COMPUTERIZATION OF CRIMINAL RECORDS OF THE NIGERIAN POLICE FORCE.

(A CASE STUDY OF WUSHISHI DIVISION, WUSHISHI LOCAL GOVERNEMENT AREA)

BY

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CERTIFICATION

This project titled the computerization of criminal Records of the Nigeria police force (A case study of wushishi police division, wushishi Local government area) by Joshua Godwin Awan meets the Regulations governing the award of post graduate diploma(PGD) of the federal university of Technology, Minna.

..... 27/1/2011

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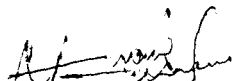
DECLARATION

I hereby declare that the project titled the computerization of criminal Records of the Nigeria police Force (A case study of wushishi police division, wushishi local Government Area) is an Original work carried out by Joshua Godwin Awan under the supervision of Dr. Y.A Yahaya. It has never been presented else where for the award of any degree/diploma and that all work related to the field of study before the presentation has been duly acknowledged and referenced.



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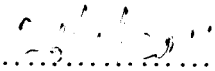

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Date

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DEDICATION

This work is dedicated to my beloved parents, Engr. J.A. Awan & Hauwa J.Awan (Mrs).

ABSTRACT

There are many records that are kept in the Nigerian Police stations, but this project focuses on the Computerization of only one of these records; namely: criminal records. The Police Division in Wushishi Local Government Area was used as a case study. Visual Basic was used as the programming Language in the computerization of these records. It is hoped that the new system will enhanced the efficiency & effectiveness of the Police force in the area of Data/ Information Documentation.

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CHAPTER ONE

1.0 INTRODUCTION

1.1 BRIEF HISTORY OF THE NIGERIA POLICE FORCE

Before the advent of the British, there were local law enforcement agencies operating under the control of our natural rulers in different parts of this Country.

With the coming of British, the assistance of these natural rulers was sought for the protection of imperial trade interest and the abolition of slave trade. Sometimes, there were open confrontations between the British representatives and the chiefs on political and commercial grounds. About 1890, some rulers in Cross River area blocked the British trade routes and harassed natives loyal to British officials.

The acting consul then ANGLESEY was forced to raise the oil Rivers Protectorate Police Force whose duties were essentially military to stop the molestation by the natives. Because of the atrocities committed by this force, it was disbanded and replaced by Hausa constabulary in 1891.

When the Oil Rivers Protectorate became known as the Niger Coast Protectorate in 1893, the 'Hausa constabulary' developed into the Niger Coast protectorate constabulary with about 500 men in 1898. However, the function of this force was to harass the indigenes, especially the chiefs who constituted a threat to imperial authority remained, by and large, uncharged.

The political, social and economic difficulties experienced by British officials from 1840 to 1860 aided the emergence of the Lagos consular Guard which was acclaimed to be the nucleons of the modern Nigeria Police Force. In 1861 when Lagos was annexed, the British consuls made use of the consular Guard to maintain law and order and enforce sanitary regulations. 1863 saw the emergence of the armed 'Hausa' Police Force, a Para-Military establishment symbolizing the evidence of imperial authority in Lagos and environs. This Force was supplemented by Civil District or Country Police in the rural areas of Lagos.

Until the first half of 1960, three separate Police Forces existed in what is now known as Nigeria. These were the Lagos Police Force, the Southern Police Force, and the Northern Police Force. In 1914, the Southern and Northern Police Forces were amalgamated. Under the ordinance No. 2 of 1930, came the existence of the Nigeria Police Force which had its headquarters in Lagos.

In 1954, the Nigeria Police Force became a Federal Force in line with the 1954 constitution. The implication of this was that the Federal and Regional Governments became jointly, responsible for the maintenance of law and order in their areas of jurisdiction. When Nigeria became a Republic State on 1st October, 1963, the year in which Mid-Western Region was carved out of the Western Region, the Police was administered under five command levels – Lagos, Northern Region, Western Region, Eastern Region and Mid – Western Region each having a

Commissioner of Police with the Inspector – General of Police as the overall head at the Force Headquarter level. In April 1964, the Nigeria Police Force was privileged to be headed by L.O. EDET, the first Nigerian Inspector – General of Police.

By 1972, the Local Government P facilitates police work and help in the maintenance of discipline even outside working hours.

Police in different parts of the Country were merged with the Nigeria. Police Force. The Unique contribution of the Federal Republic of Nigeria Police Force in this Country. Section 194 (I) of the constitution states: "There shall be a Police Force for Nigeria, which shall be styled the Nigeria Police Force and subject to the provisions of this section no other Police Force shall be established for the Federation or any part thereof".

Accordingly the Nigeria Police Force is the only Police Force in the Country today.

1.2 AIMS OF THE STUDY

The aims of the study include:

1. To examine the feasibility of potential computer application.
2. To analyze the existing systems with a view to their computerization.
3. To design and implement a program that will meet its specification (i.e. Automation of records).

1.3 SIGNIFICANCE OF THE STUDY

The study will be useful in the sense that

1. There will be a shift from the manual method of documentation/storage of records to the computerized form.
2. It will make the police force see and embrace the use of computer in their Organization as this will enhance their efficiency & effectiveness most especially in the area of Data/Information Documentation.

1.4 SCOPE AND LIMITATION OF THE STUDY

The study focuses on the computerization of only one of the many records kept in the police station. The criminal records.

The project does not cover all the records maintained in the police station. Hence, it is only the records under review that the analyst tends to automate.

1.5 THE ROLE OF POLICE IN CRIME DETECTION AND CONTROL

It is obvious that a rising trend in crime is noted in Nigeria. The consequence of this trend is that every organ of the administration of criminal justice comes under some strain.

The administration of Criminal Justice is an exceedingly complex process that involves a large number of formal and informal agencies concerned with different aspects of the problems of crime and delinquency.

The aim of Criminal Justice has been aptly summarized thus: it is to sustain the Rule of Law by preventing crime wherever possible; by detecting the culprit, when crimes are committed; by convicting the guilty and acquitting the innocent; and by dealing adequately and appropriately with those who are guilty and by giving proper effect to the sentence and orders which are imposed.

Six other major tasks of Police prevention work with adults and juveniles have been identified as follows:-

a. Preliminary Survey of prevention problems

b. Authority for the prevention programmes

c. Determinations or prevention Policy

d. Relation of prevention policy to the work of other community institution or organizations

e. Prevention with the department structure

f. Police – community Relation.

The first major task of police prevention work should be preliminary survey of prevention methods. Ascertaining the specific offences that are most prevalent, the age and sex of the persons involved, and other characteristics of a given Criminal or delinquency problems makes it possible to focus prevention efforts on specific area that carry the highest risk on offences that are more common. For example, the Police routine patrol and inspective activities give special attention to

federal highways, nation's land and sea borders, airports, very strategic public buildings or establishment. Like the Central Bank of Nigeria, and important public events or gathering because of the opportunities they offer for expression of criminal tendencies.

It is in the light of the above aim of Criminal Justice therefore that the role of the Police becomes important to the sustenance of the Rule of Law by controlling, and preventing Criminal in Nigeria.

1.6 ORGANIZATION OF POLICE FORCE HEADQUARTERS

For the purpose of control and administration, the police force Headquarters is divided or organized into the following department namely:

(a) 'A' Department (Finance & Administration) consisting of

i. Administration branch

ii. Security registry branch

iii. Personnel branch and

iv. Welfare branch

(b) 'B' Department (Operations) consisting of

i. Operations branch

ii. Traffic branch

iii. Force signal branch

iv. Force mechanical workshops (Transport) branch

v. Force name branch and

vi. Force armed branch

(c) 'C' Department (Logistics & Supply) consisting of

i. Supply branch and

ii. Works branch

(d) 'D' Department (Federal Bureau of Investigation & Intelligence) consisting of

i. Investigation branch

ii. Technical aids to investigation branch (C.I.D.)

iii. C.I.D. Training branch

iv. Interpol Bureau

v. Finger print branch and

vi. Central registry of offenders

(e)'E' Department

(f)'F' Department(The force training Department)

(g)'G' Department (Public Relations) consisting of

i. Press and publication branch

ii. Employee information branch

iii. Community Relations & publicity branch

iv. Complainant Bureau

The inspector General who is the Head of the police force assigns the command of 'A', 'B', 'C' and 'D' and training Department each to a Deputy Inspector-General of police.

1.7 COMMANDS OF THE POLICE FORCE.

The Inspector-General exercises the command of the force, and he is been assisted by the deputy Inspector General who are the commanders of 'A', 'B', 'C' and 'D' and training department.

