

**COMPUTER AUTOMATION ON VIDEO
RECORDING AND RENTAL SYSTEM**

(A Case Study of Tomag Video Club, Mpape Abuja)

BY

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NOVEMBER 2004

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MINNA-NIGER STATE**

**A PROJECT SUBMITTED IN PARTIAL FULFIMENT OF
THE REQUIREMENTS FOR AWARD OF THE POST
GRATUATE DIPLOMA IN COMPUTER SCIENCE**

NOVEMBER, 2004

CERTIFICATION

This is to certify that this project work is carried out by **OLUPEHIN FEMI THOMAS** under the supervision of **Mallam D. HAKIMI**, Maths/Computer Department, Federal University of Technology, Minna.

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EXTERNAL EXAMINER

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Date

ACKNOWLEDGEMENT

Blessed be the name of the Lord for His mercy and protection over me throughout the period of my study.

My deep appreciation is to my Project Supervisor, Mallam D. Hakimi for his accommodating heart, untiring co-operation, instruction and dedication all through the project work. My unreserved thanks to the Head of Department, Mr. L. N. EZEAKO and to the Dean of School of Science and Science Education, Prof. K. R. ADEBOYE for their co-ordination of staff and we students.

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OLUPEHIN FEMI THOMAS

NOVEMBER, 2004.

DEDICATION

This project is dedicated to the Almighty (THE CITY OF REFUGE) for His mercy and to my Beloved wife **MRS AGNES FEMI OLUPEHIN** for her love and prayer.

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ABSTRACT

The Tomag Video Club lends out videocassette and also records any films to the registered customers. This activity involves the keeping of individual record, which involves large volume of document that is liable to removal without anybody's knowledge and loss.

This manual operation of Tomag causes a delay to both the customer and Tomag itself. Due to this reason, the researcher decided to computerize Tomag operation.

The registration of the customers done by three different person (clerks) could only be done by one person with a personal computer (pc) installed with the proposed system; and open a file for individual customer to keep their record. This would reduce the cost of Tomag and there would not be any delay in the activities.

Tomag does not check any customer record not until a request is made, as part of the objective of the researcher this has been taken care of updating the file of individual customer.

CHAPTER ONE

GENERAL INTRODUCTION

1.1 INTRODUCTION

The Danish Electrical Engineer Valdemar Poulsen invented the wire recorder, an instrument that records information on a moving, management wire, in 1898.

Video tape recording was first used by a television network in 1956. By the 1970's Cassettes and Atridge System had Surpassed open-real System in popularity, particle tapes and digital recording were developed for producing recording of superior quality, VCR'S enjoyed a limited popularity?

There are two common types for home use the VHS (Video Home System) and Betamax. Both use cassettes but the two systems are incompatible, a recording made by one System cannot be played on a machine using the other.

A Video Cassettes recorder is often referred to as VCR.

1.1.1 VIDEO CASSETTES

The VCR bring the user two things never before available in the home. One is extremely easy-to-use magnetic tape System for playing pre- recording Video programs.

The other is the ability to record Video programs. One can record any program you want from television. One can view the program at any time.

In addition the user can invest in a Video cameral and can record any "live" scene. The VCR-Camera-TV set system becomes a home" movies" system. It's the virtue that the "movies" can be scans just a few moments after they are shot. This ability to make

home recordings is one great advantage the Video Cassettes has over the Videodisc. All Videodisc must be commercially recorded.

Since the late 1970's thousand of programs have been recorded on cassettes. The majority of them are movies from the large film studios

For home recording of television programs, all popular VCR models include automatic timers. The timer tuts on both the television set and the VCR at any present time to "catch" a program on the air when one is away from home, one can then see the program whenever you want. Home Video recorder-Video tape is in use throughout the world for storing black and white and colour television programs for immediate or future replaying.

1.1.2 CASSETTES

All VCR'S use the same form of cassette:a flattish box about 6 inches by 4 inches by $\frac{3}{4}$ inch. It has reels one at each end. Magnetic tape, $\frac{1}{2}$ inch wide, is wound around the reels. When the cassette is pushed into the recorder and the "start" button depressed, the machine automatically picks up a loop of the tape. It then moves the tape over magnetic heads inside the player, the tape going from one reel to the other.

Although all cassettes have the same form, there are two different "formats" or arrangement of the signal, on the tape. One is the" Beta", originated by Matsushita (Panasonic). The two systems differ in a number of ways, but there is no overall quality difference. Recording made in a Beta machine cannot, however, be played on a VHS machine, and vice versa.

1.1.3 RECORDING ON TAPE

The tape recording basically involves putting a pattern on magnetic tape. The pattern corresponds to the electric signal of the program being recorded. Signals from the program affect the magnetic field

of a recording head. The tape passes over this magnetic head and is magnetized. It is magnetized in pattern corresponding to the strength of the magnetic field and thus to the program signals. In playback, the magnetic pattern on the tape is changed back into signals that are converted into a sight-and-sound program.

1.2 TOMAG VIDEO RECORDING CLUB

Tomag Video Club was established in 1998 and it is situated at Mpape (one of the satellite town) in Abuja. Tomag is understandably one of the most established Video Club in FCT-Abuja today.

Tomag Video Recording Club is a Subsidiary of Tomag Nig. Ltd, which has a board of 10 men directors headed by a philanthropist/industrialist based in Lagos.

In addition to the primary functions of the recording Club, it also functions in the area of importing new recording and Video technologies in the country.

Finally the Club is continuously expanding and progressing due to the tested hands of its management team.

1.3 OBJECTIVES OF THE STUDY

The researcher has been motivated to study the activity of Video Club and understand how the Club operates the business effectively in view of the high competitors and demand.

This study is aimed at gathering all in developing an “integrated Software package on Tomag Video Club, Mpape- Abuja”. It is aimed at developing a system that will stand the numerous problems associated with the existing operation of Tomag Video Club.

The objectives of the design identify the primary expectations of the design as listed below:

- (i) Provide problem solving facility's:
Some controversial decisions often arise in the process of calculating extra charge, registration fees, staff salary and the number of films bought per annum.
Some times decision on what to add or what to estimate or what to ignore often cause some problem, such problems are taken care of by standardadising the conditions under which any of the processing can be entertained so that only cases satisfying these condition are entertained.
- (ii) Improving the Flow of Data
This entails making records or information available within a shortest possible time for various issues like enquiries, updating and references.
- (iii) Back- up and Security
The pile of up –dated file which could not be easily destroyed often become nuisance to the management, the entire information from the voluminous files could be stored on a magnetic storage medium (floppy diskettes) which is not more than that of a file and it can accommodate thousands of recodes, so such files could be stored on a diskette as long as it is required.

The security and integrity of data mean data is kept in a safe environment. It is of reasonable importance as concerned fraud and access by unauthorized user to maintain security on the files. With the use of password and various files security system, security of sensitive and important information can be assured.

- (iv) The efficiency of the manual strategies used in dealing with customers should be studied.
- (v) To determine the benefits and importance of computerization of past or whole of the Video Club activities.
- (vi) To arrive at meaningful suggestion on how to solve problem emanating from the management of the club.

1.4 METHOD OF INVESTIGATION

In this chapter, the existing operation is studied closely to discover the true nature of the problem, which led to the request for an investigation. At the same time to gain a better understanding of the way the Tomag Video Club carries out its manual operation, there is a strong possibility that recommendation from someone who knows the Tomag operation well will find a favour with management. The following methods are used in carrying out the investigation:

- (i) Study Textbooks and Manual: The University Library and the management of the Tomag Video Club gave enough copies of textbooks and journals related to the subject.

This method really helped in determining the serious need of Tomag Video Club to be computerized.

- (ii) Interview: The interview is one of the most valuable and versatile methods available to the researcher for learning

about an existing operation. The following guidelines were followed, helping the success of the interview

- The right people were chosen to interview.

For example, manager was asked about the cost of registration, fees and the extra charge for any customers that fail to return the cassette at the stipulated day. On the other hand, clerk was asked about the exact detail of how an order is filled.

- Authorization from management to conduct the interview was sought. This made the customer to be more co-operative.

- The point to be covered and relevant question asked were written down.

- (iii) Observe the existing operation: This initially give us a chance to obtain data first-hand. It also gives a privilege to determine whether the data or information obtained from interview is consistent with what he sees.

However it is noted that this method has some important drawbacks. Because people perform differently when they are being observed, some may become self-conscious; causing their productivity to fail. On the other hand the presence of an observer make some to work harder than they normally do when no one is watching. Thus data obtained may not be true reflection of the normal situation.

Another disadvantage is that since the observer must be physical present to observe operations. It may be very inconvenient if the procedure is to be observing in the night.

CHAPTER TWO

LITERATURE REVIEW

2.0 THE REVIEW OF TOMAG OPERATION

2.1 THE EXISTING OPERATION

The Major operation of Tomag Video recording club is to lend out a videocassette to a registered customer and also to record a particular file to both registered and unregistered customers with stipulated time and amount of money for the device rendered. In short Tomag operation is carried out manually.

2.1.1 (a) Registration of customers

A customer is registered before he could be considered as a full member of the club. The full name of a customer, his home and contact address, and his occupation, so as to know whether he would be able to meet the demand if there is a damage of cassette, all these are noted before a customer could be registered.

A registered customer must be a grown up adult with his entire working sensor. Once a customer is registered, then he would be given a registered membership card and identity card.

The amount of money paid for registration varies depending on the number of cassette a customer wishes to borrow daily. A customer who wishes to borrow 5 cassettes for every two days would pay N600.00, three cassettes daily would pay N400.00 and two cassettes daily would pay N300.00.

(b) **Reception**

Every customer is first attends to by club attendant and the customer's request is made known to the clerk. A clerk would write down the title of the cassette borrowed, the day it is collected and the day to be returned into the membership card of the registered customer, when borrowing cassette.

The same procedure follows if a cassette is to be returned by a customer and an extra charge of N10.00 would be paid if the cassette exceeds one day.

(c) **Recording Cassette**

Both registered and unregistered customers enjoy this facility Tomag Video club could record any film of the customers choice for them. The charge for the service depends on the hours of the cassette, a two-hour cassette-charge N100 while N150.00 is being charged for three-hour cassette.

2.2 **THE PROBLEMS INVOLVED IN THE EXISTING OPERATION**

The existing manual operation combines a large number of disadvantages, which are listed below.

