

COMPUTERIZATION OF ROAD TRAFFIC OFFENDERS' RECORDS

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PDG/MCS/99/2000/918

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COMPUTERIZATION OF ROAD TRAFFIC OFFENDERS' RECORDS

**(Case Study of Federal Road Safety Commission
(FRSC) Headquarters Abuja)**

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*A Project Submitted to
Department of Mathematics/ Computer Sciences
In Partial fulfilment of the Requirements for the
award of a Postgraduate Diploma in
Computer Science.*

SEPTEMBER 2001

CERTIFICATION

This is to certify that this project work was carried out by JAGABA SHU'ABU TAMU under the supervision of department of Maths/Computer of the Federal University of Technology, Minna, Niger State.

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DEDICATION

This project work is dedicated to God Almighty who has taught man the use of the pen, and teaches him that which he known not.

ACKNOWLEDGEMENT

All praises and adoration are due to God Almighty for giving me the enablement strength and seeing me through this research work.

I am grateful to my supervisor Mr. S.A. Reju for his kind supervision, while not forgetting Mallam Hakimi Danladi and all other lecturers in Maths/Computer Department.

My utmost gratitude goes to my Honey-wife Dorcas Ezekiel for her love, support and encouragement, my Mother Aisha Tamu Jagaba for her words of encouragement and comfort especially when the going was a bit tough, my daughter Sharon Shekwoga Zagni Jagaba.

This acknowledgement would be incomplete without mentioning Mr. Silas Anji, Alhassan Abdulsalm, Abubakar Ibrahim, Comfort Olorunmaiye who did the typing work and many others good people.

May Almighty God continue to guide and protects us all (Amen)

ABSTRACT

The advent of computer has brought about more efficient way of collecting data processing them and giving out information.

The main aim of this work is to introduce the Federal Road Safety Commission (FRSC) giving it historical background, statutory functions, structures and achievement so far.

The commission is made up of six directorates namely, Motor Vehicle Administration, Logistic and Supplies, Administration and Finance, Training and Planning, Research and Statistics and the directorate of operation which is saddled with the responsibility of road traffic offender is the main concern.

Also the manual system being presently utilised by the operation directorate is investigated and analysed, taking cognisance of its merits and numerous demerits. The information obtained is then used in the development of a programme using dBase IV programming language for the computer to automatically process road traffic offenders records.

Thus the study is to give us the detail of an offender. The zone, name, registration number, type of offence, code of offence and penalty attached to the offence.

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PROGRAM LISTING

PROGRAM OUTPUT

Chapter One

1.0 HISTORICAL BACKGROUND OF THE FEDERAL ROAD SAFETY COMMISSION (FRSC)

Prior to the establishment of the Federal Road Safety Commission (FRSC), road safety matters were handled by the defunct National Road Safety Commission (NRSC) under the Federal Ministry of Works and Housing with enforcement patrols and logistics under the Nigerian Police Force.

The FRSC came into being on the 18th of February 1988 via sections 2, 2.1, 2.2, 2.3, 6 and 7 of Decree 45 of 1988.

- that the Presidency is the supervisory authority of the Commission established directly under the President, who is accordingly vested with the policy control of the paramilitary organisation.

The commission commenced full patrol operations with research on the first of September 1998 operating with five zonal commands namely Zone RS1 - Abuja. Zone RS2 - Benin, Zone RS3 - Kaduna, Zone RS4 - Moniya and Zone RSS - Aba. There were then no guidelines to be followed as nothing had existed on large scale nationwide before.

The amendment decree 35 of 1992 later conferred on the members of the commission. The same power, authorities and privileges as given by law to members of the Nigerian Police Force including the power to bear firearms.

However in the year 2000, the commissioner was merge up to the Police Force and all powers, authorities and privileges of the Commission has not being withdraw. But the controller now re-

port to the Inspector General of Police instead of the presidency as it was the case before. The certainty of the commission remaining with the Police Force is not certain.

Today the operations of the commission have expanded rapidly and the present statutory constitution of the Federal Road Safety Commission under the Presidency confers a level of autonomy and independence on the commission which enable it to determine and operate the following in relations to itself.

- i. Policies
- ii. Operational methods and modes
- iii. Staff development and training
- iv. Administration
- v. Salary Structure
- vi. Line of Communication
- vii. Self Accounting
- viii. Bearing of Firearms as a paramilitary body

1.1 STATUTORY FUNCTIONS

The Federal Road Safety Commission is charged with the following:

- i. Preventing or minimising accidents on the highway.
- ii. Clearing obstructions on any part of the highway.
- iii. Educating drivers, motorist and other members of the public on the proper use of the highway and appropriate road safety conducts.
- iv. Giving prompt attention and care to victims of accidents.
- v. Conducting researches into causes of motor accidents and methods of prevention them and putting use the use results of such researches.

- vii. Enforcing Road Traffic Regulations
- vii. Co-operating with bodies, agencies or groups engaged in road safety activities in the prevention of road accidents on the highway.

1.2.0 ORGANISATIONAL STRUCTURE

The commission is headed by the Corps Marshal and Chief Executive (COMACE), who operates from the National headquarters located in Abuja. His office encompasses other special units like legal. Audit, Protocol Public enlightenment, Corps secretary, intelligence and provost each of which is headed by a deputy director.

The Corps Marshal's office is supported by six directorate namely operations, motor vehicles Administration, Logistics and supplies, Administration and Finance, Research and Statistics and Training each of which is headed by a director. For operational and administrative convenience, the country is divided into eight.

Zonal commands each of which is headed by a Zonal commanding office (SCO). The zones are then subdivided into sector commands representing the states including the Federal Capital Territory, hence there are thirty-seven sector command in all, The six directorates are replaced by departments in the various sectors. A sector is headed by a sector commander not lower than the rank of Assistant Area Commander.

Each sector is further subdivided into units which are formations at Local Government areas. There are thirty-nine units in the country.

TABLE ZONES WITH THEIR HEADQUARTERS, SECTOR AND UNIT COMMAND

Zones	Headquarters/Code		Sector Code	Command	Unit Command	Code
RS1	Jos	1.0	Bauchi	1.1	Azare	1.11
			Benue	1.2	Gboko	1.21
			Plateau	1.3	Lantang	1.31
			Nasarawa	1.5	Pankshin	1.32
					Akwanga	1.51
RS2	Benin	2.0	Edo	2.1	Auchi	2.11
			Ondo	2.2	Ore	2.21
			Enugu	2.3	Aba	2.41
			Anambra	2.4	Warri	2.51
			Delta	2.5		
			Ebonyi	2.6		
RS3	Kaduna	3.0	Kaduna	3.1	Kafanchan	3.11
			Kano	3.2	B/Gwari	3.12
			Katsina	3.3	Zaria	3.13
			Gigawa	3.4	Dan Batta	3.21
					Funtua	3.31
					Daura	3.41
					Hadeja	3.41
RS4	Lagos	4.0	Oyo	4.1	Ogbomoso	4.11
			Lagos	4.2	Oluyole	4.12
			Kwara	4.3	Badagry	4.21

			Ogun	4.4	Epe	4.22
			Osun	4.5	V/Island	4.23
			Ekiti	4.6	Ijebu Ode	4.41
RS5	Owerri	5.0	Rivers	5.1	Aboh-Maise	5.21
			Imo	5.2	Okigwe	5.22
			C/Rivers	5.3	Ogoja	5.31
			A/Ibom	5.4	Ekiti	5.41
			Abia	5.5	Aba	5.51
			Bayelsa	5.6		
RS6	Yola	6.0	Borno	6.1	Biu	6.11
			Adamawa	6.2	Mubi	6.21
			Taraba	6.3	Hong	6.22
			Yobe	6.4	Wukari	6.31
			Gombe	6.5	Potiskum	6.41
RS7	Sokoto	7.0	Sokoto	7.1	Zuru	7.21
			Kebbi	7.2		
			Zamfara	7.3		
RS8		8.0	F.C.T.	8.1	Gwagwalada	8.11
			Niger	8.2	Keffi	8.12
			Kogi	8.3	Mokwa	8.21
					Suleja	8.22
					Kontagora	8.23
					Ankpa	8.31

1.2.0.1 THE DIRECTORATE OF OPERATIONS

This is the directorate that is responsible for the objective of this study. It has the following functions.

- i. **PROVISION OF EFFECTIVE AND REGULAR PATROLS ON NIGERIAN ROADS IN ORDER TO ENFORCE ROAD TRAFFIC REGULATIONS.**
- ii. Supervision of operations, rescue, public enlightenment and special marshal personnel and equipment in the zones, sectors and units.
- iii. Formulate operational, rescue and public enlightenment and special marshal policy and strategies for the entire commission.
- iv. Provision of emergency rescue services for victims of road accidents.
- v. Supervise the National Network of Emergency Road Service (NWERS).
- vi. Monitoring and controlling the generation of revenue through charges, towing and custody.
- vii. To maintain through various programmes a good and healthy working relationship with the public (public education and special and marshal unit).
- viii. Any other duties as may be assigned by the COMACE.

1.2.1 THE RANK STRUCTURE

- i. The Federal Road Safety Commission operates rank structure of commander and Marshal Cadres similar to the officers and men structure of the military and other para-military

- organisations. A commander is a graduate members of the corps while a (regular) Marshal is a non-graduate member.
- ii. There is also a Cadre of volunteers called special marshals that assist the regular marshals who must have satisfied the following:
- Be a Nigerian adult who is above 35yrs of age and not more than 75rs or a foreigner who has taken up residency in Nigeria and has lived in Nigeria for more than two years.
 - Be a person of high integrity in the society as has to been convicted by any law court.
 - Must have a Nigerian driver's license of not less than 7 years old with a clean driving record, free of traffic offence penalties and must be literate.
 - Must have a road vehicle of his own and a visible means of livelihood.
- ii. Road Safety clubs in schools are set up to inculcate road safety ethics in our youth as a way of building and enduring road safety culture in our society.

1.3 ACHIEVEMENTS OF COMMISSION

Amongst the achievements of the FRSC is the quantitative reduction in road traffic accidents estimated by comprising the projected accident rates within the recorded rates over a five year period as follows:

YEAR	RELATIVE REDUCTION
1988	3.8%
1989	18.7%
1990	33.5%
1991	42.0%
1992	43.5%
1993	53.4%
1994	59.8%
1995	66.0%
1996	66.4%

The above was possible through

- a. Maintaining speed limits
- b. Evacuation and clearing of road accidents scares
- c. Prompt rescue attention for road accident victims
- d. An average of about 100,000 vehicle - km highway patrols everyday including weekends and especially on public holiday.

ii. On foundations of road safety culture

- a. Streamlining all matters relating to road traffic system by injecting control and order into the road traffic system through the following.