The following commands exist in the Nigeria police force.

i. Police zonal command:- usually commanded by an assistant Inspector General of police.

ii. Police state command:- commanded by the commissioner of police for the state command

iii. Police Area Command:- commanded subject to the control of the Commissioner of police for the state command of which the police Area command forms a division, by an officer of not below the rank of Assistant Commissioner of police. He is designated the police Area commander.

iv. Police Division: - usually commanded by a Superior police officer of not below the rank of assistant Superintendent of police who is designated the Divisional police officer.

v. Police District: - A police district is usually commanded by an officer not below the rank of Inspector. The police officer commanding a police district is designated the District police officer.

vi. Police station: - Each police station is commanded; subject to the control of the officer in charge of the police district or police division of which its forms a sub-division, by an officer of not below the rank of sub-Inspector. The officer shall be designated the officer in charge of the police station or simply the station officer.

vii. Police post:- commanded, subject to the control of the officer in charge of the police station of which the post forms a sub-division, by a police officer of not below the rank of corporal.

viii. Village police post:- A village police post is commanded, subject to the control of the station officer or officer in charge of the police post of which the village police post forms a sub-division, by a police officer of the rank of Corporal or by a police constable with not less than five years of service

1.8 GENERAL DUTIES OF THE POLICE FORCE

The Police forces is saddled with the following duties and are expected to perform such military duties within or outside Nigeria as may be required by them by or under the authority of the police act or any other act.

a. The prevention and Defection crime

b. The Apprehension of Offenders

c. The preservation of law and order.

d. The protection of life and property

e. The due enforcement of all laws and regulation with which they are directly charged.

1.9 FUNCTIONS AND ORGANIZATION OF THE POLICE STATION

The police station is the principal operational formation of the force and the primary functions (Exercisable within the limit of the police station area of responsibility) of the police station are:-

i. To carry out the General duties of the force as specified in the police act

ii. To create & maintain good relations with members of the public.

iii. To create and maintain permanent records of action taken to implement measures for the prevention of crime, preservation of law and order and for the protection of property.

iv. To create and to maintain permanent records of action taken in the detection of crime and apprehension of offenders that is to say the record of;

a. Complaints made of the commission of criminal offence

b. The particulars of persons arrested and the reasons for their arrest.

c. The particulars of criminal and other proceedings taken against individuals in the enforcement of the law.

v. To create & maintain permanent records of every incident reported (i.e. accident, fire, flood or other acts of God).

1.10 RECORDS TO BE KEPT AT THE POLICE STATION

Records to be kept in the police station include:

a. Crime prevention records:- the police station records of all beats and patrols duties performed and of special duties perform for the prevention of crime, the prosecution of law and order and the protection of property.

The crime prevention records of the police station are maintained in the following registers namely:-

- The Duty Register
- The Station Routine Diary
- The Register of habitual Criminals
- The Register of persons sentenced to police supervision

b. Criminal Records:- means the police station records of

i. Offences against the law (other than minor offences) reported to the police station.

ii. Police action taken for the detection and apprehension of the offenders.

iii. The judgments and sentences passed by the courts on such offenders

iv. Acquittals and discharges

The criminal records of the police station are maintained in the following registers namely:

a. The station crime and incidents diary

b. The register of Arrest (persons newly apprehended)

c. The register of sudden and unnatural deaths

d. The charge register (of feloures and misdemeanor)

e. The register of simple offences (offences punishable with imprisonment for not more than six months)

f. The register of court exhibits

g. The register of lost, stolen and recovered property.

h. The register of warrants of arrests

i. The register of court processes

j. The register of missing persons.

c. "Minor offences Record":- means the police station records of reports received in the police station of

i. Offences for which the penalty provided by the law does not exceed imprisonment for more than seven days or a fine of N6

ii. Offences against the motor traffic laws

iii. Offences against any bye-law and the police station records of police action taken for the detection of offenders and of judgments and sentences passed by the courts on offenders and of acquittals and discharges.

d. "Incident Record":- means the police station records of accidents, floods, fire or other acts of God occurring within the police station. Area of responsibility, which affect or may affect the life, health or well being of any member of the public, and the records of the police action taken in respect of such incidents and of the police assistance given to the victims of such incidents.

The incidents records of the police station is maintained in the following registers:- namely

a. The register of Road accidence

b. The Register of fire and other incidents

c. The medical report book

Note: the minor offences records of the police station is maintained in the following register, namely

a. The station minor offences Diary

b. The Register of minor offences

c. The Register of motor traffic offences

d. The Register of lost, stolen and recovered bicycles

e. The Register of court processes.

1.11 DEFINATION OF TERMS

Misdemeanor - A less serious crime than a felony and resulting in a less severe punishment.

Felony - a serious crime such as murder that is punished more severely than a misdemeanor.

Command - as used in the content is referred to as a unit or units, an Organization or an entire area under the control of one person.

Police - a civil organization whose members are given special legal Powers by the government and whose task is to maintain public order and to some also prevent crimes. It also seen as organized group of people whose job is maintaining order, ensuring that regulations are obeyed and preventing crime

t: - body of information or statistics gathered over a period of time.

Conviction: an act of finding somebody guilty of a crime or an instance of being found guilty.

Crime: An illegal act, illegal actually, immoral act, inacceptable act.

i. Illegal act- an action prohibited by law or a failure to act as regard by law.

ii. Illegal activity- activity that involves breaking the law

iii. Immoral act- an act considered morally wrong

iv. Unacceptable act- a shameful, immerse or regrettable act

Register: A book in which a registration of names, attendance or events is kept.

Police officer: A member of the police force.

CHAPTER TWO

2.0 LITERATURE REVIEW &SYSTEM ANALYSIS

2.1 POLICE DIVISION IN WUSHISHI LOCAL GOVERNMENT

i. Police Station:

This is station with a permanent personal establishment of more than 14. it shall be Commanded, subject to the control of the officer in charge to the Police District or Police division of Which it forms a sub-division by an officer of not below the rank of Inspector. The officer commanding a police station shall be or the station officer.

ii. Police Post:

It is a formation with a permanent personal establishment of less than 13 but more than 3. It is Commanded, subject to the control of the Officer in charge of the Police of not below the rank of corporal. The officer in charge of a police post shall be so designated.

iii. Village Police Post:

This is a formation with a permanent, personal establishment of 3 or less. It Commanded, subjected to the control of the officer in charged of the police ion or police post of which the village police post forms a sub-division, by a e constable with not less than five years of service. The officer in charge of a village police post shall be so designated.

2.1.1 Nature of Crime in Wushishi Local Government

Certain crimes may be said to be particularly characteristics of cities or towns in the process of full development, Wushishi for different than in other towns or cities in the process of development within the state. Some of these variations relate to the type of the offences Committed, some being common or even unique no less developed societies.

According to the security agents. (The Police) analysis, crimes of violence and property crimes are two common types of crime committed within and round the neighborhood of Wushishi Local Government.

As already pointed out. Property crimes increase sharply with economic growth and development. The increasing demand for prestige articles for conspicuous consumption is an important factor in the increased rate of theft, ɔurglary, Arson, Fraud and Vandalisation in developing societies like Wushishi. Young persons are tempted to steal articles or to obtain money to buy items that lend prestige or a sense of modernization. The stealing of bicycles, motorcycle and motor vehicles are example of a common feature of developing cities in which ɔoth items cost above are necessary both for transportation and prestige. Other prestige items often stolen by young are transistor radio, Television, Video Machine, Wrist watches and others. This factor is considered extremely significant in the rise of Juvenile crime in Wushishi where also lack of manufacturing

Industries and companies contribute more to high rate of unemployment commonly dominated University and Secondary graduates not only in Wushishi but throughout the state as well. However, this is needed accompanied by the need to import foreign products which are sold at higher prices. The youth see them displayed in great provision in the stores and super markets and yet cannot afford them. Over a period of time young offenders develop more sophisticated techniques in such offences as shop breaking a common offence in Wushishi local government area. They may remove all unattached articles from a house or apartment and through established channels, dispose readily or these goods for which there is an ever-increasing demand.

The major finding in this distribution is the predominance of theft from individuals, quite often persons well known to the offenders. Given the list of items tolen, these crimes repellent low level of sophistication and could easily be the work of a single individual.

The most common of these crimes earlier mentioned is robbery, many cases of robbery according to police have been reported in the past from Wushishi and its environs, with offenders making use of local weapons such as cutlasses, Knives bows and arrows, sticks and other local materials for their operations with many of such identified as inhabitants of the near by villages where such crimes occurred. According to the police many of such robberies are planned many day before

occur, with offenders piecing together the elements of the crime by improvisation. Most targets of such robbers are: Banks, Shops, Super markets and other places where they believe huge amount of money is readily available for every day's business men who travel in groups with huge money to buy goods from other states also experienced road attacker by rubbers who must calculate the time the car will reach the place of their target.

2.2 SYSTEM ANALYSIS

2.2.1 INTRODUCTION

System analysis is the art of analyzing the method of doing things, designing and changing to new methods. It is simply finding out what happens in the existing system, deciding what changes and new features are needed and then defining xactly what the new system must do occasionally. The systems analysis phase is he prime opportunity to communicate well with the users and conceive a joint understanding of what a system should be doing and it relative importance.

2.2.2 ANALYSIS OF THE EXISTING SYSTEM

In analyzing the existing system, we need to know the aim of the system analysis. System analysis is the phenomenon that deals the thorough examination of an organization system to determine its extent and limitation in order to provide an improved solution to the system.