- i) Cassette are being lost to their customer
- ii) In the manual operation the filling operation involves a large amount of paper work and as such, it is easy for important information or document to be destroyed or misplaced after a period of time due to frequent handling.
- iii) Document could be removed or altered without anyone's knowledge.
- iv) A lot of material is involved in the manual operation and replacement always causes a delay in the activities.
- v) The customer damages cassette borrowed out often.

- vi) Some customers bring bad or used cassette for recording.

2.3 SOLUTION TO THE PROBLEMS

The purpose of this project work therefore is to address the listed problems above with a view to elimination them and make the Tomag operation more efficient, easy to manage and result oriented.

Knowing what the subject matter is, it is also evident that the purpose of the subject matter is to design a software package that will solve the problems of manual operation carried out by the club. Hence, the following are the useful solution.

- i) Customer should deposit some amount of money aside from the one paid for the rentage so as to serve as collateral, in case if there is any eventuality.
- ii) The identity card of the customer should be kept with the management if the cassette is borrowed.
- iii) The Management needs to computerize the whole activity so as to reduce the job done manually.
- iv) A password should be used for the database so that only authorized personnel would have an access to the database.
- v) Cassette brought for recording should be tested incase if there's any bad track.
- vi) Borrowing cassette should be tested before the customer, to ensure that it is in a good condition before giving it out.

2.4 DEFINATION OF TERM

Relevant term used in the project are defined as follows:

- (a) **COMPUTER:-** This is an electronic device, which stores information on discs or magnetic tapes, analyses

it and produce information as required from the data. On the disc or tapes. Defined in another way Computer is an electronic machine that can receive instruction through input, process the instruction and produce meaningful results.

- (b) **HARDWARE:-** These are the physical component of a computer which we can touch e.g keyboard, printer etc.
- (c) **SOFTWARE:-** This are set of instruction that direct the computer on what to do to perform a specific task.
- (d) **TABLE:-** a set of information about a particular subject for example a table can contain information on the type of cassette.
- (e) **RECORDS:-** A record is made up of fields, which contain specific information about what the record represent.
- (f) **FIELD:-** This holds one piece of information and it is the smallest component or part in a database.
- (g) **DATABASE MANAGEMENT SYSTEM (DBMS):-** Is a collection of programmes, which stores, retrieves and processed data stored in files.
- (h) **CHARACTER:-** This allows the entry of alphanumeric text e.g letter, number, spaces, symbols, and punctuation.
- (i) **NUMERIC:-** This numeric data type is used for digits or number wheel may be interger or fraction.

- (j) **DATE:-** This accepts data entries of day, month and year.

CHAPTER THREE

SOFTWARE DEVELOPMENT

3.1 CHOICE OF PROGRAMMING LANGUAGE

The chosen programming language for this project is database (DBASE) for the efficient running of the proposed system.

In Video cassette line service, records keeping, storage and manipulation of large amount of data is basic.

Each division of records requires a system of record, files and for proper coordinate among these division, information must be shared and to perform these will involve using database management software for its development.

3.1.1 FEATURES OF MICROSOFT VISUAL FOXPRO

Microsoft visual pro 6.0 is a database programming software, which has many features that will greatly enhance the proposed system development. These feature are:-

- i. It is an improvement on Dbase IV and it is one of the recent well established database application that is useable with the window operating system
- ii. It can build an executive file, which can be installed in any system running windows operating system not necessarily having the Microsoft visual foxpro built on it.

- iii. It can contain as much as one billion records, a view in a table can contain about 258 characters and a table can contain 300 fields.
- iv. It has a graphic user interface, which makes the logic of software development to be easily understood by users because program codes are written in modular structure.
- v. It has built in data dictionary that has definition for tables, established relationship between tables etc.
- vi. It has a general field in the table structure that can be used to call in files from other applications such as Microsoft word, Microsoft excel and graphics like picture graphs and charts.

All these features mentioned above clearly show that Microsoft visual foxpro would meet all the requirement needed for this project.

3.2 THE PROPOSED SYSTEM

As studied in the previous chapter, all the operations of Tomag Video club are carried out manually and this makes the efficiency and the output of the job to be minimal. So, the proposed system would tackle the manual operation and computerized the necessary and important aspect of the operation.

3.2 THE DESIGN OF THE PROPOSED SYSTEM

After careful study of the existing operating as contained on the previous chapter, the main programs contained or calling program is designed to invoke all the programs contained in the main menu of the proposed system. The proposed system will operate in the following:

- i) Main Menu
- ii) Sub Menu

Main Menu:- Here, all the files in the database could be accessed through the main menu and it consist of the following files.

1. Transaction
2. File management
3. Report Generator
4. Quit

ii) **SUB-MENU:** - Each file in the main menu has sub-menu, which could be accessed. The following programs are written as subroutines of the main program, which call or involve them according to their needs. The programs are:

TRANSACTION PROGRAM: This program will be used to serve the activities involving renting of cassettes.

FILE MANAGEMENT PROGRAM:- This program will used for daily transaction. It should be able to perform the two operations of registering the number of cassettes and the registering of the customers.

REPORT GENERATION PROGRAM:- This program will be used to print out the generated report as contained in the data output file.

QUIT PROGRAMM: It will terminate the operation of the system and cause the system to exit to the prompt of the operating system

3.4 **OUTPUT SPECIFICATION/FORMAT**

The output will be report generated in the reconciliation statement file i.e report generation file. A fill will also be used to hold the formatted output for easy print out for the customers.

The report generation file deal with three items. Namely:-

List of Registration Cassette

List of Borrowed Cassette

List of Films recorded.

These are shown in fig 3.1, 3.2 and 3.3 respectively.

3.5 INPUT SPECIFICATION/FORMAT

The input structures is designed such that it will make use of the following data files:

- i) Customers file
- ii) Registered film file
- iii) Rental file

**COMPUTERISED VIDEO RECORDING AND
RENTAL SYSTEM (TOMAG VIDEO CLUB)**

LIST OF REGISTERED CASSETTES AVAILABLE FOR BORROWING

Film Code	Film Name	Qty	Time	Purchase Date
01FC001	Violated Part 1	5	2.30	01/02/2004
01FC002	“ “ “ II	5	2.30	01/02/2004
01FC003	Glamour Girls I	5	2.30	05/02/2000
01FC004	“ “ “ II	5	2.30	07/02/2004
01FC005	Deadly Affairs	4	2.30	07/02/2004
01FC006	Dead End I	3	2.30	07/02/2004
01FC007	Dead End II	3	2.30	12/02/2004
02FC001	True Confession	20	2.45	12/02/2004
02FC002	Heritage I	14	3.00	11/02/2004
02FC003	Lady of the Rose	12	3.00	09/02/2004
02FC004	Golden Circle	4	2.45	11/09/2003
02fc004	Golden Circle	4	2.45	11/09/2003
02FC004	Golden Circle	4	2.45	11/09/2003
02FC002	Love in Vendetta	19	2.45	10/02/2004
02FC006	Iya Alhaji	2	2.30	10/02/2004
02FC007	Jungle Man	2	2.45	08/02/2004

**COMPUTER VIDEO RECORDING
AND RENTAL SYSTEM {Tomag Video Club}**

LIST OF BORROWED CASSETTES BY CUSTOMERS

CREIT CODE	FILM CODE	FILM NAME	RENTAL AMT.	BORROE DATE	RETURN DATE
01CC001	01FC001	VIOLATED PT. I	10	23/02/2004`	26/02/2004
01CC002	01FC004	GLAMOUR GIRL I	10	23/02/2004	25/02/2004
01CC003	01FC002	VIOLATED PT.I	10	27/02/2004	01/03/2004
01CC003	01FC004	GLAMOUR GIRL II	10	23/02/2004	27/02/2004
01CC004	01FC003	GLAMOUR GIRL I	10	23/02/2004	26/02/2004
01CC005	01FC007	DEAD END II	10	24/02/2004	27/02/2004
01CC005	01FC006	DEAD END I	10	24/02/2004	27/02/2004

Fig 3.2

COMPUTERIZED VIDEO RECORDING AND RENTAL SYSTEM {Tomag Video Club}

LIST OF RECORDED FILMS BY CUSTOMERS

FILM CODE	FILM NAME	TIME	AMOUNT	RECORDED DATE
01FC001	VIOLATED PART I	2.30	60.00	10/02/2004
01FC002	VIOLATED PART II	2.30	60.00	13/02/2004
01FC002	VIOLATED PART II	2.30	60.00	17/02/2004
01FC003	GIAMOUR GIRL I	2.30	60.00	15/02/2004
01FC003	GIAMOUR GIRL I	2.30	60.00	17/02/2004
01FC004	GIAMOUR GIRL II	2.30	60.00	10/02/2004
01FC004	GIAMOUR GIRL II	2.30	60.00	17/02/2004
01FC004	GIAMOUR GIRL II	2.30	60.00	17/02/2004
01FC005	DEADLY AFFAIRS	2.30	60.00	10/02/2004
01FC005	DEADLY AFFAIRS	2.30	60.00	13/10/2004
01FC005	DEADLY AFFAIRS	2.30	60.00	17/02/2004
01FC006	DEAD END I	2.30	60.00	11/02/2004

iv) **Recording File**

- i) Customers file (This is a file that deals with the registered customers which is shown in fig. 2

Field Description	Data Type	Field Length
Registration Date	Date	8
Credit Code	Character	7
Credit Name	Character	25
Credit Site	Character	20

- ii) **REGISTERED FIRLM FILE:** This file deals with the list of films in stock. This is shown in fig 1.

Field Description	Data Type	Field Length
Film Code	Character	7
Film Name	Character	30
Quantity	Numeric	2
Hours	Numeric	4
Purchased Date	Date	8

- iii) **RENTAL FILE:** The file of the cassette being rented by the customer. This is shown in fig. 4.

Field Description	Data Type	Field Length
Credit Code	Character	7
Film Code	Character	7
Film Title	Character	30
Rental Amount	Numeric	2
Date of Borrowing	Date	8
Date of Returning	Date	8

iv) RECORDING FILE

This file deals with the cassettes being recorded for customer, this is shown in fig 3.