National Driver's Licence scheme

National vehicle licence scheme

National vehicle identification scheme

National vehicle inspection scheme

National motor vehicle administration

- b. Design and production of the Revised highway code in 1989 to be culture related, comprehensive and well illustrate. It has been translated and printed in Hausa, Arabic Yoruba, Igbo and has been adopted as basis for the African highway code UN-ECA.
- c. Production of the National Road Traffic regulation in 1997 and Co-ordination of its induction nationwide.
- d. Development of road safety significant scheme like the National network of road emergency services, driving school standardization programme and the production of national network guide.

iii. On International Significance

- a. Nigeria through the commission serves as the vice chairman of the African sub group of the International Road Safety organisation.
- b. FRSC activities and programmes have received acclamation not only within the ECOWAS sub region and the African continent but also on the international scene.
- c. FRSC has active international technical cooperation with India, Belgium and Germany which had already sponsored overseas training for FRSC staff.
- d. The prevention Route International in Belgium adopted the FRSC approach as a model for developing countries.

- e. Some fourteen African countries have requested for copies of the commission's established legislations, road safety materials and programmes to facilitate their own formation.
- f. FRSC serves as a consultant to Kenya, Ghana and Guinea and has provided action plans for African countries seeking to replicate some unique aspects of the common like
 - The special marshal unit the autonomous placement of the FRSC
 - The independent enforcement of traffic regulations
 - The National Driver's licence scheme
 - The National Vehicle Number place Scheme.
- g. The Commission has provided references for the following international bodies outside Africa:
 - New York State Motor Vehicle department, on single card laminated driver's licence for New York State.
 - Olympic games committee, on features National driver's licence.
 - Interpol on type and specifications of vehicle plates in Nigeria.
 - European Registration plate association, on materials for inclusion in "Registration plates of the world"
 - Government of Finland on features of National driver's licence.

- Union of Technical Assistance for vehicles and Road traffic (UNATAC), Geneva, Switzerland.
- International Council of Alcohol, drugs and Traffic Safety (ICADTS), USA.

In addition to all these, Road Marshals have recovered and tendered huge sums of money and various valuables found on accident victims, the highest sum being \$441,000.00 and N17,000 found on sixteen dead victims in a Peugeot J5 commuter bus accident along Benin-Asaba road on 2nd October 1991. Several stolen vehicles have also been recovered during highway patrol operation.

Chapter Two

2.0 DISTINCTION BETWEEN LAW ENFORCEMENT AGENCIES SEEN ON THE ROADS

All the law enforcement agents seen on the roads are primarily charged with helping to maintain law and order in the land, one way or another. Often times they have to work hand in hand in order to achieve this goal. They however have the following basic distinctions.

THE TRAFFIC WARDEN:

They are essentially charged with controlling the smooth flow of traffic in the metropolis either to substitute or to supplement the use of traffic lights.

THE POLICE:

They are basically responsible for handling all criminal cases on the highway like smuggling.

ROAD SAFETY MARSHAL:

Helping to prevent road accidents by checking the excesses of motorist and enforcing road traffic regulations.

2.1 ANTECEDENT OF TRAFFIC LEGISLATION

The traffic rules are as contained in the revised highway code while traffic regulations are as contained in the various traffic legislation enacted by the federal, regional and states of the federation since 1913 when the first of such motor traffic ordinance

for the southern protectorate was enacted. Other relevant traffic regulations include:

- Federal Highway Act 1971
- Federal Highway (declaration) order 1971
- Right hand driver change over Act 1972
- Federal highway Amendment Decree 1973
- Road Traffic Regulation of Lagos 1973
- Road Traffic Act 1976
- Various State traffic laws 1976
- Federal Road Safety Commission Act 1988
- Federal Road Safety Commission Amendments Decree

2.2 ROAD TRAFFIC OFFENCES

Below is the list of the road traffic offences with their respective codes, penalty points and fines.

I. LIGHTS/SIGN VIOLATION (LSV) 2PTS/N100

Failure to use headlights, rear light between 1900hrs and 630 hr. When it is dark when on the highway or failure to use directional signal indicators when required to do so.

II. ROAD OBSTRUCTION VIOLATION (OBS) 2PTS/N100

Obstructing the highway by indiscriminate parking, repair of broken down vehicles or obstructing the highway with any other object.

III. ROUTE VIOLATION (RTV) 2PTS/N100

Contravention of the provision of any traffic regulation relating to the route to be followed by vehicles general by a class of vehicle to which the vehicle belongs or the roads which are to be used by such vehicles.

- iv. This applies to using a vehicle on the highway for purposes that it is not registered for or in a manner that poses danger to other road users for examples, a right hand drive commercial vehicle carrying goods or eight or more passengers.

V. SPEED VIOLATION (SPV) 2PT N100

Driving or riding on the highway in excess of the prescribed speed limits for a category of vehicle or road.

VI. VEHICLE LICENCE VIOLATION (NVL) 3PTS /N200

Being on the road with expired vehicle licence or not being in possession of one.

VI DRIVER'S LICENCE VIOLATION (NDL) 3PTS/N200

Driving without being in possession of a valid driver's licence for the category of vehicle. The classes of Driver's licence area as follows:

CLASS A Motorcycle

CLASS B Motor vehicle of less than 3 tonnes gross weight other than motor cycle, taxi, stage carriage or omnibus.

CLASS C Motor vehicles of less than 3 tonnes gross weight other than motorcycle.

CLASS D Motor vehicle other than motor cycle, taxi, stage carriage or omnibus but excluding an articulated vehicle or a vehicle drawing a trailer, agricultural machines tractors and earth moving vehicles.

CLASS E Motor vehicle other than a motorcycle, articulated vehicle, agricultural machines tractors and earth moving vehicle.

CLASS F Agricultural machines and tractors

CLASS G Articulated vehicles

CLASS H Earth moving vehicles

CLASS J Special for physically handicapped persons.

VII. OVERTAKING VIOLATION (OVT) 3PTS/N200

Overtaking a vehicle when it is unsafe to do so for example, brow of a hill and a bend

IX. TRAFFIC LIGHT DISOBEDIENCE (TRL) PT/N200

Failure to observe directions at a junction controlled by traffic light or a traffic warden.

X. TRAFFIC SIGNS/MARKINGS VIOLATION (TSV) 2PTS/N200

Failure to observe road markings, regulatory or mandatory road traffic signs.

XII. WARNING SIGN VIOLATION (WSW) 2PTS/N200

Driving a vehicle without carrying reflective warning triangles or failure to display a place properly reflective warning triangles or failure to display and place properly reflective warning triangles signs in the advent of a breakdown vehicle on the highway and

failure to report to members of the commission within a reasonable space of time to enable the commission effect the removal of the vehicle.

IX. DANGEROUS DRIVING (DGD) 3PTS/=N=200

Driving in a manner that is reckless and poses a threat to the life of oneself and other road users, for example, overtaking at high speed in places of high pedestrian traffic.

XIII. ALCOHOL/DRUG INFLUENCE (ALD) 3pts/N200

Driving under the influence of alcohol or drugs.

XIV. FORGED PAPERS AND LICENCE (FPL) 3pts/N200

Driving while being in possession of forged driver's licence or vehicle documents.

XV. DAMAGE TO PUBLIC PRESENCE (DAM) 3pts/N200

Unauthorised removal of or tampering with road traffic signs or driving in such a manner to collide with and damage road barriers, electric and telephone post, fire hydrants etc. This fine does not however remove the responsibility of such persons to pay to the appropriate authority the cost of repairs/replacement of such structures so damaged.

XVI. ROAD HAZARD VIOLATION (RHU) 2pts/N200

Being on the highway in such a manner as to create a risk to other road users, for example, improper loading of a vehicle with goods, improper towing of another vehicle, spilling of diesel oil along the highway etc.

XVII. DO NOT MOVE VIOLATION (RHU) 2pts/N200

Moving a vehicle bearing "DO NOT MOVE STICKER. This sticker is reserved for use on a vehicle whose driver is under the road or a wanted vehicle or a vehicle or a vehicle impounded awaiting the arrival towing a towing vehicle.

XVIII. CONSTRUCTION AREA VIOLATION (CAV) 3pts/N200

Not adhering to warning directional signs and speed limits to be observed at road repairs/construction sites on the highway.

XIX. FAILURE TO MOVE OVER (FMO) 3pts/N200

In the case of slow moving vehicles on a single carriage way failure to move out of the road when four or more vehicles have queued behind and on a dual carriage way, failure to move over to the slow lane for all categories of vehicles.

XX. FLYING PARTICLES VIOLATION (FPV) 2pts/N100

Failure to cover securely unstable material such as gravel, sand, refuse and thereby their spillage on the highway.

XXI. NUMBER PLATE VIOLATION (NPV) 2pts/N100

Failure to display revaluation number plates on vehicles.

XXII. OVERLOADING VIOLATION (OVL) 2pts/N200

Being on the highway with a vehicle loaded with passengers or goods over and beyond the prescribed number or weight respectively.

XXII. INADEQUATE CONSTRUCTION WARNING (ICW) 3pts/N200

Failure of a road construction company to provide adequate warning and directional signs at road repairs or construction sites.

XXIV. OBSTRUCTION MARSHAL'S DUTIES (OMD) 2pts/N100

Unnecessary interference and wilful disruption of a road marshal carrying out his duties.

XXV. WINDSCREEN VIOLATION (WDV) 2pts/N100

Being on the road without a windscreen or with a severely damaged windscreen that impairs vision for safe driving.

XXVI. TYRES VIOLATION (TYV) 2pts/100

Driving a vehicles without a spare tyre or with tyres whose threading are worn out.

XXVII. PROTECTION LOAD VIOLATION (PLV) 3pts/N200

Driving with a projected load without adequate warning: a red flag at the end of the projection in the daytime or a red warning light at the end of a projection at night.

XXVIII. MECHANICALLY DEFICIENT VEHICLE (MDV)

Being on the highway with a mechanically deficient vehicle such as emitting dark exhaust fumes that impairs vision, driving a vehicle with bent chassis, driving with incomplete wheels, driving a damaged vehicle etc. This offence has no option of fine except as determined by the court of law. It has to be validated with a vehicle inspection report before court trial.

XXIX. ASSAULING MARSHAL ON DUTY (AMD) 4PTS

Mal-handling a road marshal in the course of his duties and causing him bodily harm.

This offense has not option of fine except as determined by the court of law. Witnesses are however required for a successful court trial.

XXX. ATTEMPTING TO CORRUPT MARSHAL (ATC) 1pt

For traffic offenders who offer bribes to road marshal in order to pervert the course of justice. This offense has no fine except as determined by the court of law. Road marshals are to ensure that there exist sufficient proof in terms of money offered in denomination and serial number and witnesses to substantiate such claims.

XXXI. OTHER VIOLATION / OFFENCES (OVO)

This refers to other road traffic regulation as contained in the various legislation tabled above. The penalties for violation of such regulations that are covered in these legislation. The offense has no option of fine except as determined by the court of law. Some of the regulations that are covered in these legislation include the prescribed maximum height of commercial vehicles, the limit of the registration of right hand vehicles, the procedure for carrying extra wide loads on the highway, the extent of projected load allowed, the design specification of commercial vehicles and so on.

XXXII. REPROBATE OFFENDER ALERT SERIES (ROAS)

This is reserved for compulsive traffic offenders or violent traffic offender.

On contravening any of the above, the offender is booked and an notice of offense is issued. This is a legal document as it may be tendered in a court. It is only valid for fifteen days after which being in possession of the ticket may lead to instant arrest of offender or the impounding of his vehicle.

