CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The federal republic of Nigeria comprises of 36 states, The federal capital territory (FCT), and 774 local government areas (LGAs). The country is located in west Africa and shares land borders with the republic of Benin in the west, Chad and Cameroon in the east and Niger in the north. The three largest ethnic groups in Nigeria are the Ibo, Hausa and Yoruba ethnic groups.

In Nigeria, General elections are conducted every four years, where a head of state the president and the national assembly representatives are elected. They are elected by the people. The national assembly has about 360 members representing various constituencies.

Most African electoral bodies with no exception to INEC, even with the advancements of technology, still use primitive paper based methods during voting; this system is characterized by manual form filling to chose leaders and transfer of information from manual data capture forms to computerized datasheets, this has led to a high number of mistakes making their way into the final votes count. The main advantage of the paper based system is the ballot papers are easily human auditable. The disadvantages outweigh the advantages for instance printing of ballot papers is slow, expensive, inflexible, environmentally hostile and also literacy limitations and last minute changes to

the voter register are difficult to accommodate among others. Over the last few years some election observers have suggested the introduction of electronic voting at state and federal level. The online voting system mainly addresses the voting phase. Electronic voting process using the online voting system should be cheaper than the present paper based system been used by the independent national electoral commission (INEC). Online voting is an electronic way of choosing leaders via a web driven application. The advantage of online voting over the present manual system is that the voters have the choice of voting at their own free time and reduced congestion. It also minimizes on errors of vote counting. The individual votes are submitted in a database which can be queried to find out who the aspirants for a given post has the highest number of votes.

With the online voting system , a voter can use his/her voting right online without any difficulty. He/she has to register as a voter first before being authorized to vote. The registration should be done prior to the voting date to enable data update on the database.

1.2 Statement of the Problem

The election process begins from voters registration. The method adopted during voters registration goes a long way to determine the freeness and fairness of the election. In Nigeria, voting/registration process is very cumbersome. So many cases, missing data in the voter registration file have been reported. There

are also situations where unregistered voters flock to the polling station to participate in the voting process. Even after voting, malicious clerks and officers- in – charge of a polling station end up playing with the result figures.

1.3 Objectives of the Study

- The aim of this project is to develop a database for voter's registration which will in turn help government to conduct a free and fair election using electronic machines.
- To replace the current inefficient manual system of voting in Nigeria.
- To ensure credibility in elections by preventing double voting,
- Help the government reduce the huge costs incurred in conducting elections.

1.4 Scope of the Study

The research work is designed to enable National Electoral Commission to use electronic device to capture voter's information. The design will cover some security issues like authenticating the nationality of the voters through integrating the national ID database to the voter's registration process and also capturing the picture of the electorates for validation during election.

1.5 Limitations

During the design of this project work, much finance was required and owing to the financial meltdown globally, the research was limited by finance and hence concentrated on the available materials within the locality.

1.6 Significance of the Study

In view of the rapid development of computer technology in virtually all fields of operation and its use in relation to information management, it has become important to look into the development of electronic voters registration system to enable government to achieve the following:

(a) Conduct free and fair election

(b) Safeguard data and information in the system.

(c) Reduced workload in the process of conducting election

(d) Keep accurate record of votes

(e) Reduce time wasted in announcing election result

(f) Eliminate disenfranchising electorates.

1.7 Project Report Organisation

This project was covered under five stages:

- CHAPTER 1; Deals with the introduction. The background of the project is discussed. The objectives of the project, its significance, scope, and constraints are pointed out.

- CHAPTER 2; This chapter is a Review of Voters Registration in Some Countries and the literature review.
- CHAPTER 3; Discusses system Investigation and Analysis. It deals with detailed investigation and analysis of the existing system and problem identification.
- CHAPTER 4; Treats the system design and implementation
- CHAPTER 5; The summary and conclusion of the project are finally treated in this chapter.

1.8 Definition of Terms

voting system: is a method by which voters make a choice between options, often in an election or on a policy referendum

e-voting: also known as electronic voting is a term encompassing several different types of voting, embracing both electronic means of casting a vote and electronic means of counting votes.

Information System: It is a collection of procedures, people, instructions and equipment to produce information in a useful form

Technology: It is study of techniques or process of mobilizing resources (such as information) for accomplishing objectives that benefit man and his environment

Computer Network: is a system that connects two or more computers together using a communication link.

Databases: A systematically arranged collection of computer data, structured so that it can be automatically retrieved or manipulated. It is also called databank.

Chapter Two

Literature Review

2.1 Review of Voters Registration in Some Countries

Systems of voter registration vary widely from country to country, and sometimes from locality to locality. In some, voters are automatically added to the rolls when they reach legal voting age. In others, potential voters are required to apply to be added to the rolls.

In Australia, the Australian Electoral Commission administers Australia's federal electoral roll. Each state also has its own electoral commission or office, but voters need only register with the AEC, which passes the registration details to relevant state commissions.

Voter Registration is mandatory for all citizens 18 years of age or above. An individual has 8 weeks after turning 18 to register, but may register at any time with no penalty being enforced for failure to register. Similarly, if a change of address causes an individual to move to another electorate (Electoral Division) they are legally obliged to notify the Electoral Commission within 8 weeks. In Australia, details of house and apartment sales are in the public domain. The Electoral Commission monitors these and sends a reminder (and the forms) to new residents in case they have moved to another electorate, making compliance with the law much easier.

Periodically the Electoral Commission conducts door-to-door and postal campaigns to try to ensure that all eligible persons are registered in the correct electorate.