Field Description	Data Type	Field Length
Film Code	Character	7
Film Name	Character	30
Hours	Numeric	4
Amount	Numeric	2
Data of Recording	Date	8

3.6 FILE DESIGNS

1. CUSTOMER DBF: This stores the information of customer.

Structure for database: C/OLA/VIDEO/CUSTOMER.
DBF

Number of data records : 5

Date of last update: 10/12/2003

Field	Field Name	Type	Width	Index
1	Regtime	Date	8	N
2	Regtime	Numeric	4	N
3	Credit Name	Character	7	N
4	Creditname	Character	25	N
5.	Creditsite	Character	20	N

II FCODE.DBF

This is for storing of registered films

Structure of Database. C:/OLA/VIDEO/FCODE.DBF

Number of data records: 22

Date of last update 10/12/2003

Field	Field Name	Type	Width	Index
1	Regdate	Date	8	N
2	Regtime	Numeric	4	N
3	Film-Code	Character	7	N
4	Title	Character	36	N
5	QTY	Numeric	2	N
6	Hours	Numeric	4	N
7	P-Date	Date	8	N
8	Record-AMT	Numeric	2	N
9	Rent-AMT	Numeric	2	N
Total			77	

III. **RECORDER DBF:** This is for storing or recording of files.

Structure for Database: C/OLA/VIDEO/RECORDER.DBF

Number of data records: 12

Date of last update 10/12/2003

Field	Field name	Type	width	index
1	Regdate	Date	8	N
2	Regdate	Numeric	4	N
3	credit code	Character	7	N
4	Film-Code	Character	7	N
5	Title	Character	30	N
6	B-Date	Date	8	N
7	R-Date	Date	8	N
8	Rent-AMT	Numeric	2	N

3.7 FLOW CHART

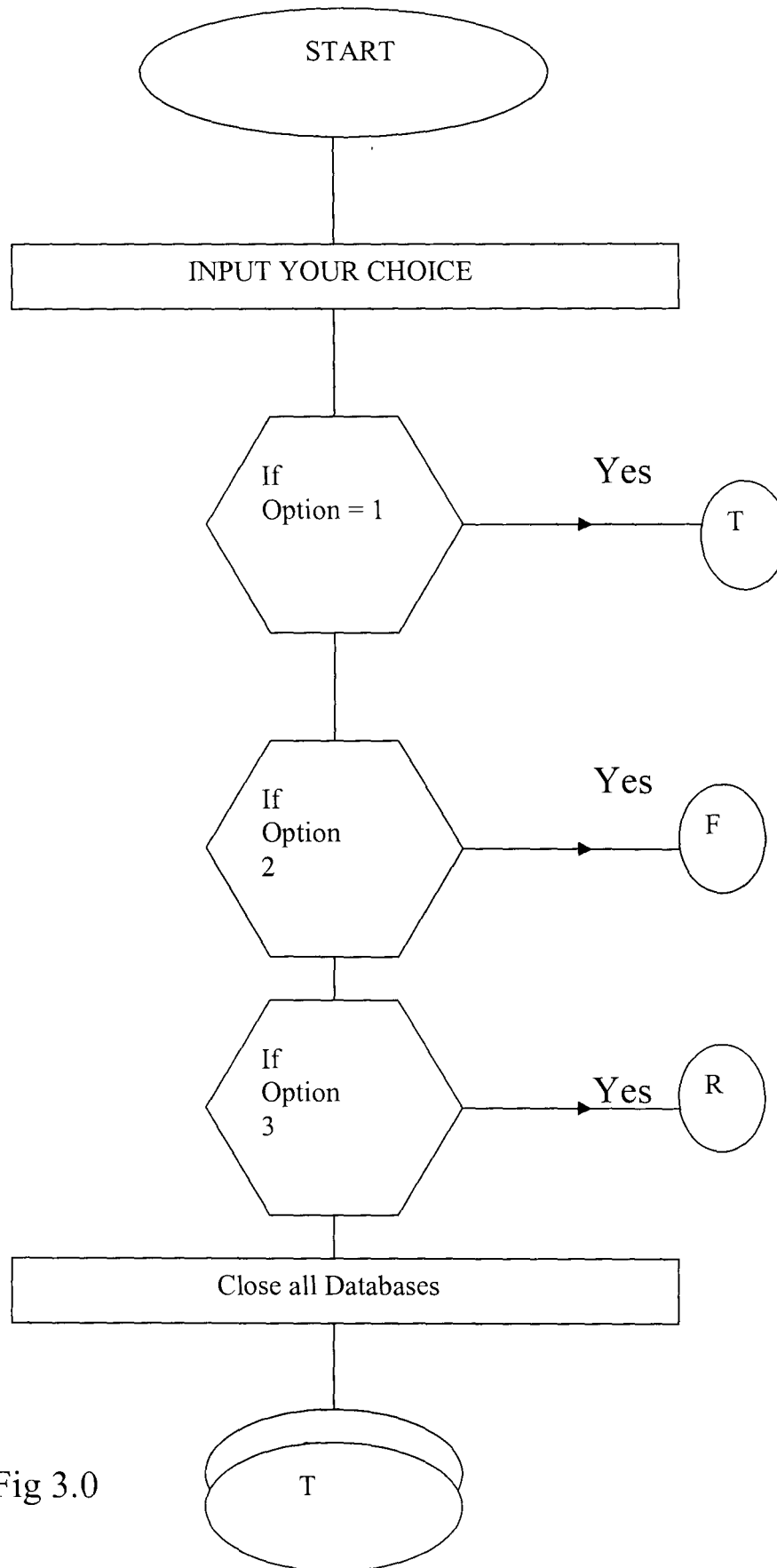
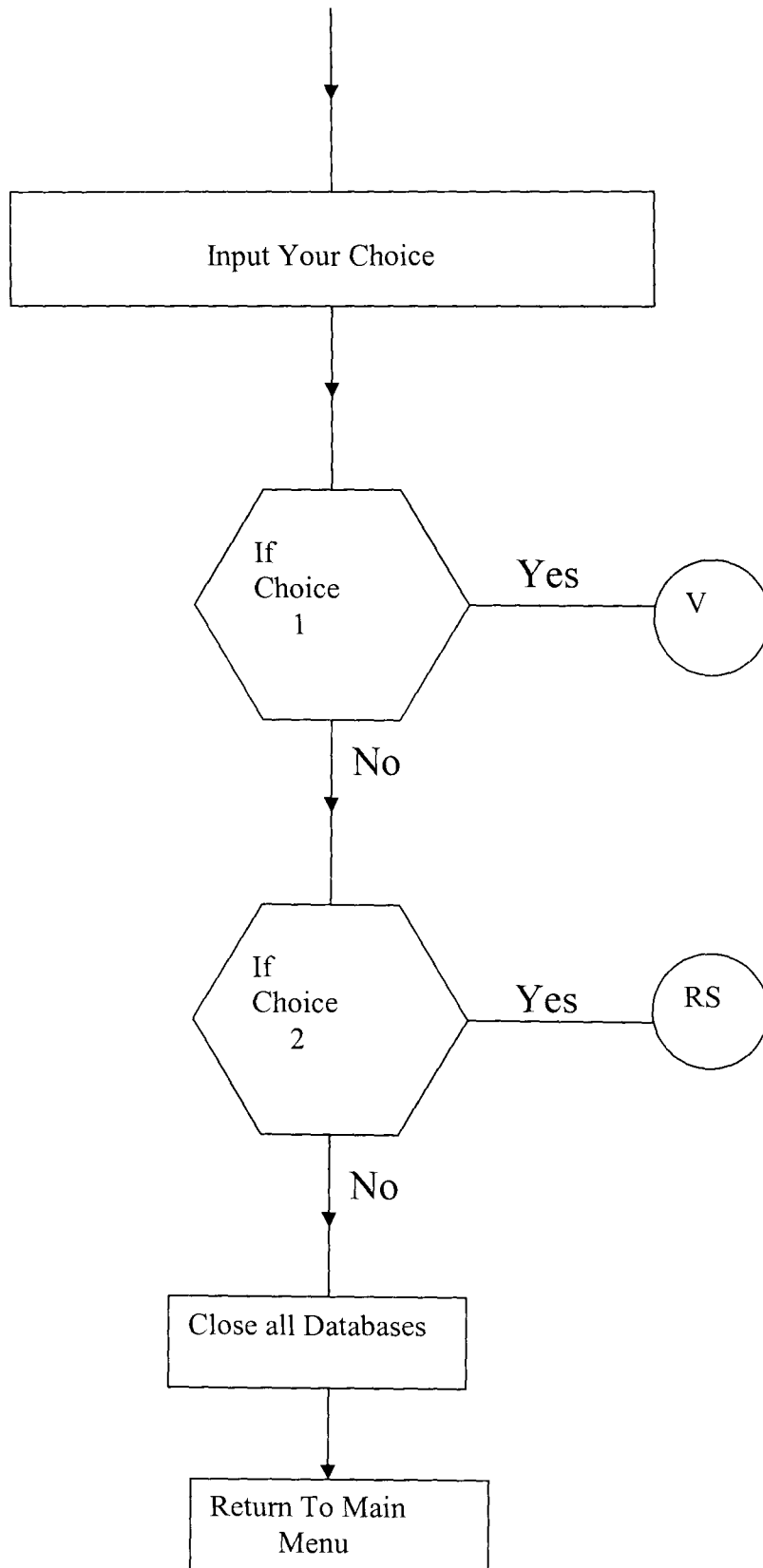
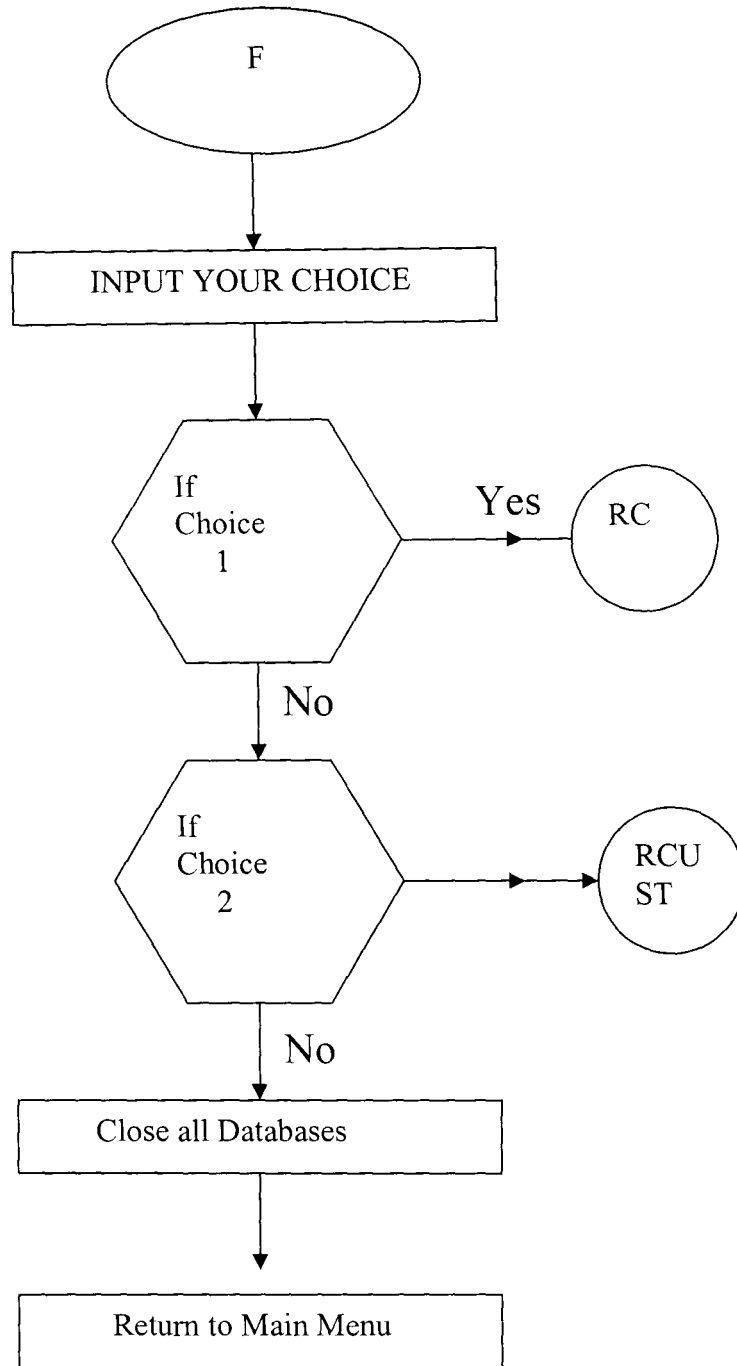
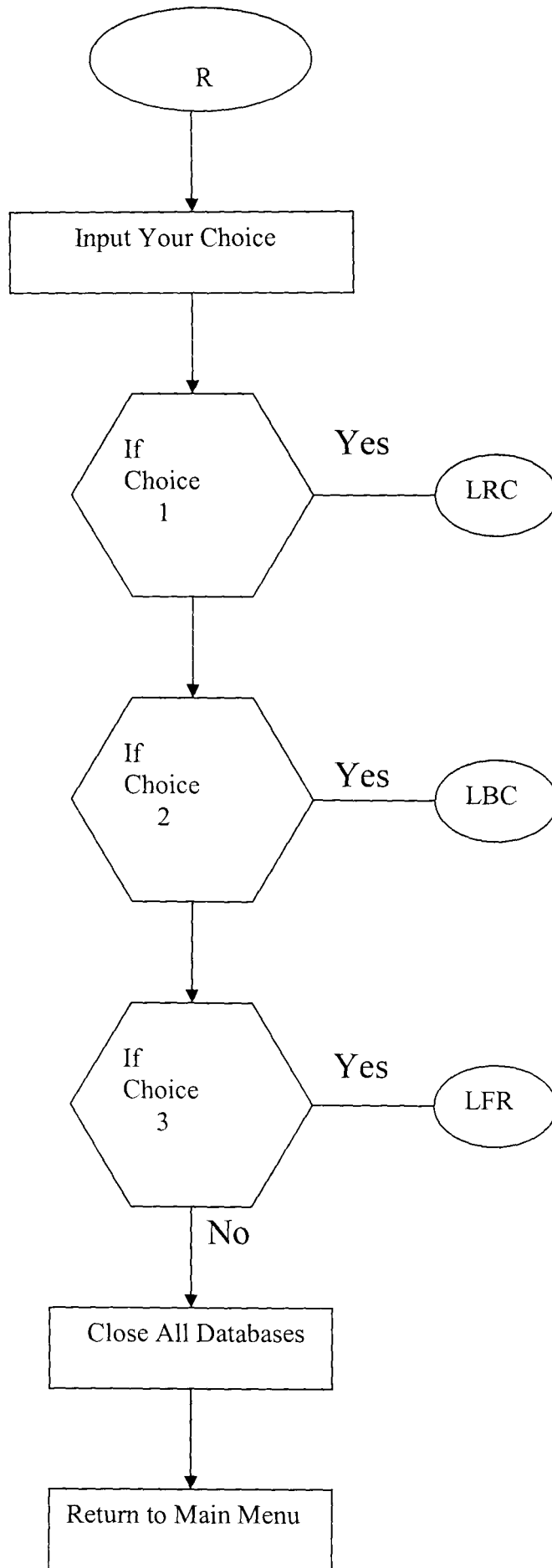


