = 348
Top = 60
Visible = .T.
Width = 74
Name = "REG_NO1"

FontSize = 10
Caption = "Driver's Name:"
Height = 25
Left = 10
Top = 109
Visible = .T.
Width = 95
Name = "LBLDRIVER_NAME1"
ControlSource = "maintain.driver_name"
Enabled = .F.
InputMask = "!!!!!!!!!!!!!!!!!!!!!"
Left = 108
Top = 108
Visible = .T.
```

```
Width = 150
Name = "DRIVER_NAME1"


FontSize = 10
Caption = "Fault Type:"
Height = 25
Left = 260
Top = 110
Visible = .T.
Width = 90
Name = "LBLFAULT_TYPE1"

ReadOnly = .T.
Top = 106
Visible = .T.
ForeColor = 128,128,128
BackColor = 255,255,255
ControlSource = "maintain.fault_type"
Name = "FAULT_TYPE1"

FontSize = 10
Caption = "Amount"
Height = 25
Left = 10
Top = 167
Visible = .T.
Width = 90
Name = "LBLAMT_CHARGED1"

ControlSource = "maintain.amt_charged"
Enabled = .F.
InputMask = ""
Left = 104
Top = 168
Visible = .T.
Width = 72
Name = "AMT_CHARGED1"

FontSize = 10
Caption = "Amount"
Height = 25
Left = 260
Top = 172
Visible = .T.
Width = 90
Name = "LBLAMT_PAID1"

ControlSource = "maintain.amt_paid"
Enabled = .F.
InputMask = ""
Left = 348
Top = 172
```

```
Visible = .T.
Width = 72
Name = "AMT_PAID1"

FontSize = 10
Caption = "Receipt no"
Height = 25
Left = 8
Top = 220
Visible = .T.
Width = 90
Name = "LBLRECEIP_NO1"

Enabled = .F.
InputMask = "XXXXX"
Left = 105
Top = 216
Visible = .T.
Width = 60
Name = "RECEIP_NO1"

FontSize = 10
Caption = "Datepaid:"
Height = 25
Left = 260
Top = 232
Visible = .T.
Width = 90
Name = "LBLDATEPAID1"

Century = 1
Alignment = 3
ControlSource = "maintain.datepaid"
Enabled = .F.
Left = 348
Top = 228
Visible = .T.
Width = 62
Name = "DATEPAID1"

FontSize = 10
Caption = "Month"
Height = 25
Left = 8
Top = 268
Visible = .T.
Width = 90
Name = "LBLMONTHS1"

Left = 33
Visible = .T.
oldtalk = OFF
```

```
viewkey = ("")
parentkey =
viewtype = 3
gridalias =
topfile = .T.
endfile = .T.
addmode = .F.
nworkarea = 3
oldsetdelete = OFF
oldreprocess = 0
previewmode = .F.
previewinit = .F.
usedataenv = .F.
editmode = .F.
gridref =
oldsetfields = OFF
oldmultilocks = ON
oldrefresh = 0
oldbuffering = 1
editforecolor = 0
editdisforecolor = 8421504
editbackcolor = 16777215
editdisbackcolor = 16777215
hasmemo = .T.
Name = "BUTTONSET1"
cmdPrev.Enabled = .T.
cmdPrev.Name = "cmdPrev"
cmdNext.Enabled = .T.
cmdNext.Name = "cmdNext"
cmdTop.Enabled = .T.
cmdTop.Name = "cmdTop"
cmdEnd.Enabled = .T.
cmdEnd.Name = "cmdEnd"
cmdFind.Enabled = .T.
cmdFind.Name = "cmdFind"
cmdPrint.Enabled = .T.
cmdPrint.Name = "cmdPrint"
cmdExit.Enabled = .T.
cmdExit.Name = "cmdExit"
cmdAdd.Picture = (HOME()+"WIZARDS\WIZBMPS\WZNEW.BMP")
cmdAdd.DownPicture = wizards\wizbmps\wznew.bmp
cmdAdd.Enabled = .T.
cmdAdd.Name = "cmdAdd"
cmdDelete.Enabled = .T.
cmdDelete.Name = "cmdDelete"
cmdEdit.Picture = (HOME()+"WIZARDS\WIZBMPS\WZEDIT.BMP")
cmdEdit.DownPicture = wizards\wizbmps\wzedit.bmp
cmdEdit.Enabled = .T.
cmdEdit.Name = "cmdEdit"

FontSize = 10
Caption = "Paid"
```

```
Height = 17
Left = 261
Top = 192
Width = 95
Name = "Label2"

FontSize = 10
Caption = "Charged"
Height = 17
Left = 8
Top = 186
Width = 95
Name = "Label3"

