

COMPUTERIZED REVENUE COLLECTION
SYSTEM FOR NIGER STATE

BY

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A Final year project submitted in partial fulfillment of the requirement for the award of Bachelor of Technology (B. Tech.), Department of Mathematics/Statistics and Computer Science, Federal University of Technology, Minna.

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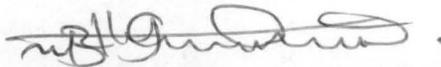
DECLARATION

I hereby declare that this project is an original work of mine and has not been presented elsewhere in any form for the award of degree.



Thomas Gana

Confirmed By



Mr. H. A. Babagbale

Project Supervisor

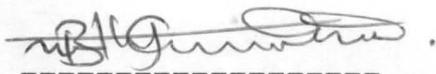
DEDICATION

This project is dedicated to the
Almighty God and all the beloved
ones in the Lord Jesus Christ.

CERTIFICATION

This is to certify that this project "COMPUTERIZED REVENUE COLLECTION SYSTEM FOR NIGER STATE" has been presented by Gana, Thomas of the Department of mathematics/Statistics and computer science, School of Science and Science Education, Federal University of Technology, Minna.

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Tender wishes to all beloved brethren in the Lord Jesus Christ, most especially My intimate Sister, Debbie Jev, Stephen O.O and all members of the Fellowship of Christian Students, F.U.T., Minna for their prayer.

ABSTRACT/SUMMARY

The aim/objective of this work is to increase accuracy of stored facts, reduce the rate at which file containing information get mis, and to ensure proper accountability capable of improving collection record in most effective way.

The project was carried out in stages which involved the feasibilities study, system analysis, system design and program development.

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CHAPTER ONE

1.0 INTRODUCTION

Computers are classified in different ways, as such a digital electronic computer is a system consisting of an input device, a processor, and an output device. The computer performs mathematics and logical operations on data within its central processing unit, based on a set of instructions, and produces the result (information) in the form of useful output with a minimum of human intervention.

The computer's unique technology achievement is radically changing business production methods and the art and science of management. The computer is improving the quantity and quality of Man's cogitation and is rapidly recognized as an effective way of achieving productivity and performance.

The competitive nature and complexity of today's business make it necessary that an information system be available to provide all levels of management, with the right kind of accurate and timely information for effective decision making and successful goal attainment.

1.1 *HISTORY OF THE BOARD*

The State Board of Internal Revenue was a successor to the Revenue Division under the Niger State Ministry of Finance. Legally the Board's power to impose taxes was established after the creation of the State in 1976 under a Law known as the Personal Income Tax Law (PTL) of 1962 section 7; which was an offspring of Income Tax Management Act 1961 section 3; a Federal Law providing for the Management of Personal Income Tax and Companies tax.

Taxation is one of the few Governmental functions which has a clear and evidently tangible result that can easily be seen and measured in terms of achievement.

Tax therefore, can be defined as an imposition of a sort of levy by the Government on its citizens resident in its area of jurisdiction.

1.2 *The Management Structure of Board of Internal Revenue.*

The Management structure of the Board of Internal Revenue is built on six (6) categories of sections, namely :-

- i) Collection, ii) Assessment iii) Administration or Personnel management
- iv) Inspectorate
- v) Finance and vi) Policy making (Administrator).

Since collection is the cardinal objective and efficiency measurement factor, emphasis should be laid on those proven system of collection and make irrelevant all weaknesses that may arise. Therefore this project has focused on the collection section. However, references where applicable were made to other section.

For effectiveness, the collection section can be divided into three (3) levels of functions.

- i) Collection Liason
- ii) Collector
- iii) Director of Collection.

Collection Liason :- They are in charge of control of collection.

Their responsibilities are as follows :-

1. Preparation and issue of demand Notes to tax payer.
2. Preparation of cases for enforcement of processing.
3. Periodic accounting work and balancing of accounts.
4. Preparation of arrears list.
5. Supervision of collectors
6. Making out reports for collection.
7. Liasing with Assessment section.

The whole purpose of collection liason work is to achieve the following :-

- a) Maximum collection within the time limit in any accounting year.

- b) Enabling Director of collections advise administrator on the whole working of collection machinery based on tried experience.
- c) Education of tax payers to be more amiable and co-operative with the tax authority.

Collectors :- Mainly to provide for decentralization of actual collection (i.e having smaller unit to cover and scout for information about tax payer).

The responsibilities are as follows :-

- i) Receive payment from tax payer who pays in person or by post.
- ii) Paying personal visits to tax payers towards enforcing tax payment.
- iii) Banking of monies collected.
- iv) Sending statements of the bank lodgement to the Government Treasury.
- v) Out-door work to obtain information about tax payers, required by the Assessment and collection sections.

The product resulting from collectors work include :-

- 1) Keeping up-to-date records of all payment of taxes by individual tax payer.
- 2) Making tax payers more aware of their civic responsibility and getting to prompt payment.

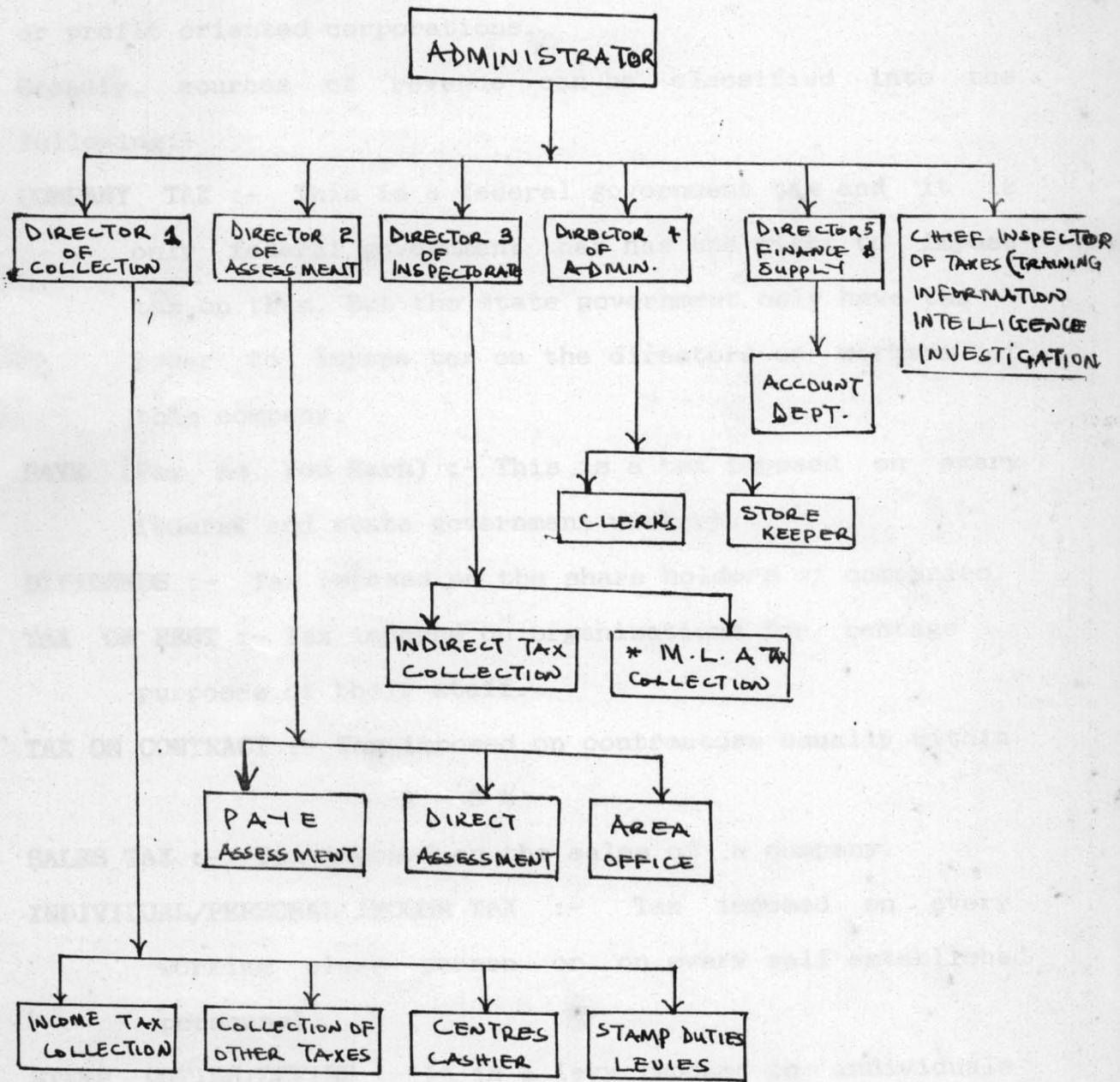
Director of Collection :- He is the main link between the policy and execution of collection activities.