Fig 3.0







Meaning of key word in the flowchart

T	=	Transaction Menu
F	=	File Management
R	=	Report Menu
V	=	Video Recording
RS	=	Rental System
RC	=	Registration of cassette
RCUST	=	Registration of Customer
LRC	=	List of registered cassette
LBC	=	List of borrowed cassette

3.9 Cost Benefit Analysis

In decision techniques for comparing development and planning options, these are two groups of decision techniques applicable to the planning and designing a project. These are:-

- i) The first group is concerned with the best means to a given end; that is best plan or design from the point of view of value of money to solve a particular planning or design problem.
- ii) The techniques are variously known as COST-IN-USE, LIFE CYCLE COSTING, TOTAL COSTS AND ULTIMATE COST ANALYSIS. They are developed independently as analytical solutions to slightly different problems.
- iii) The second includes COST-BENEFIT ANALYSIS, COST EFFECTIVENESS are concerned with ends as well as means. They are really investment tools not only with the plan or design which the projects would make the best use of the available resources and give the highest return.

The techniques are concerned with serving the cost of construction, maintenance and appearance. As far as possible each cost and benefit is evaluated in money terms.

3.9.1 Reason For Cost-Benefit Analysis (C.B.A)

The cost benefit analysis is chosen for the project because of the following reasons. However, explanation is based on this analysis.

1. It is more powerful than cost-in-use. It is not just concerned with which alternative gives the best

value for money but with which gives the best return on capital.

2. It can be used to determine which of the possible projects to finance in order to maximize the return from a given amount of capital or public resources.
3. With cost benefit analysis, the rate of discount is determined by the analysis. In either case the rate of discount affect the weight given to the items. The higher the rate, the lesser the weight is given to cost and benefits and the lower the rate the more weight is given to costs and benefit.

Cost: As far as this project is concerned, the system will require or run on a personal computer (PC).

Benefit: The system would be expected to assist in coping with peaks and reduce the need for overtime or casual temporary staff

3.9.2 **A cost – benefit analysis of the proposed system**

In order to analyses this, the following were put into consideration.

- (a) Old system cost
- (b) New system cost

(a) Old system cost:

(1) Operating Cost

(i) Maintenance Cost

- Environmental cost: This includes, air conditioning fire extinguisher etc and this may gulp N250,000.00

(ii) Implementation Cost

- Staff Training gulped N 10,000.00
- Staff Salary/Wages gulped N 30,000.00

(iii) Users and staff facilities cost		
- Furniture	-	N120,000.00
- TV and Video Set	-	N100,000.00
- Journals	-	N 5,000.00
- Transportation	-	N 20,000.00
- Electrical Appliance	-	N100,000.00
- Video Cassette	-	N200,000.00
Total Analysis cost	-	N825,000.00

(b) New system cost

(i) Development cost

- Installation and delivery cost	=	N50,000.00
- Video System software packages		N60,000.00

(2) Operating cost

i) Maintenance Cost

- Environmental Cost	=	N300,000.00
- Software Modification Cost		N 30,000.00
- System Servicing		N 30,000.00

ii) Implementation Cost

- Staff Training	=	N 30,000.00
- Staff Salary/Wages	=	N 40,000.00

iii) Hardware Cost

- Electrical appliances		N160,000.00
- Monitor, CPU and keyboard		N250,000.00
- Printer, Ribbon, toner		N150,000.00

iv) Users and staff facilities cost

- Furniture		N 120,000.00
- Journals		N 20,000.00
-T.V and video set		N 100,000.00
Total Analysis Cost		N1,340,000.00

Though the cost benefit analysis for the proposed system is more costly compared to the existing (old) cost benefit analysis, yet its ongoing value provide benefit that out weight these initial development costs.

.CHAPTER FOUR SYSTEM IMPLEMENTATION AND MAINTENANCE

4.1 SYSTEM IMPLEMENTATION

Assuming that the necessary hardware is available, the computer program are written, tested and debugged. During this phase, it may be necessary to make changes to the design specifications. If so, the changes are made, approval is obtained and implementation continues.

The implementation involves the process and effort of the establishment to put the proposed system into use. To achieve this an implementation committee should include system analyst, the system programmer and the representatives of the user department [in this case, the clerk department] and the representative of the security unit.

The manager may decide to prefer a format rather than the proposed system. It is best if changes can be made before the system actually does into operation, changes at this stage are less expensive and less disruptive than if they have to be made later on.

As part of contract agreement the software house may provide operation manual on the new system. This does not mean staff should undergo training on the new system, but will training easier. The software house that develops the new system provides the best training on the system. When the system has been thoroughly tested and the user is satisfied with what it does, the system is ready to be put into operation.

4.2 SYSTEM REQUIREMENT

Tomag Video Club requires the following hardware and softwares.

Hardware Requirement

Personal Computer [PC] with the following features;

- a] IBM COMPATIBLE [286]
Memory : 4MB [RAM]
Disk Drive: One or two floppy disk drive
Types of diskettes: 3.5 and 5^{1/4} floppy diskette
Hard disk : 80MB.

- b] Printer
Laser jet or Dot matrix

- c] Stabilizer/U.P.S
U.P.S 1.6
Stabilizer: 600va

Software requirement

Disk Operating System [DOS]:- Ms. DOS 3.0 and above
DBMS package:DBASE iv version 1.1 and above.

4.3 SYSTEM TESTING

4.4

It has been claimed that testing is a demonstration that faults are not present. Despite that fact that some organization spends up to 50% of their software budget on testing, delivered tested software is notoriously unreadable.