The one registration covers Federal, State and Local voter registration. In Australia it is a legal offence to fail to vote (or at the very least, attend a polling station and have one's name crossed off the roll) at any Federal or State election, punishable by a fine. The amount of the fine varies between federal and various state elections (The fine for not voting is currently AU$20.00 in Victoria. This figure is indexed at the beginning of every financial year). Usually people are issued with warnings when it is found that they have not voted, and they are given an opportunity to show cause for not voting. Acceptable reasons for not voting may include: being in the Accident Department of a Hospital, being ill (requires confirmation), being out of the country on election day, religious objections, being incarcerated etc. *I forgot* is not considered acceptable and will incur a fine. Section 245 of the Electoral Act provides that if an elector who has been asked the "true reason" for his failure to vote states that he did not do so because it was against his religion, this statement shall be regarded as conclusive, and no further action will be taken.

Traditionally voters cannot register within three weeks of an election, but in 2004 the Howard Government passed legislation that prevents registration after 8PM on the day that the writs are issued (this can be up to ten days after the

election has been announced), Australian Electoral Commission (2010). This legislation was considered controversial by some Australians who contended it disenfranchised first-time voters or those who have forgotten to re-register. The law was repealed just prior to the 2010 Federal election, when advocacy group GetUp! won a High Court decision deeming the changes unconstitutional, ABC News Australia (August 2010).

In Canada, the task of enumeration was handled by the relevant elections bureau such as Elections Canada for the federal level until 1992. Until that time, the task was delegated to temporary employees from the public who were charged with going to each residence in assigned areas to determine the eligible voters for a publicly displayed list for each election. However, this system was discontinued for fiscal reasons in the 1990s in favour of an opt-in option where voters mark their consent to be added the national voters list, or register, on their annual income tax returns. Although this allows the list to be updated annually, there are still complaints of excessive numbers of omissions which needlessly complicates voting for the public and is contributing to a serious decline in the percentage of the population who votes.

The Register is also updated using the following sources:

- provincial and territorial motor vehicle registrars
- Citizenship and Immigration Canada

- Canada Revenue Agency
- provincial and territorial vital statistics registrars, and provincial electoral agencies with permanent lists of electors (e.g. British Columbia and Quebec
- information supplied by electors when they register to vote or revise their information during and between federal electoral events
- proven electoral lists from other Canadian jurisdictions
- Same-day registration is also permitted.

In Denmark, all citizens and residents of Denmark are included in the national register, Det Centrale Personregister, where each person is assigned a personal number of ten digits which include the person's date of birth. The register is used for tax lists, voter lists, membership in the universal health care system, official record of residence and other purposes, and it is maintained by the Ministry of Welfare (Velfærdsministeriet). All eligible voters receive a card in the mail before each election which shows the date, time and local polling place; it may only be presented at the designated local polling station. Only citizens may vote in national elections, while long-time residents may vote in local and regional elections. Voting is not compulsory.

Voter registration in Finland is automatic and based on a national population register. Each citizen is assigned a register ID at birth which contains a six digit date of birth, a century marker, and four other characters to make the ID unique which are mostly random, but one of which also indicates the person's sex. Permanent residents appear in this register even if they are not citizens, but this information is marked on the register. People in the register are legally obliged to notify the register keeper of changes of address. Changing the address in the register automatically notifies all other public bodies (for example the tax district for local taxation and the social security authorities) and certain trusted private ones (e.g. banks and insurance companies) making the process of moving residence very simple. Close to election time a notification is mailed to registered persons informing them of the election and where and when to cast their votes. Only citizens may vote in national elections but all residents can vote in local elections.

All permanent residents of Germany are required to register their place of residence (or the fact that they are homeless) with local government. Citizens who will be age 18 or higher on the day of voting will automatically receive a notification card in the mail some weeks before any election in which they are eligible to vote; for European and local elections, resident citizens of other EU countries will also receive these cards. Polling places have lists of all eligible voters resident in the neighbourhood served by the particular station; the voter's

I.D. card is checked against these lists before they receive a ballot. Voting is not compulsory.

In Hong Kong all permanent residents who are above 18 years of age and suffering from no mental illness can register as voters. Imprisoned people can also register and vote since the laws prohibiting them from voting was ruled unconstitutional in 2009. (They can vote starting from mid-2010 when the electoral roll is updated annually.) The registration process is voluntary. In 2002 around 1.6 million permanent residents did not register.

In Israel, all citizens who are 18 years of age or older on election day are automatically registered to vote.

In Mexico, there is a general electoral census. Any citizen of age 18 or greater must go to an electoral office in order be registered into the electoral census. Citizens receive a voting card (*credencial de elector con fotografía*) that must be shown to vote in any election. The same voting card generally serves as a national identity document.

All citizens and residents of Norway are included in the national register, *Folkeregisteret*, where each person is assigned a personal number of eleven digits which include the person's date of birth. The register is used for tax lists,

voter lists, membership in the universal health care system and other purposes, and it is maintained by the tax authorities. All eligible voters receive a card in the mail before each election which shows the date, time and local polling place. Only citizens may vote in national elections, while long time residents may vote in local and regional elections. Voting is not compulsory.

All citizens and other residents of Switzerland are required to register themselves with the municipal authorities at their place of residence. Voter registration is automatic for citizens, who receive their ballot by mail a few weeks before an election or referendum.

In the UK voter the failure to complete the voter registration form with accurate information is an offence, and thus registration is actively encouraged by central and local government. Voters must be on the electoral roll in order to vote in national, local or European elections.

A fixed address is required to vote; if someone wishes to vote but lacks a fixed address for some reason, they may register to vote by filling in a 'Declaration of local connection' form. This establishes a connection to the area based on the last fixed address someone had, or the place where they are likely to spend a substantial amount of their time (e.g. a homeless shelter).

A voting card is sent to each registrant shortly before any elections. This does not need to be taken to the polling station, instead it serves to remind individuals of the exact details they provided to the electoral register.

The current system of registration, introduced by the Labour government is known as rolling registration whereby electors can register with a local authority at any time of the year. This replaced the twice-yearly census of electors which often disenfranchised those who had moved during the interval between censuses.