RowSourceType = 3
RowSource = "sele * from month_tab into cursor combo1"
ControlSource = "maintain.months"
Height = 25
Left = 104
Top = 263
Width = 85
Name = "Combo1"
```

```
LOCAL lcMainClassLib
LOCAL lcLastSetTalk,lcLastSetPath,lcLastSetClassLib,lcOnShutdow
n

*-- Save and configure environment.
lcLastSetTalk=SET("TALK")
SET TALK OFF
lcLastSetPath=SET("PATH")
CD "\expenses\"
SET PATH TO ;DATA;INCLUDE;FORMS;GRAPHICS;HELP;LIBS;MENUS;PROGS;
REPORTS
PUSH MENU _msysmenu
lcLastSetClassLib=SET("CLASSLIB")
lcMainClassLib="libs\expenses"
SET CLASSLIB TO (lcMainClassLib) ADDITIVE
lcOnShutdown="ShutDown()"
ON SHUTDOWN &lcOnShutdown
ON ERROR ErrorHandler(ERROR(),PROGRAM(),LINENO())
_shell="DO Cleanup IN progs\expenses"

*-- Instantiate application object.
RELEASE goApp
PUBLIC goApp
goApp=CREATEOBJECT("cApplication")
set century on
do form background.scx

*-- Configure application object.
goApp.SetCaption("Expenses")
goApp.cStartupMenu="menus\expenses"

*-- Show application.
goApp.Show
*-- Release application.
RELEASE goApp

*-- Restore default menu.
POP MENU _msysmenu

*-- Restore environment.
ON ERROR
ON SHUTDOWN
IF NOT lcLastSetClassLib==SET("classlib")
        RELEASE CLASSLIB (lcMainClassLib)
ENDIF
IF EMPTY(lcLastSetPath)
        SET PATH TO
ELSE
        SET PATH TO &lcLastSetPath
ENDIF
IF lcLastSetTalk=="ON"
        SET TALK ON
```

```
ELSE
        SET TALK OFF
ENDIF
RETURN



FUNCTION ErrorHandler(nError,cMethod,nLine)
LOCAL lcErrorMsg,lcCodeLineMsg

WAIT CLEAR
lcErrorMsg=MESSAGE()+CHR(13)+CHR(13)
lcErrorMsg=lcErrorMsg+"Method:    "+cMethod
lcCodeLineMsg=MESSAGE(1)
IF BETWEEN(nLine,1,10000) AND NOT lcCodeLineMsg="..."
        lcErrorMsg=lcErrorMsg+CHR(13)+"Line:        "+ALLTRIM(
STR(nLine))
        IF NOT EMPTY(lcCodeLineMsg)
                lcErrorMsg=lcErrorMsg+CHR(13)+CHR(13)+lcCodeLin
eMsg
        ENDIF
ENDIF
IF MESSAGEBOX(lcErrorMsg,17,_screen.Caption)#1
        ON ERROR
        RETURN .F.
ENDIF
ENDFUNC



FUNCTION ShutDown

IF TYPE("goApp")=="O" AND NOT ISNULL(goApp)
        RETURN goApp.OnShutDown()
ENDIF
Cleanup()
QUIT
ENDFUNC



FUNCTION Cleanup

IF CNTBAR("_msysmenu")=7
        RETURN
ENDIF
ON ERROR
ON SHUTDOWN
SET CLASSLIB TO
SET PATH TO
CLEAR ALL
CLOSE ALL
POP MENU _msysmenu
```

RETURN

```
set defa to \expenses
USE  '
clear
USE \expenses\data\maintain
store spac(3) to tagmon
@15,15 say "Month to report (xxx)" get tagmon pict "!!!"
read

SET FILTER TO maintain.MONTHS = tagmon
REPORT FORM \expenses\reports\MONTHLY_maintain.frx  preview
*NOEJECT NOCONSOLE TO PRINTER
CLEAR
CLEA
```

"MEDICAL.SCT

```
                         VERSION =    3.00        dataenvironment         dataenviro
nment          Dataenvironment        JLeft = 1
Top = 220
Width = 520
Height = 200
Name = "Dataenvironment"

BufferModeOverride = 5
Order = "staff_no"
Database = ..\data\belus.dbc
CursorSource = "medical"
Name = "CURSOR1"

Top = 20
Width = 90
Height = 90
Alias = "month_tab"
Database = ..\data\belus.dbc
CursorSource = "month_tab"
Name = "Cursor2"