At wushishi police division is was noticed, through the technique of interview and observation that documentation of records is being done manually and this tends to limit the effectiveness and efficiency of the police in this area.

2.2.3 PROBLEM WITH THE EXISTING SYSTEM

The following problems were noticed in the existing system

a. The manual system makes difficult the documentation and retrieval of record due to large volume of records involved

b. The system lacks timely and quick access to records

c. The system lacks quick processing of report

d. There is no maximum confidentiality of records as unauthorized persons can easily access these records.

2.2.4 SOLUTION TO THE PROBLEMS

The solution to the problems associated with the existing system is simply its computerization, and this lead to the following;

a. Easy documentation and retrieval of records

b. Timely and quick access to records

c. Quick processing of reports

d. Maximum confidentiality of records

2.2.5 FEASIBILITY STUDY

The purpose of the feasibility study is to investigate the project in sufficient depth so as to provide information that either justifies the development of the new system or shows why the project should not continue.

It is essential to gather all the facts about a current system to ensure that all strengths and weaknesses as possible are eliminated, whilst retaining strength.

To justify the automation of the existing system, the techniques of observation and interview were employed in obtain in the facts. Other methods of fact finding technique include; questionnaires, record inspection and user workshop.

Based on facts it was concluded the computerization of the existing system is necessary and can be achieved.

The technical aspect of the feasibility study indicates the hardware components of a computer system which are:-

i. Board

ii. Processor

iii RAM

iv. Hard disk

v. power pack

vi. Fan etc, which we can be able to see and touch and other peripherals that will make our new system to work perfectly, these are:

i. SVGA Monitor

ii. Windows standard Keyboard

iii. A flat bed scanner for scanning inn identification image.

iv. Printers (Laser Jet and DeskJet) for printing out report

The operational feasibility involves software that is going to be used. The economic feasibility explains the cost of the proposed system which we are going to put in the cost analysis of the next chapter (4). The system requires the purchase of the hardware components which are available in computer accessories shops.

CHAPTER THREE

3.0 SYSTEM DESIGN

3.1 INTRODUCTION:

System design is the investigation and recording of existing systems and the design of new ones. It is the procedure involved in utilizing the information collected during investigation of a system in order to accomplish the logical desire of the information system

3.2 Significance of the New System

The objectives of the computerization of police security system on crime detection, prevention and control are to enhance an effective measure within the system.

The benefits of computerization may include among others the followings:

1. The computerization will facilitate the most efficient and effective handling of large volume of criminal data.
2. The computerization will allow for effective evaluation of police performance and success on duty based on his report of crime and investigation carried out.
3. The computerization will provide a desirable system of data distribution a deficient manipulation, storage and retrieval within a particular station.

4. Finally, the computerization will no doubt increase the general efficiency of police in the area of records documentation

3.3 LIMITATION OF THE NEW SYSTEM

This study is perhaps considered to support a freshman course in the use of computer in records documentation in Nigeria. The system will however, be faced with such limitation like:

a. Lack of networking – environment

b. Lack of Telecommunication devices

c. Inefficient transmission devices

d. Lack of satellite system.

3.4 Choice of Programming Language

Visual Basic was used as the programming language. This is because this application requires security and Visual Basic is one of most secured programming languages.

The following are other reasons why Visual Basic was used to build the system.

- Scalability: - Visual Basic can handle large amount of data and a system that is built with Visual Basic has more chances of adapting to change in the system without any part of the system failing.

- Simplicity: - We wanted to build a system that is easy to use without a lot of esoteric training and which leveraged today's standard practice. Visual Basic helps to build or construct software that can run stand-alone in small machines.
- Object oriented: - Object orientation has proven its worth in the last 30 years, and it is inconceivable that a modern system would not use it. It helps to implement a great software design.
- Robust: - Visual Basic is intended for writing programs that must be reliable in a variety of ways. The Visual Basic compiler detects many problems that in other languages would show up only at runtime.
- Potable: - A Visual Basic program can run across all platforms whether it is windows OS, or Linux, Solaris or Macintosh. Visual Basic is machine independent.
- Speed: - Visual Basic is fast in terms of program execution.

3.5 INPUT REQUIREMENTS

- Criminal Data (personal information) e.g. age, name, location of crime, weapon used, sex, mode of operation.
- Victim Data (personal information and picture) e.g. name, age, sex, occupation, address, location of crime e.t.c.

3.5.1 OUTPUT SPECIFICATION

Full crime and victim details. Information can be saved and retrieved at any time.

The output is when you are able to store criminal or victim information and be able to access, modify/edit or rather delete any information later.

3.6 PROGRAM DESIGN

Visual Basic was used as the programming language because this application requires security and Visual Basic is one of the most secured programming languages

3.6.1 LOGIN FORM: - This allows the user to have access to the system.

3.6.2 CRIMINAL RECORD

- New Record:- For entering a new criminal record or creating a new criminal record.
- Edit Record: - To modify an existing criminal record/file.
- Delete Record: - To delete an existing criminal record.
- View All: - To view criminal records/files in the entire database.

3.6.3 VICTIMS RECORD

This stores victim's information which can also be retrieved, edit, print and so on.

- New Record: - For entering a new record victim record.
- Edit Record: - For modifying an existing file.
- Delete Record: - To delete an existing victim record.
- View All: - To view victim records/files in the entire database.

3.6.4 PROPERTY REGISTER

This is used to record/ store all information about properties being stolen, recovered

3.6.5 STATION DIARY: - This is used to record day to day activities of the station.

3.6.6 SEARCH/VIEW ALL FORM: - This is to search criminal/victim's record

The above form can also be used to view all the records in the database.

3.6.7 EXIT: Closes the program

3.7 TYPE OF INTERFACES

There are two types used in the building of this system, and they are form fill and Menu interfaces

i. **FORM FILL**: - This was used because it consists of onscreen form or web based forms displaying fields containing data parameters that need to be communicated to the users' e.g.

- Criminal record form
- Victims Record form
- Property Register form
- Station Diary

This technique is also known as form base method or input/output forms.

CRIMINAL RECORD FORM: This form is used to record the detailed information about the criminal. The form can store, edit and delete.

VICTIMS RECORD FORM: This is used to record all the information about the victims; it can also be modified or deleted.

PROPERTY REGISTER: - This form is used to record all the properties being stolen or recovered e.t.c.

STATION DIARY: - This form is used to record the day to day activities in the station.