Following an experiment in Northern Ireland using personal identifiers, such as National Insurance numbers and signatures, the number of registered electors fell by some ten thousand; it is understood that this may have taken off the electoral roll fictitious voters. The system of individual registration used in Northern Ireland may be piloted in Great Britain if the recently introduced Electoral Administration Bill is made into law in time for the local elections in 2006.

Across the country, the registration of electors is still technically the responsibility of the 'head of the household', a concept seen by some as being somewhat out of step with modern society. This current system is controversial as it is possible for one person to delete people who may live with them from the electoral roll.

Under the United States Constitution, states may not restrict voting rights in ways that infringe one's right to equal protection under the law (Fourteenth Amendment), on the basis of race (Fifteenth Amendment), gender (Nineteenth Amendment), or age for persons age 18 and older (Twenty-Sixth Amendment).

Only U.S. citizens have the right to vote in federal elections. In a few cases, permanent residents (Green Card holders) have registered to vote and have cast ballots, most without realizing that it is illegal; non-citizens convicted in criminal court of having made a false claim of citizenship for the purpose of registering to vote in a federal election can be fined and imprisoned for up to a year, then deported, and removal proceedings have resulted in several cases, Kirk Semple (2010).

While the federal government has jurisdiction over federal elections, most election laws are decided at the state level and the true authority to interpret and enforce those laws comes at the local level. Usually the county election office is the place to start if you want to register to vote. The administration of elections can vary widely across jurisdictions.

Registering to vote is the responsibility of individuals in the United States. Voters are not automatically registered to vote once they reach the age of 18. Every state except North Dakota requires that citizens who wish to vote be registered.

Traditionally, voters had to register at state offices to vote, but in the mid-1990s efforts were made by the federal government to make registering easier, in an attempt to increase turnout. The National Voter Registration Act of 1993 (the "Motor Voter" law) forced state governments to make the voter registration process easier by providing uniform registration services through drivers' license registration centres', disability centres, schools, libraries, and mail-in registration. Some states allow citizens to register to vote on the same day of the election, known as Election Day Registration. States with same-day registration are exempt from Motor Voter, namely: Idaho, Minnesota, New Hampshire, North Dakota, Wisconsin, and Wyoming. Voters may register at the local election office (which is usually at city or town hall) or, one may call the election department and request a voter registration form through the mail. Voter registration forms may be found at public libraries and registries of motor vehicles. These forms must be filled out and mailed to the local election department. Also, one may register at a voter registration drive. The only states with online voter registration are Arizona, Colorado, Indiana, Kansas, Utah, Oregon, Louisiana and Washington, though legislation has been introduced in other states.

Some states prohibit individuals convicted of a felony from voting, known as felony disenfranchisement. Some states prohibit voting when on parole and/or

probation but allow voting after. Some states have a lifetime ban from voting for ex-convicts, Graves (2010).

One may register wherever one has an address, regardless of its permanence—for example, a college student living away from home may register to vote in the college's city, even if that is not a permanent address. In most states, one must register, usually 30 days before a given election, in order to vote in it. Seven states, Idaho, Iowa, Maine, Minnesota, New Hampshire, Wisconsin and Wyoming, allow for Election Day Registration.

In some states, when registering to vote, one may declare an affiliation with a political party. This declaration of affiliation does not cost any money, and it is not the same as being a dues-paying member of a party; for example, a party cannot prevent anybody from declaring his or her affiliation with them, but it can refuse requests for full membership. Some states, including Georgia, Michigan, Virginia, Minnesota, Wisconsin and Washington do not have party affiliation with registration.

In general elections, a voter may choose to vote for all of a particular party's candidates (straight-ticket voting) or to vote for candidates from different parties for different offices (Party X's candidate for President, Party Y's candidate for Senator, Party Z's candidate for Governor). In a general election, a person may vote for any party's candidates, regardless of the political party they belong to.

2.2 Electronic Voters Registration System and Method

According to Martin (2006), electronic voters registration system is a system and a method for facilitating an election. A database containing voter registration information is downloaded from a central computer to a portable computer that is accessible at a polling station. The database can be searched by a proctor or official at the polling station to determine whether a prospective voter is eligible to vote at the polling station. The name or name and date of birth of the prospective voter is entered into a search field of the portable computer and the database is searched. If and when a matching record is found, additional information is displayed on a second screen and the proctor or official can make a determination whether the prospective voter is eligible to vote at the polling place.

To ensure the health of a free and democratic society, it is essential that voting be carried out in a fair and efficient manner, and in compliance with state and federal statutes. Individuals who are not registered voters, who have been placed on the inactive voters list, and who no longer reside in the precinct, ward or district of a particular polling station must be identified and either permitted to vote at that polling station, not allowed to vote at that polling station, directed to the proper polling place, or provided other direction on how to proceed.

Furthermore, those individuals permitted under the rules to vote at a particular polling station must be properly identified and counted as having voted.

Presently, some individual polling stations have an updated paper copy of township lists, lists of active/inactive (or in suspense) voters, and/or a poll book listing the registered voters for a particular precinct. These lists (poll book) can be greater than a thousand pages for any given large municipality, which can have several hundred individual polling stations. This system is very inefficient and prone to inaccuracies. For example, when a prospective voter enters a polling station, his or her name is checked against the list of registered voters in the poll book for that particular polling station. If the prospective voter is not listed in the poll book, the polling station monitor will contact the election office, which will obtain the name and date of birth date of the prospective voter and determine the appropriate polling station for the prospective voter. Many times, the poll judge cannot timely reach the election office during times of active voting because of busy phone lines, lack of cell phone service in the area and/or a general lack of communication.