The reason for this contradiction is simply put by Dijkstra it that “program testing can be a very effective way to show the presence of bugs, but it is hopelessly inadequate for showing their absence”.

What Dijkstra is saying is that if a product is run with test data and the output is wrong than the product definitely contains a fault. But if the output is correct, than there still may be a fault in the product; all that particular test has shown is that the product runs correctly on that particular set of test data.

The proposed system has to be put into testing because of the following behaviour properties of testing.

I] UTILITY

Utility is the extent to which a user's needs are met when a correct product is used under conditions permitted by its specifications. In other words, a product that, as far as is known, is functioning correctly is subjected to use, whether the product performs useful functions and whether the product is cost effective.

II] CORRECTNESS

A product is correct if it satisfies its output specifications, independent of its use of computing resources, when operated under permitted conditions. In other words, if input satisfying the input specifications is provided and product is given all the resources it needs, then the product is correct if the output satisfies the output specification.

III] RELIABILITY

Reliability is a measure of the frequency and critically of product failure, where failure is an unacceptable effect or behaviour occurring under permissible operating conditions. In other words, it is necessary to know how often the product fails and how bad the effects of that failure can be. When a product fails, an important issue is how long it takes on

average, to repair it. But often more important is how long it takes to repair the result of the failure.

IV] ROBUSTNESS

Another aspect of every product that requires testing is its robustness. While it is difficult to come up with a precise definition of robustness, robustness is essentially a function of a number of factors such as range of operating conditions, the possibility of unacceptable effects on valid input and the acceptability of effect when the products is given invalid input. With regard to the first factor a product with the wide range of permissible operating conditions is more robust than a product that is more restrictive. The second factor is the possibility of unacceptable effects when the product satisfies its specifications. The third factor is the acceptability of effect and behaviour when the product is not used under permissible operating condition.

V) PERFORMANCE

It is essential to know the extent to which the product meets its constraint with regard to response time or space required. For an embedded computer system such as an on-board computer in a handhold anti aircraft missile, the space constraints of the system may be such that there is no way that more than say, 128 kilobytes (kb) main memory can be provided. No matter how excellent the software may be if it cannot operate without 256kb of memory, then it is no use at all.

So, having implemented the proposed system and all the necessary amendment are made, testing of the system takes

over and fortunately meets the specifications (requirements) of Tomag Video recoding club Mpape-Abuja.

4.5 SYSTEM MAINTENANCE

A maintenance routine is necessary to monitor and evaluate the new proposed system.

The user of the proposed system should endeavour to check on the reliability, efficiency, target and goals of the new information system being maintained in the course of using the new system.

Also change is one of the ways of life and so the system should be designed to accommodate changes, which are bound to occur over a period of time. As a good user who has anticipated changes and eventually catered for the changes in his proposed system design. No matter how good the proposed design is, eventually there comes a time when the system becomes unwieldy, changes are difficult and expensive to incorporate.

The system has outlined its usefulness and must be replaced.

Change to the system may be needed for a quite number of reasons listed.

- i) Errors may be discovered in programs. Such errors may show up only after the system has been operating for a while.
- ii) The system specification may change

- iii) The organization may expand its operations for instance Tomag Video Club may decide to add another department to the existing ones.
- iv] Information requirement may change. The manager may now want a list of the fastest borrowing and slowest borrowing cassettes. The programs to produce these reports must now be written.

CHAPTER FIVE

SUMMARY AND CONCLUSION

5.1 SOME CHARACTERISTICS OF VIDEO

- (i) **Illustration**:- above all it is the ability video gives to illustrate process, concepts and behaviour which initially attracts the business users.
- (ii) **Consistency**: Being able to project the same message anywhere at anytime regardless of the availability of key communication, is an important practical reason for using medium.
- (iii) **Flexibility**: one massive advantage over the spoken word is that material of a video is paramount. Especially importantly for the older adult since the efforts required to pay attention to absolutely everything that a speaker says becomes more difficult to maintain as people get older. For the hard-pressed executive as well, the strain of sitting at the back of a conference room which a speaker drones on in a monotone is likely to make snoozing a worthwhile prospect. Attending to every word a speaker deliver making a scene of it, relating what is being said now to what was said earlier, are all very demanding tasks. Since the speaker determines the paces on is apt to loose the thread of what he is saying if one pauses to reflect on the issues. With video, the viewer can control the pace, stop it, start it, makes notes, review and repeat sections to check on their meaning or on details.

- (iv) **Reducing anxiety:** - Video and television are media that people are familiar with in the home. They associated with relaxation, with informal learning, with being entertained and with the comfort of home. They are, for most people, media, which do not threaten or produce anxiety. By contrast face-to-face learning environments often possess residual fear of many adults who remember their experience of school. Many speakers when coming to the end of a talk ask “any questions?” and are met by a resounding silence.

No doubt there are many questions that can be asked. Everyone perk up and nod agreement when one self-confident individual asks the question that everyone use wanted to ask but was too embarrassed or polite to ask. To question the speaker is often to present him with a challenge. Will he reply in a way, which demonstrates the intelligence of questioner or shows up ignorance?

Many, in face – to – face situation, prefer to say silent rather than reveal what they fear is their ignorance by being humiliated by a smart reply. Video then provides an intermediary since it cannot answer directly itself. If a sponsor is there and asked if there are any question arising from the Video it is often easier for many adult to put then question since they are not seen as personal challenges to the sponsor.

- (v) **Creating coherence:** - in a complex world where causes and effect can be separated in time and

distance, coherence and interaction can be made more evident by the skillful use of editing in video.

The implication of action taken in the distance past can be felt today through their origins may well have been forgotten.

Video has the ability to move through time, to preserve history to bring yesterday into today's arguments through achieve materials.

Its ability to move from the very detailed microscopic view to the overview from the air can be done in seconds.

Its ability to speed up processes or slow then down is something that we cannot experience except through video or film

5.1 SUMMARY AND CONCLUSION

The main aim of this project is to effectively design and computerize the activities of an establishment (Tomag Video Club) that would reduce their inefficiency, data application associated with the management section of the debugged and tested with some of the existing data and is found to be working fine.

The project design was based on the information gathered from Tomag Video club Mpape Abuja, and other renowned Video club in FCT.

The project has helped me to understand what system design and development entail and how to go about it, not only in the university, as a project but also for future needs.

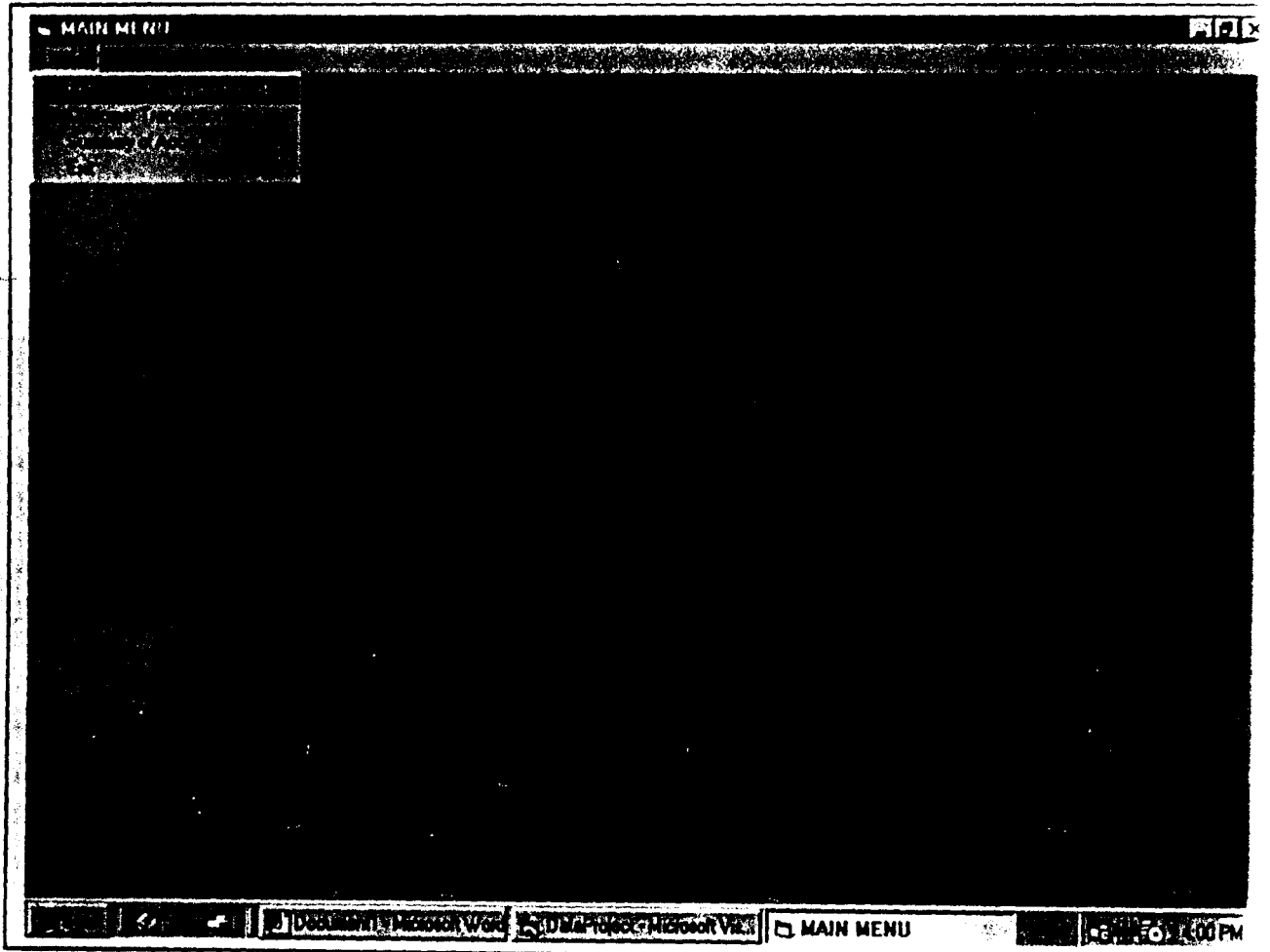
It has also help me to know how much about anything related to be fast, efficient and error free.

To achieve these computers have to come in and more so as system to do the processing must be developed.