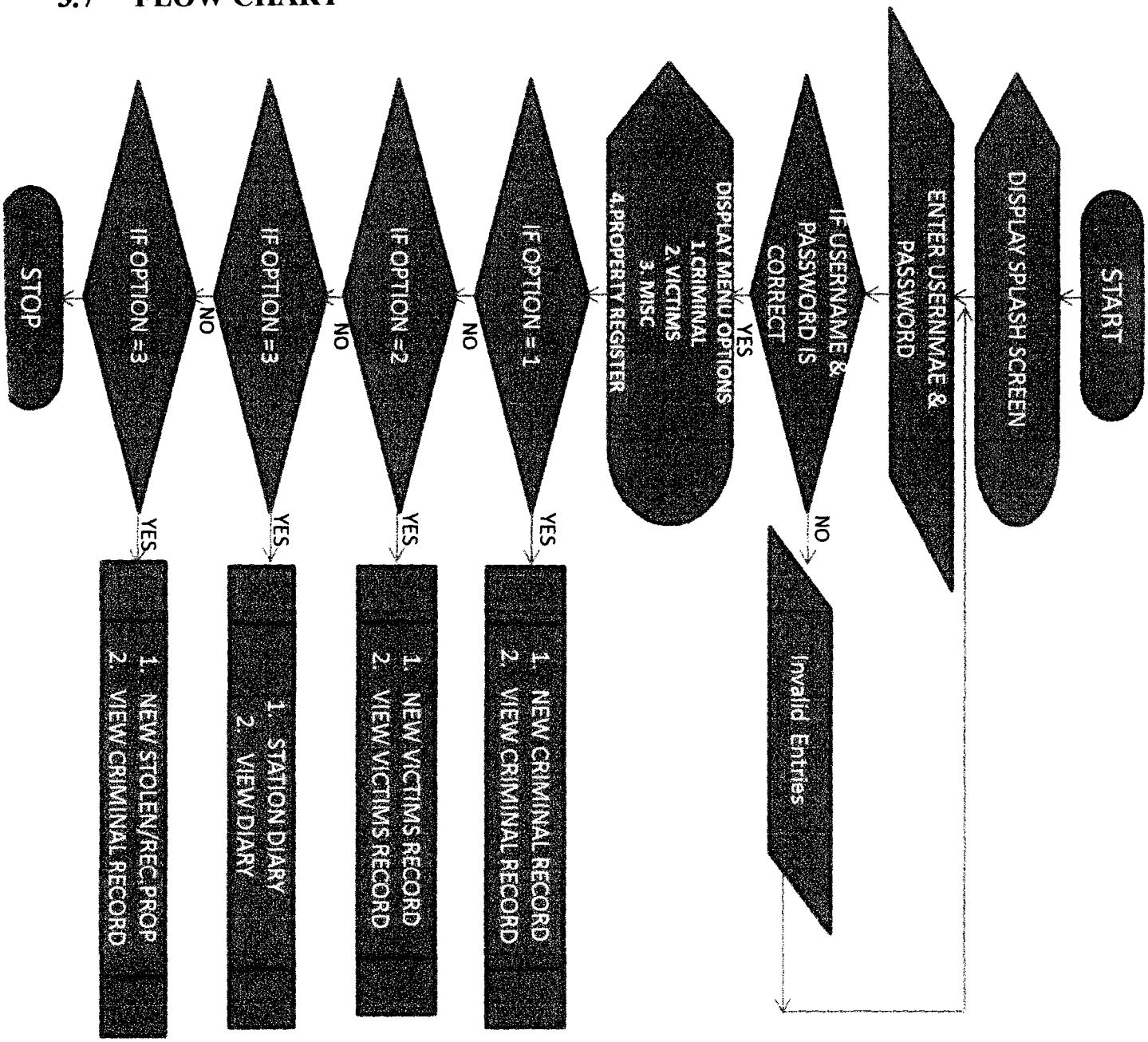
ii. MENU INTERFACE:-

A menu interface provides users with on onscreen list of available selections (options) (restriction).

In responding to the menu, a user is limited to the option displayed. The user needs not to know the system, but does need to know what task to accomplish.

Menu can be set up to use keyboard entry, light-pen or mouse.

3.7 FLOW CHART



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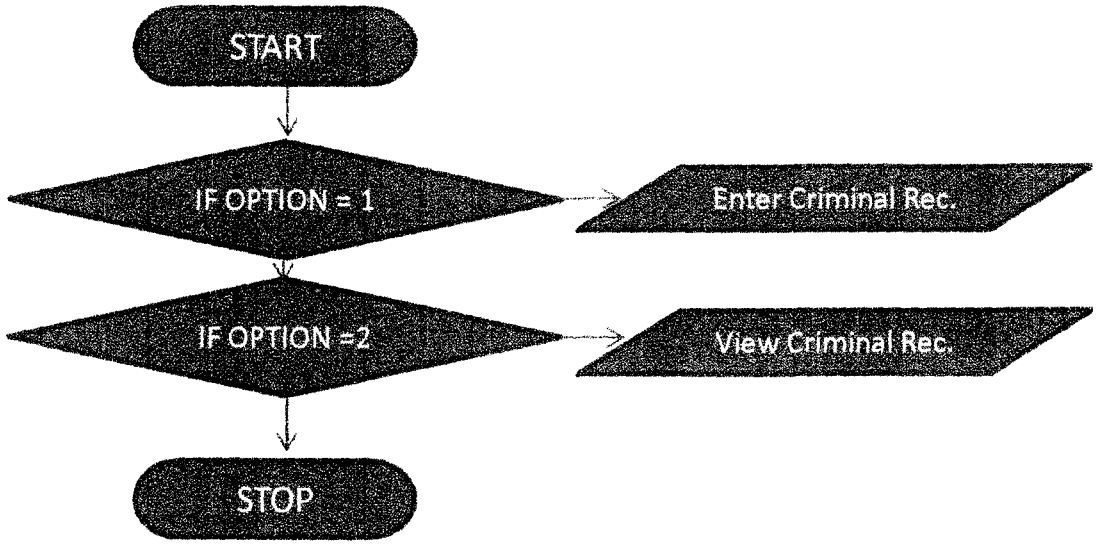

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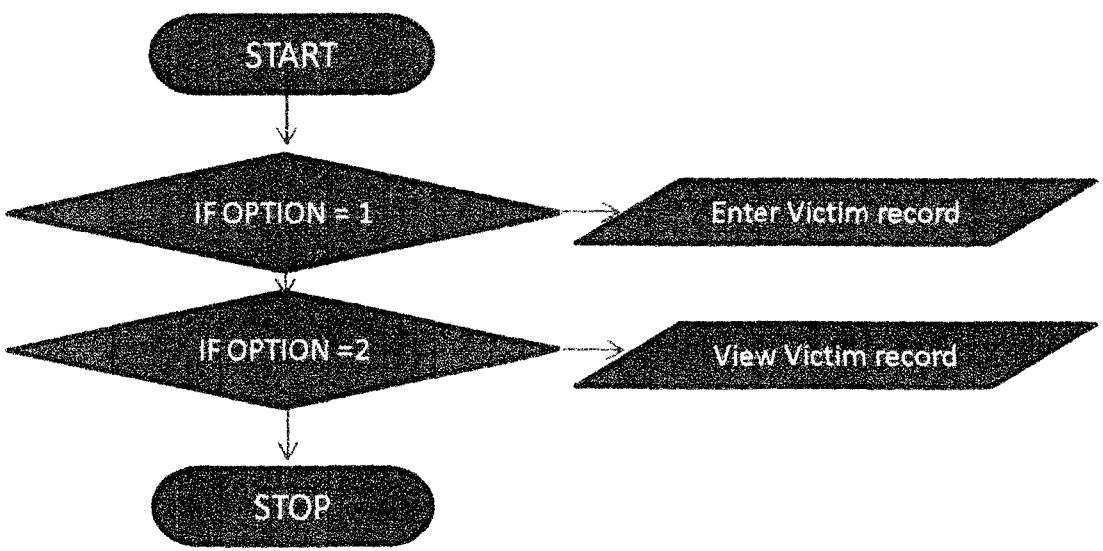

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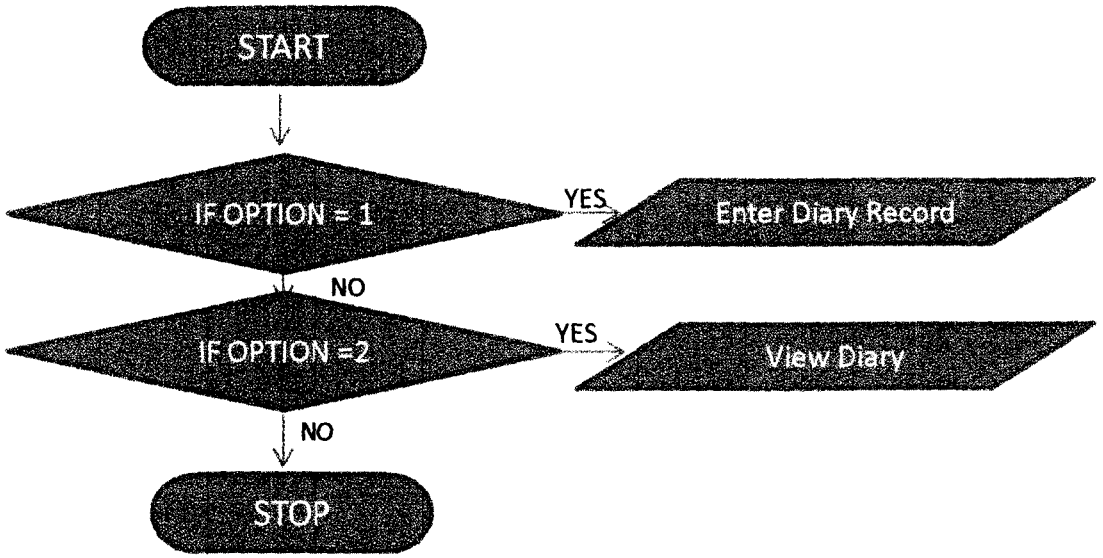
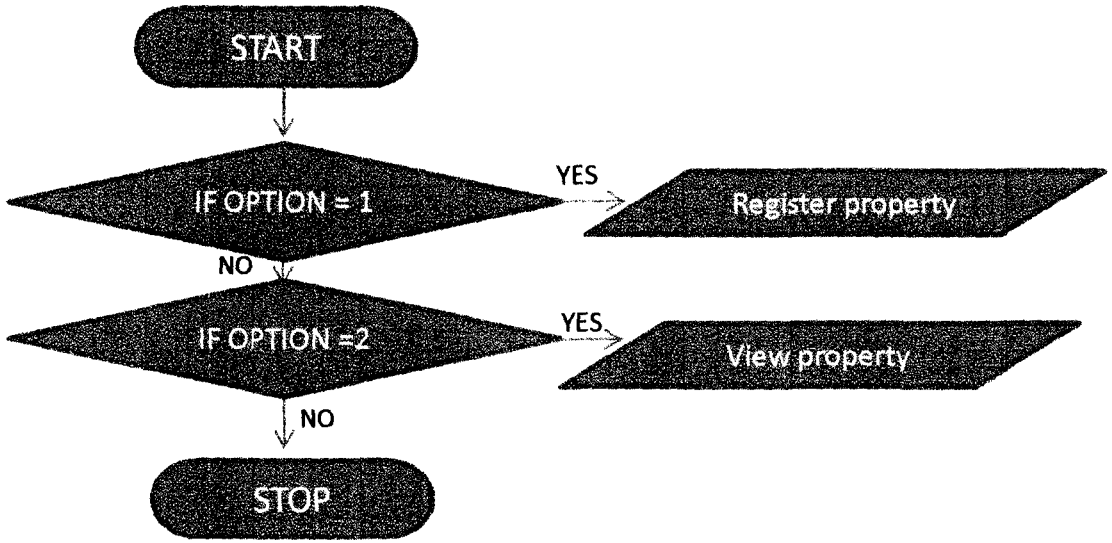


PROPERTY REGISTERING



Important of flow Chart

A flowchart shows the step sequence of computer operation necessary to solve a particular problem. In preparing flow chart, the programmer should follow a different through process from the hierarchical approach of structure design. In using the flowchart, the programmer should consider the sequence of the activities that the computer will carryout. This type of design has been labeled the algorithmic approach. An algorithm approach is a recipe for solving a problem.