This system is inefficient, expensive and prone to error. For example, in some districts, polling stations are furnished with expensive cell phones for use in contacting the election office to obtain voter information, since each polling station does not have direct access to the entire voting roles, laptops with

adequate T1 lines, and lack of cell phone service in places like gymnasiums, polling locations and rural areas.

New federal mandates that allow for provisional ballots have created some logistical and potentially legal problems for voters and voting districts. Provisional ballots are generally cast by those voters who are not registered to vote or who show up at the wrong polling place, and in cases in which the poll judge cannot reach the election board because of a lack of communication. A problem with provisional ballots in many jurisdictions is that provisional ballots may not be counted if they are cast in the wrong polling place, which obviously defeats the purpose of the provisional ballot cast because the voter has found himself in the wrong polling place.

An object of the invention is a system and method of directly accessing up-to-date and useful information on a portable electronic device (e.g., computer). The system and method greatly improve the efficiency and accuracy of the voting process. Several advantages of the instant invention include

(1) the elimination of the need in many cases for provisional ballots or the improper discarding of provisional ballots,

(2) shorter lines and quicker moving lines at polling places due to quick elimination of voters who show up at the wrong polling place,

(3) a reduction in the call volume generated at polling places and forwarded to the election center on election day,

(4) happier voters, who can obtain relevant voting information at any polling place in a particular county/state,

(5) happier election judges, who can determine the eligibility of any prospective worker at any polling place in real time, and

(6) reduced stress on the statewide voter registration systems because queries are performed on a handheld devices instead of on-line to a central computer.

In a preferred embodiment, the up-to-date and useful information is voter registration and polling place location information. The method comprises the steps of exporting data from a central database voter registration system onto a portable computer located at a polling station, entering a first information into a searchable field displayed on the portable computer, and obtaining additional information associated with the first information, and making a decision regarding the person associated with the name. In a preferred embodiment, the portable computer is located at a polling place/precinct, the first information is a name, and the additional information comprises the status of a prospective voter as registered to vote or not. Preferably, the method additionally comprises compiling an up-to-date and useful information database, which, for example

but not exclusively, may be a voter registration database that includes name, date-of-birth, address, ward and precinct (or the equivalent thereof) for each voter in a state or municipality. The decision to allow or to disallow a prospective voter to vote at the polling station is based upon information displayed on the second screen.

Another object of the invention is an electronic information system, which comprises a central database that contains voter information, a central computer that houses the central database, a portable computer, a means for transferring data between the central computer and the portable computer, a software program that enables a user to enter first information into a field and retrieve additional useful information related to the first information. While the database may relate to any and all myriad useful information, in a preferred embodiment, the database is directed to voter registration information, which comprises name, date-of-birth, address, voting location such as precinct and ward (or equivalent thereof), status (e.g., canceled, in suspense/inactive, active) for a prospective voter, and optionally a voter identification number. Alternatively, but not to the exclusion of the previous, the database may comprise a list of inactive voters.

In another object of the invention, the invention is directed to methods and systems for managing and deploying voter registration information at a polling

place using a computer and program to organize, convert and/or transfer voter data to multiple portable electronic devices for use at polling places. The system comprises a precursor voter database, a central computer (or a plurality of central computers across a voting district) and converter software, a converted voter database, a portable computer or a plurality of portable computers, and a means for transferring the converted voter database from the central computer to the portable computer(s). The precursor voter database may be a paper file or an electronic database file containing records of prospective voters. The converted voter database is an electronic database of records in a format compatible with the portable computer. The records contain voter registration data such as name of voter, birth date of voter, voter status (preferably active vs. inactive), ward/precinct, and street address. In a preferred embodiment, two converted databases are deployed on the portable computer(s), a voter data database and a street data database.

The method according to this object comprises the steps of

(1) optionally producing (e.g., from a paper file) or obtaining a first electronic database file of voter registration information, the information includes the name of a voter, the birth date, the status (preferably active vs. inactive), the ward/precinct, and the street address,

(2) converting the first electronic database file into a second electronic database file of a type that is generally exportable across one or more computer systems, the type such as, e.g., comma separated value (“CSV”) or (preferably) tab separated value (“TSV”) format,

(3) converting the second electronic database into a third electronic database having a format that is accessible via the portable computer (preferably a palm database (“PDB”) format), and

(4) downloading the third electronic database onto the portable computer(s) (preferably Palm OS® personal digital assistant), which. can be distributed to local polling places.

In yet another object of the invention, the invention is directed to a method for collecting, transferring and/or storing voter data. Voter information is obtained from the prospective voter at the polling place by an election official, the data is inputted into a portable computer device, such as for example a Palm PDA device, which may be accompanied by an accessory input device such as a keyboard. The information may be name, address and/or birth date, or whatever information is requested to facilitate the voting process, verify a voter's eligibility, and/or develop an up-to-date voter registration list. The information that now resides on the portable computer may be transferred to a media device such as a multimedia card or other like device. The media or the portable

computer is brought to a central election office and the information is transferred to a central computer. The information is then integrated into the voter registration database, in whatever form, that is used by the election office.

The inventor has developed a system and method for enabling the access of information contained in a large database on a portable computer useable at a remote site. The inventor envisions that the system is applicable to any business method wherein useful information housed on a central computer may be downloaded onto a portable computer for use at a site distant from the central computer. Thus, the invention is not to be construed to be limited solely to the embodiment herein disclosed, but by the claims which follow.

The inventor has recognized the need for reliable and readily accessible information at polling stations. Currently, voter registration information is printed, bound (this is a poll list) and distributed by an election office to individual polling stations. The information is then used by a polling station proctor or official to determine if a prospective voter, who enters a polling station, is eligible to vote. If the prospective voter is not on the roster for a particular polling station and is not on the inactive voter list, the polling station official can contact the election office to determine which polling station the prospective voter should report to vote. The prospective voter, who's name is not found on the poll list or inactive voter list, may be allowed to cast a

provisional ballot with the caveat that in some jurisdictions, the provisional voter must cast that provisional ballot in the correct precinct. Thus, the inventor has invented a system and a method for efficiently delivering accurate and up-to-date voter registration information to each polling station in a voting area.