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MAIN MENU



ENTRY FOR NEW PURCHASED ITEM(S)

MAIN MENU
_ | _ | x

New Item Bought Template
_ | _ | x

Coming to america
v

Item Number : 1

Description : Coming to america

Quantity Bought : 2

Film Locality : International v

Date Purchased : 01/02/01

Item Number	Description	Quantity Bought	De
1	Coming to america	2	
2	The Prodical Son	3	
2	The Day of Wrath	1	

Insert	<<	Update	<<	>>	K<
>>	Delete	Find	Reset	Exit	

Start | DataProject - Micro | MAIN MENU | MAINMENU - Micro | New Item Boug... | 4:02 PM

CUSTOMER TRANSACTION TEMPLATE

MAIN MENU
Transaction...

List of Customer

Registration Number: Full Name:

Registration Number	Full Name
0001	Abobade Olajide
0002	Abobade Okundayo
0003	Abobade Okusola
0004	Abobade Okukemi
0005	Abobade Okutosin
0006	Johnson Emma

Action Template:

Transaction Template

Transaction Number: 2 Registration No.: 0001

The Day of Redemption:

S/N	Film Collected	Amount Paid	Date Collected	Date Returned	DayT	MonthT	Year
2	The Day of Redemption	40	01/01/01	XXX	MON	JAN	2001
3	Welcome Home	50	02/03/02	XXX	THUR	MAR	2002
4	The Lion Of Judah	50	01/02/02	XXX	THUR	FEB	2002

Action Template:

Start | DataProject - Micro | MAIN MENU | PURCH - Microsoft | Transaction... | 4:03 PM

SUMMARY OF ACCOUNT

Summary of Account
Summary Print Exit

SUMMARY OF ACCOUNT

Total Number of Films Collected :- 0

Year :- 1999

Month :- JAN

Day :-

Date :-

Summary of account :- .00

Select to Summarize

1999 JAN MON

Year *Month* *Day*

Year Month Day All

Start | DataProject - Micro | MAIN MENU | CUS - Microsoft Word | Summary of Ac... | 4:05 PM

PROGRAM SOURCE LISTING

```
Private Sub cmbDay_Change()  
    Call cmdItem_Change  
End Sub
```

```
Private Sub cmbDay_Click()  
Call cmdItem_Change  
End Sub
```

```
Private Sub cmbMonth_Change()  
    Call cmdItem_Change  
End Sub
```

```
Private Sub cmbMonth_Click()  
Call cmdItem_Change  
End Sub
```

```
Private Sub cmbYear_Change()  
    Call cmdItem_Change  
End Sub
```

```
Private Sub cmbYear_Click()  
Call cmdItem_Change  
End Sub
```

```
Private Sub cmdAmt_Change()  
    Call cmdItem_Change  
End Sub
```

```
Private Sub cmdAmt_Click()  
    Call cmdItem_Change  
End Sub
```

```
Private Sub cmdCloseRec_Click()
```

```
    Unload Me
```

```
End Sub
```

```
Private Sub cmdDelete_Click()
```

```
    ' On Error Resume Next
```

```

Dim delrec As Integer
Dim strDelet As String

'
strDelet = InputBox("Enter the Transaction number of the record to be deleted",
"Request for Tr...")

delrec = MsgBox("Do you want to delete the record with this ID " & strDelet & "
number ", vbYesNo + vbCritical, "Delete Mode")

'
If delrec = vbYes Then
'
With adoTran2
RecordSource = "SELECT * FROM TransactionTb WHERE IdI " + strDelet +
'''
.Refresh
End With
'
With adoTran2.Recordset
Delete
.Requery

End With
'
adoTran2.Refresh
Set MSHFlexGrid1.DataSource = adoTran2
MSHFlexGrid1.FormatString = "| S/N | Film Collected | Amount
Paid | Date Collected | Date Returned |"

MsgBox "Record Deleted.."

Else
MsgBox "Delete Operation Cancelled"
End If

End Sub

```



```

Private Sub cmdDeleteRec_Click()

    ' On Error Resume Next

    Dim delrec As Integer
    Dim strDelet As String

    '
    strDelet = InputBox("Enter the Registration number of the record to be deleted",
    "Request for regn...")
    '
    With adoTran1
        .RecordSource = "SELECT * FROM CustomerTable where RegNo =" + strDelet +
    """"
        .Refresh
    End With
    '
    'Exit Sub

    delrec = MsgBox("Do you want to delete the record with this ID " & strDelet & "
    number ", vbYesNo + vbCritical, "Delete Mode")

    '
    If delrec = vbYes Then

        With adoTran2

            .RecordSource = "SELECT * FROM TransactionTb WHERE Reg_no_1 = " +
    strDelet + """"
            .Refresh
        End With
        '
        With adoTran2.Recordset

            Do While .EOF = False

                'Move (MSHFlexGrid1.Row - 1) ' the first row of msflgrid is the tile of
    msflgrid...
                .Delete
                .Requery
                'MoveNext

            Loop

        End With
    End With

```

With adoTran1.Recordset

.Move (MSHFlexGrid2.Row - 1) ' the first row of msflgrid is the tile of msflgrid...

.Delete

.Requery

End With

adoTran1.Refresh

Set MSHFlexGrid2.DataSource = adoTran1

MSHFlexGrid2.FormatString = "| Registration Number | Full Name |"

adoTran2.Refresh

Set MSHFlexGrid1.DataSource = adoTran2

MSHFlexGrid1.FormatString = "| S/N | Film Collected | Amount

Paid | Date Collected | Date Returned |"

MsgBox "Record Deleted.."

Else

MsgBox "Delete Operation Cancelled"

End If

End Sub

Private Sub cmdExit_Click()

Unload Me

End Sub

Private Sub cmdFind_Click()

Dim findddd As String

findddd = UCase(InputBox("Enter the Transaction Number to find" & vbCrLf & "XXX
to view unreturned films ", "Search"))

If findddd = "XXX" Then

With adoTran2

.ConnectionString = "Provider = Microsoft.Jet.OLEDB.4.0;Data Source= C:\video_club\dbms.mdb;Persist Security Info= false"

.RecordSource = "SELECT * FROM TransactionTb WHERE data_return = "" + findddd + "" ORDER BY Id1"

.Refresh

End With

,

adoTran2.Recordset.MoveFirst

,

With adoTran2.Recordset

Label1.Caption = "Transaction Number : - " & .Fields(0) & " Registration No : - " & .Fields(5)

cmdItem.Text = .Fields(1)

cmdAmt.Text = .Fields(2)

txtCollect.Text = .Fields(3)

txtReturn.Text = .Fields(4)

cmbYear.Text = .Fields(8)

cmbMonth.Text = .Fields(7)

cmbDay.Text = .Fields(6)

Label1.Caption = "Transaction Number : - " & .Fields(0) & " Registration No : - " & .Fields(5)

End With

,

Set MSFlexGrid1.DataSource = adoTran2

MSFlexGrid1.FormatString = "| S/N | Film Collected | Amount Paid
| Date Collected | Date Returned |"

Else

With adoTran2

.ConnectionString = "Provider = Microsoft.Jet.OLEDB.4.0;Data Source= C:\video_club\dbms.mdb;Persist Security Info=false"

.RecordSource = "SELECT * FROM TransactionTb WHERE Id1= "" + findddd + "" ORDER BY Id1"

.Refresh

End With

,

```

adoTran2.Recordset.MoveFirst
'
With adoTran2.Recordset

    Label1.Caption = "Transaction Number : - " & .Fields(0)

    cmdItem.Text = .Fields(1)
    cmdAmt.Text = .Fields(2)
    txtCollect.Text = .Fields(3)
    txtReturn.Text = .Fields(4)

    cmbYear.Text = .Fields(8)
    cmbMonth.Text = .Fields(7)
    cmbDay.Text = .Fields(6)

End With
'

Set MSIFlexGrid1.DataSource = adoTran2
MSIFlexGrid1.FormatString = "| S/N | Film Collected | Amount Paid |
| Date Collected | Date Returned |"
End If
'

End Sub

Private Sub cmdFinfRec_Click()

    On Error Resume Next

    'With adoTran1

        ' ConnectionString = "Provider=Microsoft.Jet.OLEDB.4.0;Data
Source=C:\video_club\dbms.mdb;Persist Security Info=false"
        ' RecordSource = "SELECT * FROM NewItemTable"
        ' Refresh

    End With
    '
    'adoTran1.Recordset.MoveFirst
    '
    'With adoTran1.Recordset

        ' Do While .EOF = False
        '     cmdItem.AddItem .Fields(1)
        '     .MoveNext
        ' Loop

```

```

'
'End With
'
'adoTran1.Recordset.Close
'

With adoTran1

    .ConnectionString = "Provider = Microsoft.Jet.OLEDB.4.0;Data
Source=C:\video_club\dbms.mdb;Persist Security Info=false"
    .RecordSource = "SELECT * FROM CustomerTable WHERE RegNo = '" +
txtReg.Text + "'"
    .Refresh

End With
'
'
adoTran1.Recordset.MoveFirst

With adoTran1.Recordset

    txtReg.Text = .Fields(0)
    txtName.Text = .Fields(1)

End With
'
'
Set MSHFlexGrid2.DataSource = adoTran1
MSHFlexGrid2.FormatString = "| Registration Number | Full Name |"
'
'
With adoTran2

    .ConnectionString = "Provider = Microsoft.Jet.OLEDB.4.0;Data
Source=C:\video_club\dbms.mdb;Persist Security Info=false"
    .RecordSource = "SELECT * FROM TransactionTb where Reg_no_1 = '" +
txtReg.Text + "' ORDER BY Id1"
    .Refresh

End With
'
'
adoTran2.Recordset.MoveFirst
'
With adoTran2.Recordset

    Label1.Caption = "Transaction Number : - " & .Fields(0)

```

```

cmdItem.Text = .Fields(1)
cmdAmt.Text = .Fields(2)
txtCollect.Text = .Fields(3)
txtReturn.Text = .Fields(4)

cmbYear.Text = .Fields(8)
cmbMonth.Text = .Fields(7)
cmbDay.Text = .Fields(6)
Label1.Caption = "Transaction Number : - " & .Fields(0) & " Registration No : - "
& .Fields(5)

End With
'
Set MSIFlexGrid1.DataSource = adoTran2
MSIFlexGrid1.FormatString = "| S/N | Film Collected | Amount Paid |
| Date Collected | Date Returned |"
'
'With adoTran2.Recordset

' Do While .EOF = False
' sngBal = sngBal + Val(.Fields(4))
' .MoveNext
' Loop
'

'End With
'txtBal.Text = Val(txtRQty.Text) - sngBal
'sngBal = 0