CHAPTER FOUR

4.0 IMPLEMETATION OF THE AUTAMATED SYSTEM

4.1 Hardware Requirement

The hardware components of a computer system are basically the part that can be seen and touched. To support our specification the hardware requirement will include the following:

i. An IBM personal Computer or Compatible with a Pentium processor and a clock speed not less than 166MHZ with MMX for effective usage.

ii. SVGA Monitor

iii. Windows standard keyboard

iv. A flat bed scanner for scanning in identification image

v. Printers (Laser jet and Desk jet) for printing out report.

4.2 Software Requirement

The program will run on Microsoft Windows 95 or higher version with Visual Basic. It supports a Network environment.

4.3 System Conversion

A major decision associated with system conversion lies in choosing the methodology to use. There is almost infinite number of plans that can be devised for phasing- in one system and phasing- out another. There are three methods of changing over to a new system.

4.3.1Types of Conversion

i. Direct Conversion

It is a system where the old system is discontinued altogether and the new system becomes operational immediately. This sudden system change-over may produce a gap in operation while the change-over is being made. For this reason and because it is difficult to develop complex system without errors, this process is recommended only for small systems without errors. This process is recommended only for small systems and or proven turnkey installations.

ii. Parallel Conversion

It is a system where the old and new systems are run concurrently using the same input. The output is compared and reasons for differences resolved. Output from the old system continues to be distributed until the new system has proven itself satisfactorily.

At this point the old system is discontinued and the new one takes its place. The draw back to this approach is that the work load for the user and information processing personnel is doubled for the duration of parallel period. This includes sensitive operations involving people-related activities such as charging people to Court etc. this is strongly recommended.

iii. Phased Conversion

A variation of either of the two basic methods is the phased conversion. The new system is substituted in stages. It is phased in one minor subsystem at a time. The fact that such phasing in is possible however, can be a clear indication that the new system is no more integrated than the old one. Phasing-in is usually impossible when a computerized online system is replacing manual operations or a computerized batched system.

4.3.2 Staff Training

The amount of training required for various categories of personnel will depend upon the complexity of the system and the skills presently available. The system analyst would be required to ensure that all persons involved with the new system are capable of making it an operational success. The following aids would be used as appropriate.

a. **Handbooks:** These will be produced as art of or development from the system specification

ii. **Courses:** Either full time or part time courses often run by the computer manufacturers.

iii. **Lectures:** General background knowledge or knowledge of specification areas could be covered by means of lectures.

4.4 System Evaluation

Program flowcharts for the designed system on Computerization of Police Security system on crime detection prevention and control was shown in chapters three, which includes the premium system flowchart as main program and premium computation as subprograms under the main programs? The taste of the pudding they say is in the eating. This system design therefore cannot be complete without a proper scrutiny of the system to evaluate its performance.

Here, all efforts shall be made to test every module and subsystem, so that the end result will importantly be a reliable system.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 SUMMARY:

A feasibility study was carried out to justify the need for the automation of the existing system of records documentation in the Nigeria police stations. Facts were collected at the police division wushishi through the methods of observation and interview. Based on the facts gathered it was concluded that the computerization of these records is necessary for the effectiveness of police force in the area of records documentation.

The automated system was finally introduced which is designed to replace the existing system.

It is hope that a desirable system of records documentation has come to be and will indeed enhance the effectiveness of the police force

5.2 CONCLUSION:

The idea of automating the crime prevention and criminal records is to aid the Nigeria police in it quest for excellence service delivery in the area of records documentation. A change from the existing system (manual)to the new system(automated) will contribute immensely to the realization of this goal.

5.3RECOMMENDATION:

To facilitate the efficiency of operational process of the new system, I hereby recommend that conducive environment be provided for proper functioning of the system. Also the system should be properly maintained, this should include training of the users of the new system on how to operate it. Proper security measures should also be put in place to avoid unauthorized access to the system.

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C.S French (1996); **Computer Science** (5^{th} ed) Singapore:Seng Lee's press

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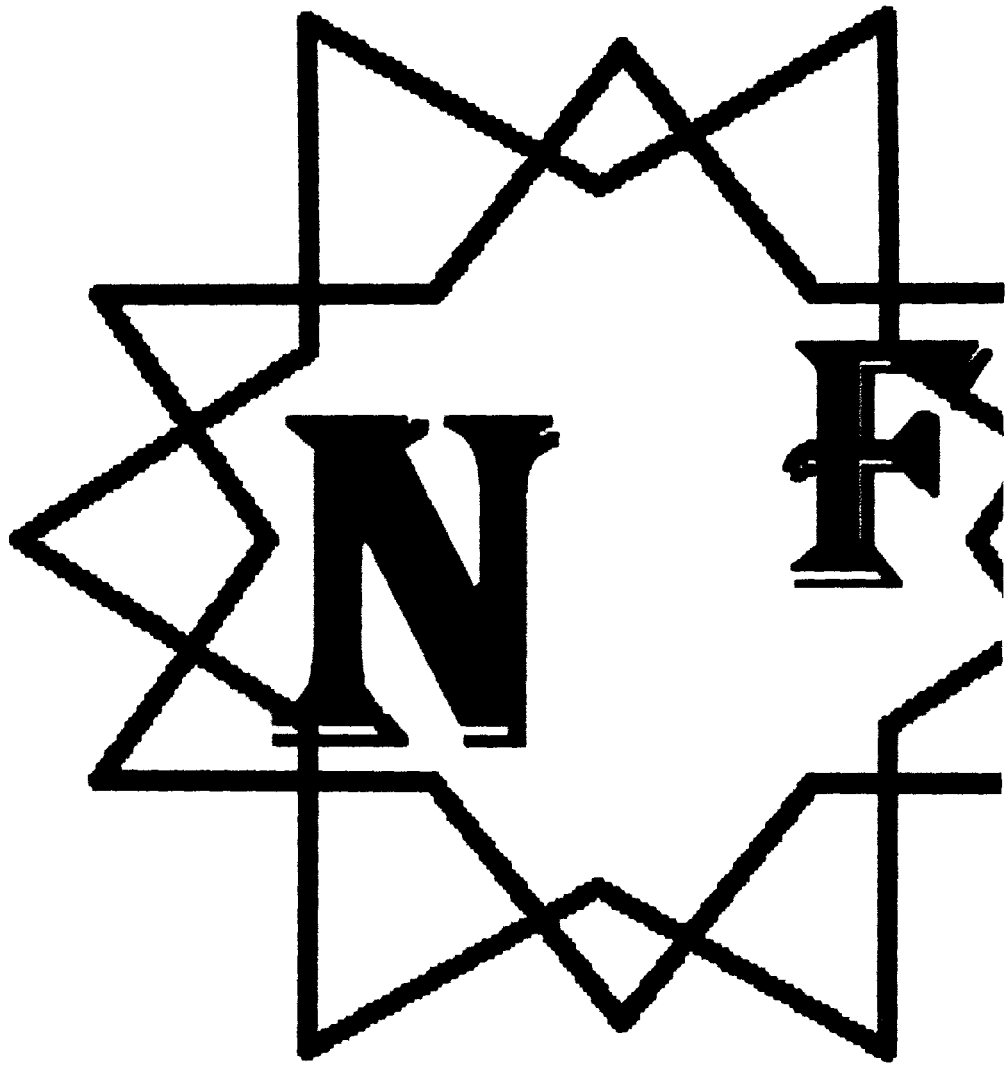

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ate Sub exit_Click()
ad Me
 Sub

ate Sub Label10_Click()
iary.Show
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ate Sub Label12_Click()
roperty.Show
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ate Sub Label13_Click()
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ate Sub Label5_Click()
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ate Sub Label6_Click()
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ate Sub Label7_Click()
ictims.Show
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ate Sub Label8_Click()
ictims1.Show
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ate Sub Label9_Click()
iary1.Show
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ate Sub NewEntry_Click()
iary.Show
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ate Sub NewPropertRec_Click()
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ate Sub NewRecord_Click()
riminals.Show
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roperty1.Show
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:riminals - 1