In one embodiment, the invention is directed to an electronic voter registration system. In a particular preferred aspect of the embodiment, the electronic voter registration system comprises a database of voter information in electronic format. The database contains records for registered voters of a particular voting area (municipality, county, state, and the like), wherein each record includes the name, date of birth and address of a voter. More preferably, each record also includes the precinct, ward and voting eligibility status of the voter. Status refers to whether the voter is active or inactive, in suspense, cancelled, military, and the like. Alternatively, but not exclusively, status can refer to whether a voter has already cast a ballot in the current election, and is therefore ineligible to vote again. Database structures are well known in the computer arts and are readily available as shareware, freeware and from commercial vendors such as FileMaker, Gupta, iAnywhere, InterSystems, IBM, Microsoft, Oracle, Pervasive Software, Progress Software, Sybase, and TimesTen. Some common voter registration systems include ES&S (offered by Election Systems and Software, Inc.), VR Systems, HART Interactive and IBM.

Preferably, the database, which is maintained and up-to-date, resides on a central computer, which may be a server, personal computer, or the like, and which may be located in a state controlled office, an election office, space controlled by an election office, or with a vendor, or any combination thereof. Prior to an election, all or part of the database is transferred to one or more portable computers, which are located and used at one or more polling stations. Portable computers include, but are not limited to pocket PC (windows, linux, mac os), cell phone, tablet PC, Palm OS device, and laptop computer. In a preferred embodiment, the portable computer is a personal digital assistant ("PDA"). More preferably, the portable computer is a Palm OS device.

The database is transferred from the central computer to the portable computer by any one or more methods that are well known in the art, including, but not limited to, wire transfer means, such as through a USB connection, serial connection, modem or network (e.g., hot synchronization), or wireless means, such as by infrared ("IR"), microwave and radio wave, and/or by physical transfer of media, such as CD, multimedia or memory card, Zip™ disc, and the like. Examples of wireless transmission methods or protocols include Bluetooth (2.56 GHz band), IrDA (infrared frequencies), and Home RF or SWAP (2.45 GHz range). In a preferred embodiment, the transfer is by hot synchronization of the central computer and a PDA. In a more preferred embodiment, the

transfer is by transfer of a multimedia or memory card between the central computer and PDA.

In another preferred aspect of this embodiment, the electronic voter registration system (supra) comprises a database of voter information in a first electronic format, which may be in any one or more myriad database formats, including for example text file, spread sheet file, access file and/or the like. The database in this first electronic format is then converted to a universal format (second electronic format) using a converter software located on the central computer or a multiplicity of computers. Universal formats are generally recognized in the art, and include for example tab separated/tab delimited (“tsv”, aka “txt”), comma separated (“csv”), and xml. The second electronic format is then converted, using a conversion software program, to a format that is compatible for a portable computer (third electronic format). In a preferred embodiment, the portable computer is a Palm OS PDA and the third electronic format is a palm database format (“pdb”).

In a preferred aspect, two databases are loaded onto the PDAs, a voter dataset, and a street dataset. In a more preferred aspect and in addition to downloading a voter dataset and a street dataset onto the portable computers, a voting district or state logo can be downloaded onto the portable computers. Additionally, an

“about” screen data can be downloaded onto the portable computers, to identify the vendor, district, date of election, and/or other information.

In this embodiment of the system, multiple portable computers contain the database and are distributed to multiple polling stations throughout an official voting area. Displayed on the screen of the portable computer (“first screen”) is a searchable field, into which a polling station official or other individual can input the name of a prospective voter. The input can be by way of any input device, such as for example a stylus, a keyboard, an optical electronic card, a mouse, and a microphone. Preferably, the name is input using a keyboard or a stylus. The input name is compared to the records of the database and a matching record is called up and useful fields are displayed on the screen of the portable computer (“second screen”). The polling official or other individual can make a decision to allow or disallow the prospective voter associated with the input name to vote. More preferably, the first screen can display an additional searchable field, such as date-of-birth, to assist in narrowing the database search. Alternatively, the arrow keys on the PDA may be toggled to scroll through the list of names in the database.

In another embodiment, the invention is directed to a method of facilitating an election. The method enables an official or proctor at a polling station to access information about a prospective voter on an easy to use portable computer, and

to provide useful advice to the prospective voter. The method comprises creating, importing or updating a database, which contains voter records, on a central computer. The database is downloaded onto one of more portable computers using a wire, wireless or direct transfer method, wherein the database is stored on a medium that can be moved from the central computer and loaded onto the portable computer (e.g., disc, CD, chip). The central computer can be a server or personal computer that operates using any operating system, such as Palm, Windows, Linux, Mac and the like. Likewise, the portable computer may utilize any operating system, such as Palm, Windows, Linux, Mac and the like. In a preferred embodiment, the central computer utilizes a windows operating system and the portable computer is a personal digital assistant ("PDA") which utilizes a Palm operating system, and the database is transferred using a hot synchronization method through a USB, serial, modem or network connection. In a more preferred embodiment, the database is transferred on a memory or multimedia card that is transferred between the central computer and the PDA.

Having the database loaded onto the portable computer, the portable computer is accessed at a polling station. A prospective voter enters a polling station and optionally (i.e., in some jurisdictions) presents a proctor or official with a form of identification. The proctor or official enters the name or name and date of birth of the prospective voter into a searchable field displayed on the screen

(“first screen”) of the portable computer, which then executes a search program to search the records of the database. If the name or name and date of birth is matched to a record of the database, additional fields associated with that record are displayed on the screen (“second screen”) of the portable computer. Those additional fields include one or more of address, precinct, precinct part, ward and status of the prospective voter. Status may be active, inactive, in suspense, cancelled, ineligible, or not available. Preferably status is either active or inactive. If the name or name and date of birth of the prospective voter does not match with any record in the database, additional fields may not be displayed on the second screen, but rather a notification is displayed on the second screen indicating that no match was found in the database.

