

**COMPUTERIZATION OF SAVINGS ACCOUNT
(A CASE STUDY OF INTER-CITY BANK PLC)**

BY

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COMPUTER SCIENCE**

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CERTIFICATION

Having read through this project carried out by MAHMOUD K BELLO, it is our opinion that it is up to the standard for Post-graduate Diploma in Computer Science.

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SUPERVISOR

DATE

DR. K. R. ADEBOYE
HEAD OF DEPARTMENT

DATE

EXTERNAL EXAMINER

DATE

DEDICATION

This Project work is dedicated to the course of Allah.

ACKNOWLEDGEMENT

Project work demands a lot of concentration, energy, patience from both the writer and other individuals whom in one way or the other contribute to its huge success. To these kind of people, one needs to recognise and express appreciation for their kind gesture.

First among such person is my Supervisor, Prince R Badamosi, a very energetic, charistimatic and above all a very committed person to a good cause. Despite his tight schedules, always took time to proof-read the write-up, make very helpful comments, advise and encourage where and when necessary through out the duration of the project work. BADMUS, I say thank you indeed.

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I must also not fail to express my sincere gratitude to my family members especially, Habiba Mahmoud for her encouragement to carry on with the course to completion.

My colleagues in the office, especially the Managing Director of Intercity Bank, also contributed their support to see me through with the programme. I thank them all.

ABSTRACT

In this modern era of High Technology, the banking sector has made considerable efforts in embracing the use of computers as regards their operations.

This project focuses on the need to develop a computerized approach of operating the savings account section of the bank. It emphasises the need for a new system to replace the existing one based on the current and the expected problems that are inherent in the current procedure in the organisation.

Indeed, the mode of operation of the proposed system is analysed and its stages of implementation. The implementation stage is done in a way to ensure reliability and continuity of savings account activities in the bank.

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CHAPTER ONE

INTRODUCTION

Indeed, the present human effort alone can no longer cope with the great demand of the present situation on the ground. The arrival of the modern technology particularly, computer application into many diverse aspects of our existence has really made life easier and many problems are gradually been brought into mankind's control.

One of the areas that has benefited most from the computer application is that of banking institution. Banking business now uses computer for series of tasks earlier done by manual process. Such areas include current account, savings account, fixed and short term deposit, credit control, loan advances, etc.

Indeed, of all the various areas of computer application in the banking industry, the area that easily comes to mind most often is that of savings account operation. This is due to the fact that savings account is the most popular of all the customer accounts in the bank and have the largest number of customers after current account. It is in this view that computer application in this section of banking operations that major savings can be made in the area of clerical forces (labour), since many hands are always required in manual operation. Besides, there is the need always for accurate and urgent savings account processing and the required reports produced without wasting much time of the customers.

Also, a fully computerized savings account operation will enhance

the competitive ability of the organisation in the banking industry; and also providing the management with easy reference accounting information when required. There is also room for adequate security measures for the record like the backup system in case of any accident.

It is in recognition of this reality that this project will give an analytical view of the computerization of savings account system in a banking industry using the Intercity Bank Plc as a case study. The term savings can be said to be refraining from spending or as not spending income on consumption. In other words, any after tax income which is not spent on the purchase of goods and services is regarded as been saved.

WHY SAVINGS?

Many people do have surpluses, which they either spend on luxuries or retain as savings. Indeed, people save due to the following assumptions:

1. Saving is done to enable the saver have something to fall back on in case of unexpected happenings.
2. People save in order to purchase or acquire a specific item. This could be for building houses, purchase cars, paying fees, insurance premiums, etc.
3. People save in order to meet up certain contractual obligations which have specific period(s) of payment.

4. People save especially in developed countries to go on vacation, studies, etc.

In the past, the rate of interest determines the volume of savings, that is people save more when the interest rate was high in order to gain the advantage of higher rates. On the other hand, when the interest rate falls, there would be a reduction in the savings. But this has been discovered to be untrue because despite low interest rates in some advanced countries, people still save especially to have something to spend for vacations and other unexpected events.

In Nigeria, individuals wanting to save can make a choice between the commercial bank or any other financial institutions or groups. The factors that often influence the choice of institutions are the degree of security, rate of return, accessibility, liquidity and above all, efficiency and promptness in attending to various customers needs.

Banking industry of today is highly competitive. To meet up with this competitiveness, new innovations are been introduced into the system, such as Electronic Funds Transfer (EFT), MoneyGram, Computers, etc.

AIMS AND OBJECTIVES OF THE STUDY

The aims of this work is to highlight ways of overcoming the various shortcomings associated with the present system. Also, the focus will be to bring out a new system for better and efficient customer services.

Computers are devices that are capable of retrieving, storing,

processing and manipulate data into information at a very fast rate than that of humans. Therefore, data obtained from the operational procedures in the existing system is coded into computer languages and input into the system so as to -

- a) Process information more accurately.
- b) Make information readily available
- c) Provide or process information more cheaply.

Thus, the aim and objectives of the proposed system will include:

- a) Increased efficiency and effectiveness of the new system, resulting in cost savings and operational efficiency, which are direct benefits to be derived.
- b) Enhancement of the competitive ability of the organisation and the improvement of customer relations as a result of more timely and accurate information.
- c) It will also help in reducing the number of hands required in handling the record books.
- d) It will also provide good avenue of keeping records in a well organised format.
- e) Create ease of recalling data at any given instance for reference or enquiry without delay.

Indeed, the attributes of the computer to accomplish any task with high speed and high level of accuracy makes it very relevant in the present time.

SCOPE AND LIMITATION OF STUDY

Despite the necessity for the substitution of a computer based

saving's accounting system, for manual procedures in these modern times carried out worldwide, there are still some problems to be faced due to the incapability of the new system to perform some relevant functions in the present operations procedures. This includes:

- 1) Verification of customers signatures, as at now customer's signatures cannot be computerized. Signature scanners do not give the desired level of accuracy
- 2) The computer based savings account system does not include filing of the signature cards in a signature card box.
- 3) It is rather incapable of making comparison between the customers passbook balance and the balance in the computer itself.
4. It cannot verify dates, that is, check whether the deposit or withdrawal forms are dated correctly.

METHODOLOGY

In an attempt to fashion out a new computer based savings accounting system, many fact-finding methods have to be involved in gathering the required information. This include:

- a) Observation - This involves direct study of the entire operations of the existing system in the Bank.
- b) Interviewing - Mainly to obtain relevant information from both the customers and the staff in the section under study.
- c) Record Inspection - Various forms, procedures used in the savings department were analysed and reviewed.

CHAPTER TWO

BANKING (A PERSPECTIVE)

A bank is a financial institution established for the sole purpose of keeping money and valuables for safety.

Banking plays important role in the economic sphere of a country through various monetary activities carried out by its defined function.

TYPES OF BANKS

Different banks were established, with different aims and objectives and offering different services to the general public. The following are some of the banks in operation now in Nigeria:

- a) The Central Bank
- b) The Commercial Banks
- c) The Development Banks
- d) Mortgage Banks
- e) Merchant Banks
- f) Community Banks
- g) Agricultural Loan Banks
- h) Cooperative Banks

Some basic services provided by the banks most especially the commercial banks are:

1. Accepting deposits - Banks accept both current and savings deposit accounts from customers for safe keeping.
2. Agents of Payment - Customers can instruct the bank to pay anyone or other party on their behalf.

3. Use of Cheque - Help to reduce the fear and other risks involved in carrying cash around.
4. Lending Agents - Gives loans and advances to customers (individual and corporate).
5. Sales of foreign exchange to the needed customers.
6. Provide services such as advising the businessmen and payment of insurance premium constantly.
7. Undertake the services of safeguarding valuable items of customers.

HISTORICAL BACKGROUND OF INTERCITY BANK PLC

Intercity Bank Plc was incorporated on 27th April, 1987 and a banking license obtained on 28th October, 1987. The Bank commenced operations on 28th October, 1988 as a Commercial Bank with special focus on treasury activities.

In a bid to secure a successful take-off of the bank, a three-year technical management agreement was entered into with First Bank of Nigeria Plc. However, this was prematurely terminated and replaced with a similar arrangement with International Merchant Bank Plc (IMB) in December, 1990. The agreement with IMB which was initially for three years was renewed for another two years from January, 1994 to terminate in December, 1995. Through these arrangements, the Bank has gotten access to experienced professionals from older and established financial institutions. A management succession plan drawn up in 1993 is currently being implemented.

Although, promoted by Niger State Government, the Bank's shareholding structure has changed over the years such that currently the promoter has become a minority shareholder. The current shareholding structure and beneficial ownership of the bank is as shown below:

Ownership Structure of Intercity Bank Plc

<u>Shareholder</u>	<u>Percentage %</u>
Niger State Development Co. Ltd.	13.92
El-Amin Limited	12.17
International Merchant Bank Plc	10.05
Niger State Trust Fund	9.66
Niger State Local Government	5.31
Other Corporate Bodies	16.79
Nigerian Citizens	<u>32.10</u>
	100%
	=====

ORGANISATIONAL STRUCTURE OF THE BANK

The Board of Directors is the highest decision making body of the Bank. The general policies of the Bank is determined by the board consisting of seven members chaired by AVM John N Doko (Rtd) and six others.