Height = 338
DoCreate = .T.
ShowTips = .T.
AutoCenter = .T.
Caption = "MEDICAL EXPENSES FORM"
Closable = .T.
Visible = .F.
WindowType = 0
LockScreen = .F.
Name = "form1"
layoutsty.Shape1.Name = "Shape1"
layoutsty.Shape2.Name = "Shape2"
layoutsty.Shape3.Name = "Shape3"
layoutsty.Shape4.Name = "Shape4"
layoutsty.Left = 4004
layoutsty.Visible = .F.
layoutsty.Name = "layoutsty"
Label1.Caption = "MEDICAL EXPENSES FORM"
Label1.Width = 369
Label1.Name = "Label1"
Shape1.Name = "Shape1"
Shape2.Name = "Shape2"
Shape3.Top = 282
Shape3.Name = "Shape3"
Shape4.Top = 283
Shape4.Name = "Shape4"

FontBold = .T.
FontSize = 12
FontExtend = .F.
Caption = "Staff No."
Height = 18
Left = 10
```

```
Top = 61
Visible = .T.
Width = 80
Name = "LBLSTAFF_NO1"

Enabled = .F.
InputMask = "!!!!!!"
Left = 103
Top = 57
Visible = .T.
Width = 58
Name = "STAFF_NO1"

FontBold = .T.
FontSize = 12
FontExtend = .F.
Caption = "Staff Name:"
Height = 18
Left = 264
Top = 61
Visible = .T.
Width = 85
Name = "LBLNAME1"

Enabled = .F.
InputMask = "!!!!!!!!!!!!!!!!!!!!"
Left = 359
Top = 57
Visible = .T.
Width = 150
Name = "NAME1"

FontBold = .T.
FontSize = 12
FontExtend = .F.
Caption = "Dept:"
Height = 18
Left = 10
Top = 109
Visible = .T.
Width = 80
Name = "LBLDEPT1"

Enabled = .F.
InputMask = "!!!!!!!!!!"
Left = 103
Top = 105
Visible = .T.
Width = 90
Name = "DEPT1"

FontBold = .T.
FontSize = 12
FontExtend = .F.
Caption = "Illness Type:"
Height = 18
Left = 267
Top = 108
Visible = .T.
Width = 90
```

Name = "LBLILLNESS_TYPE1"

Enabled = .F.
InputMask = "!!!!!!!!!!!!!!!!!!!!!!!"
Left = 362
Top = 104
Visible = .T.
Width = 150
Name = "ILLNESS_TYPE1"

FontBold = .T.
FontSize = 12
FontExtend = .F.
Caption = "Hospital"
Height = 18
Left = 10
Top = 157
Visible = .T.
Width = 80
Name = "LBLHOSP_NAME1"

Enabled = .F.
InputMask = "!!!!!!!!!!!!!!!!!!"
Left = 103
Top = 153
Visible = .T.
Width = 115
Name = "HOSP_NAME1"

FontBold = .T.
FontSize = 12
FontExtend = .F.
Caption = "Amount"
Height = 18
Left = 264
Top = 156
Visible = .T.
Width = 80
Name = "LBLAMT_CHARG1"

ControlSource = "medical.amt_charg"
Enabled = .F.
Height = 22
InputMask = "99,999.99"
Left = 363
Top = 155
Visible = .T.
Width = 81
Name = "AMT_CHARG1"

FontBold = .T.
FontSize = 12
FontExtend = .F.
Caption = "Receipt No:"
Height = 18
Left = 10
Top = 205
Visible = .T.
Width = 90
Name = "LBLRECEIP_NO1"

```
ControlSource = "medical.receip_no"
Enabled = .F.
InputMask = "99999"
Left = 103
Top = 201
Visible = .T.
Width = 48
Name = "RECEIP_NO1"

FontBold = .T.
FontSize = 12
FontExtend = .F.
Caption = "Date Paid:"
Height = 18
Left = 268
Top = 208
Visible = .T.
Width = 80
Name = "LBLDATE_PAID1"

Century = 1
Alignment = 3
ControlSource = "medical.date_paid"
Enabled = .F.
InputMask = ""
Left = 361
Top = 204
Visible = .T.
Width = 62
Name = "DATE_PAID1"

FontSize = 12
Caption = "Months:"
Height = 18
Left = 136
Top = 256
Visible = .T.
Width = 80
Name = "LBLMONTHS1"

Left = 33
Visible = .T.
oldtalk = OFF
viewkey = ("")
parentkey =
viewtype = 3
gridalias =
topfile = .T.
endfile = .T.
addmode = .F.
nworkarea = 3
oldsetdelete = OFF
oldreprocess = 0
previewmode = .F.
previewinit = .F.
usedataenv = .F.
editmode = .F.
gridref =
oldsetfields = OFF
```