The responsibilities are as follows :-

- i) Co-ordinating the work of collection authorities.
- ii) Shaping collection policy of the state tax authority.
- iii) Correlating collection progress reports from Direct Assessment, PAYE section and other taxes.
- iv) Recommending to the Administrator, the appointment of collection authority and remission of taxes on grounds of poverty or deliberate default by tax payer.
- v) Identifying training needs for collections staff.

The interrelationship between Assessment and collection cannot be overemphasized. These are two separate key activities of tax administration, though interrelated. Due to the importance of Assessment in the field of collection, collection would have remained difficult without Assessment.

1.3 PRESENT ORGANIZATIONAL STRUCTURE OF BOARD OF INTERNAL REVENUE



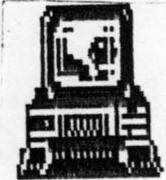
Other sources of revenue include those generated by the Local Government; common among which are: Community Tax, Cattle Tax, Market Store Tax, Motor Park Tax and Head Counts Tax or Levies.

1.5 UTILIZATION OF GENERATED REVENUE

The revenue generated by the collections section on a periodic basis are payed to the director of collection's cashier, who in turn deposits the revenue in the bank account and submits copies of bank teller to state government treasury/account.

The revenue generated is being utilized as follows:-

- 1) To provide money to the government for the payment of operating cost of its staff.
- 2) To serve as regulatory device in fiscal and economic policy.
- 3) For construction of Feeder roads to the rural areas.
- 4) For construction and management of Schools and Health Services.



CHAPTER TWO

2.1 *RESEARCH METHODOLOGY*

The research was concerned with the collection of information about the operations of the existing systems, the identification of difficulties and problems of the systems, together with specification of fresh requirements which the newly designed system will have to fulfil.

Since the activities to be carried out are qualitative rather than being quantitative, the research was undertaken in stages as follows:

2.1.1 *Problem Definition*

This entails a clear specification of the problem and the range (scope) that the work will encompass.

No problem can be solved effectively until after it has been clearly defined. Therefore the problem definitions gave an opportunity to reevaluate the problem as to whether it was real or imaginary, major or minor and urgent or otherwise.

During the course of defining the problem, computer-based Revenue system was determined to be real and valid.

2.1.2 *Feasibility Analysis*

This involves the study of the existing system in sufficient depth in order to be able to provide management for the proposed system. This focuses on an existing business operation that requires improvement.

The investigation covered three major phases, namely :

(1) Analysis of the present manual system (2) Design of the proposed computer-based system and (3) testing and implementation of the new system.

2.1.3 *Fact Finding*

This is one of the research method employed to get detailed information about the existing manual system. Among the common fact finding methods (i.e Interviews, Questionnaires, Observations and record/data inspection). Interview was used for this research as an investigating tool. It was found to be the most productive fact-finding means of obtaining information without upsetting anyone, as well as capable of overcoming intended users resistance.

2.1.4 *System Analysis*

The objectives of this phase was to evaluate and examine the existing system in order to analyse its strengths and weakness, determined information needs and the best methods by which it can be achieved.

2.1.5 *System Design*

It determines the best of several methods for actualising the proposed system.

The ultimate of this phase was the development of a logical model system in close collaboration with the user in line with the activities of the Board of Internal Revenue Minna.

The files and program are as simple as possible, and relate closely to the day-to-day data processing of the board of Internal Revenue. The specification reflect the logical component.

2.2 OPERATIONS/ACTIVITIES UNDERTAKEN BY THE SECTIONS

Operations undertaken by each sections are as follows :

Director of collection (Result Producing) :- This section are responsible for producing tangible and measurable result.

Director of Assessment (Result Contributing) :- Are responsible for assessing tax payers, they do not produce result but without which result cannot be achieved.

Director of Inspectorate :- Are responsible to cross check receipt from the collections department to make sure that, the tax collected are in proper order. Function as an audit department.

Director personnel management (House-keeping) :- Are responsible for staff wel-fare and supply of material to other sections. They do not effect result but their absence or weakness could affect efficient and effective of result producing.

Director of Finance and Supply :- Are responsible for the payment of their staff.

Chief inspector of taxes (Training Information Intelligence and Investigation) :- Are responsible for carrying out investigation about the tax defaulters.

Administrator (Policy making) :- He is responsible to produce comprehensive and workable policy of good values and standard's e.g Top management co-ordinating and training of the staff.

2.3 *Difficulties and Problems*

During the cause of investigation, the difficulties and problems associated with the existing manual system were identified.

These include :

- Tax payers have no proper records
- Time lag in compilation of reports
- Imbalance between estimates and actual amount collected
- Weak collection machinery :- Little amount usually realised due to weak collectors)

- Accessing of Information generally slow (due to maintenance of several manual files).
- Inadequate Security :- due to lack of adequate security, confidential information can easily be withdrawn or missing from a file.
- Misplacement of a file :- After accessing, a file contain a particular information may be misplaced which will eventually result to delay in processing.
- Data Redundancy (It leads to data redundancy because tax payers open a new file every year which contain the same information.

2.4 JUSTIFICATION FOR COMPUTERIZATION

It has become pertinent for the Board of Internal Revenue to have a Computer-Based system for handling data for the purpose of efficiency, and reliable/valid output. This system will satisfy a growing need for improved management information, and the manager/Directors will be able to plan better and smoother, for more effective and efficient operations in their respective sections.

Other justification include :-

- * -- Ability of the computer to capture data pertinent to the firms operations, processing the data in the most efficient manner, and producing concise and timely information as required by each sections.