For ease of administration and to enhance service delivery to meet the needs of its customers, the bank is structured into three major groups namely - Banking Group, Services Group and Financial Group. Each of these groups have a number of Departments/Branches under

them. The Banking Group have Treasury & Financial Control Department and seven branches located at Victoria Island, Yaba, Minna, Suleja, Kaduna, Kano and Abuja while Services Group have Human Resources Management Department, Administration Department, Head Office Operations, Minna and Head Office Operations Department, Lagos and Financial Group have under it, Systems Department and Finance Department.

Reporting to the Managing Director/Chief Executive Officer are all Group Heads, Internal Audit & Control, Legal, Corporate Affairs Departments.

TYPES OF ACCOUNTS

a) Current Account - To open a current account, an introductory letter or references are required by the Bank. Cash, cheques, dividends can be paid into a current account. Also one can withdraw his cash by the use of the cheque leaflet provided by the bank. However, you are not allowed to draw against an uncleared cheque, draft, likewise, you cannot overdraw your account without prior arrangement with the bank.

For operating a current account, banks usually charge certain percentage for services often called "Commission on Turnover" (COT) on monthly or quarterly basis. However, no charge is made for clearing of cheques drawn and payable anywhere within Nigeria.

Details of money, cheques, money order and dividend coming on or going out of your account are usually set out in form of

statements. The statement also shows how much is the balance in the account. The customer has the right to enquire about his/her statement of account anytime. Any error discovered in the statement should be reported immediately to the officer in charge of account.

- b) Savings Account - Here no letter of introduction or reference is required before an account could be opened, however, one may be required to open this nature of account with a specified minimum amount. Presently, the minimum amount required for this account to be opened in Intercity Bank Plc, Minna is fixed at N10,000.00 (Ten thousand Naira only).

You can deposit into or withdraw from your account on presentation of your passbook at the branch where the account is opened. The main disadvantage here is that cheques cannot be used to withdraw from your savings account, but cheques can be paid into the account by special arrangement approved by the Management of the Bank. A saving account earns interest the minimum of which is now fixed by the central bank for all commercial banks.

- c) Deposit Account - This can be subdivided into fixed and short deposit accounts.

Under the fixed deposit accounts one can arrange to deposit any amount with the bank for a fixed period. The terms for such deposits including interest payable thereon are subject to negotiation between the depositor and the bank.

The deposit can be renewed after maturity for a further fixed period depending upon the depositors request.

CHAPTER THREE

SYSTEM ANALYSIS AND DESIGN

System analysis and design is a critical study of the current procedures with a view to designing a better and more efficient alternative procedures using computer and other resources to perform tasks which meet the information needs of an organisation. The objective of system analysis is to design an effective computerized procedure which will create benefits in excess of those created by other means. It entails a process of collecting and analysing facts in respect of the existing operations and procedures in order to obtain a full appreciation of the situation prevailing so that an effective computerized system can be designed and implemented.

FEASIBILITY STUDY

After a problem has been defined and various approaches to the solution have been considered with a view of selecting the best, the next important and vital step is to conduct a feasibility study.

Basically, the function of the feasibility study is to determine whether a new system would be more beneficial to the firm than the present one. The importance of doing a thorough explanatory survey, the initial step of a feasibility study cannot be over emphasised. It is extremely essential for the future well-being of the bank that this time - consuming first step be done accurately and methodically. A fast and half-hearted attempt will often result into a premature conclusion about a new system.

It is only after the installation that the real problems come to light, which often could result in major data processing problems or data processing costs which could be higher than envisaged. Indeed, a careful and systematic approach to this study is a must for installing a successful data processing system.

PROJECT FEASIBILITY TESTING

For this project to be judged feasibly, it must undergo the following three main tests:

- 1) Operational Feasibility Testing
 - 2) Technical Feasibility Testing
 - 3) Economic Feasibility Testing
1. Operational Feasibility - This relates or is concerned with the workability of the proposed system. When developed and installed, generally what is considered is that, the project has to receive the support of the management and user.
 2. Technical Feasibility - This test seeks to clarify if the proposed project can be done with current equipment, existing software technology and available personnel. The staff as at now in the computer unit can manage but for more efficiency and maintenance, there is the need to employ more staff to man the new development.
 3. Economical Feasibility - This aspect is taken into consideration to assess cost of implementing a proposed project along side with the benefit to be derived from implementing it.

FINDINGS

Based on the Feasibility Study carried out, the project is operationally feasible, because the management is very much keen in the computerization of the entire banking operations to boost their efficiency.

Technically, the project is very feasible in that the bank already has a computer section and has purchased enough computers and terminals which are presently in use.

There are some professionally qualified computer staff on the ground while others are receiving in-house training or attending professional computer courses in some higher institutions.

Economically, the project is feasible since the bank has almost all that will be needed for the new system to be operated.

THE CURRENT SYSTEM

The use of the current system of savings account operations where virtually everything is done manually is associated with so many problems.

Some of the problems associated with the present procedures methods of operating a savings account involves the following:

- a) The processes are time consuming
- b) The process involve a lot of writing thereby lot of paper work is involved.
- c) A lot of staff is needed in carrying out this job.
- d) Easy reference and enquiry is not possible as one needs to open pages before getting to a desired ledger card.

- e) Problem of carrying ledger sheet binder up and down, as the individual ledger sheets binded together could get turn and often leads to fatigue.
- f) The present system gives easy access to fraudulent practices as figures could be altered easily.
- g) No security for records and documents.
- h) Subject to errors in calculation during interest calculation period.
- i) The processes are very inefficient as customers could be kept waiting for long hours.

COST AND BENEFIT ANALYSIS OF THE NEW SYSTEM

OPERATING COST (1 YEAR)

a) Supplies - Diskettes (50 Pkts)	-	N50,000.00
b) Stationery	-	50,000.00
c) Equipment Maintenance	-	25,000.00
d) Program Maintenance	-	15,000.00
e) Utilities	-	10,000.00
f) Miscellaneous Expenses	-	<u>15,000.00</u>
		165,000.00
		=====

DEVELOPMENT COST

Software Development & Implementation	-	15,000.00
4 IBM PC at 55,000 each	-	220,000.00
2 Laser (6L) Printers at 45,000.00	-	90,000.00
Installation	-	10,000.00
Personnel Training (3 weeks)	-	7,500.00
UPS	-	<u>20,000.00</u>
		362,500.00
		=====
Overall Total	-	N527,500.00
		=====

SYSTEM BENEFITS

1. Processing and Production of Information more cheaply
2. Making information available more timely.
3. Efficiency and improvement in customers relations due to timely and accurate information.
4. More organised format of keeping records.
5. The output printed on computer flow-line papers is more portable, well organised and clearer than that of the existing system
6. Closed accounts can easily be deleted from the system to create more storage facilities in the database.

INPUT SPECIFICATION

This is based on the input items to be used. Such items include:

- a) Account Opening Form
- b) Withdrawal Form
- c) Closed of Account Form
- a) Account Opening Form - When a new account is opened by a customer. The personal data of the customer needs to be given. Such checklist include -
 - i) Account Number
 - ii) Customer's Name
 - iii) Official Address
 - iv) Occupation
 - v) Marital Status
 - vi) Account Status Code
 - vii) Account Class (Minor, Personal, Joint,

Society, etc)

viii) Initial Deposit

b) DEPOSIT FORM

This has the following features on it, that is:

- a) Account Number
- b) Customer's Name, Address and Signature
- c) Amount to be deposited
- d) Passbook Number
- e) Balance on the account (official work)

c) WITHDRAWAL FORM

This is very similar to the deposit voucher form

d) CLOSED OF ACCOUNT FORM

Presently, there is no prescribed form for this type of transaction. The customer or account holder merely informs the bank for his/her intention to close the account. However, the form used for withdrawal is also applicable here.

OUTPUT SPECIFICATION

Output refers to the results that are generated by the system. The output from a computer system is required primarily to communicate the results of processing to users or other system or more importantly to provide a permanent (hard) copy of these results for consultation.

Specifically, the output form of the proposed system is designed to generate required reports on the transaction carried out.

SYSTEM CONFIGURATION

An IBM PC/AT

- Size - 386
- Memory - 640 KBYTE RAM
- 80 MBYTE HDD
- Speed - 33 NGHZ
- Disk Drives - 3.5, 5.25

A monochrome or colour graphics monitor

- Accessories - MS-DOS 5.0
- Monitor Anti-Virus
- Windows for work
- Software - Wordperfect 5.0
- dbase IV

Power Supply - UPS

Printer

CHAPTER FOUR

PROGRAM/SOFTWARE DEVELOPMENT/IMPLEMENTATION

INTRODUCTION

An organisation initiate a system development project if there is a problem with the existing system, in terms of errors, delays, system inefficiencies and the desire to increase profits or reduce costs.