Having obtained additional information related to the prospective voter, the proctor or official at the polling station makes a decision whether to allow or disallow the prospective voter to vote at the polling place. If the prospective voter has a status of active or inactive/in suspense and the precinct and ward match with the polling place, the voter may be allowed to proceed to vote. If the prospective voter has a status of active or inactive/in suspense and the precinct and ward do not match with the polling place, the proctor or official may notify the prospective voter of the proper polling place that serves the precinct and ward of the voter. If no record match has been found related to the name or

name and date of birth, the voter may not be allowed to proceed to vote, or the voter may be allowed to file a provisional ballot.

2.3 Paper-based electronic voting system

Sometimes called a "document ballot voting system", paper-based voting systems originated as a system where votes are cast and counted by hand, using paper ballots. With the advent of electronic tabulation came systems where paper cards or sheets could be marked by hand, but counted electronically. These systems included punched card voting, mark sense and later digital pen voting systems. In this process, the voter gets a blank ballot and uses a pen or marker to indicate he wants to vote for a particular candidate. Hand counted ballots is a time and labour consuming process. But it is easy to manufacture paper ballots.

2.4 Direct-recording electronic (DRE) voting system

A direct-recording electronic (DRE) voting machine records votes by integrating a keyboard with a touch screen or buttons for the voters press to pool. Its one that processes data with computer software; and that records voting data and ballot images in memory components. After the election it produces a tabulation of the voting data stored in a removable memory component and as printed copy. The system may also provide a means for transmitting individual

ballots or vote totals to a central location for consolidating and reporting results from precincts at the central location. These systems use a precinct count method that tabulates ballots at the polling place. They typically tabulate ballots as they are cast and print the results after the close of polling.

In 2002, in the United States, the Help America Vote Act mandated that one handicapped accessible voting system be provided per polling place, which most jurisdictions have chosen to satisfy with the use of DRE voting machines, some switching entirely over to DRE. In 2004, 28.9% of the registered voters in the United States used some type of direct recording electronic voting system

Electronic voting systems may offer advantages compared to other voting techniques. An electronic voting system can be involved in any one of a number of steps in the setup, distributing, voting, collecting, and counting of ballots, and thus may or may not introduce advantages into any of these steps. Potential disadvantages exist as well including the potential for flaws or weakness in any electronic component.

Charles Stewart of the Massachusetts Institute of Technology estimates that 1 million more ballots were counted in 2004 than in 2000 because electronic voting machines detected votes that paper-based machines would have missed.

In May 2004 the U.S. Government Accountability Office released a report titled "Electronic Voting Offers Opportunities and Presents Challenges", analyzing

both the benefits and concerns created by electronic voting. A second report was released in September 2005 detailing some of the concerns with electronic voting, and ongoing improvements, titled "Federal Efforts to Improve Security and Reliability of Electronic Voting Systems Are Under Way, but Key Activities Need to Be Completed".

It has been demonstrated that as voting systems become more complex and include software, different methods of election fraud become possible. Others also challenge the use of electronic voting from a theoretical point of view, arguing that humans are not equipped for verifying operations occurring within an electronic machine and that because people cannot verify these operations, the operations cannot be trusted. Furthermore, some computing experts have argued for the broader notion that people cannot trust any programming they did not author.

Under a secret ballot system, there is no known input, nor any expected output with which to compare electoral results. Hence, electronic electoral results and thus the accuracy, honesty and security of the entire electronic system cannot be verified by humans.

Critics of electronic voting, including security analyst Bruce Schneier, note that "computer security experts are unanimous on what to do (some voting experts disagree, but it is the computer security experts who need to be listened to; the

problems here are with the computer, not with the fact that the computer is being used in a voting application)...DRE machines must have a voter-verifiable paper audit trails... Software used on DRE machines must be open to public scrutiny"[10] to ensure the accuracy of the voting system. Verifiable ballots are necessary because computers can and do malfunction, and because voting machines can be compromised.

2.5 Electronic ballots

Electronic voting systems may use *electronic ballots* to store votes in computer memory. Systems which use them exclusively are called DRE voting systems. When electronic ballots are used there is no risk of exhausting the supply of ballots. Additionally, these electronic ballots remove the need for printing of paper ballots, a significant cost. When administering elections in which ballots are offered in multiple languages (in some areas of the United States, public elections are required by the National Voting Rights Act of 1965), electronic ballots can be programmed to provide ballots in multiple languages for a single machine. The advantage with respect to ballots in different languages appears to be unique to electronic voting. For example, King County, Washington's demographics require them under U.S. federal election law to provide ballot access in Chinese. With any type of paper ballot, the county has to decide how

many Chinese-language ballots to print, how many to make available at each polling place, etc. Any strategy that can assure that Chinese-language ballots will be available at all polling places is certain, at the very least, to result in a significant number of wasted ballots. (The situation with lever machines would be even worse than with paper: the only apparent way to reliably meet the need would be to set up a Chinese-language lever machine at each polling place, few of which would be used at all.)

Critics argue the need for extra ballots in any language can be mitigated by providing a process to print ballots at voting locations. They argue further, the cost of software validation, compiler trust validation, installation validation, delivery validation and validation of other steps related to electronic voting is complex and expensive, thus electronic ballots are not guaranteed to be less costly than printed ballots.