/ate Sub Form_Unload(Cancel As Integer)
:reen.MousePointer = vbDefault
 Sub

/ate Sub datPrimaryRS_Error(ByVal ErrorNumber As Long, Description As String, ByVal Scode As Lc
 ByVal Source As String, ByVal HelpFile As String, ByVal HelpContext As Long, fCancelDisplay As
)lean)
This is where you would put error handling code
If you want to ignore errors, comment out the next line
If you want to trap them, add code here to handle them
sgBox "Data error event hit err:" & Description
 Sub

vate Sub datPrimaryRS_MoveComplete(ByVal adReason As ADODB.EventReasonEnum, ByVal pError As ADC
Error, adStatus As ADODB.EventStatusEnum, ByVal pRecordset As ADODB.Recordset)
This will display the current record position for this recordset
atPrimaryRS.Caption = "Record: " & CStr(datPrimaryRS.Recordset.AbsolutePosition)
 Sub

vate Sub datPrimaryRS_WillChangeRecord(ByVal adReason As ADODB.EventReasonEnum, ByVal cRecords
Long, adStatus As ADODB.EventStatusEnum, ByVal pRecordset As ADODB.Recordset)
This is where you put validation code
This event gets called when the following actions occur
im bCancel As Boolean

elect Case adReason
ase adRsnAddNew
ase adRsnClose
ase adRsnDelete
ase adRsnFirstChange
ase adRsnMove
ase adRsnRequery
ase adRsnResynch
ase adRsnUndoAddNew
ase adRsnUndoDelete
ase adRsnUndoUpdate
ase adRsnUpdate
d Select

 bCancel Then adStatus = adStatusCancel
 Sub

/ate Sub cmdAdd_Click()
 Error GoTo AddErr
tPrimaryRS.Recordset.AddNew
ields(0).SetFocus
it Sub
rr:
gBox Err.Description
 Sub

/ate Sub cmdDelete_Click()
ox ("Are you sure you want to Delete this Record"), ([vbYesNoCancel])
bYes Then
 Error GoTo DeleteErr
th datPrimaryRS.Recordset
 .Delete
 .MoveNext
 If .EOF Then .MoveLast
d With
xit Sub
eteErr:
sgBox Err.Description
lse
rmcriminals.Show
nd If
 Sub
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:riminals - 2

/ate Sub cmdRefresh_Click()
?his is only needed for multi user apps
1 Error GoTo RefreshErr
atPrimaryRS.Refresh
xit Sub
reshErr:
sgBox Err.Description
 Sub

vate Sub cmdUpdate_Click()
n Error GoTo UpdateErr

atPrimaryRS.Recordset.UpdateBatch adAffectAll
xtFields(0) = ""
 txtFields(1) = ""
 txtFields(2) = ""
   txtFields(3) = ""
     Combo1 = ""
       txtFields(5) = ""
         txtFields(6) = ""
           txtFields(7) = ""
             txtFields(8) = ""
               txtFields(9) = ""
     MsgBox "Record saved"
xit Sub
ateErr:
sgBox Err.Description
 Sub

vate Sub cmdClose_Click()
nload Me
 Sub
```

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```
/ictims - 1


/ate Sub textFields_Change()

 Sub

/ate Sub Form_Unload(Cancel As Integer)
creen.MousePointer = vbDefault
 Sub

/ate Sub datPrimaryRS_Error(ByVal ErrorNumber As Long, Description As String, ByVal Scode As Lo
 ByVal Source As String, ByVal HelpFile As String, ByVal HelpContext As Long, fCancelDisplay As
olean)
This is where you would put error handling code
If you want to ignore errors, comment out the next line
If you want to trap them, add code here to handle them
sgBox "Data error event hit err:" & Description
 Sub

/ate Sub datPrimaryRS_MoveComplete(ByVal adReason As ADODB.EventReasonEnum, ByVal pError As ADC
Error, adStatus As ADODB.EventStatusEnum, ByVal pRecordset As ADODB.Recordset)
This will display the current record position for this recordset
atPrimaryRS.Caption = "Record: " & CStr(datPrimaryRS.Recordset.AbsolutePosition)
 Sub

/ate Sub datPrimaryRS_WillChangeRecord(ByVal adReason As ADODB.EventReasonEnum, ByVal cRecords
Long, adStatus As ADODB.EventStatusEnum, ByVal pRecordset As ADODB.Recordset)
This is where you put validation code
This event gets called when the following actions occur
im bCancel As Boolean

elect Case adReason
ase adRsnAddNew
ase adRsnClose
ase adRsnDelete
ase adRsnFirstChange
ase adRsnMove
ase adRsnRequery
ase adRsnResynch
ase adRsnUndoAddNew
ase adRsnUndoDelete
se adRsnUndoUpdate
se adRsnUpdate
d Select

 bCancel Then adStatus = adStatusCancel
 Sub

ate Sub cmdAdd_Click()
  Error GoTo AddErr
tPrimaryRS.Recordset.AddNew
ields(0).SetFocus
it Sub
rr:
gBox Err.Description
 Sub

ate Sub cmdDelete_Click()
ox ("Are you sure you want to Delete this Record"), ([vbYesNoCancel])
bYes Then
 Error GoTo DeleteErr
th datPrimaryRS.Recordset
 .Delete
 .MoveNext
 If .EOF Then .MoveLast
d With
it Sub
teErr:
gBox Err.Description
lse: frmVictims.Show
```

```
Victims - 2

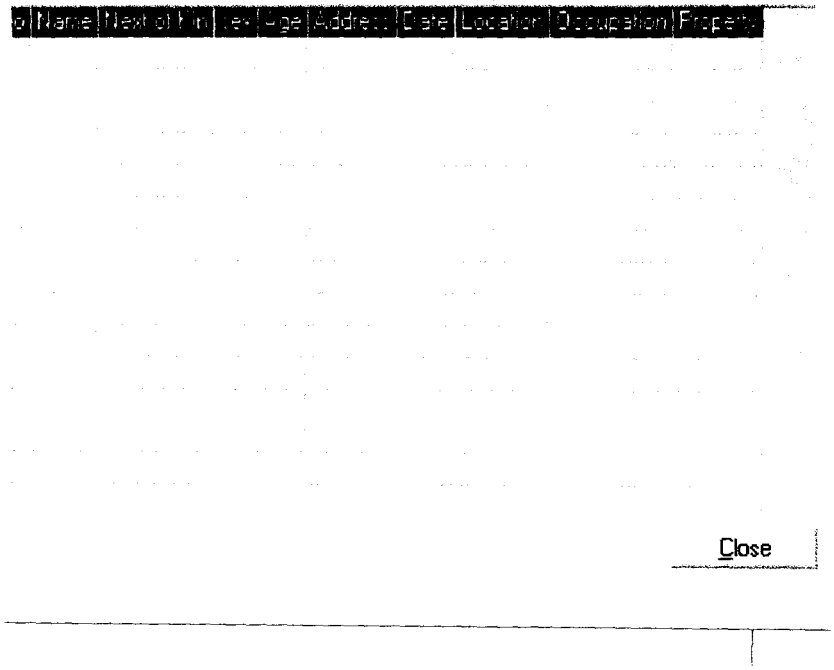
 If
 Sub

vate Sub cmdRefresh_Click()
This is only needed for multi user apps
n Error GoTo RefreshErr
atPrimaryRS.Refresh
xit Sub
reshErr:
sgBox Err.Description
 Sub

vate Sub cmdUpdate_Click()
n Error GoTo UpdateErr

atPrimaryRS.Recordset.UpdateBatch adAffectAll
xtFields(0) = ""
 txtFields(1) = ""
 txtFields(2) = ""
   txtFields(3) = ""
     Combo1 = ""
       txtFields(5) = ""
         txtFields(6) = ""
           txtFields(7) = ""
             txtFields(8) = ""
               txtFields(9) = ""
         MsgBox "Record saved"
 Exit Sub
ateErr:
sgBox Err.Description
 Sub

vate Sub cmdClose_Click()
nload Me
 Sub
```