CHOICE OF LANGUAGE

Database management system is a software, expands, and maintain the data contained in the database. This software enables the user to record, organise, select, summarise, extract report on and manage the data contained.

The database management system keep related information in files which are organised into rows and columns with each row making up a record and a column of data is known as a field and the column heading is a field name.

FEATURES OF LANGUAGE CHOSEN

1. Data Integration - It is opined that data from several files is coordinated, accessed and operated as if in one file.
2. Data Redundancy is Reduced - With data base management system the possibility of data appearing in more that one file without arranging it to suit the application programme accessing the data leads to wastage of storage space and duplication of efforts is greatly reduced.
3. Data Independence is Achieved - Dbase enhances data independence as more data comes in, changes occur and the

programme accessing the data must be changed to conform with the changing nature of data.

4. Data Integration Is Achieved - Here when only one data or consistent information is recorded, this avoids data redundancy thereby resulting in data integration as one consistent update will achieve a new record status for all applications.

Dbase IV which is an advanced version of Dbase which provides a full relational database environment to users will be used.

FILE SPECIFICATIONS

The proposed system will be developed with Dbase IV. This will require creation of database files which will serve as storage for data that are needed to be processed and those that are the results of processing.

Indeed, the new system will require about five (5) database files namely:

Master.dbf, status.dbf class.dbf

Daily.dbf and Moved.dbf

- 1) MASTER.DBF - This is a file that contains the details of individual customers and their balances. The structure of this file is thus:

S/NO	FIELD NAME	FIELD TYPE	WIDTH	DEL.	INDEX
1.	ANUB	CHARACTER	7		N
2.	CNAME	CHARACTER	35		N
3.	ADDR1	CHARACTER	40		N
4.	DOB	DATE	8		N

2) STATUS.DBF - This is a reference file which contains the various accounts status that a customer may have and their respective codes. The structures looks thus:

S/NO.	FIELD NAME	DESCRIPTION	FIELD TYPE	WIDTH	INDEX
1.	CODE	Status Code	Character	1	N
2.	DESC.	Status Code	Character	17	N

3) CLASS.DBF - This is a file that contains the various account classes such as personal, joint, society, etc, that an account could be and their respective codes. The format of this file is the same as the Status.DBF; except in the description in which it will be class code.

4) DAILY.DBF - This is a file that will contain the daily transactions of customers. This involves all the transactions that occur within a particular date. The structure looks thus:

S/NO.	FIELD NAME	DESCRIPTION	FIELD TYPE	WIDTH
1.	DATE	Daily Date	Date	8
2.	ANUM	Account Number	Character	7
3.	CNAME	Customer Name	Character	30
4.	CBAL.	Current Balance	Numeric	13/2
5.	Dr	Debit	Numeric	13/2
6.	Cr	Credit	Numeric	13/2
7.	Nbal	New Balance	Numeric	13/2

5) MOVED.DBF - This is a file that contains transactions which occur within a week. The daily transactions are being entered

into this file at the end of the day throughout the week. The format is thus:

S/NO.	FIELD NAME	DESCRIPTION	FIELD TYPE	WIDTH
1.	DATE	Daily Date	Date	8
2.	ANUM	Account Number	Character	7
3.	CNAME	Customers Name	Character	30
4.	CBAL.	Current Balance	Numeric	13/2
5.	Dr	Debit	Numeric	13/2

CHANGE-OVER PROCEDURES/SYSTEM CONVERSION

Operation of new system is the process of converting from old system to new system. It involves the following processes:

1. Parallel System - This consist of feeding both systems with the same input data and comparing files and output results. During parallel operations, mistakes often found are not those of the new system, but are of the result of the old system. These differences should be reconciled as far as it is economically feasible.
2. Direct System - This is just sudden move from the old to the new system. The main disadvantage is that if a problem comes up, it may lead to total stoppage of work until it is resolved.
3. Staged System - This is a gradual movement from one stage to the other in a piece-meal like manner. The problems encountered could be sorted out with sufficient time. The main disadvantage here is that the process is very slow and

could be cumbersome.

FINDINGS

Once the new system has been completely converted, the Data processing section should spend several days checking with all officers about their respective area. As with every new installation, minor adjustments can be expected. The system as initially designed should be flexible enough to accommodate the changes.

SYSTEM TESTING

System testing is the key stage in system implementation. It involves the use of test data on the new system in order to ensure that the system works accurately and efficiently before live operations commence.

The system test in implementation serves as a confirmation that all is correct and an opportunity to show the users that the system is working as expected.

STARTING SYSTEM

In order for the user to have access to the program, the following steps should be followed:

- a) Change directory to dbase;
- b) Type DBASE and press ENTER key to activate the control centre of dbase IV;
- c) Press ESC key to go to the dot prompt;

d) Type DO IC to activate the main menu of this new system. Once this is done, you are prompt to the main menu.

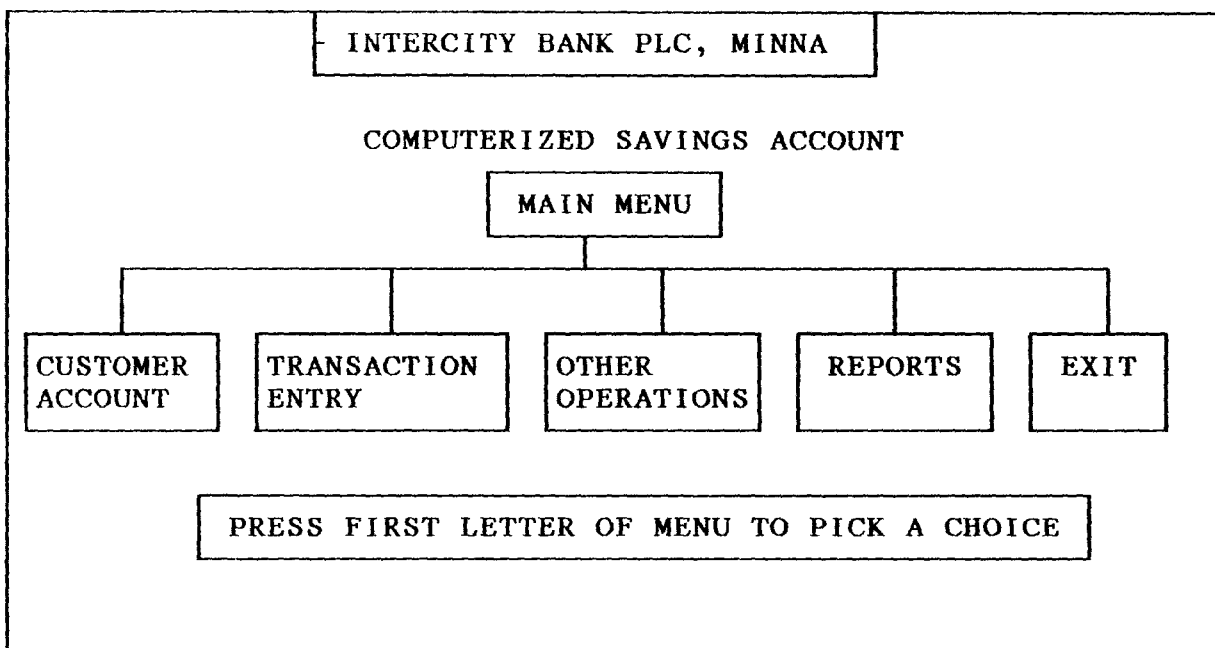
FILE MENU STRUCTURE

The new system is made up of the main menu which consists of five options namely:

- a) Customer account
- b) Transactions entry
- c) Other operations
- d) Reports
- e) Exit/Quit

At this main menu, the system will prompt you to enter the first letter of any of the available options to pick choice.

The format for the main menu looks thus:



CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

The continued substitution of computer based systems for manual procedures has in the present day become a worldwide phenomenal. This is due to its relevance in virtually all areas of human endeavours.

This interest is intensified by the capability of computers in performing a given set of procedures with all the necessary accuracy.

Indeed, its versatility and high speed to perform a given task within reasonable time makes it applicable in the present time. It would be acceptable that computer based procedures need to be designed in a way to achieve the benefit of computer usage in terms of speed, full automation of procedures, avoid constant problems, ensure data security. In view of this fact that a newly designed computerized savings accounting system is recommended for the bank. Specifically, the bank will derive the following benefits from the new system:

1. Enhance the efficient operations of the savings department of the bank.
2. Creation of speedy savings accounting processing and generation of necessary reports.
3. Provision of automated procedures especially in terms of computations that is required during data entry.
4. Provision of adequate data security.

Given the above benefits of the newly designed system, it is highly

recommended that the hardware requirement for this new system be increased adequately to meet with the urgent need of the computerized process.

In addition, intending users of the new system should be adequately briefed and prepared for the usage of the new system.

Conclusively therefore, the pursuance of the installation of this newly designed system needs to be absolute as all the procedures have been tested and confirmed to be very efficient. Indeed, its application in the savings account operations will meet both the present and future needs of the savings accounting procedures of the bank.