- Reduce to a large extent the chances for embezzlement.
- Lost of information is minimized.
- It is more safe than ordinary manual e.g files.

2.5 *CRITERIA FOR SELECTING THE PROPOSED SYSTEM*

The criteria by which the proposed system was selected are as follows :

- Effectiveness and Efficiency :- It is more effective and most efficient.
- Accuracy :- Its consistency can be relied upon and for highly degree of accuracy satisfied by the computer.
- Complexity : It will be able to handle the most complex operation.
- Volume :- Computerised facility offers the advantage of handling high - volume data and large-scale applications more efficiently and at a relative lower cost than manual or other system.
- Speed :- It has the ability to communicate with other system faster and respond very quickly to a given situations.

2.6 *Recommended Computer System*

For the effective of the new implementation system, an AT Processor, colour graphic microcomputer system is recommended for the Board of Internal Revenue. This provides a means for even greater performance to run more sophisticated software at faster speeds.

It also has a comparative advantage over large computer (such as mainframe) because they do not require a critically large controlled environment apart from the maintenance of normal room temperature.

The use of computer does not required highly trained staff, if the operator can learn a mere sequence of keyboard operations.

Moreover a competent operator is essential as the output is determined by the speed and accurancy of the operator in the use of the keyboard.

Specifically, the recommended Computer Hardware should have the following specifications.

AT Processor	80286/80386
RAM	1.2 MB
Diskette Drive/Slot	
a) 3½	1.44 MB
b) 5¼	1.2 MB
Hard Disk	30 or 40 MB
Printer	24-pin Dot matrix printer
Operating System	MS-DOS 3.30 and above
UPS	

**2.7 COST ANALYSIS OF THE
PROPOSED SYSTEM**

AT Processor	80286/80386	₦80,000.00
RAM	1.2 MB	
Diskette Drive/Slot		
a) 3½	1.44 MB	
b) 5¼	1.2 MB	
Hard Disk	30 or 40 MB	
Printer	24-pin Dot matrix printer	₦25,000.00
Operating System	MS-DOS 3.30 and above	₦5,000.00
UPS 500 Volts		₦5,000.00
Development Cost		₦35,000.00
Installation Cost		₦10,000.00
Staff training Cost		₦12,000.00
Operating Cost		
a) paper		₦2,000.00
b) Ribbon		₦3,000.00
c) Diskette		₦1,000.00
Maintenance		₦600.00

- Efficiency :- i.e Designed such that the best use of the system (most especially in terms of storage and time) can be made.
- Portability :- i.e Designed in such away that, it can be transfered from one system to another, yet performing the same operations.

3.1 *DATABASE*

The proposed system is going to be a complete Database system. A database is a collection of data usually files, arranged such that it is independent of any particular program or application. This arrangement is such that data redundancy was eliminated to a great extend. Access to the files are done directly by the application via a database management system.

A database management system (DBMS) consist of a collection of interrelated data and a set of programs which handle and control all accesses to the database. The primary goal of a database management system is to provide an environment that is both convenient and efficient to use in retrieving information from stored database.

3.2 *Advantage of Database Systems*

Generally, database systems will help users in achieving the following :-

- Increase the integrity of data
- Reduce computer processing time.
- Reduce data duplication and inconsistency.
- Provide a single information sources for accurate data processing.

3.3 *Types of Database system*

There are three types of database system, namely, Relational, Hierrarchical and network.

Relational Database have a simple structure that defines the relationships among data elements and provided an effective means for maintaining and manipulating a large amount of information.

Relational model was choosen in designing of this system, because of its simple nature.

Among the commonest feature of relational approach are as follow :-

- Maintaining and updating the contents of the database
- Ease of locating, accessing and retrieving data that meet a given set of specification.
- Sorting a set of data record into a desired order.

This work took advantage of these flexible features in the designing of Computerized Revenue Collection System for Niger State.

3.4 *Database Management Software Used*

A useful database application based on the relational model was developed using Dbase III Plus. Dbase III Plus perform a vital tasks in the efficiency runing of a wide range of organization. Its ability to sort, select and summarized data makes it more powerful and flexible.

3.5 *Maintenance of Database*

It has the power to impose centralized control over its operational data as one of its advantages.

The developed application for the management can be maintain by frequent modifying, editing, and updating the records in the database.

3.6 *Input/Output specification*

The relationship between input and output determines the understanding of the actual behaviour, potential, and efficiency of the proposed system.

3.6.1 *Input specification*

This describe all data inputs of the proposed system in proper order. It summarized the features and acceptable values of data inputs and format.

---- COMPUTERIZED REVENUE COLLECTION SYSTEM FOR NIGER STATE ----

MASTER DATABASE FILE (MSTFIL.DBF)

FIELD NAME	TYPE	WIDTH	DEC.
1. ASS_NO	C	14	
2. SOURCE	C	25	
3. NAM	C	16	
4. INIT	C	8	
5. ADDR	C	25	
6. TAX_ASS	N	10	2
7. TAX_PD	N	10	2
8. D_PD	D	8	
9. RECEPT_NO	C	12	
10. TAX_OUTS	N	10	2

STATE MTN DATABASE FILE (STATE.DBF)

FIELD NAME	TYPE	WIDTH	DEC.
1. ASS_NO	C	14	
2. SOURCE	C	20	
3. NAM	C	16	
4. INIT	C	8	
5. ADDR	C	25	
6. TAX_PD	N	10	2
7. D_PD	D	8	
8. TAX_ASS	N	10	2
9. TAX_DISCH	N	10	2
10. TAX_OUTS	N	10	2
11. TAX_PEN	N	10	2
12. RECEPT_NO	C	14	
13. TAX_REM	N	10	2
14. TOT1	N	12	2

NOTE THAT :-

C = Character
 N = Numeric
 D = Date

----- COMPUTERIZED REVENUE COLLECTION SYSTEM FOR NIGER STATE -----

LGA DATABASE FILE (LGA.DBF)

	FIELD NAME	TYPE	WIDTH	DEC.
1.	ASS_NO	C	14	
2.	SOURCE	C	16	
3.	NAM	C	14	
4.	INIT	C	8	
5.	ADDR	C	25	
6.	TAX_PD	N	10	2
7.	D_PD	D	8	
8.	TAX_REM	N	10	2
9.	TAX_DISCH	N	10	2
10.	TAX_PEN	N	10	2
11.	RECEPT_NO	C	12	

DEFAULTER'S DATABASE FILE (DEFA.DBF)

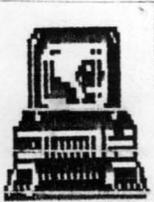
	FIELD NAME	TYPE	WIDTH	DEC.
1.	C_NO	C	10	
2.	NAM	C	16	
3.	INIT	C	8	
4.	ADDR	C	25	
5.	NAT_INC	C	25	
6.	S_INFORM	C	30	
7.	AMT	N	10	2
8.	PD	C	12	
9.	DATE	D	8	

NOTE THAT :-

C = Character
 N = Numeric
 D = Date

3.6.2 *Output specification*

This describe the format of the expected output of the proposed system with respect to the input. See Appendix B for the output specification.