II. SURVEILLANCE PATROL

This mode of patrol is utilized in town traffic and on the highways to detect traffic and on the highway to detect traffic violators. It can be at any speed under the limit of the law.

IV. RESCUE MISSION

This mode of patrol is utilised on being informed of an accident and mobilising the team for rescue of accident victims and freeing the road of obstruction created by the affected vehicles. In this mode the patrol vehicle makes use of the emergency siren and flasher to get to the scene of the accident.

2.3.2 THE PATROL VEHICLE

The patrol car with its distinctive colours, blue light, communication and insignia is a very effective deterrent by making people conscious of the presence of the enforcement agent and creating an awareness of punitive action. It is the heart of enforcement. FRSC patrol vehicles are painted blue with two white stripes (one solid and a dotted line on the side and another set running from bonnet through the roof of the boot).

Chapter Three

1.0 INTRODUCTION TO SYSTEM ANALYSIS

A system is a set of interacting elements responding to inputs to produce a set of output or an organised method of achieving a function. Business is an example of a system. Analysis is an in depth study of an often complicated process, Hence, system analysis can be said to be an investigation in the method and procedure of operations of the organization understudy, with a view to discovering its inherent problems proffering recommendation on how to improve in the existing situation or replacing it with a new and better one. Systems must be developed to meet the specified needs of the users and must be accepted by them. Those that are saddled with these responsibilities are known as system analyst.

System analysis involves the understanding, interpreting and implementing of user's needs. It requires the system analyst to possession dual knowledge. First and foremost, is a high degree of knowledge and experience in computer technology, usually he is an efficient programmer. Secondly, the analyst must be able to understand and meet users needs. This requires some experience about the business or professional operations of the users on the organisation. System analysis involves gathering enough information to define and describe user operation in terms of volume of transaction, number of people involved, turnaround or deadline requirements, methods of storage of accumulated data, current problems and opportunities for improvement.

The main technique of gathering information are questionnaires, interviews, observation and collecting sample document.

Questionnaire are employed where little information is required from a great number of people who maybe at different locations. When managers and key people are involved personal interviews are conducted. Observation and sample documents help to identify where data originates and where it is used in an organization. The system analyst is a coordinator who communicates with and meet the needs of both users and computer professionals. He borrows knowledge from

System maker: to obtain a new and to study changes.

Business Management: From where to study business

Project Management: Where he carries out all his activities

Communication Skills: Advise or convince who is going to use the system.

System analysis spells out the strength and weakens of a system.

3.1.0 FEASIBILITY STUDY

It is essential to conduct a feasibility study prior to the commencement of the proposed project. This study determines whether the project is realistic in terms of line, cost and resources. The prevents the organisation ending up with a white elephant project and avoiding unnecessary wastage of valuable time, effort and other limited resources. The objectives whiten the analyst hopes to accomplish at the end of the day are as summarised below:

- a. Clarification and understanding the project request . The following will be the attainment of this project.

What is being done?

What is required?

- b. Determining the size of the project
This is necessary, so as to estimate the amount of time and number of people require to develop the project.
- c. Assessing costs and benefits of the alternative approaches.
What is the cost of the project including the cost of training and retaining and users of the system.
- d. Report the finding to management with recommendation outlining the acceptance or rejection of the proposal.

In order to carry out the above feasibility study has been subdivided into three classes.

They are as follows technical feasibility, operational feasibility and economic feasibility.

TECHNICAL FEASIBILITY: This is basically concerned with the availability of the required equipment, software and all other technology to carry out the proposed project information or output. The ability of the computer to among other things handle and process large volume of data at very high speed that would have been humanly impossible has made the computer the most versatile and indispensable tool of the millennium.

To effect the proposed automation, change over procedure would have to be employed. The common methods of change over available include direct, parallel running, pilot running and staged change over. However for this study parallel change over is recommended. This would involve running both old (manual) and new (computerized) systems concurrently for at least one system

cycle using full live data in the operational environment of place, people equipment and time. This allows for the result of the new system to be compared with the old system before the full acceptance by the commission. This way mistakes and oversight made during the designing could be corrected before full acceptability. Although it might involve some extra cost at the beginning due to the fact that two systems are being run simultaneously at the time available for one, this extra cost would have been worth it in the long run.

In addition, for the new system to succeed at all the staff would obviously have to be computer literate. To reduce the total cost of computerisation, the staff training should be done in house. Computer experts should be temporarily transferred to the directorate of operations from Motor vehicle administration directorate and the directorate of planning, research and statistics that are already making use of computer for most of their operations. A few staff could later be sponsored for specialized courses as or if the need arises.

3.4 SYSTEM DESIGN

Giving the required specification of the proposed system, this now has to be interpreted to create a design for a programming system which will satisfy these requirement.

Perhaps the purpose of system design is best explained by the end product that mark its completion. This step concludes with the acceptance of a document called system specification. This is a description that cover in details to satisfy both management and

users of the results and methods to be incorporated in the new system.

System design become more meaningful when discussed along side the five design components or elements which are:

1. Input
2. Output
3. Files
4. Procedure
5. People

1.INPUT: Input refers to the mode of entering data into system. It is basically influenced by the needs of the output consideration should be given to:

- Data collection method and validation
- Types of input media available
- Volume of input document
- Design of input layout.

The overall objective is to employ an input device that has the highest level of accuracy and is acceptable and understood by the users. The input design element to be employed in this study would be the keyboard and the disk drives.

2.OUTPUT: This refers to the end product of data processing, that is, the information generated by the system. It is necessary to consider what is required from the system before deciding on how to go about producing it. The following would have to be considered.

Forms

Types

Volumes and frequency of reports and document

Choice of the output media.

The output from a computer system is required primarily to communicate the result of processing to other users and even more importantly to provide a permanent (hard) copy of the result for future usage or for management decision making. There exist several forms of communicating to help users understand what will be involved in the new system output. For instance, a print card shows how the printed output will look like. By showing the users this, the changes are being increased that reports and displays generated would be effectively used later.

For the case study, a description of what the output of the program is given in the next chapter and a better illustration the appendix. These output would form the bulk of what would be sent to various units, sector and zone commands of the directorate as either terminal or annual reports.

3.FILES: This design element is very much linked to input and output. Input is processed against the files to produce the necessary output. Consideration involved in designing files are:

Storage media;

Method of file organisation and access;

Files security;

Record layout.

4.PROCEDURES: This provides the operational details of the system in a stepwise approach. It maybe given as simple algorithm, pseudo codes, flow chart or program. They are the steps that unify the whole process to be carried out. They normally begin with the origination of the source document and end with output document being distributed.

For our case study, a program flow chart is given in the next chapter and a listing of the coded program is given in the appendix.

5.PEOPLE: The success of the proposed system depends on how involved users are with the design of the system. It is critical that the application development team identifies with the personnel required to implement the new system.

It is for this same reason amongst other that a user friendly package (Dbase iv) was used for development of the software. Hence the newly trained personnel should have no problem with the design of the system.

3.5 COST AND BENEFIT ANALYSIS

A.COST ANALYSIS

Development Cost

5 pc (Pentium 586p)	200,000
1 printer (HP Desk Jet 895 Cxi)	35,000
2 Air conditioners	120,000
1 Stabilizer	25,000
Software	80,000
1 Scanner	28,000

Staff training	40,000	
Installation cost	15,000	
Miscellaneous	<u>10,000</u>	
		550,000

OPERATIONAL COST

Ups	16,800	
Diskette	5,000	
Stationaries	23,000	
Furniture	30,000	
Fax modern with voice	5,200	
		<u>80,000</u>
		<u>630,000</u>

Total cost Analysis = Development Cost + Operational Cost

Total cost Analysis = N630,000

B. BENEFIT ANALYSIS

- i. The large volume of data from the various units, sector and zonal commands can be handled easily.
- ii. Easy accessibility to past data make forecasting and planning simpler.
- iii. Data security and protection will be ensured.
- iv. Comparative analysis can now easily be made from available data since data would now be centrally controlled.
- v. Data can be processed faster than was formally done.

Chapter Four

4.0.0 BRIEF ON PROGRAMMING LANGUAGE

Programming is the act of writing programs. A program is a sequence of instructions informing the computer on the steps required to achieve a defined task. There are basically two classes of programming languages refer to those that involve the use of binary digits or mnemonic codes and symbols for their development, that is, they involve the use of computer language. High level languages in the other hand, are those developed using natural languages like English. When speaking of programming languages, the high level languages are often implied. There exist a lot programming languages to suit different needs, examples are FORTRAN and PASCAL languages for scientific purposes.

Choosing the wrong language would be catastrophic as it could lead to loss of time, money and the inability of the program to do the expected. The following would serve as a guide in the choice of a programming language.

1. Identifying and analysing the peculiar needs of the organisation.
2. The existing hardware in the organisation
3. The simplicity of the language relative to the user.
4. Doing a comparative study to determine the language that best suit the organisation needs where there exist more than one suitable language.

Relating the above to the Operation Directorate of the Federal Road Safety

Commission experience, a Database Management system would be most appropriate.

Database management system (DBMS) are soft wares that can construct, expand and maintain data in a database and allows data to be organised separately from other resources. DBMS came into being in the 50's with COBOL (Common business oriented language) but has since metamorphosed to various advanced languages like CLIPPER, DBASE, FOXPRO and ORACLE. Employing the use of any of Database management system would lead to the following merits:

- Data integration would be achieved;

- Data integrity can be maintained

- Elimination of data redundancy

- Data independence is maintained.

Dbase iv programming language would be employed in the development of this study's program. It is developed by BORLAND. It requires a 286 minimum processor, 2 megabyte RAM and a minimum hard disk space of 4.5 megabyte. It provides full relational and database environment. The software can be used as both a programming language three different methods of processing stored data: Programming language mode (to be employed in this study); the control centre and the dot.

4.0.1 REASONS FOR CHOOSING DBASE IV

Dbase iv often referred to as one of the most popular and powerful Databse management system available for personal computers. It is ideal for the present study in view of its simplicity to new computer users and its ability to handle the large database of the

organisation some other features that make dbase iv unique are as follows.

1. Preferable to other versions of dbase due to the improvements it contains among which is the available of full relational database capabilities using structural query language that is compatible with IBM machines.
2. It's simplicity makes it preferably to their relation database system like the ORACLE. It is easy to learn and use.
3. Accessibility to as many as ninety-nine files at once.
4. Has up to 255 fields per record
5. Allows for pop-up menus and window design
6. Makes allowance for customised or user defined functions
7. Can handle large memory variables.

4.1 SYSTEM REQUIREMENT

The proposed internal control system will require personal computers with the following specifications.

A. HARDWARE REQUIREMENT

1. PROCESSOR: A minimum of 286 processor
2. MEMORY: At 2 megabyte of Random Access Memory (RAM)
3. STORAGE CAPACITY: A minimum of 4.5 MB
4. Display a coloured monitor
5. Input device
 - a. Disk drive: 3.5" floppy disk drive
 - b. Keyboard standard keyboard (IBM)
6. Printer Hp desk jet 895 CXI

7. Power saver 650 KVA UPS
8. Stabilizer' up to 1000V

B. SOFTWARE REQUIREMENT

1. Dbase iv package
2. Microsoft disk operating system
3. "Traoffend" (the developed program)

4.2 PROGRAM DESCRIPTION

To access the program, insert the floppy diskette containing the program in to the disk drive. Then change the drive to A.