Accessibility

Electronic voting machines can be made fully accessible for persons with disabilities. Punched card and optical scan machines are not fully accessible for the blind or visually impaired, and lever machines can be difficult for voters with limited mobility and strength. Electronic machines can use headphones, sip and puff, foot pedals, joy sticks and other adaptive technology to provide the necessary accessibility.

Organizations such as the Verified Voting Foundation have criticized the accessibility of electronic voting machines and advocate alternatives. Some disabled voters (including the visually impaired) could use a tactile ballot, a ballot system using physical markers to indicate where a mark should be made, to vote a secret paper ballot. These ballots can be designed identically to those used by other voters. However, other disabled voters (including voters with dexterity disabilities) could be unable to use these ballots.

Electronic voting systems can offer solutions that allow voters to verify their vote is recorded and tabulated with mathematical calculations. These systems can alleviate concerns of incorrectly recorded votes.

One feature to mitigate such concerns could be to allow a voter to prove how they voted, with some form of electronic receipt, signed by the voting authority using digital signatures. This feature can conclusively prove the accuracy of the tally, but any verification system that cannot guarantee the anonymity of voter's choice, can enable voter intimidation or vote selling.

Some cryptographic solutions aim to allow the voter to verify their vote personally, but not to a third party. One such way would be to provide the voter with a digitally signed receipt of their vote as well as receipts of other randomly selected votes. This would allow only the voter to identify their vote, but not be able to prove their vote to anyone else. Furthermore, each vote could be tagged

with a randomly generated voting session id, which would allow the voter to check that the vote was recorded correctly in a public audit trail of the ballot.

Electronic voting machines are able to provide immediate feedback to the voter detecting such possible problems as under voting and over voting which may result in a spoiled ballot. This immediate feedback can be helpful in successfully determining voter intent.

It has been alleged by groups that a lack of testing, inadequate audit procedures, and insufficient attention given to system or process design with electronic voting leaves "elections open to error and fraud".

In 2009, the Federal Constitutional Court of Germany found that when using voting machines the "verification of the result must be possible by the citizen reliably and without any specialist knowledge of the subject." The DRE Nedap-computers used till then did not fulfil that requirement. The decision did not ban electronic voting as such, but requires all essential steps in elections to be subject to public exam inability.

CHAPTER THREE

3.0 System Analysis and methodology

3.1 Description and Analysis of the Existing System

Analysis involved a detailed study of the current system, leading to specifications of a new system. The existing system of voting in Nigeria is highly manual; the INEC has a laid out data capture form that is used to register residents in their area. A period of registration is set to start and end on a particular day, such a period is announced to the public using various mass communication means including radios and newspaper publications. During such periods, intending voters are expected to report to these officers to be registered using a paper and a pen. Every potential voter fills a form with details such as location, date of birth among others also individuals must be verified to be residents of an area.

The INEC officers collects the filled data forms from officials at the end of the registration process to be taken to the central INEC offices where data entry clerks are then employed to input entries into the central database from which a voter register is produced. At the end of this process, voter registration cards are produced and issued to voters.

3.2 Fact Finding Method / Methodology

3.2.1 Interview Method

This was done between the researcher and the staffs of Independent National Electoral Commission. System of conducting voters registration was gathered from them and a well documented procedure for registration was ascertained.

3.2.2 Reference to Written Text

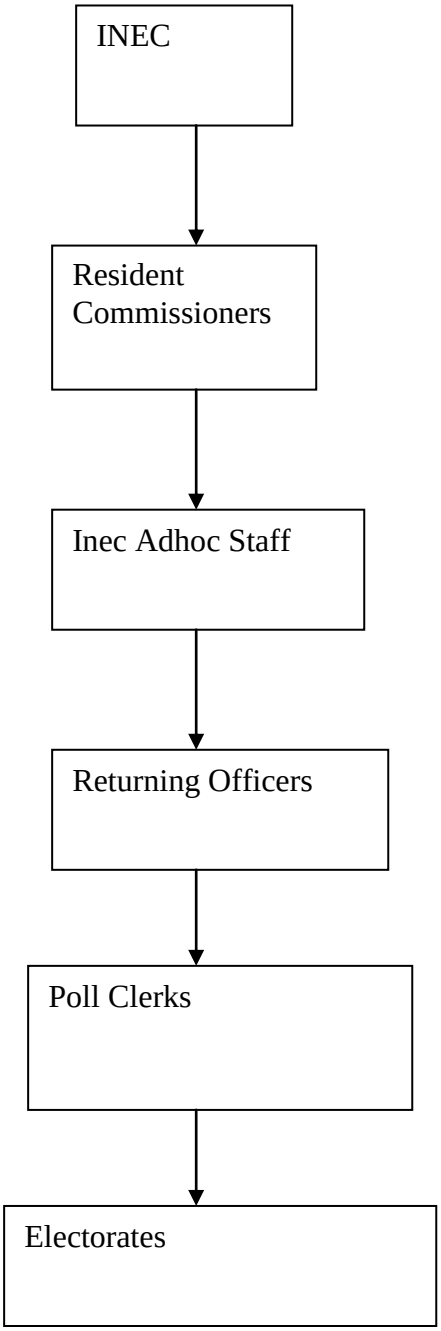
A search on online voters registration system was carried out and a lot of information concerning the system in question was obtained. Some forms that are necessary and available were assessed. Also Internet down loads was made to obtain some text materials.

3.3 Present Procedures

The Nigerian Electoral Commission administers Nigeria's federal electoral roll. Each state also has its own electoral commission or office, but voters need only register with the INEC, which passes the registration details to relevant state commissions. Voter Registration is mandatory for all citizens 18 years of age or above. Periodically the Electoral Commission conducts door-to-door and postal campaigns to try to ensure that all eligible persons are registered for voting.

The one registration covers Federal, State and Local voter registration.

3.4 Information Flow Diagram



3.5 Input, Process and Output Analysis

3.5.1 Input Analysis

The input to the system is the collection of voter's information. The details of the voter's data especially age, name, and nationality forms the basis for data processing.