CHAPTER FOUR

4.0 PROGRAM DEVELOPMENT

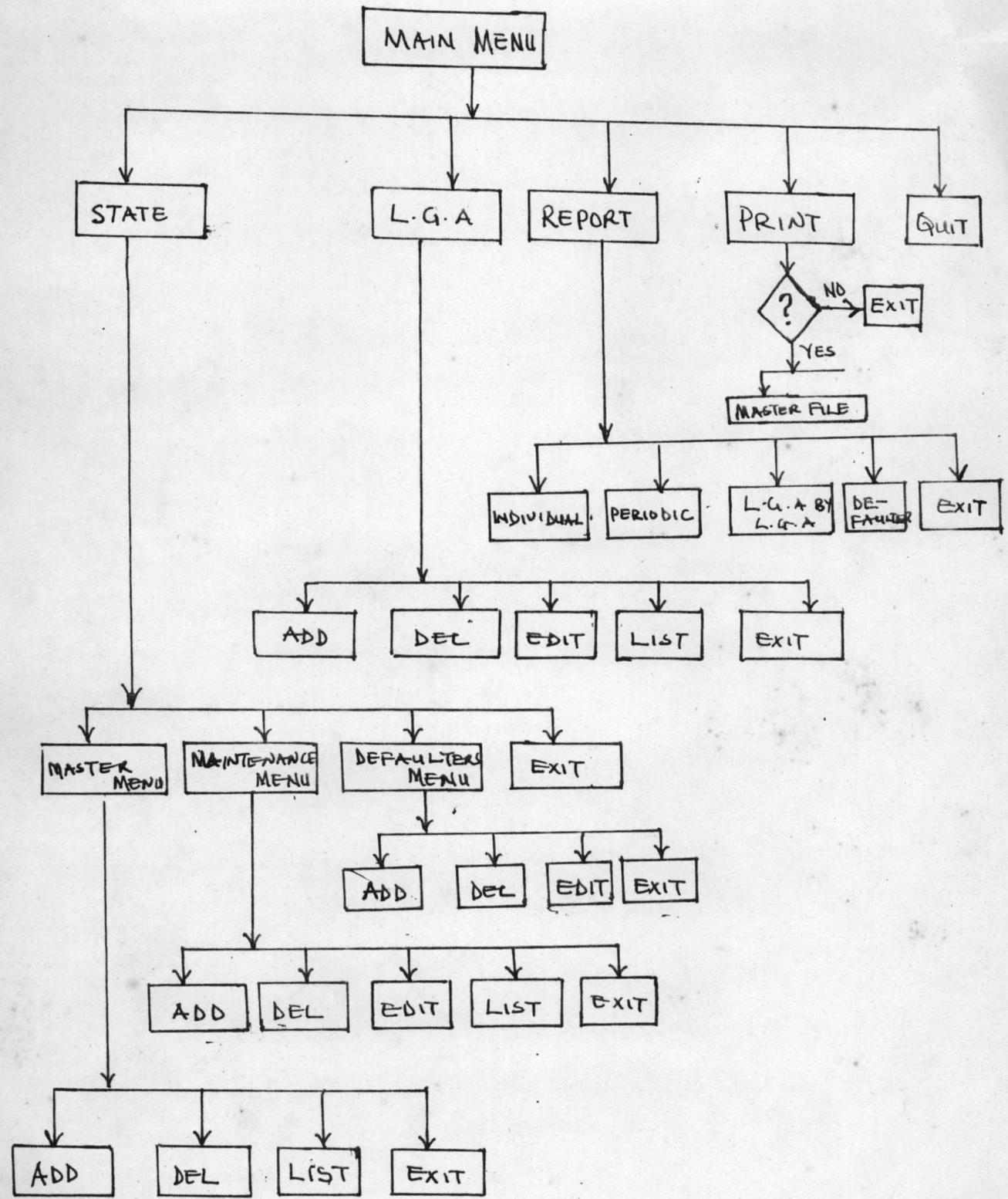
The development of the proposed systems, takes into consideration the idea of, and the need for an orderly structuring of interdependent activities, designed to accomplish a set of predetermined objectives. This project computerized Revenue Collection System for Niger State involves the phases of problem definition, procedure and program development.

Program development is the writing of a computer program for actual production run, which include the modification of the sets of logical instruction.

Specifically, it covers the following areas :- 1) data capturing, 2) deleting of records, 3) Editing of records, 4) generating of report for the Maintenance, Master file for State, Local Government and Tax defaulter menu.

4.1

SYSTEM STRUCTURE LAYOUT



4.2 *Processing Specification*

BEGIN

switch on the system

Enter the Password

Main Menu is displayed

CASE OPTION : "STATE"

Displayed Submenu

Endcase

Select Option : "MASTER FILE MENU"

Displayed The Task Menu

Procedure

Option : "ADD"

Execute Data Entry transaction

Procedure

option : "DELETE"

Execute Delete transaction

Procedure

Option : "LIST"

Displayed report on the screen

Endcase

Enddo

Select Option : "MAINTENANCE FILE MENU"

Displayed the task menu

Procedure

option "ADD"

Execute Data Entry Transaction

and "UPDATE" Master file

Procedure

Option : "EDIT"

Execute Modified transaction

Procedure

Option : "DELETE"

Execute Delete transaction

Procedure

Option : "LIST"

List records on the screen

Endcase

Enddo

Select Option : "DEFAULTER'S MENU"

Displayed the task menu

Procedure

Option : "ADD"

Add to the existing records

Procedure

Option : "EDIT"

Modified the existing records

Procedure

Option : "DELETE"

Delete the existing records

Procedure

Option : "LIST"

List the records on the screen

Endcase

Enddo

Select Option : "REPORT"

Displayed Report Menu

Procedure

Option : "INDIVIDUAL REPORT"

Generate Individual report on the screen

Procedure

Option : "PERIODIC REPORT"

Generate report Periodically on the screen

Procedure

Option : "LGA BY LGA"

Generate report LGA BY LGA on the Screen

Procedure

Option : "DEFAULTER'S REPORT"

Generate Defaulter's report on the screen

Endcase
Enddo

CASE Option : "LGA"

Displayed the task menu

Procedure

Option : "ADD"

Execute data entry transaction

Procedure

Option : "EDIT"

Execute Modified transaction

Procedure

Option : "DELETE"

Execute delete transaction

Procedure

Option : "LIST"

List all the records on the screen

Endcase

Enddo

Select Option : "PRINT"

Print the Generated Revenue from Niger State

Endcase

Enddo

Select Option : "QUIT"

Quit to the DOS PROMPT

Endcase

Enddo

ENDDO.

4.3 *Implementation*

During this stage, the program codification, debugging and testing was done. Niger State Board of Internal Revenue can therefore, if so desire with some amount for the implementation of this system.

4.4 *User/Procedure Manual*

This helps the user to understand and operate the system.

Switch on the system and boot it either by cold or warm booting with the aid of MS-DOS release 3.00 and 4.00. A> "prompt" will appeared. At A> or B> prompt, if the developed application is in the floppy diskette, insert the diskette that contained reven.exe in any of the Drive specified above and Press ENTER key.