Type "CD Dbase."

Change the drive back to C and enter the Dbase environment.

ie. Type "CD Dbase"

At the Dot prompt, set Default to A.

Type "DO TRAOFEND"

An introductory message is displayed. After which the screen clears and a menu screen Traofend is seen as shown below

TRAOFEND

OFFENCE

OFFENDER

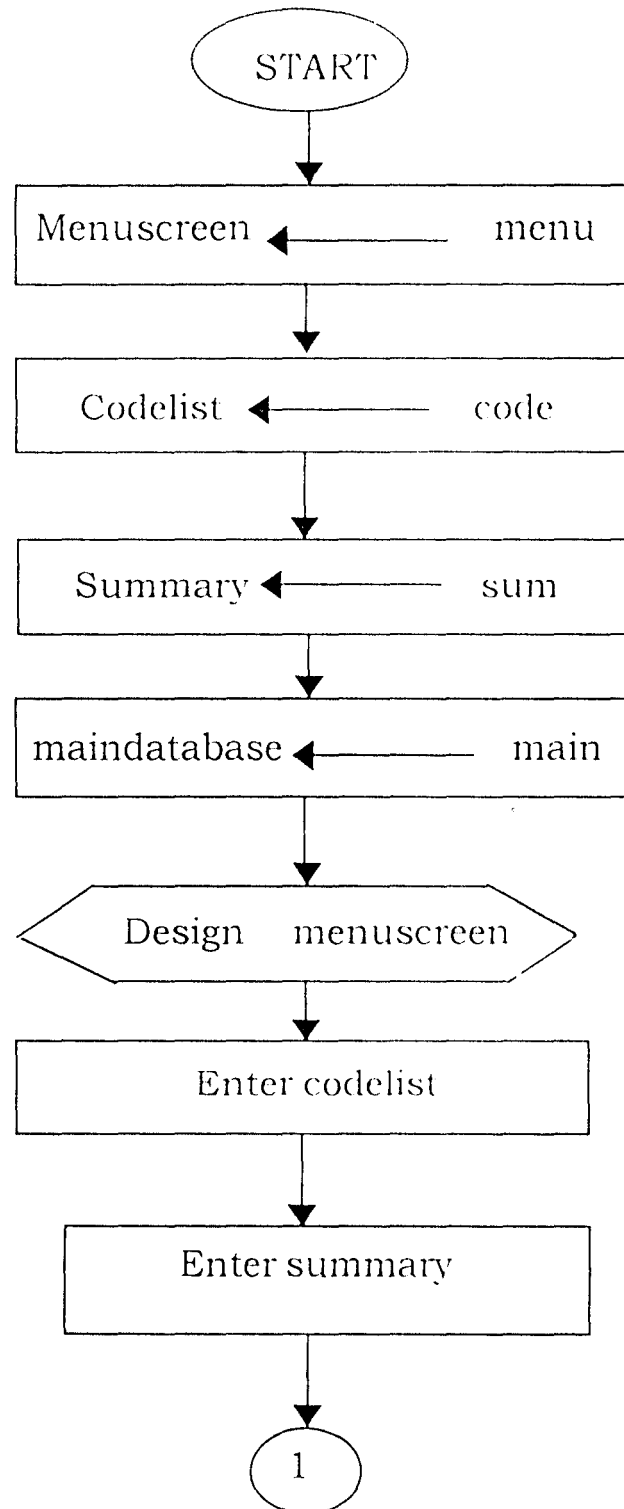
QUIT

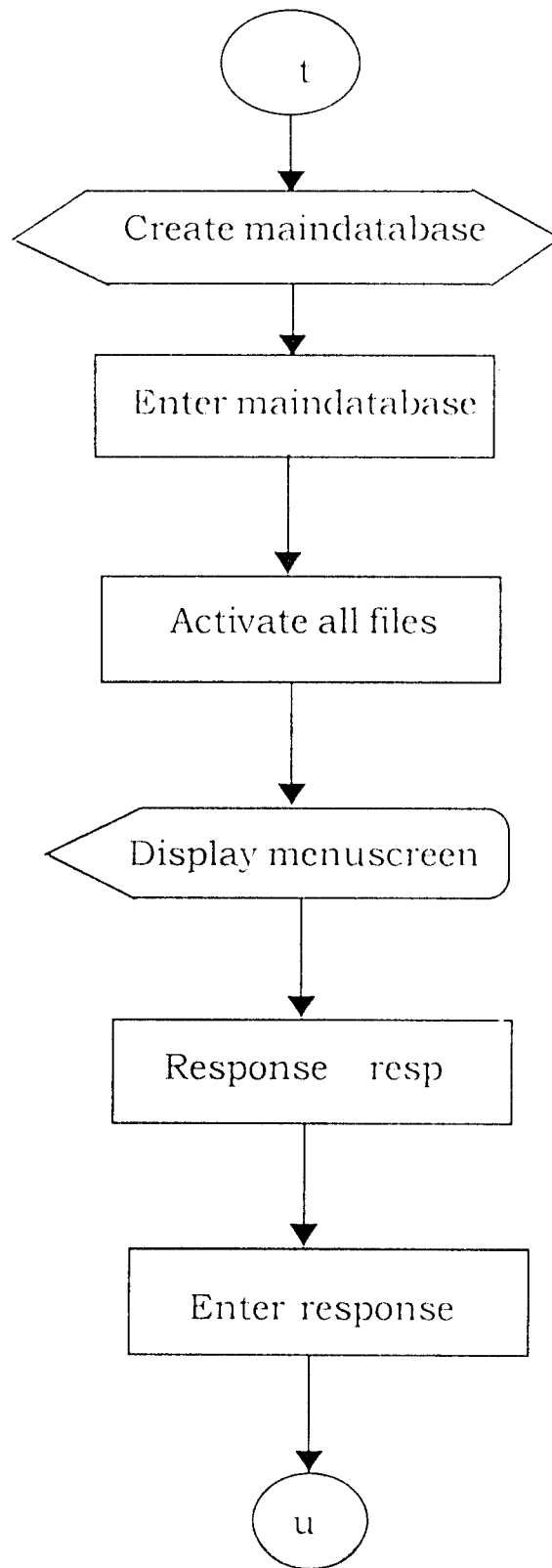
Highlight and press enter key.

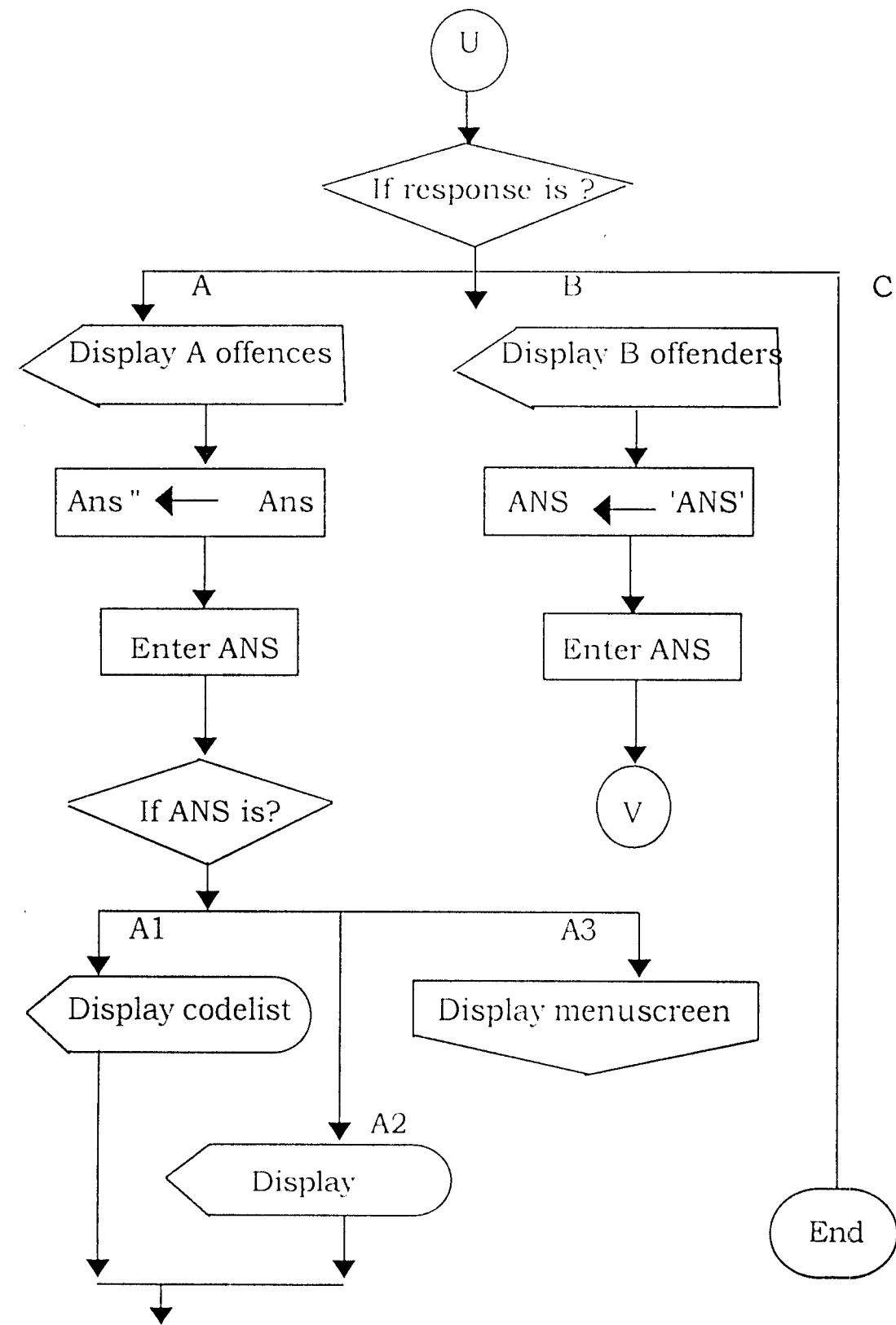
On highlight any of options a sub-menu comes into view. If offence is highlighted a sub-menu with option; Codelist, summary and exist is seen. Highlight codelist now shows a table showing the names of the various offences, with their codes and points. Highlighting summary presents one with a detailed summary of what constitute the various offences while exit takes one back to the main menu. If offender is selected another pull down menu with options update, locate and exist comes to view. Selecting update allows one to add more records to Master file, selecting locate allows one to find a particular record from Master while exit one back to the main menu.