Name
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Date
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Occupation
Property
Close

```
Victims1 - 1

vate Const MARGIN_SIZE = 60      ' in Twips
ariables for enabling column sort
vate m_iSortCol As Integer
vate m_iSortType As Integer

ariables for column dragging
vate m_bDragOK As Boolean
vate m_iDragCol As Integer
vate xdn As Integer, ydn As Integer

vate Sub Form_Load()

 datPrimaryRS.Visible = False

 With MSHFlexGrid1

     .Redraw = False
     ' set grid's column widths
     .ColWidth(0) = -1
     .ColWidth(1) = -1
     .ColWidth(2) = -1
     .ColWidth(3) = -1
     .ColWidth(4) = -1
     .ColWidth(5) = -1
     .ColWidth(6) = -1
     .ColWidth(7) = -1
     .ColWidth(8) = -1
     .ColWidth(9) = -1

     ' set grid's style
     .AllowBigSelection = True
     .FillStyle = flexFillRepeat

     ' make header bold
     .Row = 0
     .Col = 0
     .RowSel = .FixedRows - 1
     .ColSel = .Cols - 1
     .CellFontBold = True

     .AllowBigSelection = False
     .FillStyle = flexFillSingle
     .Redraw = True

 End With

 Sub

/ate Sub MSHFlexGrid1_DragDrop(Source As Control, X As Single, Y As Single)
-------------------------------------------------------------------------------
)de in grid's DragDrop, MouseDown, MouseMove, and MouseUp events enables column dragging
-------------------------------------------------------------------------------

 If m_iDragCol = -1 Then Exit Sub     ' we weren't dragging
 If MSHFlexGrid1.MouseRow <> 0 Then Exit Sub

 With MSHFlexGrid1
     .Redraw = False
     .ColPosition(m_iDragCol) = .MouseCol
     .Redraw = True
 End With

 Sub

vate Sub MSHFlexGrid1_MouseDown(Button As Integer, shift As Integer, X As Single, Y As Single)
-------------------------------------------------------------------------------
ode in grid's DragDrop, MouseDown, MouseMove, and MouseUp events enables column dragging
-------------------------------------------------------------------------------
```

```
Victims1 - 2

 If MSHFlexGrid1.MouseRow <> 0 Then Exit Sub

 xdn = X
 ydn = Y
 m_iDragCol = -1      ' clear drag flag
 m_bDragOK = True

 Sub

vate Sub MSHFlexGrid1_MouseMove(Button As Integer, shift As Integer, X As Single, Y As Single)
-------------------------------------------------------------------------------------------
ode in grid's DragDrop, MouseDown, MouseMove, and MouseUp events enables column dragging
-------------------------------------------------------------------------------------------

 ' test to see if we should start drag
 If Not m_bDragOK Then Exit Sub
 If Button <> 1 Then Exit Sub                          ' wrong button
 If m_iDragCol <> -1 Then Exit Sub                     ' already dragging
 If Abs(xdn - X) + Abs(ydn - Y) < 50 Then Exit Sub     ' didn't move enough yet
 If MSHFlexGrid1.MouseRow <> 0 Then Exit Sub           ' must drag header

 ' if got to here then start the drag
 m_iDragCol = MSHFlexGrid1.MouseCol
 MSHFlexGrid1.Drag vbBeginDrag

 Sub

vate Sub MSHFlexGrid1_MouseUp(Button As Integer, shift As Integer, X As Single, Y As Single)
-------------------------------------------------------------------------------------------
ode in grid's DragDrop, MouseDown, MouseMove, and MouseUp events enables column dragging
-------------------------------------------------------------------------------------------

 m_bDragOK = False

 Sub

/ate Sub MSHFlexGrid1_DblClick()
-------------------------------------------------------------------------------------------
ode in grid's DblClick event enables column sorting
-------------------------------------------------------------------------------------------

 Dim i As Integer

 ' sort only when a fixed row is clicked
 If MSHFlexGrid1.MouseRow >= MSHFlexGrid1.FixedRows Then Exit Sub

 i = m_iSortCol                    ' save old column
 m_iSortCol = MSHFlexGrid1.Col     ' set new column

 ' increment sort type
 If i <> m_iSortCol Then
     ' if clicking on a new column, start with ascending sort
     m_iSortType = 1
 Else
     ' if clicking on the same column, toggle between ascending and descending sort
     m_iSortType = m_iSortType + 1
 If m_iSortType = 3 Then m_iSortType = 1
 End If

 DoColumnSort

 Sub

 DoColumnSort()
-------------------------------------------------------------------------------------------
oes Exchange-type sort on column m_iSortCol
-------------------------------------------------------------------------------------------

 With MSHFlexGrid1
```

```
Victims1 - 3

     .Redraw = False
     .Row = 1
     .RowSel = .Rows - 1
     .Col = m_iSortCol
     .Sort = m_iSortType
     .Redraw = True
 End With

 Sub

vate Sub Form_Resize()

 Dim sngButtonTop As Single
 Dim sngScaleWidth As Single
 Dim sngScaleHeight As Single

 On Error GoTo Form_Resize_Error
 With Me
     sngScaleWidth = .ScaleWidth
     sngScaleHeight = .ScaleHeight

     ' move Close button to the lower right corner
     With .cmdClose
             sngButtonTop = sngScaleHeight - (.Height + MARGIN_SIZE)
             .Move sngScaleWidth - (.Width + MARGIN_SIZE), sngButtonTop
     End With

     .MSHFlexGrid1.Move MARGIN_SIZE, _
         MARGIN_SIZE, _
         sngScaleWidth - (2 * MARGIN_SIZE), _
         sngButtonTop - (2 * MARGIN_SIZE)

 End With
 Exit Sub

n_Resize_Error:
 ' avoid error on negative values
 Resume Next

 Sub
/ate Sub cmdClose_Click()

 Unload Me

 Sub
```

rial No:

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>perty - 1


:e Sub Form_Unload(Cancel As Integer)
:en.MousePointer = vbDefault
ıb

:e Sub datPrimaryRS_Error(ByVal ErrorNumber As Long, Description As String, ByVal Scode As Lc
'Val Source As String, ByVal HelpFile As String, ByVal HelpContext As Long, fCancelDisplay As
:an)
.s is where you would put error handling code
you want to ignore errors, comment out the next line
you want to trap them, add code here to handle them
ox "Data error event hit err:" & Description
b

·e Sub datPrimaryRS_MoveComplete(ByVal adReason As ADODB.EventReasonEnum, ByVal pError As ADC
or, adStatus As ADODB.EventStatusEnum, ByVal pRecordset As ADODB.Recordset)
s will display the current record position for this recordset
rimaryRS.Caption = "Record: " & CStr(datPrimaryRS.Recordset.AbsolutePosition)
b

e Sub datPrimaryRS_WillChangeRecord(ByVal adReason As ADODB.EventReasonEnum, ByVal cRecords
g, adStatus As ADODB.EventStatusEnum, ByVal pRecordset As ADODB.Recordset)
s is where you put validation code
s event gets called when the following actions occur
)Cancel As Boolean

:t Case adReason
adRsnAddNew
adRsnClose
adRsnDelete
adRsnFirstChange
adRsnMove
adRsnRequery
adRsnResynch
adRsnUndoAddNew
adRsnUndoDelete
adRsnUndoUpdate
adRsnUpdate
elect

ancel Then adStatus = adStatusCancel


 Sub cmdAdd_Click()
ror GoTo AddErr
imaryRS.Recordset.AddNew
ds(0).SetFocus
Sub

ĸ Err.Description


 Sub cmdDelete_Click()
("Are you sure you want to Delete this Record"), ([vbYesNoCancel])
s Then
ror GoTo DeleteErr
datPrimaryRS.Recordset
lete
veNext
.EOF Then .MoveLast
ith
Sub
:rr:
ıx Err.Description
:: frmProperty.Show

)

: Sub cmdRefresh_Click()
```

```
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is is only needed for multi user apps
Error GoTo RefreshErr
PrimaryRS.Refresh
t Sub
shErr:
Box Err.Description
ub

e Sub cmdUpdate_Click()
Error GoTo UpdateErr

rimaryRS.Recordset.UpdateBatch adAffectAll
ields(0) = ""
tFields(1) = ""
tFields(2) = ""
 txtFields(3) = ""
   txtFields(4) = ""
   MsgBox "Records saved"
ub
Err:
ox Err.Description
b

e Sub cmdClose_Click()
ad Me
o
```

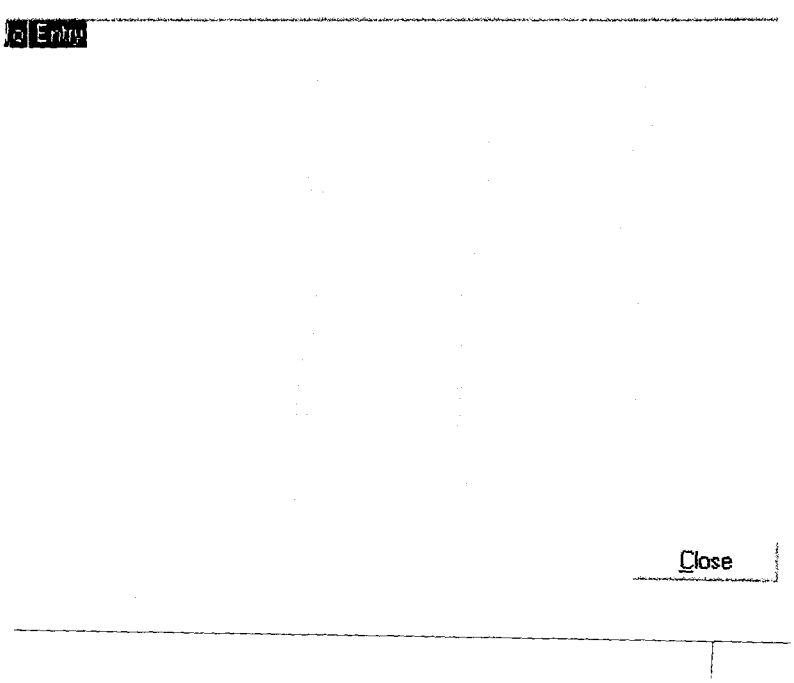
Entry
Close