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FB.PRG

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set talk off
set stat off
set safe off
set scor off
set colo to w/b
do while .t.
  clea
  @0,19 to 2,60 doub
  @1,21 say "INTERCITY BANK PLC"
  @0,0 TO 24,79 DOUB
  @3,25 TO 5,54 DOUB
  @4,26 SAY "COMPUTERISED SAVINGS ACCOUNT"
  @6,30 TO 8,49
  @7,32 SAY "M A I N M E N U"
  @9,1 TO 9,78
  @10,1 TO 12,18
  @10,21 TO 12,39
  @10,42 TO 12,59
  @10,62 TO 12,70
  @10,73 TO 12,78
  SET COLO TO R
  @ 11,2 SAY "C"
  @ 11,22 SAY "T"
  @ 11,43 SAY "O"
  @ 11,63 SAY "R"
  @ 11,74 SAY "E"
  SET COLO TO W/B
  @ 11,3 SAY "USTOMER ACCOUNT"
  @ 11,23 SAY "RANSACTION ENTRY"
  @ 11,44 SAY "THER OPERATIONS"
  @ 11,64 SAY "EPORTS"
  @ 11,74 SAY "XIT"
  @ 21,17 TO 23,62
  @ 22,18 SAY "PRESS FIRST LETTER OF MENU TO PICK CHOICE:"
  DO WHILE .T.
    CH=" "
    SET COLO TO B/W
    @ 22,61 GET CH PICT "!"
    READ
    SET COLO TO W/B
    IF CH $ 'CTORE'
      EXIT
    ELSE
      LOOP
    ENDI
  ENDD
  @ 21,17 CLEA TO 23,62
  DO CASE
    CASE CH='C'
      DO CMENU
    CASE CH='T'
```

```

        DO THENU
        CASE CH='O'
        DO OMENU
        CASE CH='R'
        DO RMENU
        OTHE
        EXIT
    ENDC
ENDD
CLEA
RETU

*CUSTOMER MENU OPTION*
*CMENU.PRG

@ 13,9 SAY CHR(25)
DO WHILE .T.
    @ 14,1 TO 22,24
    @ 20,2 TO 20,23
    @ 15,2 SAY '[C]'
    @ 16,2 SAY '[M]'
    @ 17,2 SAY '[V]'
    @ 18,2 SAY '[D]'
    @ 19,2 SAY '[E]'
    @ 15,3 SAY 'REATING NEW ACCOUNT'
    @ 16,3 SAY 'ODIFYING ACCOUNT'
    @ 17,3 SAY 'IEWING ACCOUNT'
    @ 18,3 SAY 'ELETING ACCOUNT'
    @ 19,3 SAY 'XIT'
    @ 21,6 SAY 'PICK CHOICE:'
DO WHILE .T.
    CH = ' '
    SET COLO TO B/W
    @21,19 GET CH PICT '!'
    READ
    SET COLO TO W/B
    IF CH $ 'CMVDE'
    EXIT
    ELSE
    LOOP
    ENDI
ENDD
DO CASE
    CASE CH='C'
        DO ADD
    CASE CH='M'
        DO EDIT
    CASE CH='V'
        DO VIEW
    CASE CH='D'
        DO DELETE
    OTHE
        EXIT
ENDC

```

```
ENDD  
CLEA  
RETU
```

```
*TRANSACTION MENU*  
*TMENU.PRG
```

```
@ 13,9 SAY CHR(25)  
DO WHILE .T.  
  @ 14,21 TO 21,39  
  @ 19,22 TO 19,38  
  SET INTE ON  
  @ 15,24 SAY '[D]'  
  @ 16,24 SAY '[W]'  
  @ 17,24 SAY '[T]'  
  @ 18,24 SAY '[E]'  
  @ 15,27 SAY 'EPOSIT'  
  @ 16,27 SAY 'ITHDRAWAL'  
  @ 17,27 SAY 'RANSFER'  
  @ 18,27 SAY 'XIT'  
  @ 20,23 SAY 'PICK CHOICE:'  
  DO WHILE .T.  
    CH = ' '  
    SET COLO TO B/W  
    @20,36 GET CH PICT '!'  
    READ  
    SET COLO TO W/B  
    IF CH $ 'DWTE'  
      EXIT  
    ELSE  
      LOOP  
    ENDI  
  ENDD  
  DO CASE  
    CASE CH='D'  
      DO DEP  
    CASE CH='W'  
      DO WITH  
    CASE CH='T'  
      DO TRANS  
    OTHE  
      EXIT  
  ENDC  
ENDD  
CLEA  
RETU
```

```
*OPERATIONS MENU*  
*OMENU.PRG
```

```
@ 13,9 SAY CHR(25)  
DO WHILE .T.  
  @ 14,42 TO 20,59
```

```

@ 18,43 TO 18,58
SET INTE ON
@ 15,43 SAY '[A]'
@ 16,43 SAY '[I]'
@ 17,43 SAY '[E]'
@ 15,46 SAY 'CCOUNT STATUS'
@ 16,46 SAY 'NTEREST CALC'
@ 17,27 SAY 'XIT'
@ 19,44 SAY 'PICK CHOICE:'
DO WHILE .T.
  CH = ' '
  SET COLO TO B/W
  @20,36 GET CH PICT '!'
  READ
  SET COLO TO W/B
  IF CH $ 'AIE'
    EXIT
  ELSE
    LOOP
  ENDI
ENDD
DO CASE
  CASE CH='A'
    DO STATUS
  CASE CH='I'
    DO INTEREST
  OTHE
    EXIT
ENDC
ENDD
CLEA
RETO

```

```

*REPORTS MENU*
*RMENU.PRG

```

```

@ 13,9 SAY CHR(25)
DO WHILE .T.
  @ 14,59 TO 23,77
  @ 21,60 TO 21,76
  @ 15,60 SAY '[T]'
  @ 16,60 SAY '[A]'
  @ 17,60 SAY '[M]'
  @ 18,60 SAY '[F]'
  @ 19,60 SAY '[D]'
  @ 20,60 SAY '[E]'
  @ 15,63 SAY 'RANSACTION LIST'
  @ 16,63 SAY 'UDIT TRAIL'
  @ 17,63 SAY 'OVED LIST'
  @ 18,63 SAY 'ULL LIST'
  @ 19,63 SAY 'ORMANT LIST'
  @ 20,63 SAY 'XIT'
  @ 22,61 SAY 'PICK CHOICE:'

```

```

DO WHILE .T.
  CH = ' '
  SET COLO TO B/W
  @22,74 GET CH PICT '!'
  READ
  SET COLO TO W/B
  IF CH $ 'TAMFDE'
    EXIT
  ELSE
    LOOP
  ENDI
ENDD
DO CASE
  CASE CH='T'
    DO LIST1
  CASE CH='A'
    DO LIST2
  CASE CH='M'
    DO LIST3
  CASE CH='F'
    DO LIST4
  CASE CH='D'
    DO LIST5
  OTHE
    EXIT
ENOC
ENDD
CLEA
RETN

*ADD.PRG

SELE 1
  USE MASTER
SELE 2
  USE STATUS
SELE 3
  USE CLASS
SELE 4
  USE DAILY
MDATE=DATE()
STOR SPAC(40) TO MADDR1, MADDR2
STOR SPAC(1) TO MSEX, MASC, MACC
STOR CTOD(' / / ') TO MDOB, MDAC
STOR 0 TO MIDEP, MBAL
MANUMB=SPAC(7)
MCNME(SPAC(35))
MOCC=SPAC(15)
MPB=SPAC(9)
SELE 1
DO WHIL .T.
  @ 0,25 TO 2, 54 DOUB
  @ 1,26 SAY 'COMPUTERISED SAVINGS ACCOUNT'

```

```

@ 0,3 TO 24,76 DOUB
@ 22,4 TO 22,75
@ 3,26 TO 5,53 DOUB
@ 4,27 SAY 'SAVINGS ACCOUNT INPUT FORM'
@ 7,6 SAY 'ACCOUNT NUMBER (OR PRESS "9999999" TO EXIT): ' GE
MANUMB PICT '@!'
READ
IF MANUMB = '9999999'
  EXIT
ENDI
GO TOP
LOCA FOR ANUMB=MANUMB
IF FOUND()
  @23,17 SAY 'ACCOUNT NUMBER ALREADY EXIST - PRESS ANY KEY'
  SET CONS OFF
  WAIT
  SET CONS ON
  MACNUMB=SPAC(7)
  @23,17 CLEA TO 23,65
  LOOP
ENDI
@9,6 SAY "CUSTOMER'S NAME:" GET MCNAME PICT '@!'
@11,6 SAY "OFFICE ADDRESS:" GET MADDR1 PICT '@!'
@13,6 SAY "HOUSE ADDRESS:" GET MADDR2 PICT '@!'
@15,6 SAY "DATE OF BIRTH:" GET MDOB
@15,35 SAY "SEX:" GET MSEX PICT '@!'
@15,47 SAY "OCCUPATION:" GET MOCC PICT '@!'
@17,6 SAY "DATE ACCOUNT OPENED"
@17,30 SAY "ACCOUNT STATUS CODE"
@17,53 SAY "ACCOUNT CLASS CODE"
@20,6 SAY "INITIAL DEPOSIT: #"
@20,43 SAY "PASSBOOK NO. :"
READ
@ 18,11 GET MDAC
READ
DO WHILE .T.
  @18,30 GET MASC
  READ
  SELE E
  GO TOP
  LOCA FOR MASC=CODE
  IF .NOT. FOUND()
    @23,17 SAY "ACCOUNT STATUS CODE NOT EXISTING...PRESS ANY KE
    SET CONS OFF
    WAIT
    SET CONS ON
    @23,17 CLEA TO 23,64
    LOOP
  ENDI
  MDESC1=DESC
  EXIT
ENDD
@ 18,30 GET MASC
@ 18,32 GET MDESC1

```