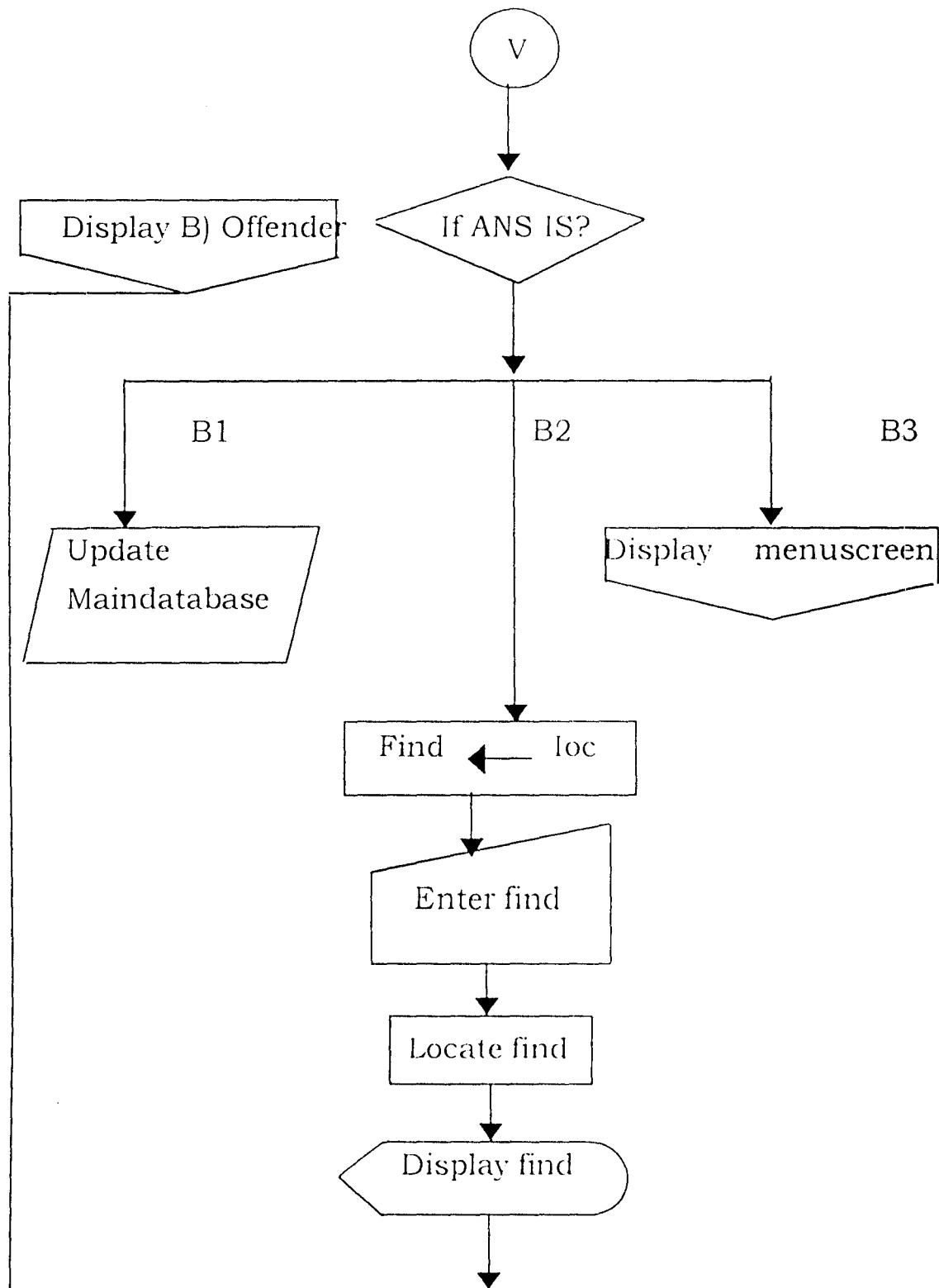
Quit allows one to either go to dot prompt or back to the DOS prompt.

4.3.0 PROGRAM FLOW CHART









4.4.0 PROGRAMME IMPLEMENTATION

This encompasses the activities needed to get the system ready for use. It involves establishing all computer related requirement in place before the system becomes operational.

The main activity is the preparation and testing of programmes for the new system.

The methodology employed into section or modules. Each module is tested as it is written. As connecting modules are completed, testing extends to sets of module and eventually the entire programme.

Other implementation activities embarked upon include the performance of complete system test after the programme is ready. This is the actual operation of the computer system by both the users and the analyst using real application data. The data used had however been processed previously under the existing system and the result already known from previous processing. This serves to ensure that the users understand and are satisfied with the result that would be delivered:

The summary of the steps involved are as follows:

- Preparation of an implementation schedule;
- Preparation and presentation of management briefing in order to educate and train staff on the new system;
- Getting and installing the specified software
- Design the required software
- Documenting all instruction for the use of the new program for the users.

Perform for the users.

Perform complete system test and establish new procedures.

Plan and organise the conversion

HANDOVER THE SYSTEM TO USERS

SUPERVISION FROM TIME TO TIME

4.5.0 PROGRAMME DOCUMENTATION

This is the process to describing the way the program works. There are two forms of documentation external and internal. External documentation refers to explanation given about the working of the program, often printed out as reference manuals.

Internal documentation refers to comments inscribed within the program to describe what is happening at a particular time. This method is employed more in the development of the software for this study. This was to make it possible for any other programmer to be able to understand the program so as to carry out modifications as at when due.

Effort was also made to ensure that the documentation are readable and the language very simple. To promote better communication within the organisation it is recommended that professionals henceforth use the same standard for design and documentation.

Finally enhancement of a program is a requirement built into the very nature of computer systems. As soon as a new system becomes operational, it is usually soon subjected to modifications either to meet new regulations or to capitalise on newly discovered opportunities. An undocumented program would soon be redundant as it would be unable to do this.

Chapter Five

5.0 SUMMARY

The study introduces the Federal Road Safety Commission (FRSC) giving its historical background, statutory functions, structures and achievements so far. The commission is made up of six directorates namely; Motor Vehicle Administration; Logistics and supplies; Administration and Finance; Training and Planning; Research and statistics and the directorate of operations which is saddled with the responsibility of road traffic offender which is the main concern.

The study also gives an insight into what constitutes the various road tragic offences and their liable penalties, as well as the various types of patrols and patrol produces that are involved in the operation.

Also the manual system being presently utilised by the operation directorate is investigated and analysed, taking cognisance of its merits and numerous demerits. The information obtained it then used in the development of a program using dbase iv programming language for the computer automatic of the road traffic offenders records.

5.1 CONCLUSION

In a developing country like Nigeria, the importance of a commission like the Federal Road Safety Commission and in particular the operations directorate to handle issues related to road traffic offences can not be overemphasized. It should be noted however that, although defaulters face some penalties, the role of the commission is basically corrective not punitive, since their ultimate goal is to ensure that our roads are accident-free and safe.

There are however some obstacles militating against the achievement of this goals they include the following:

- Insufficiency of patrol vehicles, even the few existing ones have almost broken down and are seriously in need of servicing;
- Inadequate funding. This can be regarded as the major problem as it carries with it a lot of associated problems like inadequate patrol equipment and insufficient materials for accident victims.;
- Inadequate public enlightenment campaigns;
- Most of the roads are bad and UN-motor able without adequate road signs;
- Most of the cars used by commercial drivers are old and not road worthy.

5.2 RECOMMENDATIONS

1. More funds should be provided to the directorate which should be specifically used for purchasing more patrol vehicles and repairing old ones and purchasing other necessary equipment like surveillance cameras.
2. The government should repair all the bad roads and place adequate road signs where necessary.
3. There should be stiff legislation, bending all old and unroad worthy vehicles especially for commercial drivers.
4. More public enlightenment campaigns should be organised especially during festive periods for commercial drivers.
5. For effectiveness of the computer automatic process the program should be amended to suit the directorates needs as the need arises.
6. Staff should be sent for further computer training to expose and to update their knowledge, so as to be able to use the latest technology to their utmost advantage.
7. The computer automatic process should in the nearest future, be extended to the various zonal, sector and unit commands. In during only system compatible with the ones in the headquarters should be purchased. As the most ideal system for the commission would be an integrated system.

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COMPUTERIZATION OF ROAD TRAFFIC OFFENDERS RECORDS

REPORT ON ROAD TRAFFIC OFFENCES

08/30/01

DATE	NAME	REGISTRATION NUMBER	ZONE	USAGE	COMMAND	VIOLATION CODE	DRIVER'S LICENCE	VEHICLE MAKE
04 03 01	OMOH MOSES	AA134JKA	RS1	PRIVATE	RS 1	LSV	AA111BB	VOLVO
04 01 01	DELE AGBI	AA125NG	RS 1	PRIVATE	RS1	OBS	AA112BB	TOYOTA
04 03 01	JUMMY SANDRA	AA 156JKA	RS2	COMMERCIAL	RS 2	RTV	AA222BB	TOYOTA
05 12 01	YEMISI M. F.	AE135JJJ	RS3	COMMERCIAL	RS 3	SPV	AA333BB	BENZ
06 01 01	JAGABA S. T.	QW167KJA	RS4	GOVERNMENT	RS 4	NDL	AA444BB	PEUGEOT

COMPUTERIZATION OF ROAD TRAFFIC OFFENCES

FILE HELP REPORT QUIT

TRAFFIC OFFENCES

COMPUTERIZATION OF ROAD TRAFFIC OFFENCES

FILE HELP REPORT QUIT

About FRSC

About FRSC Offences

COMPUTERIZATION OF ROAD TRAFFIC OFFEN [] [] [X]

COMPUTERIZATION OF ROAD TRAFFIC OF OFFENDEF
(Case Study of Federal Road Safety Commission (FRSC) Headquarte

A project developed by:

JAGABA S. T.
PGD/MCS/99/2000/918

MATHS/COMPUTERS DEPARTMENT

FEDERAL UNIVERSITY OF TECHNOLOGY BOSSO, MINNA

IN PARTIAL FULFILMENT FOR THE REQUIREMENT FOR THE AWARD OF

POSTGRADUATE DIPLOMA IN COMPUTER SCIENCE.

TRAFFIC OFFENCE [] [] [X]

NAME	OMOH MOSES
REGISTRATION NUMBER	AA123JKA
DATE	02/03/2001
VIOLATION CODE	001
USAGE	PRIVATE
COMMAND	C
ZONE	ONE
DRIVER'S LICENCE	E
VEHICLE MAKE	NAVIGATOR

Add New	Modify	Delete	First
Next	Previous	Last	Close

HISTORICAL BACKGROUD OF THE FEDER

HISTORICAL BACKGROUD OF THE FEDERAL ROAD SAFTY COMMISSION (FRSC)

HISTORICAL BACKGROUND OF THE FEDERAL ROAD SAFETY COMMISSION (FRSC)

Prior to the establishment of the Federal Road Safety Commission (FRSC), road safety matters were handled by the defunct National Road Safety Commission (NRCS) under the Federal Ministry of Works and Housing with enforcement patrols and logistics under the Nigerian Police Force.

The FRSC came into being on the 18th of February 1998 via sections 2, 2.1, 2.2, 2.3, 6 and 7 of Decree 45 of 1998.