```
aryl - 1

te Const MARGIN_SIZE = 60      ' in Twips
iables for enabling column sort
te m_iSortCol As Integer
:e m_iSortType As Integer

iables for column dragging
:e m_bDragOK As Boolean
:e m_iDragCol As Integer
:e xdn As Integer, ydn As Integer

:e Sub Form_Load()
.m i As Integer

 tPrimaryRS.Visible = False

 th MSHFlexGrid1

   .Redraw = False
   ' set grid's column widths
   .ColWidth(0) = -1
   .ColWidth(1) = 4575

   ' set grid's style
   .AllowBigSelection = True
   .FillStyle = flexFillRepeat

   ' make header bold
   .Row = 0
   .Col = 0
   .RowSel = .FixedRows - 1
   .ColSel = .Cols - 1
   .CellFontBold = True

   ' grey every other row
   For i = .FixedRows + 1 To .Rows - 1 Step 2
       .Row = i
       .Col = .FixedCols
       .ColSel = .Cols() - .FixedCols - 1
       .CellBackColor = &HC0C0C0    ' light grey
   Next i

   .AllowBigSelection = False
   .FillStyle = flexFillSingle
   .Redraw = True

   With



   Sub MSHFlexGrid1_DragDrop(Source As Control, X As Single, Y As Single)
 ----------------------------------------------------------------------------
 in grid's DragDrop, MouseDown, MouseMove, and MouseUp events enables column dragging
 ----------------------------------------------------------------------------

 m_iDragCol = -1 Then Exit Sub     ' we weren't dragging
 MSHFlexGrid1.MouseRow <> 0 Then Exit Sub

 h MSHFlexGrid1
   .Redraw = False
   .ColPosition(m_iDragCol) = .MouseCol
   .Redraw = True
 l With

 )

 : Sub MSHFlexGrid1_MouseDown(Button As Integer, shift As Integer, X As Single, Y As Single)
 ----------------------------------------------------------------------------
 in grid's DragDrop, MouseDown, MouseMove, and MouseUp events enables column dragging
 ----------------------------------------------------------------------------
```

```
ary1 - 2


f MSHFlexGrid1.MouseRow <> 0 Then Exit Sub

dn = X
dn = Y
_iDragCol = -1      ' clear drag flag
_bDragOK = True

ıb

:e Sub MSHFlexGrid1_MouseMove(Button As Integer, shift As Integer, X As Single, Y As Single)
------------------------------------------------------------------------------------------
: in grid's DragDrop, MouseDown, MouseMove, and MouseUp events enables column dragging
------------------------------------------------------------------------------------------

 test to see if we should start drag
  Not m_bDragOK Then Exit Sub
  Button <> 1 Then Exit Sub                          ' wrong button
  m_iDragCol <> -1 Then Exit Sub                     ' already dragging
  Abs(xdn - X) + Abs(ydn - Y) < 50 Then Exit Sub     ' didn't move enough yet
  MSHFlexGrid1.MouseRow <> 0 Then Exit Sub           ' must drag header

 if got to here then start the drag
 iDragCol = MSHFlexGrid1.MouseCol
 HFlexGrid1.Drag vbBeginDrag

 b

 e Sub MSHFlexGrid1_MouseUp(Button As Integer, shift As Integer, X As Single, Y As Single)
------------------------------------------------------------------------------------------
 in grid's DragDrop, MouseDown, MouseMove, and MouseUp events enables column dragging
------------------------------------------------------------------------------------------

 >DragOK = False

 >

 : Sub MSHFlexGrid1_DblClick()
------------------------------------------------------------------------------------------
 in grid's DblClick event enables column sorting
------------------------------------------------------------------------------------------

 ı i As Integer

 ort only when a fixed row is clicked
 MSHFlexGrid1.MouseRow >= MSHFlexGrid1.FixedRows Then Exit Sub

 : m_iSortCol                    ' save old column
 .SortCol = MSHFlexGrid1.Col     ' set new column

 ncrement sort type
 i <> m_iSortCol Then
  ' if clicking on a new column, start with ascending sort
  m_iSortType = 1
 .e
  ' if clicking on the same column, toggle between ascending and descending sort
  m_iSortType = m_iSortType + 1
 m_iSortType = 3 Then m_iSortType = 1
 ı If

 :olumnSort

 >

 :olumnSort()
------------------------------------------------------------------------------------------
 Exchange-type sort on column m_iSortCol
------------------------------------------------------------------------------------------
```

```
aryl - 3

ith MSHFlexGridl
   .Redraw = False
   .Row = 1
   .RowSel = .Rows - 1
   .Col = m_iSortCol
   .Sort = m_iSortType

   .FillStyle = flexFillRepeat
   .Col = 0
   .Row = .FixedRows
   .RowSel = .Rows - 1
   .ColSel = .Cols - 1
   .CellBackColor = &HFFFFFF
   ' grey every other row
   Dim iLoop As Integer
   For iLoop = .FixedRows + 1 To .Rows - 1 Step 2
       .Row = iLoop
       .Col = .FixedCols
       .ColSel = .Cols() - .FixedCols - 1
       .CellBackColor = &HC0C0C0    ' light grey
   Next iLoop
   .FillStyle = flexFillSingle


   .Redraw = True
d With

b

e Sub Form_Resize()

n sngButtonTop As Single
n sngScaleWidth As Single
n sngScaleHeight As Single

 Error GoTo Form_Resize_Error
:h Me
  sngScaleWidth = .ScaleWidth
  sngScaleHeight = .ScaleHeight

  ' move Close button to the lower right corner
  With .cmdClose
          sngButtonTop = sngScaleHeight - (.Height + MARGIN_SIZE)
          .Move sngScaleWidth - (.Width + MARGIN_SIZE), sngButtonTop
  End With

  .MSHFlexGrid1.Move MARGIN_SIZE, _
      MARGIN_SIZE, _
      sngScaleWidth - (2 * MARGIN_SIZE), _
      sngButtonTop - (2 * MARGIN_SIZE)

( With
.t Sub

:size_Error:
ivoid error on negative values
;ume Next

)
: Sub cmdClose_Click()

load Me

)
```

I No:

ription:

mstances:

of Lost_Thetf_Recovery:

```
ary - 1


te Sub Form_Unload(Cancel As Integer)
een.MousePointer = vbDefault
ub

te Sub datPrimaryRS_Error(ByVal ErrorNumber As Long, Description As String, ByVal Scode As Lc
yVal Source As String, ByVal HelpFile As String, ByVal HelpContext As Long, fCancelDisplay As
ean)
is is where you would put error handling code
 you want to ignore errors, comment out the next line
 you want to trap them, add code here to handle them
3ox "Data error event hit err:" & Description
ıb

:e Sub datPrimaryRS_MoveComplete(ByVal adReason As ADODB.EventReasonEnum, ByVal pError As ADC
:or, adStatus As ADODB.EventStatusEnum, ByVal pRecordset As ADODB.Recordset)
.s will display the current record position for this recordset
'rimaryRS.Caption = "Record: " & CStr(datPrimaryRS.Recordset.AbsolutePosition)
ıb

e Sub datPrimaryRS_WillChangeRecord(ByVal adReason As ADODB.EventReasonEnum, ByVal cRecords
g, adStatus As ADODB.EventStatusEnum, ByVal pRecordset As ADODB.Recordset)
s is where you put validation code
s event gets called when the following actions occur
bCancel As Boolean

ct Case adReason
 adRsnAddNew
 adRsnClose
 adRsnDelete
 adRsnFirstChange
 adRsnMove
 adRsnRequery
 adRsnResynch
 adRsnUndoAddNew
 adRsnUndoDelete
 adRsnUndoUpdate
 adRsnUpdate
3elect

:ancel Then adStatus = adStatusCancel
)

: Sub cmdAdd_Click()
:ror GoTo AddErr
:imaryRS.Recordset.AddNew
.ds(0).SetFocus
 Sub

)x Err.Description
)

: Sub cmdDelete_Click()
 ("Are you sure you want to Delete this Record"), ([vbYesNoCancel])
:s Then

:ror GoTo DeleteErr
 datPrimaryRS.Recordset
:lete
)veNext
 .EOF Then .MoveLast
Vith
 Sub
Err:
)x Err.Description

ry.Show

)
```

```
ity - 2


:e Sub cmdRefresh_Click()
.s is only needed for multi user apps
:rror GoTo RefreshErr
'rimaryRS.Refresh
 Sub
hErr:
ox Err.Description
b

e Sub cmdUpdate_Click()
rror GoTo UpdateErr

rimaryRS.Recordset.UpdateBatch adAffectAll
elds(0) = ""
tFields(1) = ""
gBox "Record saved"
Sub
Err:
ox Err.Description
b

e Sub cmdClose_Click()
ad Me
>
```