Moreover, if it is in the hard disk, change from the above drive to C by typing at A> C: Then at C> type Reven and Press Enter Key.

Immediately, System Security and PassWord Menu will appeared on the screen. Type in the password, if succeeded, the Main Menu and the Title Screen will be displaced.

The Main Menu has an option in which selection is made by using UP and DOWN arrow keys to highlight the desired option and Press Enter key.

Master file :- This allow the detail information of the new members coming to pay tax for the first time after or during assessment to be entered. It also provide an option for deleting, and listing of records.

Maintenance file:- Subsequent payment of tax, by the tax payer is done in this menu. It allows you to append, edit, delete, list and update the Master file.

Likewise, other menu have similar task and selection is being made using UP and DOWN arrow keys to highlight the desired option.

Each submenu therefore, have an option for leaving the menu to another menu by highlighting exit and Press Enter key.

To print the Generated Revenue from Niger State, select an option "Print" from the Main Menu, before Pressing the Enter key make sure that the printer is properly connected to the computer and the paper is well fix in the printer.

In all, after the task has being completed, exit to the main menu, highlight an option QUIT and Press Enter key to exit to DOS PROMPT.

5.2 *Recommendation*

A large, expanded and important board that has to do with the Revenue and invariably with the income of the state need to be computerized by means of the system designed to enhance smooth execution of data efficiently.

It can be suggested that, the proper functioning of a computer-based information system requires the joint efforts of its human, procedural and physical components which generate and, feed desired information to and from for better production or output.

Each functional levels of collection sections should improved on their weaknesses.

Tax collectors should educate the tax payer in keeping proper records.

APPENDIX A

Brief checklist for Computerized System Survey

- 1) Brief history/organizational structure of the management/Board.
- 2) Summary of the various operations / activities undertaken by the s the management/Board.
- 3) Outputs/Reports generated by the sections (if any) and their distribution trends.
- 4) Input sources to the activities of section
 - a) Mode of collection of these inputs/data
 - b) Any forms being used presently.
- 5) Are there any records being kept e.g register of PV'S
- 6) Are there any difficulties faced in the generation of some specific reports ? What are they (if any ?).
- 7) Operationa] costs (e.g cost of stationary, cost of staffing).
- 8) Are there any desired for proposed of future, but which you have not stated to generate yet ? why ?
- 9) Any suggestions for computerization about your activities in general.

APPENDIX B
OUTPUT SPECIFICATION

STATE MASTER REPORT

	FIELD NAME	TYPE	WIDTH	DEC
1.	ASS_NUM	CHARACTER	14	
2.	NAME	"	12	
3.	DATE	DATE	8	
4.	TAX_PD	NUMERIC	10	2
5.	RECEIPT_NO	CHARACTER	12	
6.	TAX_OUTSTD	NUMERIC	10	2

TAX DEFAULTER'S

	FIELD NAME	TYPE	WIDTH	DEC
1.	CODE_NUM	CHARACTER	12	
2.	NAME	CHARACTER	12	
3.	AMOUNT	NUMERIC	10	2
4.	PERIOD	CHARACTER	12	
5.	DATE	DATE	8	
6.	ADDRESS	CHARACTER	14	

PERIODIC REPORT

	FIELD NAME	TYPE	WIDTH	DEC
1.	ASS_NUM	CHARACTER	14	
2.	NAME	"	12	
3.	DATE	DATE	8	
4.	TAX_PD	NUMERIC	10	2
5.	RECEIPT_NO	CHARACTER	12	
6.	TAX_OUTSTD	NUMERIC	10	2

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```

M *****
*
* Program Written By *
* Thomas Gana *
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* Fed. Univer. Of Tech. Minna *
*****
set procedure to reven
set talk off
set echo off
set status off
set intensity off
set delimiter on
set delimiter to "<>"
set scor off
do rpasswd
proc rpasswd
pwd = "TREVENS92"
do while .t.
*clea
    set colo to g+b
    A = 0
    Do while A <= 24
        @A,0 say Replic (chr(176),80)
    A = A + 1
    endd
mpwd=space(9)
set colo to g/n
@5,21 clea to 7,54
set colo to r+g/b*
@4,19 clea to 6,52
@5,20 say " S Y S T E M   S E C U R I T Y "
set colo to g/n
@12,25 clea to 14,52
set colo to w/b
@11,23 clea to 13,50
24 say @11,23 say "Enter Password" get mpwd
*@11,35 get mpwd
set colo to
set colo to n
read
if Uppe(mpwd) = pwd
exit
endi
set colo to w/r
    A = 19
    Do while A <= 22
        @A,23 say Replic (chr(176),32)
    A = A + 1
    endd
db = space(1)
do while .not. db $ "AaRr"
@20,24 say "W r o n g   P a s s w o r d "
@21,24 say "[ A ]bandon or [ R ]etry" get db
read

```

```

endd
  if db $ "Aa"
    quit
    clea
  endi
  if db $ "Rr"
    loop
  endi
set colo to
enddo
** eof of password procedure **

do rev
proc rev
do while .t.
clear
  set colo to g+b
  A = 0
  Do while A <= 24
    @A,0 say Replic (chr(178),80)
    A = A + 1
  endd
set colo to g+b/n
set colo to g/n
@3,11 clea to 5,66
set colo to
set colo to r+g/b
@2,9 clea to 4,64
@3,10 say "COMPUTERIZED REVENUE COLLECTION SYSTEM FOR NIGER
STATE"
set colo to
set colo to g/n
@8,23 clea to 10,53
set colo to
set colo to w/b
@7,21 clea to 9,51
@8,22 say "M A I N           M E N U"
set colo to
set inten on
tom=1
set colo to g/n
@14,32 clea to 22,44
set colo to
set colo to w/b+r
@13,30 clea to 21,42
@13,30 to 21,42
@14,33 prompt "STATE"
@16,33 prompt "LGA"
@18,33 prompt "PRINTING"
@20,33 prompt "QUIT"
set colo to g/n
@14,57 clea to 22,72
set colo to
set colo to w/r
  A = 13

```

```

Do while A <= 21
  @A,53 say Replic (chr(176),18)
  A = A + 1
endd
*@13,53 clea to 21,70
@13,53 to 21,70
@13,56 say "Message Box"
@14,55 say "Use "+(chr(24))+ " "+(chr(25))+ " Arrow"
@16,55 say "Keys to Select"
@18,55 say "Your Choice"
@20,55 say "Press "+(chr(17))+ (chr(196))+ (chr(217))+ " Key"
set colo to w/b+r

```

```

menu to tom
do case
set inten off
case tom = 1
  do stat
case tom = 2
  do lga
case tom = 3
  do print
case tom = 4
  quit
endca
clear
endd
return
** eof of procedure Main Menu **

```

```

proc stat
Do while .T.
clear
Set colo to b+g
A = 0
DO WHILE A<=24
@A,0 SAY REPLIC (CHR(178),80)
A = A+1
ENDD
set colo to b/n
@4,18 clea to 6,63
set colo to
set colo to w/b
@3,14 clea to 5,61
@04,17 say " S T A T E R E V E N U E M E N U "
set color to
tom2=1
set inten on
set colo to g/n
@12,30 clea to 22,51
set colo to
set colo to w/b+r
@11,28 clea to 21,49
@11,28 to 21,49
@12,31 prompt "MASTER MENU"

```