```
oldmultilocks = ON
oldrefresh = 0
oldbuffering = 1
Name = "BUTTONSET1"
cmdPrev.Enabled = .T.
cmdPrev.Name = "cmdPrev"
cmdNext.Enabled = .T.
cmdNext.Name = "cmdNext"
cmdTop.Enabled = .T.
cmdTop.Name = "cmdTop"
cmdEnd.Enabled = .T.
cmdEnd.Name = "cmdEnd"
cmdFind.Enabled = .T.
cmdFind.Name = "cmdFind"
cmdPrint.Enabled = .T.
cmdPrint.Name = "cmdPrint"
cmdExit.Enabled = .T.
cmdExit.Name = "cmdExit"
cmdAdd.Picture = (HOME()+"WIZARDS\WIZBMPS\WZNEW.BMP")
cmdAdd.DownPicture = ..\..\vfp\wizards\wizbmps\wznew.bmp
cmdAdd.Enabled = .T.
cmdAdd.Name = "cmdAdd"
cmdDelete.Enabled = .T.
cmdDelete.Name = "cmdDelete"
cmdEdit.Picture = (HOME()+"WIZARDS\WIZBMPS\WZEDIT.BMP")
cmdEdit.DownPicture = ..\..\vfp\wizards\wizbmps\wzedit.bmp
cmdEdit.Enabled = .T.
cmdEdit.Name = "cmdEdit"

FontSize = 12
Caption = "Charged"
Height = 17
Left = 264
Top = 173
Width = 80
Name = "Label2"

RowSourceType = 3
RowSource = "sele * from month_tab into cursor mon_cb"
ControlSource = "medical.months"
Height = 24
Left = 216
Top = 252
Width = 100
Name = "mon_cb"
```

```
set defa to \expenses
USE
clear
USE \expenses\data\medical
store spac(3) to tagmon
@15,15 say "Month to report (xxx)" get tagmon pict "!!!"
read

SET FILTER TO Medical.MONTHS = tagmon
REPORT FORM \expenses\reports\MONTHLY_medical.frx  preview
*NOEJECT NOCONSOLE TO PRINTER
CLEAR
CLEA
```

MONTHLY MEDICAL EXPENSES REPORT

12/14/1999

FOR THE MONTH OF JUNE   2000

Staff No	Name	Illness Type	Hospital Name	Amt Charged	Receipt No	Date Paid
BEL045	ADAM	FEVER	EURO HOSPITAL	300.00	37473	06/01/2000
Grand Total:				300.00		

Vehicle Type	Reg No	Fault Type	Amt Paid	Receip No	Date paid
MERCEDES BENZ	AJ345DAL	CHANGE OF BATTERY	5,100.00	14532	19/07/1998
PEUGEOT	AL274NSR	GEAR BOX REPAIR	14,200.00	2341	13/07/1998

MONTHLY MISCELLANEOUS EXPENSES REPORT

14/12/1999   FOR THE MONTH OF   October   1997

Expenses Type	Exp Date	Incurer	Receipt No	Amt Paid
ACCOMODATION	10/10/1997	HAMMAN DAURA	67458	50,000.00

Total Miscellaneous Expenses for the month of   December   1999   50000.00

MONTHLY UTILITY EXPENSES

12/14/1999   FOR THE MONTH OF December   1999

Bill Type	Months	Amt Paid	Receip No	Datepaid

WATER

| | DEC | 450.00 | 45321 | 12/13/199 |

CHAPTER FIVE

5.0 SUMMARY

This project work has improve my skill in this course tremendously and has also broaden my experience in implementing task using the latest object oriented programming language.

It helped in innovating ideas on how company expenses is been managed. It is also a tool for achieveing the skill of computing in a windows based program and generate i.e a set of compressed diskettes for distribution. This allows you to install enterprise wide application without distributing the development tool.

During the course of this project work the management and staff BELUS Enterprises Limited - who help in test running the programs shows appreciation for the proposed system.

5.1 RECOMMENDATION

Belus Enterprises Limited is an indigenous Contractor in building, construction, supplies of different kinds of goods. There is no doubt that a lot of expenses are been incurred during this process. Therefore this project work is recommended for the company for effective management Decision making.

5.2 CONCLUSION

A lot has been written on this topic but careful measures had never been employed in this form. Attempting to achieve this was a fulfilling task. Therefore the benefit of this course, Post Graduate Diploma in Computer Science would not have been realized if not for the project work through which the various research expand my skill and the practical application of the course.

REFERENCES

Belinda P. Payne   Management System & Computers, 1973
                                       Alexander Hammilton Institute U.S.A.

Bello A.   Computerised Travel Air Agency Sale
                                       Record, HND Project Work 1993.

Ralph Currter Davis   Principle of Management, 1962
                                       Alexander Hammillton Institute U.S.A.

Roger Hunt & John Shelley   Computer & Common Sense,1979
                                       Prentice-Hall International London.

Tenent R.D.   Principle of Programming Language,1988
                                       Prentice-Hall International London.