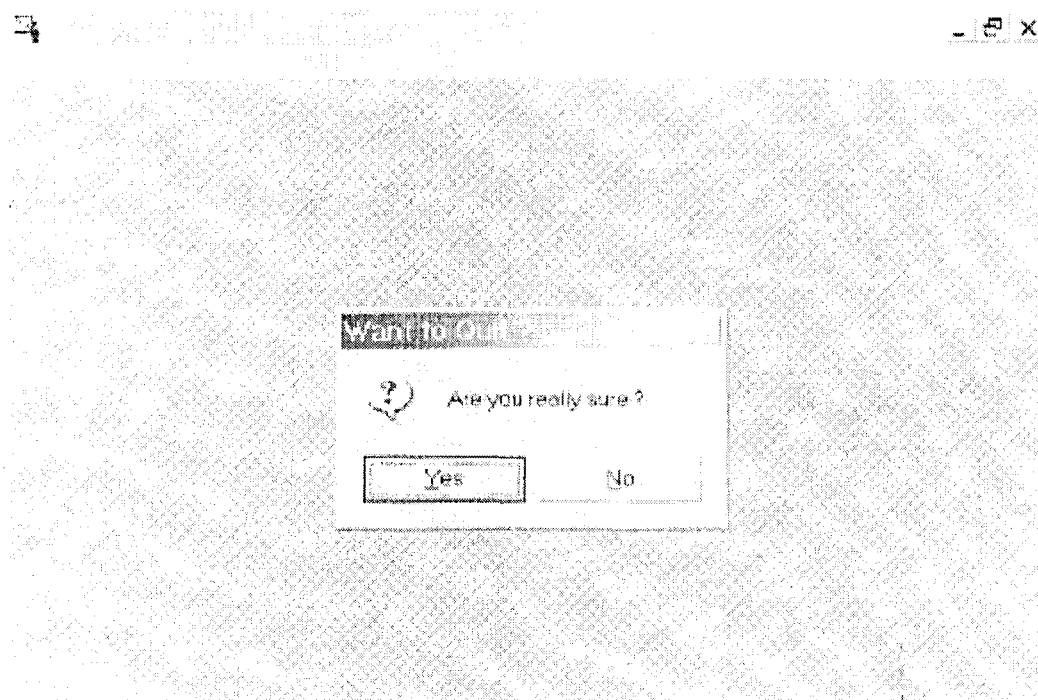
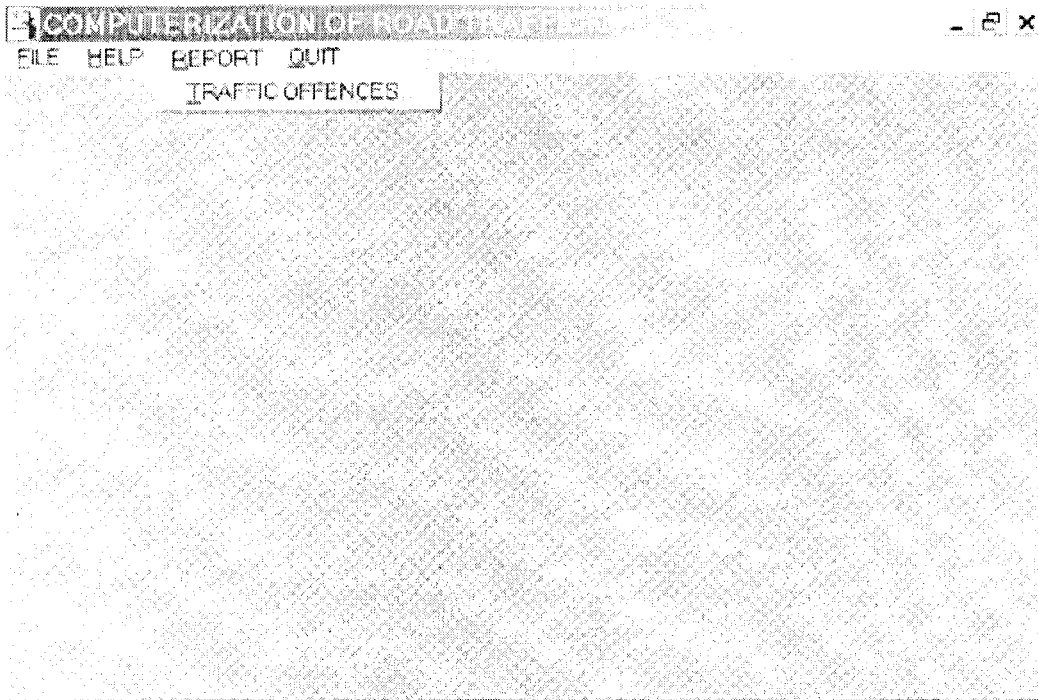
That the presidency is the supervisory authority of the Commission

ROAD TRAFFIC OFFENCES

SELECT VIOLATION CODE

DGD

OFFENCES	PENALTY
ROUTE VIOLATION	2PTS/N100
SPEED VIOLATION	2PTS/N100
VEHICLE LICENCE VIOLATION	3PTS/N200
DRIVER'S LICENCE VIOLATION	3PTS/N200
OVERTAKING VIOLATION	3PTS/N200
TRAFFIC LIGHT DISOBEDIENCE	3PTS/N200
TRAFFIC SIGNS/MAKINGS VIOLATION	2PTS/N200
WARNING SIGN VIOLATION	2PTS/N200
DANGEROUS DRIVING	3PTS/N200
ALCOHOL/DRUG INFLUENCE	3PTS/N200



```
PUBLIC oform1
```

```
oform1 = NEWOBJECT("form1")
```

```
oform1.Show
```

```
RETURN
```

```
*****
```

```
*-- Form:      form1 (c:\road\help.sex)
```

```
*-- ParentClass: form
```

```
*-- BaseClass: form
```

```
*
```

```
DEFINE CLASS form1 AS form
```

```
    Top = 5
```

```
    Left = 69
```

```
    Height = 250
```

```
    Width = 403
```

```
    DoCreate = .T.
```

```
    Caption = "ROAD TRAFFIC OFFENCES"
```

```
    Name = "Form1"
```

```
    ADD OBJECT lblcode AS label WITH :
```

```
        AutoSize = .T. ;
```

```
        FontBold = .T. ;
```

```
        WordWrap = .T. ;
```

```
        BackStyle = 0. ;
```

```
        Caption = "SELECT VIOLATION CODE". ;
```

```
        Height = 17. ;
```

```
        Left = 48. ;
```

```
        Top = 15. ;
```

```
        Width = 144. ;
```

```
        TabIndex = 1. ;
```

```
        ForeColor = RGB(0,0,0). ;
```

```
        Name = "lblCode"
```

```
    ADD OBJECT cbocode AS combobox WITH :
```

```
        Comment = "" ;
```

```
        RowSourceType = 6. ;
```

```
        RowSource = "tabout.code". ;
```

```
        ControlSource = "tabout.code". ;
```

```
        Height = 24. ;
```

```
        Left = 204. ;
```

```
        TabIndex = 6. ;
```

```
        Top = 10. ;
```

```
        Width = 100. ;
```

```
        Format = "!". ;
```

```
        Name = "cboCode"
```

```

ADD OBJECT list1 AS listbox WITH :
    BoundColumn = 1. ;
    ColumnCount = 2. ;
    ColumnWidths = "250". ;
    RowSourceType = 6. ;
    RowSource = "tabout.desc.fine". ;
    ControlSource = "tabout.desc". ;
    Height = 168. ;
    Left = 24. ;
    Top = 57. ;
    Width = 361. ;
    Name = "List1"

```

```

ADD OBJECT label1 AS label WITH :
    AutoSize = .T. ;
    FontBold = .T. ;
    WordWrap = .T. ;
    BackStyle = 0. ;
    Caption = "OFFENCES". ;
    Left = 55. ;
    Top = 43. ;
    Width = 59. ;
    TabIndex = 1. ;
    ForeColor = RGB(0,0,0). ;
    Name = "Label1"

```

```

ADD OBJECT label2 AS label WITH :
    AutoSize = .T. ;
    FontBold = .T. ;
    WordWrap = .T. ;
    BackStyle = 0. ;
    Caption = "PENALTY". ;
    Left = 296. ;
    Top = 41. ;
    Width = 52. ;
    TabIndex = 1. ;
    ForeColor = RGB(0,0,0). ;
    Name = "Label2"

```

```

PROCEDURE cbocode.InteractiveChange
    thisform.refresh ()
ENDPROC

```

```

ENDDEFINE

```

*

*-- EndDefine: form1

PUBLIC oform1

oform1=NEWOBJECT("form1")

oform1.Show

RETURN

*-- Form: form1 (c:\road\history.sx)

*-- ParentClass: form

*-- BaseClass: form

*

DEFINE CLASS form1 AS form

Top = -13

Left = 32

Height = 353

Width = 469

DoCreate = .T.

Caption = "HISTORICAL BACKGROUD OF THE FEDERAL ROAD SAFTY
COMMISSION (FRSC)"

Name = "Form1"

ADD OBJECT edthistory AS editbox WITH :

Comment = "" ;

Format = "!" ;

Height = 228 ;

Left = 24 ;

TabIndex = 2 ;

Top = 36 ;

Width = 420 ;

ControlSource = "tabout.history" ;

Name = "edtHistory"

ADD OBJECT lblhistory AS label WITH :

AutoSize = .T. ;

FontBold = .T. ;

WordWrap = .T. ;

BackStyle = 0 ;

Caption = "HISTORICAL BACKGROUD OF THE FEDERAL ROAD
SAFTY COMMISSION (FRSC)" ;

Left = 12 ;

Top = 12 ;

Width = 437 ;

```
TabIndex = 1. ;  
Name = "lblHistory"
```

```
ENDDEFINE
```

```
*
```

```
*-- EndDefine: form1
```

```
.....  
PUBLIC oform1
```

```
oform1=NEWOBJECT("form1")
```

```
oform1.Show
```

```
RETURN
```

```
*****
```

```
*-- Form: form1 (c:\road\offence.sex)
```

```
*-- ParentClass: form
```

```
*-- BaseClass: form
```

```
*
```

```
DEFINE CLASS form1 AS form
```

```
Top = 6
```

```
Left = 87
```

```
Height = 313
```

```
Width = 456
```

```
DoCreate = .T.
```

```
Caption = " TRAFFIC OFFENCE"
```

```
Name = "Form1"
```

```
ADD OBJECT txtdate AS textbox WITH :
```

```
Comment = "" ;
```

```
ControlSource = "M.date" ;
```

```
Format = "E" ;
```

```
Height = 23 ;
```

```
Left = 170 ;
```

```
TabIndex = 2 ;
```

```
Top = 71 ;
```

```
Width = 92 ;
```

```
Name = "txtDate"
```

```
ADD OBJECT lbldate AS label WITH :
```

```
AutoSize = .T. ;
```

```
FontBold = .T. ;
```

```
WordWrap = .T. ;
```

```
BackStyle = 0 ;
```

```
Caption = "DATE" ;
```

Left = 23. ;
Top = 73. ;
Width = 30. ;
TabIndex = 1. ;
Name = "lblDate"

ADD OBJECT txtzone AS textbox WITH :

Comment = "" ;
ControlSource = "M.zone" ;
Format = "!" ;
Height = 23. ;
Left = 170. ;
MaxLength = 4. ;
TabIndex = 4. ;
Top = 168. ;
Width = 72. ;
Name = "txtZone"

ADD OBJECT lblzone AS label WITH :

AutoSize = .T. ;
FontBold = .T. ;
WordWrap = .T. ;
BackStyle = 0. ;
Caption = "ZONE" ;
Left = 23. ;
Top = 168. ;
Width = 31. ;
TabIndex = 3. ;
Name = "lblZone"