```

@14,31 prompt "MAINTENANCE MENU"
@16,31 prompt "DEFAULTERS MENU"
@18,31 prompt "REPORT GENERATION"
@20,31 prompt "EXIT"
menu to tom2
set colo to
do case
set inten off
  case tom2 = 1
    do MST
  case tom2 = 2
    do MTN
  case tom2 = 3
    do tdefa
  case tom2 = 4
    do rept
  case tom2 = 5
    exit
  clear
endc
endd
clea
retur
** eof of procedure state menu **

```

```

proc mst
Do while .T.
clear
set colo to g+b/n
  A = 0
DO WHILE A <= 24
@A,0 SAY REPLIC (CHR(178),78)
A = A+1
ENDD
set colo to g/n
@04,16 clea to 6,64
set colo to
set colo to r+g/b*
@03,14 clear to 5,62
@04,18 say " S T A T E REVENUE MASTER FILE MENU ."
set colo to
tom3=1
set inten on
set colo to g/n
@12,30 clea to 20,51
set colo to
set colo to w/b+r
@11,27 clea to 19,49
@11,27 to 19,49
@12,30 prompt "ADD TO THE RECORDS"
@14,30 prompt "DELETE RECORDS"
@16,30 prompt "LIST RECORDS"
@18,30 prompt "EXIT"
menu to tom3
set colo to

```

```

set inten off
do case
  case tom3 = 1
    do MSadd
  case tom3 = 2
    do MSdel
  case tom3 = 3
    do MSlist
  case tom3 = 4
    exit
  clear
endc
endd
clea
retur
** eof of procedure Master file **

```

```

proc msadd
Do while .t.
clear
set colo to g+b/n
  A = 0
  do while A <= 24
    @A,0 say Replic (chr(178),80)
    A = A + 1
  endd
use mstfil
mAss_no =space(14)
mSource =space(25)
mNam =space(16)
mInit =space(8)
mAddr =space(25)
mTax_pd = 0
mD_pd = ctod(' / / ')
mTax_ass = 0
mRecpt_no =space(14)
mTax_outs = 0
set colo to w/b
@2,6 clea to 17,75
@2,6 to 17,75
@4,20 say "Enter Assessed Number or 0 to exit" get mAss_no
pict '@!'
read
  if mass_no = "0"
    exit
  loop
endi
set colo to w/r
  A = 20
  Do while A <= 22
    @A,22 say Replic (chr(176),38)
    A = A + 1
  endd
locate for ass_no = mAss_no
if .not. eof()

```

```

@21,25 say "Assessed Number Already exist"
sp =space(1)
do while .not. sp $ "Cc"
    @22,25 say "Press [ C ]ontinue Please" get sp
    set colo to
        read
    endd
clear
loop
endi
set colo to w/b
@7,8 say "Sources of Revenue" get mSource pict '@!'
@10,8 say "Name" get mNam pict '@!'
@10,49 say "Initial" get mInit pict '@!'
@12,8 say "Address" get mAddr pict '@!'
@12,49 say "Date Paid" get mD_pd
@14,8 say "Tax Paid" get mTax_pd
@14,49 say "Tax Assessed" get mTax_ass
@16,8 say "Receipt No" get mRecpt_no pict '@!'
@16,49 say "Tax Outst. " get mTax_outs
set colo to
r = space(1)
Do While .not. r $ "SsCcEe"
set colo to w/r
    A = 20
    Do while A <= 22
        @A,22 say Replie (chr(176),45)
        A = A + 1
    endd

```

```

@20,23 clea to 22,65
21,25 say " [ S ]ave [ C ]ancel [ E ]xit" get r
set colo to
set colo to w/b
read
endd
if r $ "Cc"
loop
endi
if r $ "Ss"
appe blan
repl ass_no with mAss_no
repl source with mSource
repl nam with mNam
repl init with mInit
repl addr with mAddr
repl Tax_pd with mTax_pd
repl D_pd with mD_pd
repl Tax_ass with mTax_ass
repl Recpt_no with mRecpt_no
repl tax_outs with mtax_outs
endi
if r $ "Ee"
exit
endi

```

```

mInit = init
mAddr = addr
mTax_pd = tax_pd
mD_pd = d_pd
mTax_Ass = Tax_Ass
mRecpt_no = Recpt_no
@7,8 say "Sources of Revenue" get mSource pict '@!'
@10,8 say "Name" get mNam pict '@!'
@10,48 say "Initial" get mInit pict '@!'
@12,8 say "Address" get mAddr pict '@!'
@12,48 say "Date Paid" get mD_pd
@14,8 say "Tax Paid" get mTax_pd
@14,48 say "Tax Assessed" get mTax_ass
@16,8 say "Receipt No" get mRecpt_no pict '@!'
read
set colo to w/r
    A = 20
    Do while A <= 22
        @A,22 say Replic (chr(176),40)
        A = A + 1
    endd
@21,25 say "Do You Want To ERASE Y / N ?"
cho = space(1)
do while .not. cho $ "YN"
    @21,54 get cho
    set colo to w/b
    read
    if cho $ "Yy"
        delete
        pack
        exit
    endi
    if cho $ "Nn"
        exit
        clea
        loop
    endi
endd
loop
endd
clea
retu
** eof of procedure master delete **

```

```

proc mslist
Do while .t.
clear
set colo to g+b/n
A = 0
Do while A <= 24
    @A,0 say Replic (chr(178),80)
    A = A + 1
endd
use mstfil
set colo to g/n

```

```

@3,17 clea to 5,71
set colo to w/b
@2,15 clea to 4,69
@2,15 to 4,69
@3,16 say "U P - TO D A T E LIST OF GENERATED R E V E N
U E"
set colo to w/b
@7,2 clea to 18,78
@8,5 say " Ass_Num "
@8,20 say " Name "
*@8,33 say " Initial"
@8,36 say " Date "
@8,44 say " Tax_Pd"
@8,54 say " Receipt_Num "
@8,67 say " Tax-Outstd"
line = 10
go top
do while .not. eof()
@line,4 say trim(Ass_No)
@line,19 say trim(Nam)
@line,28 say trim(Init)
@line,34 say D_pd
@line,44 say Tax_pd
@line,56 say trim(Recpt_No)
@line,68 say Tax_outs
skip
if line=18
do while .t.
choice = space(1)
set colo to w/r
A = 20
Do while A <= 22
@A,22 say Replic (chr(176),40)
A = A + 1
endd
@21,24 say " Press [ C ]ontinue or [ S ]uspend" get
choice pict '@!'
set colo to
set colo to w/b
read
if choice $ 'C'
exit
endif
if choice = 'S'
return
endif
endd
@9,3 clear to 18,77
@20,08 clear to 22,77
line = 10
endif
line=line+1
enddo
set colo to
choice = space(1)

```

```

do while .t.
  set colo to w/r
  A = 20
  Do while A <= 22
    @A,22 say Replic (chr(176),40)
    A = A + 1
  endd
  @21,28 say " [ E ]xit to main menu" get choice
  set colo to
  set colo to w/b
  read
  if choice $ 'eE'
    exit
  else
    loop
  endif
enddo
if choice $ 'eE'
  exit
endif
endd
return
** eof of procedure master list **

```