```

End Sub

```
Private Sub cmdFirst_Click()
```

```
On Error Resume Next
```

```
With adoTran2.Recordset
```

```
.MoveFirst
```

```
cmdItem.Text = .Fields(1)
```

```
cmdAmt.Text = .Fields(2)
```

```
txtCollect.Text = .Fields(3)
txtReturn.Text = .Fields(4)
cmbDay.Text = .Fields(6)
cmbMonth.Text = .Fields(7)
cmbYear.Text = .Fields(8)
```

```
Label1.Caption = "Transaction Number : - " & .Fields(0) & " Registration No : - " & .Fields(5)
```

```
End With
```

```
End Sub
```

```
Private Sub cmdInsert_Click()
```

```
cmdItem.Text = ""
cmdAmt.Text = ""
txtCollect.Text = ""
txtReturn.Text = "XXX"
cmbYear.Text = ""
cmbMonth.Text = ""
cmbDay.Text = ""
T1 = 1
```

```
End Sub
```

```
Private Sub cmdInsert1_Click()
```

```
txtReg.Text = ""
txtName.Text = ""
T = 1
```

```
End Sub
```

```
Private Sub cmdItem_Change()
```

```
If Trim(cmdItem.Text) <> Trim("") And Trim(cmdAmt.Text) <> Trim("") And  
Trim(txtCollect.Text) <> Trim("") And Trim(txtReturn.Text) <> Trim("") And  
Trim(cmbYear.Text) <> Trim("") And Trim(cmbMonth.Text) <> Trim("") And  
Trim(cmbDay.Text) <> Trim("") And T1 <> 0 Then
```

```
cmdSave.Enabled = True
```

```
Else
    cmdSave.Enabled = False
End If
```

```
End Sub
```

```
Private Sub cmdLast_Click()
```

```
    On Error Resume Next
```

```
    With adoTran2.Recordset
```

```
        .MoveLast
```

```
        cmdItem.Text = .Fields(1)
```

```
        cmdAmt.Text = .Fields(2)
```

```
        txtCollect.Text = .Fields(3)
```

```
        txtReturn.Text = .Fields(4)
```

```
        cmbDay.Text = .Fields(6)
```

```
        cmbMonth.Text = .Fields(7)
```

```
        cmbYear.Text = .Fields(8)
```

```
        Label1.Caption = "Transaction Number : - " & .Fields(0) & " Registration No : - " & .Fields(5)
```

```
    End With
```

```
End Sub
```

```
Private Sub cmdMoveFirst_Click()
```

```
    On Error Resume Next
```

```
    With adoTran1.Recordset
```

```
        .MoveFirst
```

```
        txtReg.Text = .Fields(0)
```

```
        txtName.Text = .Fields(1)
```



```

End With
'
'
With adoTran2

    .ConnectionString = "Provider = Microsoft.Jet.OLEDB.4.0;Data
Source= C:\inventory\inventory.mdb;Persist Security Info = false"
    .RecordSource = "SELECT * FROM TransactionTb where Reg_no = " & txtReg.Text + " ORDER BY Id1"
    .Refresh

End With
'
'
adoTran2.Recordset.MoveFirst

With adoTran2.Recordset

    cmdItem.Text = .Fields(1)
    cmdAmt.Text = .Fields(2)
    txtCollect.Text = .Fields(3)
    txtReturn.Text = .Fields(4)
    cmbDay.Text = .Fields(6)
    cmbMonth.Text = .Fields(7)
    cmbYear.Text = .Fields(8)
    Label1.Caption = "Transaction Number : - " & .Fields(0) & " Registration No : - "
    & .Fields(5)

End With
'
Set MSHFlexGrid1.DataSource = adoTran2
MSHFlexGrid1.FormatString = "[ S/N | Film Collected | Amount Paid
| Date Collected | Date Returned ]"
'
'
'With adoTran2.Recordset

' Do While .EOF = False
'     sngBal = sngBal + Val(.Fields(4))
'     .MoveNext
' Loop

'End With
txtBal.Text = Val(txtRQty.Text) - sngBal

```

```

'sngBal = 0

End Sub

Private Sub cmdMoveLast_Click()

    On Error Resume Next

    With adoTran1.Recordset

        .MoveLast

        txtReg.Text = .Fields(0)
        txtName.Text = .Fields(1)

        '
        '

    End With

    With adoTran2

        '.ConnectionString = "Provider = Microsoft.Jet.OLEDB.4.0;Data
Source=C:\inventory\inventory.mdb;Persist Security Info=false"
        .RecordSource = "SELECT * FROM TransactionTb where Reg_no_1 = '" +
txtReg.Text + "' ORDER BY Id1"
        .Refresh

    End With

    '
    '

    adoTran2.Recordset.MoveFirst

    With adoTran2.Recordset

        cmdItem.Text = .Fields(1)
        cmdAmt.Text = .Fields(2)
        txtCollect.Text = .Fields(3)
        txtReturn.Text = .Fields(4)
        cmbDay.Text = .Fields(6)
        cmbMonth.Text = .Fields(7)
        cmbYear.Text = .Fields(8)
        Label1.Caption = "Transaction Number : - " & .Fields(0) & " Registration No : - "
& .Fields(5)

    End With

```

```

'
Set MSHFlexGrid1.DataSource = adoTran2
MSHFlexGrid1.FormatString = "| S/N |      Film Collected      |      Amount Paid
| Date Collected | Date Returned |"
'
'

```

```

'With adoTran2.Recordset

```

```

' Do While .EOF = False
'   sngBal = sngBal + Val( Fields(4))
'   MoveNext
' Loop
'

```

```

'End With

```

```

'txtBal.Text = Val(txtRQty.Text) - sngBal

```

```

'sngBal = 0

```

```

End Sub

```

```

Private Sub cmdMoveNext_Click()

```

```

    On Error Resume Next

```

```

    With adoTran1.Recordset

```

```

        If .EOF Then

```

```

            .MoveLast

```

```

        Else

```

```

            .MoveNext

```

```

            txtReg.Text = .Fields(0)

```

```

            txtName.Text = .Fields(1)

```

```

        End If

```

```

    End With

```

```

'

```

```

'

```

```

    With adoTran2

```

```

        '.ConnectionString = "Provider=Microsoft.Jet.OLEDB.4.0;Data
Source=C:\inventory\inventory.mdb;Persist Security Info=false"

```

```

        .RecordSource = "SELECT * FROM TransactionTb where Reg_no_1 = '" +
txtReg.Text + "' ORDER BY Id1"

```

```

        .Refresh
    End With

```

```

End With
'
'
adoTran2.Recordset.MoveFirst

With adoTran2.Recordset

    cmdItem.Text = .Fields(1)
    cmdAmt.Text = .Fields(2)
    txtCollect.Text = .Fields(3)
    txtReturn.Text = .Fields(4)
    cmbDay.Text = .Fields(6)
    cmbMonth.Text = .Fields(7)
    cmbYear.Text = .Fields(8)
'

    Label1.Caption = "Transaction Number : - " & .Fields(0) & " Registration No : - "
    & .Fields(5)

End With
'

Set MSHFlexGrid1.DataSource = adoTran2
MSHFlexGrid1.FormatString = "] S/N ]      Film Collected      |      Amount Paid
[ Date Collected ] Date Returned [ "
'
'
'With adoTran2.Recordset

' Do While .EOF = False
'     sngBal = sngBal + Val(.Fields(4))
'     .MoveNext
' Loop

'End With
'txtBal.Text = Val(txtRQty.Text) - sngBal
'sngBal = 0
End Sub

Private Sub cmdMovePrev_Click()

    On Error Resume Next

    With adoTran1.Recordset

        If .BOF Then
            .MoveFirst
        Else

```

```

.MovePrevious

txtReg.Text = .Fields(0)
txtName.Text = .Fields(1)

End If

End With
'
'
With adoTran2

    .ConnectionString = "Provider = Microsoft.Jet.OLEDB.4.0;Data
Source=C:\inventory\inventory.mdb;Persist Security Info=false"
    RecordSource = "SELECT * FROM TransactionTb where Reg_no_1 = " +
txtReg.Text + " ORDER BY Id1"
    Refresh

End With
'
'
adoTran2.Recordset.MoveFirst

With adoTran2.Recordset

    cmdItem.Text = .Fields(1)
    cmdAmt.Text = .Fields(2)
    txtCollect.Text = .Fields(3)
    txtReturn.Text = .Fields(4)
    cmbDay.Text = .Fields(6)
    cmbMonth.Text = .Fields(7)
    cmbYear.Text = .Fields(8)
    '

    Label1.Caption = "Transaction Number : - " & .Fields(0) & " Registration No : - "
& .Fields(5)

End With
'
Set MSHFlexGrid1.DataSource = adoTran2
MSHFlexGrid1.FormatString = "| S/N |      Film Collected      | Amount Paid
| Date Collected | Date Returned |"
'

End Sub