ADD OBJECT txtcommand AS textbox WITH :

Comment = "" ;
ControlSource = "M.command" ;
Format = "!" ;
Height = 23. ;
Left = 170. ;
MaxLength = 4. ;
TabIndex = 6. ;
Top = 144. ;
Width = 142. ;
Name = "txtCommand"

ADD OBJECT lblcommand AS label WITH :

AutoSize = .T. ;
FontBold = .T. ;
WordWrap = .T. ;

```
BackStyle = 0. ;  
Caption = "COMMAND". ;  
Left = 23. ;  
Top = 144. ;  
Width = 61. ;  
TabIndex = 5. ;  
Name = "lblCommand"
```

ADD OBJECT txtname AS textbox WITH :

```
Comment = "" ;  
ControlSource = "M.name". ;  
Format = "I". ;  
Height = 23. ;  
Left = 170. ;  
MaxLength = 25. ;  
TabIndex = 8. ;  
Top = 25. ;  
Width = 271. ;  
Name = "txtName"
```

ADD OBJECT lblname AS label WITH :

```
AutoSize = .T. ;  
FontBold = .T. ;  
WordWrap = .T. ;  
BackStyle = 0. ;  
Caption = "NAME". ;  
Left = 23. ;  
Top = 25. ;  
Width = 33. ;  
TabIndex = 7. ;  
Name = "lblName"
```

ADD OBJECT txt driv_licence AS textbox WITH :

```
Comment = "" ;  
ControlSource = "M.driv_licence". ;  
Format = "I". ;  
Height = 23. ;  
Left = 170. ;  
MaxLength = 10. ;  
TabIndex = 10. ;  
Top = 196. ;  
Width = 123. ;  
Name = "txtDriv_licence"
```

ADD OBJECT lbl driv_licence AS label WITH :

```
AutoSize = .T. ;
```

```
FontBold = .T. ;  
WordWrap = .T. ;  
BackStyle = 0. ;  
Caption = "DRIVER'S LICENCE". ;  
Left = 23. ;  
Top = 196. ;  
Width = 104. ;  
TabIndex = 9. ;  
Name = "lblDrv_licence"
```

```
ADD OBJECT txtveh_make AS textbox WITH :  
Comment = "" ;  
ControlSource = "M.veh_make". ;  
Format = "!" ;  
Height = 23. ;  
Left = 170. ;  
MaxLength = 12. ;  
TabIndex = 12. ;  
Top = 220. ;  
Width = 133. ;  
Name = "txtVeh_make"
```

```
ADD OBJECT lblveh_make AS label WITH :  
AutoSize = .T. ;  
FontBold = .T. ;  
WordWrap = .T. ;  
BackStyle = 0. ;  
Caption = "VEHICLE MAKE". ;  
Left = 23. ;  
Top = 220. ;  
Width = 84. ;  
TabIndex = 11. ;  
Name = "lblVeh_make"
```

```
ADD OBJECT cbousage AS combobox WITH :  
Comment = "" ;  
RowSourceType = 1. ;  
RowSource = "PRIVATE, GOVERNMENT, COMMERCIAL". ;  
ControlSource = "M.usage". ;  
Height = 24. ;  
Left = 170. ;  
TabIndex = 14. ;  
Top = 120. ;  
Width = 137. ;  
Format = "!" ;  
Name = "cbolUsage"
```


ADD OBJECT lblusage AS label WITH :

AutoSize = .T. ;
FontBold = .T. ;
WordWrap = .T. ;
BackStyle = 0. ;
Caption = "USAGE". ;
Left = 23. ;
Top = 120. ;
Width = 39. ;
TabIndex = 13. ;
Name = "lblUsage"

ADD OBJECT txtvio_code AS textbox WITH :

Comment = "" ;
ControlSource = "M.vio_code". ;
Format = "!" ;
Height = 23. ;
Left = 170. ;
MaxLength = 4. ;
TabIndex = 16. ;
Top = 96. ;
Width = 118. ;
Name = "txtVio_code"

ADD OBJECT lblvio_code AS label WITH :

AutoSize = .T. ;
FontBold = .T. ;
WordWrap = .T. ;
BackStyle = 0. ;
Caption = "VIOLATION CODE". ;
Left = 23. ;
Top = 98. ;
Width = 97. ;
TabIndex = 15. ;
Name = "lblVio_code"

ADD OBJECT txtveh_regnum AS textbox WITH :

Comment = "" ;
ControlSource = "M.veh_regnum". ;
Format = "!" ;
Height = 23. ;
Left = 170. ;
MaxLength = 10. ;
TabIndex = 18. ;
Top = 48. ;
Width = 113. ;

Name = "txtVeh_regnum"

```
ADD OBJECT lblveh_regnum AS label WITH :
    AutoSize = .F. :
    FontBold = .F. :
    WordWrap = .F. :
    BackStyle = 0. :
    Caption = "REGISTRATION NUMBER". :
    Left = 23. :
    Top = 48. :
    Width = 136. :
    TabIndex = 17. :
    Name = "lblVeh_regnum"
```

```
ADD OBJECT container2 AS container WITH :
    Top = 248. :
    Left = 87. :
    Width = 259. :
    Height = 38. :
    TabIndex = 15. :
    ForeColor = RGB(128,0,64). :
    BackColor = RGB(238,214,213). :
    Name = "Container2"
```

```
ADD OBJECT cmdfirst AS commandbutton WITH :
    AutoSize = .F. :
    Top = 252. :
    Left = 291. :
    Height = 29. :
    Width = 52. :
    FontBold = .F. :
    FontItalic = .F. :
    FontName = "Times New Roman". :
    FontSize = 11. :
    FontUnderline = .F. :
    Caption = "> First". :
    TabIndex = 7. :
    SpecialEffect = 0. :
    ForeColor = RGB(128,0,64). :
    DisabledForeColor = RGB(128,128,128). :
    Name = "cmdfirst"
```

```
ADD OBJECT cmdclose AS commandbutton WITH :
    AutoSize = .F. :
    Top = 281. :
    Left = 276. :
```

```

Height = 29. ;
Width = 49. ;
FontBold = .F. ;
FontItalic = .F. ;
FontName = "Times New Roman". ;
FontSize = 11. ;
FontUnderline = .F. ;
Caption = "> Close". ;
TabIndex = 11. ;
SpecialEffect = 0. ;
ForeColor = RGB(128,0,64). ;
DisabledForeColor = RGB(128,128,128). ;
Name = "emdclose"

```

ADD OBJECT emdprevious AS commandbutton WITH :

```

AutoSize = .F. ;
Top = 281. ;
Left = 157. ;
Height = 29. ;
Width = 69. ;
FontBold = .F. ;
FontItalic = .F. ;
FontName = "Times New Roman". ;
FontSize = 11. ;
FontUnderline = .F. ;
Caption = "\<Previous". ;
TabIndex = 9. ;
SpecialEffect = 0. ;
ForeColor = RGB(128,0,64). ;
DisabledForeColor = RGB(128,128,128). ;
Name = "emdprevious"

```

ADD OBJECT emdlast AS commandbutton WITH :

```

AutoSize = .F. ;
Top = 281. ;
Left = 226. ;
Height = 29. ;
Width = 50. ;
FontBold = .F. ;
FontItalic = .F. ;
FontName = "Times New Roman". ;
FontSize = 11. ;
FontUnderline = .F. ;
Caption = "\> Last". ;
TabIndex = 10. ;
SpecialEffect = 0. ;
ForeColor = RGB(128,0,64). ;
DisabledForeColor = RGB(128,128,128). ;

```

Name = "cmdlast"

ADD OBJECT cmdnext AS commandbutton WITH :

AutoSize = .F. ;
Top = 281. ;
Left = 103. ;
Height = 29. ;
Width = 53. ;
FontBold = .T. ;
FontItalic = .F. ;
FontName = "Times New Roman". ;
FontSize = 11. ;
FontUnderline = .F. ;
Caption = "< Next". ;
TabIndex = 8. ;
SpecialEffect = 0. ;
ForeColor = RGB(128,0,64). ;
DisabledForeColor = RGB(128,128,128). ;
Name = "cmdnext"

ADD OBJECT cmdaddnew AS commandbutton WITH :

AutoSize = .F. ;
Top = 252. ;
Left = 93. ;
Height = 29. ;
Width = 74. ;
FontBold = .T. ;
FontName = "Times New Roman". ;
FontSize = 11. ;
Caption = "< Add New". ;
TabIndex = 4. ;
ForeColor = RGB(128,0,64). ;
DisabledForeColor = RGB(128,128,128). ;
Name = "cmdaddnew"

ADD OBJECT cmddelete AS commandbutton WITH :

AutoSize = .F. ;
Top = 252. ;
Left = 228. ;
Height = 29. ;
Width = 62. ;
FontBold = .T. ;
FontItalic = .F. ;
FontName = "Times New Roman". ;
FontSize = 11. ;
FontUnderline = .F. ;
Caption = "% Delete". ;

```

TabIndex = 6. :
SpecialEffect = 0. :
ForeColor = RGB(128,0,64). :
DisabledForeColor = RGB(128,128,128). :
Name = "cmddelete"

```

ADD OBJECT cmdmodify AS commandbutton WITH :

```

AutoSize = .F. :
Top = 252. :
Left = 168. :
Height = 29. :
Width = 59. :
FontBold = .F. :
FontItalic = .F. :
FontName = "Times New Roman". :
FontSize = 11. :
FontUnderline = .F. :
Caption = "< Modify". :
TabIndex = 5. :
SpecialEffect = 0. :
ForeColor = RGB(128,0,64). :
DisabledForeColor = RGB(128,128,128). :
Name = "cmdmodify"

```

```

PROCEDURE cmdfirst.Click
    IF USED("TOFFENCE")
        SELE TOFFENCE
    ELSE
        SELE 0
        USE TOFFENCE
    ENDIF
    IF !BOF()
        GO TOP
        SCATTER MEMVAR MEMO
        THIS.ENABLED = .F.
    ELSE
        MESSAGEBOX("This is the First Record", "Warning")
    ENDIF
    THISFORM.REFRESH
    THISFORM.cmdlast.ENABLED = .T.
ENDPROC

```

```

PROCEDURE cmdclose.Click
    THISFORM.RELEASE
ENDPROC

```

```

PROCEDURE cmdprevious.Click
    IF USED("TOFFENCE")
        SELE TOFFENCE
    ELSE
        SELE 0
        USE TOFFENCE
    ENDIF
    IF NOT BOF()
        SKIP -1
        SCATTER MEMVAR MEMO
        THISFORM.REFRESH
        ThisForm.cmdlast.ENABLED = .T.
    ELSE
        ThisForm.cmdfirst.ENABLED = .F.
        MESSAGEBOX("This is the First Record",0 + 64, "Warning")
        THIS.ENABLED = .F.
    ENDIF
    THISFORM.cmdnext.ENABLED = .T.
ENDPROC

```

```

PROCEDURE cmdlast.Click
    IF USED("TOFFENCE")
        SELE TOFFENCE
    ELSE
        SELE 0
        USE TOFFENCE
    ENDIF
    IF !EOF()
        GO BOTTOM
        SCATTER MEMVAR MEMO
        THISFORM.REFRESH
    ELSE
        MESSAGEBOX("This is the Last Record", 0 + 64, "Warning")
    ENDIF
    THIS.ENABLED = .F.
    THISFORM.cmdfirst.ENABLED = .T.
ENDPROC