```

proc mtn
Do while .T.
clear
set colo to g+b/n
A = 0
Do while A<=24
@A,0 say replic (chr(178),80)
A = A + 1
endd
set colo to g/n
@4,19 clea to 6,66
set colo to
set colo to w/b
@3,17 clea to 5,64
@04,18 say " S T A T E REVENUE MAINTENANCE FILE MENU "
set color to
tom4=1
set inte on
set colo to g/n
@11,31 clea to 21,53
set colo to
set colo to w/r+b
@10,29 clea to 20,51
@10,29 to 20,51
@11,32 prompt "ADD TO THE RECORDS"
@13,32 prompt "EDIT RECORDS"
@15,32 prompt "DELETE RECORDS"
@17,32 prompt "LIST RECORDS"
@19,32 prompt "EXIT"
menu to tom4
set colo to

```

```

set inte off
do case
  case tom4 = 1
    do Sadd
  case tom4 = 2
    do Sedit
  case tom4 = 3
    do Sdel
  case tom4 = 4
    do Slist
  case tom4 = 5
    exit
  clear
endc
endd
clea
retur
** eof of procedure Maintenance file menu **

```

```

proc sadd
sele 1
use mstfil
sele 2
use state
Do while .t.
clear
set colo to g+b/n
  A = 0
  Do while A <= 24
    @A,0 say Replic (chr(178),80)
  A = A + 1
endd
mAss_no =space(14)
*mSource =space(20)
mNam =space(16)
mInit =space(8)
*mAddr =space(14)
*mStr =space(16)
mTax_pd = 0
mD_pd = ctod(' / / ')
mTax_ass = 0
mTax_disch = 0
mTax_outs = 0
mTax_pen = 0
mRecpt_no =space(14)
mTax_rem = 0
set colo to w/b
@2,5 clea to 17,78
@2,5 to 17,78
@3,20 say "Enter Assessed Number or 0 to exit" get mAss_no
pict '@!'
read
  if mass_no = "0"
    exit

```

```

        loop
      endi
sele 1
locate for ass_no = mAss_no
set colo to w/r
      A = 20
      Do while A <= 22
        @A,22 say Replic (chr(176),40)
        A = A + 1
      endd

*@20,23 clea to 22,61
if eof()
@21,25 say "Register Your Number in Master File"
sp =space(1)
do while .not. sp $ "Cc"
@22,25 say "Press [ C ]ontinue" get sp
set colo to
read
endd
clear
loop
endi
*sele 2
set colo to w/b
*@6,8 say "Revenue Sources" get mSource
@8,8 say "Name" get mNam pict '@!'
@8,46 say "Initial" get mInit pict '@!'
*@10,8 say "Address" get mAddr
*@10,44 say "Enter Box & Town" get mStr
@10,8 say "Tax Paid" get mTax_pd
@10,44 say "Date Paid" get mD_pd
@12,8 say "Tax Assessed" get mTax_ass
@12,44 say "Tax Discharged" get mTax_disch
@14,8 say "Tax Outstanding" get mTax_outs
@14,44 say "Tax Penalty" get mTax_pen
@16,8 say "Tax Remitted" get mTax_rem
@16,44 say "Receipt No" get mRecpt_no pict '@!'
set colo to
r = space(1)
Do While .not. r $ "SsCcEe"
set colo to w/r
      A = 20
      Do while A <= 22
        @A,22 say Replic (chr(176),45)
        A = A + 1
      endd

*@20,23 clea to 22,65
@21,25 say "[ S ]ave [ C ]ancel [ E ]xit " get r
set colo set colo to
set colo to w/b
read
endd
if r $ "Cc"

```

```

loop
endi

    if r $ "Ss"
        sele 2
appe blan
repl ass_no with mAss_no
*repl source with mSource
repl nam with mNam
repl init with mInit
*repl addr with mAddr
*repl str with mStr
repl Tax_pd with mTax_pd
repl D_pd with mD_pd
repl Tax_ass with mTax_ass
repl Tax_disch with mTax_disch
repl Tax_outs with mTax_outs
repl Tax_pen with mTax_pen
repl Tax_rem with mTax_rem
repl Recpt_No with mRecpt_No
mtot1= 0.00
mtot1 = mTax_pd + mTax_pen - mTax_disch
repl tot1 with mtot1
        endi
        if r $ "Ee"
            exit
        endi
sele 1
mTax_outs = 0.00
mTax_outs = mTax_outs + mtot1
repl Tax_outs with mTax_outs
repl d_pd with md_pd
skip
endd
clear
retu
** eof of procedure add to Maintenance **

```

```

proc sedit
Do while .t.
clear
set colo to g+b/n
A = 0
Do while A <= 24
    @A,0 say Replic (chr(178),80)
    A = A + 1
endd
use state
mAss_no =space(14)
mSource =space(20)
mNam =space(16)
mInit =space(8)
mAddr =space(14)
*mStr =space(16)

```

```

mTax_pd = 0
mD_pd = ctod(' / / ')
mTax_ass = 0
mTax_disch = 0
mTax_outs = 0
mTax_pen = 0
mRecpt_no = space(14)
mTax_rem = 0
set colo to w/b
@2,5 clea to 19,78
@2,5 to 19,78
@3,20 say "Enter Assessed Number or 0 to exit" get mAss_no
pict '@!'
read
if mass_no = "0"
exit
loop
endi
locate for ass_no = mAss_no
set colo to w/r
      A = 20
      Do while A <= 22
        @A,22 say Replic (chr(176),40)
        A = A + 1
      endd

*@20,19 clea to 22,64
if eof()
@21,24 say "Assessed Number Does Not Exist"
sp =space(1)
do while .not. sp $ "Cc"
24 say "Revenue Sources (do not include friend)" get sp
set colo to
read
endd
clear
loop
endi
mAss_no = Ass_no
mSource = source
mNam = nam
mInit = init
mAddr = addr
*mStr = str
mTax_pd = tax_pd
mD_pd = d_pd
mTax_Ass = Tax_Ass
mTax_disch = Tax_disch
mTax_outs = Tax_outs
mTax_pen = Tax_pen
mRecpt_no = Recpt_no
mTax_Rem = Tax_rem
set colo to w/b
@6,8 say "Revenue Sources" get mSource
@8,8 say "Name" get mNam pict '@!'

```

```

@8,46 say "Initial" get mInit pict '@!'
@10,8 say "Address" get mAddr
*@10,44 say "Enter Box & Town" get mStr
@12,8 say "Tax Paid" get mTax_pd
@12,44 say "Date Paid" get mD_pd
@14,8 say "Tax Assessed" get mTax_ass
@14,44 say "Tax Discharged" get mTax_disch
@16,8 say "Tax Outstanding" get mTax_outs
@16,44 say "Tax Penalty" get mTax_pen
@18,8 say "Tax Remitted" get mTax_rem
@18,44 say "Receipt No" get mRecpt_no pict '@!'
set colo to
r = space(1)
Do While .not. r $ "SsCcEe"
set colo to w/r
    A = 20
    Do while A <= 22
        @A,22 say Replic (chr(176),45)
        A = A + 1
    endd