```

CLEAR GETS
DO WHILE .T.
    @ 18,53 GET MACC
    READ
    SELE C
    GO TOP
    LOCA FOR MACC=CODE
    IF .NOT. FOUND()
    @23,18 SAY "ACCOUNT CLASS CODE NOT EXISTING....PRESS ANY KEY"
    SET CONS OFF
    WAIT
    SET CONS ON
    @23,17 CLEA TO 23,64
    LOOP
    ENDI
    MDESC2=DESC
    EXIT
ENDD
@18,53 GET MACC
@18,55 GET MDESC2
CLEAR GETS
@20,24 GET MIDEP PICT '9,999,999.99'
@20,57 GET MPB PICT '@!'
READ
@23,18 SAY '[S]AVE, [R]EPEAT, [A]BANDON - PICK CHOICE:'
DO WHILE .T.
    CH=' '
    @23,61 GET CH PICT "!"
    READ
    IF CH $ 'SRA'
    EXIT
    ELSE
    LOOP
    ENDI
ENDD
@23,15 CLEA TO 23,65
IF CH $ 'SA'
    IF CH='S'
        SELE 1
        APPE BLAN
        REPL ADDR1 WITH MADDR1, ADDR2 WITH MADDR2, SEX WITH MSEX
        REPL ASC WITH MASC, ACC WITH MACC, DOB WITH MDOB
        REPL DAC WITH MDAC, IDEP WITH MIDEP, BAL WITH MBAL
        REPL ANUMB WITH MANUMB, CNAME WITH MCNAME, OCC WITH MOCC
        REPL DLO WITH MDAC, PB WITH MPB, BAL WITH IDEP
    ENDI
    STOR SPAC(40) TO MADDR1,MADDR2
    STOR SPAC(1) TO MSEX, MASC, MDAC
    STOR CTOD(' / / ') TO MDOB, MDAC
    STOR 0 TO MIDEP, MBAL
    MANUMB=SPAC(7)
    MCNAME=SPAC(35)
    MOCC=SPAC(15)
    MPB=SPAC(9)

```

```
      CLEA
    ENDI
  SELE 1
ENDD
CLOS ALL
CLEA
RETU
```

*EDIT.PRG

```
SELE 1
  USE MASTER
SELE 2
  USE STATUS
SELE 3
  USE CLASS
SELE 4
  USE DAILY
MDATE=DATE( )
MANUMB=SPAC(7)
N=0
SELE 1
CLEA
DO WHIL .T.
  @0,25 TO 2,54 DOUB
  @1,26 SAY 'COMPUTERISED SAVINGS ACCOUNT'
  @0,3 TO 24,76 DOUB
  @22,4 TO 22,75
  @3,25 TO 5,54 DOUB
  @4,26 SAY 'SAVINGS ACCOUNT EDITING FORM'
  @7,6 SAY 'ACCOUNT NUMBER (OR PRESS '999999' TO EXIT):' GI
MANUMB PICT '@!'
  IF N=1
    N=0
    CLEA GETS
  ELSE
    READ
  ENDI
  IF MANUMB='9999999'
    EXIT
  ENDI
  GO TOP
  LOCA FOR ANUMB=MANUMB
  IF .NOT. FOUND( )
    @23,17 SAY "ACCOUNT NUMBER DOES NOT EXIST - PRESS ANY KEY
    SET CONS OFF
    WAIT
    SET CONS ON
    MACNUMB=SPAC(7)
    @23,17 CLEA TO 23,65
  LOOP
ENDD
MADDR1=ADDR1
```

```

MADDR2=ADDR2
MSEX=SEX
MASC=ASC
MACC=ACC
MDOB=DOB
MDAC=DAC
MIDEP=IDEP
MBAL=BAL
MCNAME=CNAME
MOCC=OCC
MPB=PB
SELE B
GO TOP
LOCA FOR MASC=CODE
MDESC1=DESC
SELE C
GO TOP
LOCA FOR MACC=CODE
MDESC2=DESC
@9,6 SAY "CUSTOMER'S NAME:" GET MCNAME PICT '@!'
@11,6 SAY "OFFICE ADDRESS:" GET MADDR1 PICT '@!'
@13,6 SAY "HOUSE ADDRESS:" GET MADDR2 PICT '@!'
@15,6 SAY "DATE OF BIRTH:" GET MDOB
@15,35 SAY "SEX:" GET MSEX PICT '@!'
@15,47 SAY "OCCUPATION:" GET MOCC PICT '@!'
@17,6 SAY "DATE ACCOUNT OPENED"
@17,30 SAY "ACCOUNT STATUS CODE"
@17,53 SAY "ACCOUNT CLASS CODE"
@18,11 GET MDAC
@18,30 GET MASC
@18,32 GET MDESC1
@18,53 GET MACC
@18,55 GET MDESC2
@20,6 SAY "INITIAL DEPOSIT: #"
@20,43 SAY "PASSBOOK NO. :"
@20,24 SAY MIDEP PICT '9,999,999.99'
@20,57 SAY MPB PICT '@!'
CLEA GETS
@9,23 GET MCNAME PICT '@!'
@11,22 GET MADDR1 PICT '@!'
@13,22 GET MADDR2 PICT '@!'
@15,21 GET MDOB
@15,40 GET MSEX PICT '!'
@15,59 GET MOCC PICT '@!'
@18,11 GET MDAC
READ
DO WHILE .T.
    @18,30 GET MASC
    READ
    SELE B
    GO TOP
    LOCA FOR MASC=CODE
    IF .NOT. FOUND()
        @23,17 SAY "ACCOUNT STATUS CODE NOT EXISTING...PRESS ANY KEY"

```

```

SET CONS OFF
WAIT
SET CONS ON
@23,17 CLEA TO 23,64
LOOP
ENDI
MDESC1=DESC
EXIT
ENDD
@ 18,30 GET MASC
@ 18,32 GET MDESC1
CLEAR GETS
DO WHIL .T.
  @ 18,53 GET MACC
  READ
  SELE C
  GO TOP
  LOCA FOR MACC=CODE
  IF .NOT. FOUND()
  @23,18 SAY "ACCOUNT CLASS CODE NOT EXISTING....PRESS ANY KEY"
  SET CONS OFF
  WAIT
  SET CONS ON
  @23,17 CLEA TO 23,64
  LOOP
  ENDI
  MDESC2=DESC
  EXIT
ENDD
@18,53 GET MACC
@18,55 GET MDESC2
CLEA GETS
@20,24 GET MIDEP PICT '9,999,999.99'
@20,57 GET MPB PICT '@!'
READ
@23,18 SAY '[S]AVE, [R]EPEAT, [A]BANDON - PICK CHOICE:'
DO WHIL .T.
  CH=' '
  @23,61 GET CH PICT "!"
  READ
  IF CH $ 'SRA'
  EXIT
  ELSE
  LOOP
  ENDI
ENDD
@23,15 CLEA TO 23,65
IF CH $ 'SA'
  IF CH='S'
  SELE 1
  APPE BLAN
  REPL ADDR1 WITH MADDR1, ADDR2 WITH MADDR2, SEX WITH MSEX
  REPL ASC WITH MASC, ACC WITH MACC, DOB WITH MDOB
  REPL DAC WITH MDAC, IDEP WITH MIDEP, BAL WITH MBAL

```

```

        REPL CNAME WITH MCNAME, OCC WITH MOCC
        REPL DLO WITH MDATE, PB WITH MPB
    ENDI
    MANUMB=SPAC(7)
    CLEA
ELSE
    N=1
ENDI
SELE 1
ENDD
CLOS ALL
CLEA
RETU

```

*VIEW.PRG