```

```

PROCEDURE cmdnext.Click
    IF USED("TOFFENCE")
        SELE TOFFENCE
    ELSE
        SELE 0
        USE TOFFENCE
    ENDIF

    IF NOT EOF()
        SKIP 1
    ENDIF

```

```

THISFORM.cmdfirst.ENABLED = .T.
SCATTER MEMVAR MEMO
THISFORM.REFRESH
ELSE
THISFORM.cmdlast.ENABLED = .F.
MESSAGE-BOX("This is the Last Record", 0 + 64, "Warning")
THIS.ENABLED = .F.
ENDIF
THISFORM.cmdprevious.ENABLED = .T.
ENDPROC

```

```

PROCEDURE cmdaddnew.Click

```

```

    IF THIS.CAPTION = "> Add New"

```

```

        THISFORM.SETALL("ReadOnly", .F., "Textbox")
        THISFORM.SETALL("ReadOnly", .F., "ComboBox")
        THISFORM.SETALL("ReadOnly", .F., "EDITbox")

```

```

        IF USED("TOFFENCE")
            SELECT TOFFENCE
        ELSE
            SELECT 0
            USE TOFFENCE
        ENDIF

```

```

        SCATTER MEMVAR MEMO BLANK
        *THISFORM.txtidcode.SETFOCUS
        THISFORM.SETALL("enabled", .F., "commandbutton")
        THIS.ENABLED = .T.
        THISFORM.cmdclose.ENABLED = .T.
        THISFORM.REFRESH
        THIS.CAPTION = "> Save"

```

```

    ELSE
        THISFORM.SETALL("ReadOnly", .T., "Textbox")
        THISFORM.SETALL("ReadOnly", .T., "combobox")
        THISFORM.SETALL("ReadOnly", .T., "editbox")
        THISFORM.SETALL("enabled", .T., "commandbutton")

```

```

        IF USED("TOFFENCE")
            SELECT TOFFENCE
        ELSE
            SELECT 0
            USE TOFFENCE
        ENDIF

```

```

        *GO TOP
        *LOCATE FOR ALL TR(idcode) = ALL TR(m.idcode)
        *F FOUND()

```

```

"Warning.")
        *      MESSAGEBOX("This Record Already Exists!",
        THISFORM.REFRESH
    *ELSE
    *      INSERT INTO TOFFENCE FROM MEMVAR
    *      THISFORM.REFRESH
    *ENDIF
    THIS.CAPTION = "> Add New"
ENDIF
ENDPROC

```

```

PROCEDURE cmddelete.Click
    *IF USED("TOFFENCE")
    *      SELE TOFFENCE
    *ELSE
    *SELE 1
    USE TOFFENCE EXCLUSIVE
    *ENDIF

    ans = MESSAGEBOX("This record will be deleted. Proceed?", 4 +
32,"Warning")
    IF ans = 6
        DELETE
        PACK
        IF !EOF()
            SKIP
        ELSE
            SKIP -1
        ENDIF
    ENDIF
    THISFORM.REFRESH
ENDPROC

```

```

PROCEDURE cmdmodify.Click
    THISFORM.SETALL("Readonly"..F..,"Textbox")
    THISFORM.SETALL("Readonly"..F..,"combobox")
    THISFORM.SETALL("Readonly"..F..,"EDITbox")

    IF USED("TOFFENCE")
        SELE TOFFENCE
    ELSE
        SELE 0
        USE TOFFENCE
    ENDIF
    IF THIS.CAPTION = "> Modify"
        THIS.CAPTION = "> Save"
        THISFORM.SETALL("Readonly"..F..,"Textbox")
    ENDIF

```



```

        THISFORM.SETALL("enabled",.F.,"commandbutton")
        THIS.ENABLED = .T.
        THISFORM.close.ENABLED = .T.
    ELSE
        GATHER MEMVAR MEMO
        THIS.CAPTION = "> Modify"
        THISFORM.SETALL("Readonly",.T.,"combobox")
        THISFORM.SETALL("Readonly",.T.,"EDITbox")
        THISFORM.SETALL("Readonly",.T.,"Textbox")
        THISFORM.SETALL("enabled",.T.,"commandbutton")
        THISFORM.REFRESH
    ENDIF
ENDPROC

```

```

ENDDEFINE

```

```

*

```

```

*-- EndDefine: form1

```

```

.....

```

```

PUBLIC oform1

```

```

oform1=NEWOBJECT("form1")

```

```

oform1.Show

```

```

RETURN

```

```

*****

```

```

*-- Form:      form1 (c:\road\first.sex)

```

```

*-- ParentClass: form

```

```

*-- BaseClass: form

```

```

*

```

```

DEFINE CLASS form1 AS form

```

```

    Top = 7

```

```

    Left = 94

```

```

    Height = 306

```

```

    Width = 508

```

```

    DoCreate = .T.

```

```

    Caption = "COMPUTERIZATION OF ROAD TRAFFIC OFFENDERS
RECORDS"

```

```

    FontSize = 8

```

```

    Name = "Form1"

```

```

    ADD OBJECT timer1 AS timer WITH ;

```

```

        Top = 104. ;

```

```

        Left = 116. ;

```

```

        Height = 23. ;

```

```

        Width = 23. ;

```

Interval = 400. ;
Name = "Timer1"

ADD OBJECT timer2 AS timer WITH :

Top = 104. ;
Left = 322. ;
Height = 23. ;
Width = 23. ;
Interval = 3200. ;
Name = "Timer2"

ADD OBJECT timer3 AS timer WITH :

Top = 93. ;
Left = 56. ;
Height = 37. ;
Width = 61. ;
Interval = 3000. ;
Name = "Timer3"

ADD OBJECT label1 AS label WITH :

FontBold = .T. ;
FontSize = 12. ;
BackStyle = 0. ;
Caption = "COMPUTERIZATION OF ROAD TRAFFIC OF
OFFENDERS RECORDS". ;
Enabled = .T. ;
Height = 25. ;
Left = 36. ;
Top = 12. ;
Width = 420. ;
ForeColor = RGB(128,0,0). ;
Name = "Label1"

ADD OBJECT label2 AS label WITH :

FontBold = .T. ;
FontSize = 10. ;
BackStyle = 0. ;
Caption = "(Case Study of Federal Road Safety Commission (FRSC)
Headquarters Abuja)". ;
Height = 25. ;
Left = 12. ;
Top = 36. ;
Width = 432. ;
ForeColor = RGB(128,0,0). ;
Name = "Label2"

ADD OBJECT label7 AS label WITH :

AutoSize = .T. ;
FontBold = .T. ;
FontItalic = .F. ;
FontSize = 11. ;
BackStyle = 0. ;
Caption = "MATHIS/COMPUTERS DEPARTMENT". ;
Height = 20. ;
Left = 132. ;
Top = 188. ;
Width = 266. ;
ForeColor = RGB(255,0,128). ;
BackColor = RGB(0,64,128). ;
Name = "Label7"

ADD OBJECT label3 AS label WITH :

AutoSize = .T. ;
FontBold = .T. ;
FontItalic = .F. ;
FontSize = 14. ;
BackStyle = 0. ;
Caption = "A project developed by:". ;
Height = 25. ;
Left = 154. ;
Top = 92. ;
Width = 222. ;
ForeColor = RGB(128,64,0). ;
BackColor = RGB(128,0,64). ;
Name = "Label3"

ADD OBJECT label8 AS label WITH :

AutoSize = .T. ;
FontBold = .T. ;
FontItalic = .F. ;
FontSize = 10. ;
BackStyle = 0. ;
Caption = "FEDERAL UNIVERSITY OF TECHNOLOGY BOSSO,

MINNA". ;

Height = 18. ;
Left = 86. ;
Top = 216. ;
Width = 358. ;
ForeColor = RGB(255,0,128). ;
BackColor = RGB(0,64,128). ;
Name = "Label8"

```

ADD OBJECT label9 AS label WITH :
    AutoSize = .T. ;
    FontBold = .T. ;
    FontItalic = .F. ;
    FontSize = 10. ;
    BackStyle = 0. ;
    Caption = "IN PARTIAL FULFILMENT FOR THE REQUIREMENT
FOR THE AWARD OF " ;
    Height = 18. ;
    Left = 37. ;
    Top = 242. ;
    Width = 456. ;
    ForeColor = RGB(255,0,128). ;
    BackColor = RGB(0,64,128). ;
    Name = "Label9"

```

```

ADD OBJECT label10 AS label WITH :
    AutoSize = .T. ;
    FontBold = .T. ;
    FontItalic = .F. ;
    FontSize = 10. ;
    BackStyle = 0. ;
    Caption = "POSTGRADUATE DIPLOMA IN COMPUTER
SCIENCE." ;
    Height = 18. ;
    Left = 99. ;
    Top = 273. ;
    Width = 331. ;
    ForeColor = RGB(255,0,128). ;
    BackColor = RGB(0,64,128). ;
    Name = "Label10"

```

```

ADD OBJECT label5 AS label WITH :
    AutoSize = .T. ;
    FontBold = .T. ;
    FontItalic = .F. ;
    FontSize = 16. ;
    BackStyle = 0. ;
    Caption = "JAGABA S. T." ;
    Height = 27. ;
    Left = 194. ;
    Top = 128. ;
    Width = 141. ;
    ForeColor = RGB(84,18,109). ;
    BackColor = RGB(0,64,128). ;
    Name = "Label5"

```

```

ADD OBJECT label6 AS label WITH :
    AutoSize = .F. ;
    FontBold = .F. ;
    FontItalic = .F. ;
    FontSize = 10. ;
    BackStyle = 0. ;
    Caption = "PGD/MCS '99/2000/918". ;
    Height = 18. ;
    Left = 196. ;
    Top = 150. ;
    Width = 138. ;
    ForeColor = RGB(84,18,109). ;
    BackColor = RGB(0,64,128). ;
    Name = "Label6"

```

```

PROCEDURE timer1.Timer

```

```

    if (width + thisform.left >= maxw)
        thisform.left = thisform.left + 1
    else
        thisform.left = -15
    endif

```

```

ENDPROC

```

```

PROCEDURE timer2.Timer

```

```

    thisform.release()

```

```

ENDPROC

```

```

PROCEDURE timer3.Timer

```

```

    i = 0.025

```

```

    DO WHILE (THISFORM.WIDTH >= 0 AND THISFORM.HEIGHT >=

```

```

0)

```

```

        IF !(THISFORM.WIDTH = 0 OR THISFORM.HEIGHT = 0)

```

```

            THISFORM.WIDTH = THISFORM.WIDTH - i

```

```

            THISFORM.HEIGHT = THISFORM.HEIGHT - i

```

```

        ELSE

```

```

            THISFORM.VISIBLE = .F.

```

```

            THISFORM.RELEASE

```

```

            EXIT

```

```

        ENDIF

```

```

    ENDDO

```

```

ENDPROC

```

```

ENDDDEFINE

```

```

*

```

```

*-- EndDefine: form1

```

```

.....

```