*@20,19 clea to 22,64
@21,24 say " [ S ]ave      [ C ]ancel      [ E ]xit " get r
set colo to
set colo to w/b
read
endd
    if r $ "Cc"
        loop
    endi
    if r $ "Ss"
repl ass_no with mAss_no
repl source with mSource
repl nam with mNam
repl init with mInit
repl addr with mAddr
*repl str with mStr
repl Tax_pd with mTax_pd
repl D_pd with mD_pd
repl Tax_ass with mTax_ass
repl Tax_disch with mTax_disch
repl Tax_outs with mTax_outs
repl Tax_pen with mTax_pen
repl Tax_rem with mTax_rem
repl recpt_no with mRecpt_no
    endi
        if r $ "Ee"
            exit
        endi
    loop
clear
loop
endd
clear
retu

```

```
** eof of procedure edit maintenance **
```

```
proc sdel
Do while .t.
clear
set colo to g+b/n
  A = 0
  Do while A <= 24
  @A,0 say Replic (chr(178),80)
  A = A + 1
endd
use state
mAss_no =space(14)
mSource =space(20)
mNam =space(16)
mInit =space(8)
mAddr =space(14)
*mStr =space(16)
mTax_pd = 0
mD_pd = ctod(' / / ')
mTax_ass = 0
mTax_disch = 0
mTax_outs = 0
mTax_pen = 0
mRecpt_no =space(14)
mTax_rem = 0
set colo to w/b
@2,5 clea to 19,78
@2,5 to 19,78
@3,20 say "Enter Assessed Number or 0 to exit" get mAss_no
pict '@!'
read
if mass_no = "0"
exit
loop
endi
locate for ass_no = mAss_no
set colo to w/r
  A = 20
  Do while A <= 22
  @A,22 say Replic (chr(176),40)
  A = A + 1
endd

*@20,23 clea to 22,64
if eof()
@21,25 say "Assessed Number Does Not Exist"
sp =space(1)
do while .not. sp $ "Cc"
@22,25 say "Press [ C lontinue friend" get sp
set colo to
read
endd
clear
```

```

loop
endi
set colo to w/b
mAss_no = Ass_no
mSource = source
mNam = nam
mInit = init
mAddr = addr
*mStr = str
mTax_pd = tax_pd
mD_pd = d_pd
mTax_Ass = Tax_Ass
mTax_disch = Tax_disch
mTax_outs = Tax_outs
mTax_pen = Tax_pen
mRecpt_no = Recpt_no
mTax_Rem = Tax_rem
say "Revenue Sources" get mSource
@8,8 say "Name" get mNam pict '@!'
@8,46 say "Initial" get mInit pict '@!'
@10,8 say "Address" get mAddr
*@10,44 say "Enter Box & Town" get mStr
@12,8 say "Tax Paid" get mTax_pd
@12,44 say "Date Paid" get mD_pd
@14,8 say "Tax Assessed" get mTax_ass
@14,44 say "Tax Discharged" get mTax_disch
@16,8 say "Tax Outstanding" get mTax_outs
@16,44 say "Tax Penalty" get mTax_pen
@18,8 say "Tax Remitted" get mTax_rem
@18,44 say "Receipt No" get mRecpt_no pict '@!'
read
set colo to w/r
      A = 20
      Do while A <= 22
        @A,22 say Replic (chr(176),40)
        A = A + 1
      endd

*@20,23 clea to 22,64
@21,25 say "Do You Want To ERASE   Y / N   ?"
cho = space(1)
do while .not. cho $ "YN"
  @21,54 get cho
set colo to w/b
read
if cho $ "Yy"
  delete
  pack
  exit
endif
if cho $ "Nn"
  exit
  clea
  loop
endif

```

```
endd
loop
endd
clea
retu
** eof of procedure delete maintenance **
```

```
proc slist
Do while .t.
clear
set colo to g+b/n
  A = 0
  Do while A <= 24
    @A,0 say Replic (chr(178),80)
    A = A + 1
  endd
use state
set colo to g/n
@2,20 clea to 4,66
set colo to
set colo to w/b
@1,18 clea to 3,64
@2,19 say " LIST OF GENERATED REVENUE FROM THE STATE"
set colo to
set colo to w/b
@7,3 clea to 19,78
@7,3 to 19,78
@8,5 say " Ass_Num "
@8,20 say " Name"
*@8,33 say " Initial"
@8,36 say " Date "
@8,46 say " Tax_Pd"
@8,54 say " Receipt_Num "
@8,69 say " Total "
*@20,3 to 20,77
*@20,8 say "Message box"
line = 10
go top
do while .not. eof()
  @line,4 say trim(Ass_No)
  @line,19 say trim(Nam)
  @line,28 say trim(Init)
  @line,34 say D_pd
  @line,44 say Tax_pd
  @line,56 say trim(Recpt_No)
  @line,65 say Totl
  skip
  if line=18
    do while .t.
      choice = space(1)
      set colo to w/r
      A = 20
      Do while A <= 22
        @A,22 say Replic (chr(176),40)
```

```

        A = A + 1
    endd

    *           @20,20 clea to 22,60
say "Press [ C ] to continue or [ S ] suspend" get
    choice pict '@!'
        set colo to
        set colo to w/b
        read
        if choice $ 'C'
            exit
        endif
        if choice = 'S'
            return
        endif
    endd
    @9,3 clear to 19,76
    @21,08 clear to 22,76
    line = 10
endif
line=line+1
enddo
choice = space(1)
do while .t.
set colo to w/r
    A = 20
    Do while A <= 22
        @A,22 say Replic (chr(176),40)
        A = A + 1
    endd

*@20,20 clea to 22,60
@21,28 say " [E]xit to main menu" get choice
set colo to
    set colo to w/b
    read
    if choice $ 'eE'
        exit
    else
        loop
    endif
enddo
if choice $ 'eE'
    exit
endif
endd
return
** eof of procedure list records **

proc tdefa
Do while .t.
clea
set colo to g+b/n
    A = 0

```

```

Do while A <= 24
  @A,0 say Replic (chr(178),80)
  A = A + 1
endd
  set colo to
  set colo to g/n
    @4,19 clea to 6,62
    set colo to
  set colo to w/b
  @3,17 clea to 5,60
  @4,20 say "T A X   D E F A U L T E R S   M E N U"
    set colo to
    set colo to g/n
    @12,30 clea to 20,50
    set colo to
  set colo to w/b+r
  @11,28 clea to 19,48
  @11,28 to 19,48
  tom5 = 1
  set inte on
  @12,32 prompt "ADD RECORDS"
  @14,32 prompt "EDIT RECORDS"
  @16,32 prompt "DELETE RECORDS"
  @18,32 prompt "EXIT"
  menu to tom5
  set colo to
  set inte off
  Do case
    Case tom5 = 1
      do tadd
    case tom5 = 2
      do tedit
    case tom5 = 3
      do tdel
    case tom5 = 4
      exit
  endcas
  clea
endd
retu
** eof of procedure Tax defaulters Menu **

```

```

proc tadd
Do while .t.
clear

```