```

SELE 1
    USE MASTER
SELE 2
    USE STATUS
SELE 3
    USE CLASS
SELE 4
    USE DAILY
MDATE=DATE()
N=0
SELE 1
DO WHIL .T.
    CLEA
    MANUMB=SPAC(7)
    @0,25 TO 2,54 DOUB
    @1,26 SAY 'COMPUTERISED SAVINGS ACCOUNT'
    @0,3 TO 24,76 DOUB
    @3,25 TO 5,54 DOUB
    @4,26 SAY 'SAVINGS CCOUNT VIEWING FORM'
    @7,6 SAY 'ACCOUNT NUMBER (OR PRESS '9999999' TO EXIT):' GET
MANUMB PICT '@!'
    IF N=1
        N=0
        CLEA GETS
    ELSE
        READ
    ENDI
    IF MANUMB='9999999'
        EXIT
    ENDI
GO TOP
LOCA FOR ANUMB=MANUMB
IF .NOT. FOUND()
    @23,17 SAY 'ACCOUNT NUMBER DOES NOT EXIST - PRESS ANY KEY'
    SET CONS OFF
    WAIT
    SET CONS ON

```

```

    @23,17 CLEA TO 23,65
    LOOP
ENDI
MADDR1=ADDR1
MADDR2=ADDR2
MSEX=SEX
MASC=ASC
MACC=ACC
MDOB=DOB
MDAC=DAC
MIDEP=IDEP
MBAL=BAL
MCNAME=CNAME
MOCC=OCC
MPB=PB
SELE B
GO TOP
LOCA FOR MASC=CODE
MDESC1=DESC
SELE C
GO TOP
LOCA FOR MACC=CODE
MDESC2=DESC
@9,6 SAY "CUSTOMER'S NAME:" GET MCNAME PICT '@!'
@11,6 SAY "OFFICE ADDRESS:" GET MADDR1 PICT '@!'
@13,6 SAY "HOUSE ADDRESS:" GET MADDR2 PICT '@!'
@15,6 SAY "DATE OF BIRTH:" GET MDOB
@15,35 SAY "SEX:" GET MSEX PICT '@!'
@15,47 SAY "OCCUPATION:" GET MOCC PICT '@!'
@17,6 SAY "DATE ACCOUNT OPENED"
@17,30 SAY "ACCOUNT STATUS CODE"
@17,53 SAY "ACCOUNT CLASS CODE"
@18,11 GET MDAC
@18,30 GET MASC
@18,32 GET MDESC1
@18,53 GET MACC
@18,55 GET MDESC2
@20,6 SAY "INITIAL DEPOSIT: #"
@20,29 SAY "PASSBOOK NO. :"
@20,48 SAY "CURRENT BALANCE"
@21,7 SAY "#"
@21,8 GET MIDEP PICT '9,999,999.99'
@21,30 GET MPB PICT '@!'
@21,47 SAY "#"
@21,48 GET MBAL PICT '9,999,999,999.99'
CLEA GETS
@23,19 SAY "VIEWING CUSTOMER'S DETAILS - PRESS ANY KEY"
SET CONS OFF
WAIT
SET CONS ON
ENDD
CLOS ALL
CLEA
RETU

```

```

*DELETE.PRG

SELE 1
  USE MASTER
SELE 2
  USE STATUS
SELE 3
  USE CLASS
SELE 4
  USE DAILY
MDATE=DATE()
N=0
SELE 1
CLEA
DO WHIL .T.
  CLEA
  MANUMB=SPAC(7)
  @0,25 TO 2,54 DOUB
  @1,26 SAY 'COMPUTERISED SAVINGS ACCOUNT'
  @0,3 TO 24,76 DOUB
  @22,4 TO 22,75
  @3,25 TO 5,54 DOUB
  @4,26 SAY 'SAVINGS ACCOUNT DELETING FORM'
  @7,6 SAY 'ACCOUNT NUMBER (OR PRESS '999999' TO EXIT):' GET
MANUMB PICT '@!'
  IF N=1
    N=0
    CLEA GETS
  ELSE
    READ
  ENDI
  IF MANUMB='9999999'
    EXIT
  ENDI
  GO TOP
  LOCA FOR ANUMB=MANUMB
  IF .NOT. FOUND()
    @23,17 SAY "ACCOUNT NUMBER DOES NOT EXIST - PRESS ANY KEY"
    SET CONS OFF
    WAIT
    SET CONS ON
    @23,17 CLEA TO 23,65
  LOOP
  ENDI
MADDR1=ADDR1
MADDR2=ADDR2
MSEX=SEX
MASC=ASC
MACC=ACC
MDOB=DOB
MDAC=DAC
MIDEP=IDEP
MBAL=BAL

```

```

MCNAME=CNAME
MOCC=OCC
MPB=PB
SELE B
GO TOP
LOCA FOR MASC=CODE
MDESC1=DESC
SELE C
GO TOP
LOCA FOR MACC=CODE
MDESC2=DESC
@9,6 SAY "CUSTOMER'S NAME:" GET MCNAME PICT '@!'
@11,6 SAY "OFFICE ADDRESS:" GET MADDR1 PICT '@!'
@13,6 SAY "HOUSE ADDRESS:" GET MADDR2 PICT '@!'
@15,6 SAY "DATE OF BIRTH:" GET MDOB
@15,35 SAY "SEX:" GET MSEX PICT '@!'
@15,47 SAY "OCCUPATION:" GET MOCC PICT '@!'
@17,6 SAY "DATE ACCOUNT OPENED"
@17,30 SAY "ACCOUNT STATUS CODE"
@17,53 SAY "ACCOUNT CLASS CODE"
@18,11 GET MDAC
@18,30 GET MASC
@18,32 GET MDESC1
@18,53 GET MACC
@18,55 GET MDESC2
@20,6 SAY "INITIAL DEPOSIT: #"
@20,29 SAY "PASSBOOK NO. :"
@20,48 SAY 'CURRENT BALANCE'
@21,7 SAY "#"
@21,8 GET MIDEP PICT '9,999,999.99'
@21,30 SAY MPB PICT '@!'
@21,47 SAY "#"
@21,48 GET MBAL PICT '9,999,999.99'
CLEA GETS
@23,19 SAY "DO YOU WANT TO DELETE THIS RECORD (Y/N):"
DO WHILE .T.
    CH=' '
    @23,60 GET CH PICT '!'
    READ
    IF CH $ 'YN'
        EXIT
    ENDI
ENDD
@23,15 CLEA TO 23,65
IF CH='Y'
    DELE
    PACK
    @23,19 SAY "THE RECORD HAS BEEN DELETED -PRESS ANY KEY"
    SET CONS OFF
    WAIT
    SET CONS ON
ENDI
ENDD
CLOS ALL

```



```

CLEA
RETU

*DEP.PRG
SELE 1
  USE MASTER
SELE 2
  USE DAILY
MDATE=DATE()
CLEA
N=0
MANUMB=SPAC(7)
AMOUNT=0
DO WHIL .T.
  SELE 1
    @3,25 TO 5,54 DOUB
    @4,26 SAY 'COMPUTERISED SAVINGS ACCOUNT'
    @3,10 TO 22,69 DOUB
    @20,11 TO 20,68
    @6,33 TO 8,46 DOUB
    @7,34 SAY 'DEPOSIT FORM'
    @10,13 SAY 'ACCOUNT NUMBER (OR PRESS '9999999' TO EXIT):'GET
MANUMB PICT '@!'
  IF N=1
    N=0
    CLEA GETS
  ELSE
    READ
  ENDJ
  IF MANUMB='9999999'
    EXIT
  ENDI
  GO TOP
  LOCA FOR ANUMB=MANUMB
  IF .NOT. FOUND()
    @21,17 SAY 'ACCOUNT NUMBER DOES NOT EXIST - PRESS ANY KEY'
    SET CONS OFF
    WAIT
    SET CONS ON
    MACNUMB =SPACE(7)
    @21,17 CLEA TO 21,65
  LOOP
  ENDI
  MCNAME=CNAME
  MBAL=BAL
  OLDBAL=BAL
  @12,13 SAY "CUSTOMER'S NAME:" GET MCNAME PICT '@!'
  @14,13 SAY 'CURRENT BALANCE: #'
  @14,31 GET MBAL PICT '9,999,999,999.99'
  @16,13 SAY 'AMOUNT DEPOSITED: #'
  @18,13 SAY 'NEW BALANCE: #'
  CLEA GETS
  @16,32 GET AMOUNT PICT '9,999,999,999.99'
  READ

```

```

MBAL=MBAL+AMOUNT
@18,27 GET MBAL PICT '9,999,999,999.99'
CLEA GETS
@21,18 SAY '[S]AVE, [R]EPEAT, [A]BANDON - PICK CHOICE:'
DO WHIL .T.
  CH=' '
  @21,61 GET CH PICT '!'
  READ
  IF CH $ 'SRA'
    EXIT
  ELSE
    LOOP
  ENDI
ENDD
@21,15 CLEA TO 21,65
IF CH $ 'SA'
  IF CH='S'
    SELE 1
    REPL BAL WITH MBAL
    SELE 2
    APPE BLAN
    REPL ANUMB WITH MANUMB, DR WITH 0, CR WITH AMOUNT, CBAL WITH
OLDBAL
    REPL CNAME WITH MCNAME, NBAL WITH MBAL, DATE WITH MDATE
    ENDI
    CLEA
    MANUMB=SPAC(7)
    AMOUNT=0
  ELSE
    N=1
  ENDI
  SELE 1
ENDD
CLOS ALL
CLEA
RETV

```