```

```
Private Sub cmdNext_Click()
```

```
    On Error Resume Next
```

```
    With adoTran2.Recordset
```

```
        If .EOF Then
```

```
            .MoveLast
```

```
        Else
```

```
            .MoveNext
```

```
            cmdItem.Text = .Fields(1)
```

```
            cmdAmt.Text = .Fields(2)
```

```
            txtCollect.Text = .Fields(3)
```

```
            txtReturn.Text = .Fields(4)
```

```
            cmbDay.Text = .Fields(6)
```

```
            cmbMonth.Text = .Fields(7)
```

```
            cmbYear.Text = .Fields(8)
```

```
            Label1.Caption = "Transaction Number :- " & .Fields(0) & " Registration No :-  
" & .Fields(5)
```

```
        End If
```

```
    End With
```

```
End Sub
```

```
Private Sub cmdPrev_Click()
```

```
    On Error Resume Next
```

```
    With adoTran2.Recordset
```

```
        If .BOF Then
```

```
            .MoveFirst
```

```
        Else
```

```
            .MovePrevious
```

```
            cmdItem.Text = .Fields(1)
```

```
            cmdAmt.Text = .Fields(2)
```

```
            txtCollect.Text = .Fields(3)
```

```
            txtReturn.Text = .Fields(4)
```

```
            cmbDay.Text = .Fields(6)
```

```
            cmbMonth.Text = .Fields(7)
```

```
            cmbYear.Text = .Fields(8)
```

```
Label1.Caption = "Transaction Number : - " & .Fields(0) & " Registration No : - " & .Fields(5)
```

```
End If
```

```
End With
```

```
End Sub
```

```
Private Sub cmdReset_Click()
```

```
With adoTran2
```

```
    .ConnectionString = "Provider=Microsoft.Jet.OLEDB.4.0;Data Source=C:\video_club\dbms.mdb;Persist Security Info=false"
```

```
    .RecordSource = "SELECT * FROM TransactionTb where Reg_no_1 = '" & txtReg.Text & "' ORDER BY Id1"
```

```
    .Refresh
```

```
End With
```

```
adoTran2.Recordset.MoveFirst
```

```
With adoTran2.Recordset
```

```
Label1.Caption = "Transaction Number : - " & .Fields(0)
```

```
cmdItem.Text = .Fields(1)
```

```
cmdAmt.Text = .Fields(2)
```

```
txtCollect.Text = .Fields(3)
```

```
txtReturn.Text = .Fields(4)
```

```
cmbYear.Text = .Fields(8)
```

```
cmbMonth.Text = .Fields(7)
```

```
cmbDay.Text = .Fields(6)
```

```
Label1.Caption = "Transaction Number : - " & .Fields(0) & " Registration No : - " & .Fields(5)
```

```
End With
```

```
Set MSIFlexGrid1.DataSource = adoTran2
```

```
MSIFlexGrid1.FormatString = "| S/N | Film Collected | Amount Paid | Date Collected | Date Returned |"
```

```
End Sub
```

```
Private Sub cmdResetAdo_Click()
```

On Error Resume Next

With adoTran1

 ' ConnectionString = "Provider = Microsoft.Jet.OLEDB.4.0;Data
Source=C:\video_club\dbms.mdb;Persist Security Info=false"

 ' RecordSource = "SELECT * FROM NewItemTable"

 ' Refresh

End With

adoTran1.Recordset.MoveFirst

With adoTran1.Recordset

 ' Do While .EOF = False

 ' cmdItem.AddItem .Fields(1)

 ' MoveNext

 ' Loop

End With

adoTran1.Recordset.Close

With adoTran1

 ' ConnectionString = "Provider = Microsoft.Jet.OLEDB.4.0;Data
Source=C:\video_club\dbms.mdb;Persist Security Info=false"

 ' RecordSource = "SELECT * FROM CustomerTable ORDER BY RegNo"

 ' Refresh

End With

adoTran1.Recordset.MoveFirst

With adoTran1.Recordset

 txtReg.Text = .Fields(0)

 txtName.Text = .Fields(1)

End With


```

Set MSHFlexGrid2.DataSource = adoTran1
MSHFlexGrid2.FormatString = "| Registration Number | Full Name | "
'
'
'
With adoTran2
    .ConnectionString = "Provider = Microsoft.Jet.OLEDB.4.0;Data
Source= C:\video_club\dbms.mdb;Persist Security Info =false"
    .RecordSource = "SELECT * FROM TransactionTb where Reg_no_1 = '" +
txtReg.Text + "' ORDER BY Id1"
    .Refresh
End With
'
adoTran2.Recordset.MoveFirst
'
With adoTran2.Recordset

    Label1.Caption = "Transaction Number : - " & .Fields(0)

    cmdItem.Text = .Fields(1)
    cmdAmt.Text = .Fields(2)
    txtCollect.Text = .Fields(3)
    txtReturn.Text = .Fields(4)

    cmbYear.Text = .Fields(8)
    cmbMonth.Text = .Fields(7)
    cmbDay.Text = .Fields(6)

End With
'
Set MSHFlexGrid1.DataSource = adoTran2
MSHFlexGrid1.FormatString = "| S/N | Film Collected | Amount Paid
| Date Collected | Date Returned | "
'
'With adoTran2.Recordset

' Do While .EOF = False
'     sngBal = sngBal + Val(.Fields(4))
'     .MoveNext
' Loop
'
'End With
'txtBal.Text = Val(txtRQty.Text) - sngBal
'sngBal = 0

```

End Sub

Private Sub cmdSave_Click()

 With adoTran2.Recordset

 .AddNew

 .Fields(1) = cmdItem.Text

 .Fields(2) = cmdAmt.Text

 .Fields(3) = txtCollect.Text

 .Fields(4) = txtReturn.Text

 .Fields(5) = txtReg.Text

 .Fields(6) = cmbDay.Text

 .Fields(7) = cmbMonth.Text

 .Fields(8) = cmbYear.Text

 ,

 .Update

 .Requery

End With

 adoTran2.Refresh

 ,

 ,

 Set MSIFlexGrid1.DataSource = adoTran2

 MSIFlexGrid1.FormatString = "| S/N | Film Collected | Amount Paid
| Date Collected | Date Returned |"

 ,

 Label1.Caption = "Transaction Number : - " & .Fields(0)

 T1 = 0

 cmdSave.Enabled = False

End Sub

Private Sub cmdSave1_Click()

 With adoTran1.Recordset

 .AddNew

```

    ,
    .Fields(0) = txtReg.Text
    .Fields(1) = txtName.Text

    .Update
    .Requery

End With

adoTran1.Refresh
,
,

Set MSHFlexGrid2.DataSource = adoTran1
MSHFlexGrid2.FormatString = "| Registration Number | Full Name |"

T = 0
cmdSave1.Enabled = False

End Sub

Private Sub cmdUpdate_Click()

With adoTran2.Recordset

    'AddNew

    .Fields(1) = cmdItem.Text
    .Fields(2) = cmdAmt.Text
    .Fields(3) = txtCollect.Text
    .Fields(4) = txtReturn.Text
    .Fields(5) = txtReg.Text
    .Fields(6) = cmbDay.Text
    .Fields(7) = cmbMonth.Text
    .Fields(8) = cmbYear.Text

    ,

    .Update
    .Requery

End With

adoTran2.Refresh
,
,

```

```
Set MSHFlexGrid1.DataSource = adoTran2
MSHFlexGrid1.FormatString = "| S/N | Film Collected | Amount Paid  
| Date Collected | Date Returned |"
```

```
' Label1.Caption = "Transaction Number : - " & .Fields(0)
```

```
End Sub
```

```
Private Sub cmdUpdate1_Click()
```

```
With adoTran1.Recordset
```

```
.Fields(0) = txtReg.Text
```

```
.Fields(1) = txtName.Text
```

```
.Update
```

```
.Requery
```

```
End With
```

```
adoTran1.Refresh
```

```
Set MSHFlexGrid2.DataSource = adoTran1
```

```
MSHFlexGrid2.FormatString = "| Registration Number | Full Name |"
```

```
End Sub
```

```
Private Sub Form_Load()
```

```
On Error Resume Next
```

```
With adoTran1
```

```
ConnectionString = "Provider = Microsoft Jet OLEDB 4.0;Data  
Source = C:\video club\mdbms.mdb;Persist Security Info = false"  
RecordSource = "SELECT * FROM NewItemTable"
```

.Refresh

End With

adoTran1.Recordset.MoveFirst

With adoTran1.Recordset

Do While .EOF = False

cmdItem.AddItem .Fields(1)

.MoveNext

Loop

End With

adoTran1.Recordset.Close

With adoTran1

.ConnectionString = "Provider = Microsoft.Jet.OLEDB.4.0;Data

Source = C:\video_club\dbms.mdb;Persist Security Info=false"

RecordSource = "SELECT * FROM CustomerTable ORDER BY RegNo"

.Refresh

End With

adoTran1.Recordset.MoveFirst

With adoTran1.Recordset

txtReg.Text = .Fields(0)

txtName.Text = .Fields(1)

End With

Set MSIFlexGrid2.DataSource = adoTran1

MSIFlexGrid2.FormatString = "| Registration Number |

With adoTran2

.ConnectionString = "Provider = Microsoft.Jet.OLEDB.4.0;Data

Source = C:\video_club\dbms.mdb;Persist Security Info=false"

Full Name

```
.RecordSource = "SELECT * FROM TransactionTb where Reg_no_1 = " +  
txtReg.Text + " ORDER BY Id1"
```

```
Refresh
```

```
End With
```

```
adoTran2.Recordset.MoveFirst
```

```
With adoTran2.Recordset
```

```
Label1.Caption = "Transaction Number : - " & .Fields(0)
```

```
cmdItem.Text = .Fields(1)
```

```
cmdAmt.Text = .Fields(2)
```

```
txtCollect.Text = .Fields(3)
```

```
txtReturn.Text = .Fields(4)
```

```
cmbYear.Text = .Fields(8)
```

```
cmbMonth.Text = .Fields(7)
```

```
cmbDay.Text = .Fields(6)
```

```
Label1.Caption = "Transaction Number : - " & .Fields(0) & " Registration No : - "  
& .Fields(5)
```

```
End With
```

```
Set MSIFlexGrid1.DataSource = adoTran2
```

```
MSIFlexGrid1.FormatString = "| S/N |
```

```
| Date Collected | Date Returned |"
```

```
Film Collected
```

```
| Amount Paid
```

```
With adoTran2.Recordset
```

```
Do While .EOF = False
```

```
sngBal = sngBal + Val(.Fields(4))
```

```
MoveNext
```

```
Loop
```

```
End With
```

```
txtBal.Text = Val(txtRQty.Text) - sngBal
```

```
sngBal = 0
```

```
End Sub
```

```
Private Sub txtCollect_Change()
```

```
Call cmdItem_Change
```

End Sub

```
Private Sub txtCollect_Click()  
Call cmdItem_Change  
End Sub
```

```
Private Sub txtName_Change()  
Call txtReg_Change  
End Sub
```

```
Private Sub txtReg_Change()
```

```
    If Trim(txtReg.Text) <> Trim("") And Trim(txtName.Text) <> Trim("") And T <> 0  
Then
```

```
    cmdSave1.Enabled = True
```

```
Else
```

```
    cmdSave1.Enabled = False
```

```
End If
```

End Sub

```
Private Sub txtReturn_Change()  
Call cmdItem_Change  
End Sub
```

```
Private Sub txtReturn_Click()  
Call cmdItem_Change  
End Sub
```