```

*WITH.PRG
SELE 1
  USE MASTER
SELE 2
  USE DAILY
MDATE=DATE()
CLEA
N=0
MANUMB=SPAC(7)
AMOUNT=0
DO WHIL .T.
  SELE 1
  @3,25 TO 5,54 DOUB
  @4,26 SAY 'COMPUTERISED SAVINGS ACCOUNT'
  @3,10 TO 22,69 DOUB
  @20,11 TO 20,68

```

```

@6,33 TO 8,46 DOUB
@7,34 SAY 'WITHDRAWAL FORM'
@10,13 SAY 'ACCOUNT NUMBER (OR PRESS '9999999' TO EXIT):'GET
MANUMB PICT '@!'
  IF N=1
    N=0
    CLEA GETS
  ELSE
    READ
  ENDI
  IF MANUMB='9999999'
    EXIT
  ENDI
  GO TOP
  LOCA FOR ANUMB=MANUMB
  IF .NOT. FOUND()
    @21,17 SAY 'ACCOUNT NUMBER DOES NOT EXIST - PRESS ANY KEY'
    SET CONS OFF
    WAIT
    SET CONS ON
    MACNUMB =SPACE(7)
    @21,17 CLEA TO 21,65
    LOOP
  ENDI
  MCNAME=CNAME
  MBAL=BAL
  OLDBAL=BAL
  @12,13 SAY "CUSTOMER'S NAME:" GET MCNAME PICT '@!'
  @14,13 SAY 'CURRENT BALANCE: #'
  @14,31 GET MBAL PICT '9,999,999,999.99'
  @16,13 SAY 'AMOUNT WITHDRAWN: #'
  @18,13 SAY 'NEW BALANCE: #'
  CLEA GETS
  @16,32 GET AMOUNT PICT '9,999,999,999.99'
  READ
  MBAL=MBAL+AMOUNT
  @18,27 GET MBAL PICT '9,999,999,999.99'
  CLEA GETS
  @21,18 SAY '[S]AVE, [R]EPEAT, [A]BANDON - PICK CHOICE:'
  DO WHILE .T.
    CH=' '
    @21,61 GET CH PICT '!'
    READ
    IF CH $ 'SRA'
      EXIT
    ELSE
      LOOP
    ENDI
  ENDD
  @21,15 CLEA TO 21,65
  IF CH $ 'SA'
    IF CH='S'
      SELE 1
      REPL BAL WITH MBAL

```

```

        SELE 2
        APPE BLAN
        REPL ANUMB WITH MANUMB, DR WITH AMOUNT, CR WITH 0, CBAL WITH
OLDBAL
        REPL CNAME WITH MCNAME, NBAL WITH MBAL, DATE WITH MDATE
        ENDI
        CLEA
        MANUMB=SPAC(7)
        AMOUNT=0
    ELSE
        N=1
    ENDI
    SELE 1
ENDD
CLOS ALL
CLEA
RETU

```

```

*TRANS.PRG
SELE 1
    USE MASTER
SELE 2
    USE DAILY
    MDATE=DATE()
    CLEA
    N=0
    MANUMB=SPAC(7)
    AMOUNT=0
    TTYPE=0
    STOR SPAC(35) TO TIN, TOUT
    DO WHIL .T.
        SELE 1
            @0,25 TO 2,54 DOUB
            @1,26 SAY 'COMPUTERISED SAVINGS ACCOUNT'
            @0,10 TO 23,69 DOUB
            @21,11 TO 21,68
            @3,33 TO 5,46 DOUB
            @4,34 SAY 'TRANSFER FORM'
            @7,13 SAY 'ACCOUNT NUMBER (OR PRESS '9999999' TO EXIT):'GET
MANUMB PICT '@!'
            IF N=1
                N=0
                CLEA GETS
            ELSE
                READ
            ENDI
            IF MANUMB='9999999'
                EXIT
            ENDI
            GO TOP
            LOCA FOR ANUMB=MANUMB
            IF .NOT. FOUND()
                @22,17 SAY 'ACCOUNT NUMBER DOES NOT EXIST - PRESS ANY KEY'

```

```

SET CONS OFF
WAIT
SET CONS ON
MACNUMB =SPACE(7)
@22,17 CLEA TO 22,65
LOOP
ENDI
MCNAME=CNAME
MBAL=BAL
OLDBAL=BAL
@9,13 SAY "CUSTOMER'S NAME:" GET MCNAME PICT '@!'
@11,13 SAY 'CURRENT BALANCE: #'
@11,31 GET MBAL PICT '9,999,999,999.99'
@13,13 SAY 'TYPE OF TRANSFER (ENTER '1' FOR IN, '2' FOR OUT)'GE
TTYPE PICT '9' RANGE 1,2
READ
IF TTYPE=1
  @15,13 SAY 'TRANSFEROR:' GET TIN PICT '@!'
ELSE
  @15,13 SAY 'TRANSFeree:' GET TOUT PICT '@!'
ENDI
READ
@17,13 SAY 'AMOUNT OF TRANSFER: #'
@19,13 SAY 'NEW BALANCE: #'
@17,32 GET AMOUNT PICT '9,999,999,999.99'
READ
IF TTYPE=1
  MBAL=MBAL+AMOUNT
ELSE
  MBAL=MBAL-AMOUNT
ENDI
@19,27 GET MBAL PICT '9,999,999,999.99'
CLEA GETS
@22,18 SAY '[S]AVE, [R]EPEAT, [A]BANDON - PICK CHOICE:'
DO WHIL .T.
  CH=' '
  @21,61 GET CH PICT '!'
  READ
  IF CH $ 'SRA'
    EXIT
  ELSE
    LOOP
  ENDI
ENDI
@22,15 CLEA TO 22,65
IF CH $ 'SA'
  IF CH='S'
    SELE 1
    REPL BAL WITH MBAL
    SELE 2
    APPE BLAN
    REPL ANUMB WITH MANUMB, DR WITH 0, CR WITH AMOUNT, CBAL WITH
OLDBAL
    REPL CNAME WITH MCNAME, NBAL WITH MBAL, DATE WITH MDATE

```

```
      ENDI
      CLEA
      MANUMB=SPAC(7)
      AMOUNT=0
    ELSE
      N=1
    ENDI
  SELE 1
ENDD
CLOS ALL
CLEA
RETU
```

```
*STATUS.PRG
SELE 1
  USE MASTER
SELE 2
  USE STATUS
  MDATE=DATE()
  CLEA
  N=0
  MANUMB=SPAC(7)
  AMOUNT=0
  DO WHIL .T.
    SELE 1
      @4,25 TO 6,54 DOUB
      @5,26 SAY 'COMPUTERISED SAVINGS ACCOUNT'
      @4,8 TO 21,71 DOUB
      @19,9 TO 19,70
      @7,23 TO 9,56 DOUB
      @8,24 SAY 'ACCOUNT STATUS MODIFICATION FORM'
      @11,11 SAY 'ACCOUNT NUMBER (OR PRESS '9999999' TO EXIT):'GET
    MANUMB PICT '@!'
    IF N=1
      N=0
      CLEA GETS
    ELSE
      READ
    ENDI
    IF MANUMB='9999999'
      EXIT
    ENDI
    GO TOP
    LOCA FOR ANUMB=MANUMB
    IF .NOT. FOUND()
      @22,17 SAY 'ACCOUNT NUMBER DOES NOT EXIST - PRESS ANY KEY'
      SET CONS OFF
      WAIT
      SET CONS ON
      MACNUMB =SPACE(7)
      @20,17 CLEA TO 20,65
    LOOP
  ENDI
```

```

MCNAME=CNAME
MASC=ASC
SELE 2
GO TOP
LOCA FOR CODE=MASC
MDESC=DESC
@13,11 SAY "CUSTOMER'S NAME:" GET MCNAME PICT '@!'
@15,11 SAY 'OLD ACCOUNT STATUS CODE:' GET MASC
@15,38 SAY '- '
@15,40 SAY 'NEW ACCOUNT STATUS CODE:'
DO WHILE .T.
  MASC=' '
  @17,36 GET MASC1
  READ
  GO TOP
  LOCA FOR CODE=MASC1
  IF FOUND()
    EXIT
  ENDI
ENDD
MDESC1=DESC
@17,38 SAY '- '
@17,40 SAY 'DESCRIPTION:' GET MDESC1
CLEA GETS
@20,18 SAY '[S]AVE, [R]EPEAT, [A]BANDON - PICK CHOICE:'
DO WHIL .T.
  CH=' '
  @21,61 GET CH PICT '!'
  READ
  IF CH $ 'SRA'
    EXIT
  ELSE
    LOOP
  ENDI
ENDD
@22,15 CLEA TO 22,65
IF CH $ 'SA'
  IF CH='S'
    SELE 1
    REPL ASC WITH MASC1
  ENDI
  CLEA
  MANUMB=SPAC(7)
ELSE
  N=1
ENDD
SELE 1
ENDD
CLOS ALL
CLEA
RETU

LIST1.PRG
CLEA

```

```

USE DAILY
MDATE=DATE()
@12,14 SAY 'PRINTING TRANSACTION LIST IN PROGRESS -PLEASE WAIT'
SET DEVI TO PRIN
@1,37 SAY 'INTERCITY BANK PLC'
@2,37 SAY REPL('=' ,22)
@4,32 SAY 'TRANSACTIONS LIST AS AT '+DTC(MDATE)
@5,32 SAY REPL('=' ,32)
@7,0 SAY REPL('-' ,96)
@8,0 SAY "S/NO|ACCT NO | CUSTOMER'S NAME"
@8,43 SAY '|TRANS TYPE |'
@8,57 SAY 'DEBIT'
@8,67 SAY '|'
@8,70 SAY 'CREDIT'
@8,80 SAY '|'
@8,81 SAY 'CURRENT BALANCE'
@9,0 SAY REPL('-' ,96)
SNO=0
R=9
DO WHIL .NOT. EOF()
  SNO=SNO+1
  R=R+1
  MANUMB=ANUMB
  MCNAME=CNAME
  MDR=DR
  MCR=CR
  MCBAL=CBAL
  MNBAL=NBAL
  IF MDR=0
    MTRANS='DEPOSIT'
  ELSE
    MTRANS='WITHDRAWAL'
  ENDI
  @ R,0 SAY SNO PICT '9999'
  @ R,4 SAY '|'
  @ R,5 SAY MANUMB
  @ R,12 SAY '|'
  @ R,13 SAY MCNAME
  @ R,43 SAY '|'
  @ R,44 SAY MTRANS
  @ R,54 SAY '|'
  @ R,55 SAY MDR PICT '9,999,999.99'
  @ R,67 SAY '|'
  @ R,68 SAY MCR PICT '9,999,999.99'
  @ R,80 SAY '|'
  @ R,81 SAY MNBAL PICT '9,999,999,999.99'
  SKIP
  LOOP
ENDD
SET DEVI TO SCRE
WAIT
CLOS ALL
CLEA
RETU

```



```

LIST2.PRG
CLEA
USE DAILY
MDATE=DATE()
@12,14 SAY 'PRINTING AUDIT TRIAL IN PROGRESS -PLEASE WAIT'
SET DEVI TO PRIN
@1,37 SAY 'INTERCITY BANK PLC'
@2,37 SAY REPL('= ',22)
@4,32 SAY 'AUDIT TRAIL AS AT '+DTC(MDATE)
@5,32 SAY REPL('= ',32)
@7,0 SAY REPL('- ',79)
@8,0 SAY "S/NO|ACCT NO | CUSTOMER'S NAME"
@8,43 SAY '|TRANS TYPE |'
@8,57 SAY 'DEBIT'
@8,67 SAY '| '
@8,70 SAY 'CREDIT'
@9,0 SAY REPL('- ',96)
SNO=0
R=9
DO WHIL .NOT. EOF()
  SNO=SNO+1
  R=R+1
  MANUMB=ANUMB
  MCNAME=CNAME
  MDR=DR
  MCR=CR
  MCBAL=CBAL
  IF MDR=0
    MTRANS='DEPOSIT'
  ELSE
    MTRANS='WITHDRAWAL'
  ENDI
  @ R,0 SAY SNO PICT '9999'
  @ R,4 SAY '| '
  @ R,5 SAY MANUMB
  @ R,12 SAY '| '
  @ R,13 SAY MCNAME
  @ R,43 SAY '| '
  @ R,44 SAY MTRANS
  @ R,54 SAY '| '
  @ R,55 SAY MDR PICT '9,999,999.99'
  @ R,67 SAY '| '
  @ R,68 SAY MCR PICT '9,999,999.99'
  SKIP
  LOOP
ENDD
SET DEVI TO SCRE
WAIT
CLOS ALL
CLEA
RETU

```

```

LIST3.PRG
CLEA
USE GEN
GO BOTT
MDATE=DATE()
COPY STRU TO TEMP.DBF
USE TEMP
NDATE=MDATE-7
APPE FROM GEN.DBF FOR DATE>=NDATE
GO TOP
@12,17 SAY 'PRINTING MOVED LIST IN PROGRESS -PLEASE WAIT'
SET DEVI TO PRIN
@1,37 SAY 'INTERCITY BANK PLC'
@2,37 SAY REPL('=' ,22)
@4,15 SAY 'MOVED LIST FOR THE PERIOD OF '+DTC(NDATE)+' TO
'+DTC(MDATE)
@5,15 SAY REPL('=' ,49)
@7,7 SAY REPL('-' ,66)
@8,7 SAY "S/NO|ACCT NO | CUSTOMER'S NAME"
@8,55 SAY '|'
@8,57 SAY 'CURRENT BALANCE'
@9,7 SAY REPL('-' ,66)
SNO=0
R=9
DO WHIL .NOT. EOF()
    SNO=SNO+1
    R=R+1
    MANUMB=ANUMB
    MCNAME=CNAME
    MCBAL=CBAL
    @ R,7 SAY SNO PICT '9999'
    @ R,12 SAY '|'
    @ R,14 SAY MANUMB
    @ R,22 SAY '|'
    @ R,24 SAY MCNAME
    @ R,55 SAY '|'
    @ R,57 SAY MNBAL PICT '9,999,999,999.99'
    SKIP
    LOOP
ENDD
SET DEVI TO SCRE
WAIT
CLOS ALL
CLEA
RETN

```

```

LIST4.PRG
CLEA
USE MASTER
MDATE=DATE()
@12,14 SAY 'PRINTING FULL LIST IN PROGRESS -PLEASE WAIT'
SET DEVI TO PRIN
@1,37 SAY 'INTERCITY BANK PLC'
@2,37 SAY REPL('=' ,22)

```

```

@4,16 SAY 'FULL LIST FOR THE PERIOD OF '+DTC(NDATE)+' TO
'+DTC(MDATE)
@5,16 SAY REPL('=' ,48)
@7,7 SAY REPL('-' ,66)
@8,7 SAY "S/NO|ACCT NO | CUSTOMER'S NAME"
@8,55 SAY '|'
@8,57 SAY 'CURRENT BALANCE'
@9,7 SAY REPL('-' ,66)
SNO=0
R=9
DO WHILE .NOT. EOF()
  SNO=SNO+1
  R=R+1
  MANUMB=ANUMB
  MCNAME=CNAME
  MCBAL=CBAL
  @ R,7 SAY SNO PICT '9999'
  @ R,12 SAY '|'
  @ R,14 SAY MANUMB
  @ R,22 SAY '|'
  @ R,24 SAY MCNAME
  @ R,55 SAY '|'
  @ R,57 SAY MBAL PICT '9,999,999.99'
  SKIP
  LOOP
ENDD
SET DEVI TO SCRE
WAIT
CLOS ALL
CLEA
RETN

```

```

LIST5.PRG
CLEA
USE MASTER
COPY STRU TO TEMP.DBF
USE TEMP
NDATE=MDATE-7
APPE FROM MASTER.DBF FOR ASC='5'
GO TOP
MDATE=DATE()
@12,17 SAY 'PRINTING DORMANT LIST IN PROGRESS -PLEASE WAIT'
SET DEVI TO PRIN
@1,37 SAY 'INTERCITY BANK PLC'
@2,37 SAY REPL('=' ,22)
@4,26 SAY 'DORMANT LIST AS AT '+DTC(MDATE)
@5,26 SAY REPL('=' ,27)
@7,0 SAY REPL('-' ,79)
@8,0 SAY "S/NO|ACCT NO | CUSTOMER'S NAME"
@8,43 SAY '|DATE OF LAST OPERA. |'
@8,63 SAY 'CURRENT BALANCE'
@9,0 SAY REPL('-' ,79)
SNO=0

```

```
@4,16 SAY 'FULL LIST FOR THE PERIOD OF '+DTC(NDATE)+' TO  
'+DTC(MDATE)  
@5,16 SAY REPL('= ',48)  
@7,7 SAY REPL('-',66)  
@8,7 SAY "S/NO|ACCT NO | CUSTOMER'S NAME"  
@8,55 SAY '|'  
@8,57 SAY 'CURRENT BALANCE'  
@9,7 SAY REPL('-',66)  
SNO=0  
R=9  
DO WHIL .NOT. EOF()  
  SNO=SNO+1  
  R=R+1  
  MANUMB=ANUMB  
  MCNAME=CNAME  
  MCBAL=CBAL  
  @ R,7 SAY SNO PICT '9999'  
  @ R,12 SAY '|'  
  @ R,14 SAY MANUMB  
  @ R,22 SAY '|'  
  @ R,24 SAY MCNAME  
  @ R,55 SAY '|'  
  @ R,57 SAY MBAL PICT '9,999,999.99'  
  SKIP  
  LOOP  
ENDD  
SET DEVI TO SCRE  
WAIT  
CLOS ALL  
CLEA  
RETU
```