3.5.2 Process Analysis

The information gathered was processed into a more meaningful format for entry into the system. The voter's card is stored in the database for verification during voting.

3.5.2 Output Analysis

The output from the system designed is generated from the system inputs. More of the output generated is on voters register.

3.6 Problems of the Current System

Manual system of operation faces a lot of problems which includes:

- Delay in data processing.
- Complex registration system.
- Errors in processing.
- Lost of Materials to fire incidents
- Insecurity of data

3.7 Justification for the New System

The new system will help to solve all the problems inherent in the existing system. The justification for the new system includes:

- Direct capture of Voters register
- Error free processing of data
- Early display of voters register before election
- Checks double voting
- Detects double registration
- Transparency

CHAPTER FOUR

SYSTEM DESIGN, TESTING AND IMPLEMENTATION

4.1 Specifications of the New System

The new system was designed to capture data from the input device, process it and generate meaningful output on the output device. There are some specifications that are necessary for the design of the new system. They are input, output specification and database specification. The objective of the design includes:

- Design an input format that will enable the user capture all the necessary data for the purpose of voter's registration.
- Structure a database system that will store all the information.
- Design a well formatted output that will present information to management in a meaningful format.
- Maintain a Database for voters registration
- Maintain a database for party registration
- Maintain a database for local governments and wards
- Setup criteria for qualifying one for registration
- Allow users to register for voting
- Publish voters register

4.2 Input Specification

The input to the new system is designed to capture data from the voters registration form. These forms are designed to capture voters register, party registration etc. The forms include:

Voter's Registration form

Voter's Name …….

Voter's No ……...

Form No ……...

Sex ……

Address ……

Age ……

Ward……

LGA……

Zone ……

State ……

Occupation ……

State ID ……

Party Registration Form

Party Name …….

Code ……...

Headquarter ……

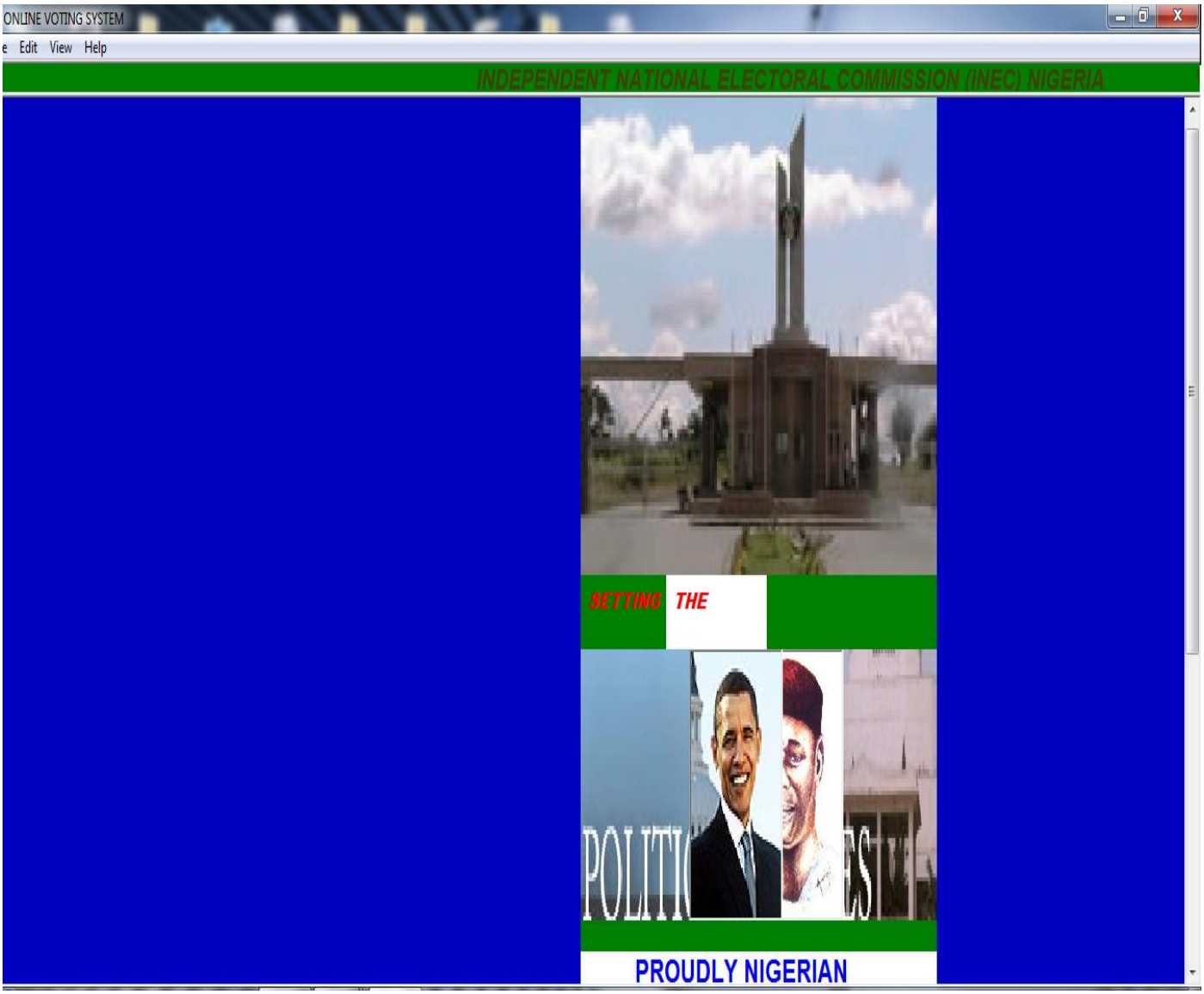
Chairman……

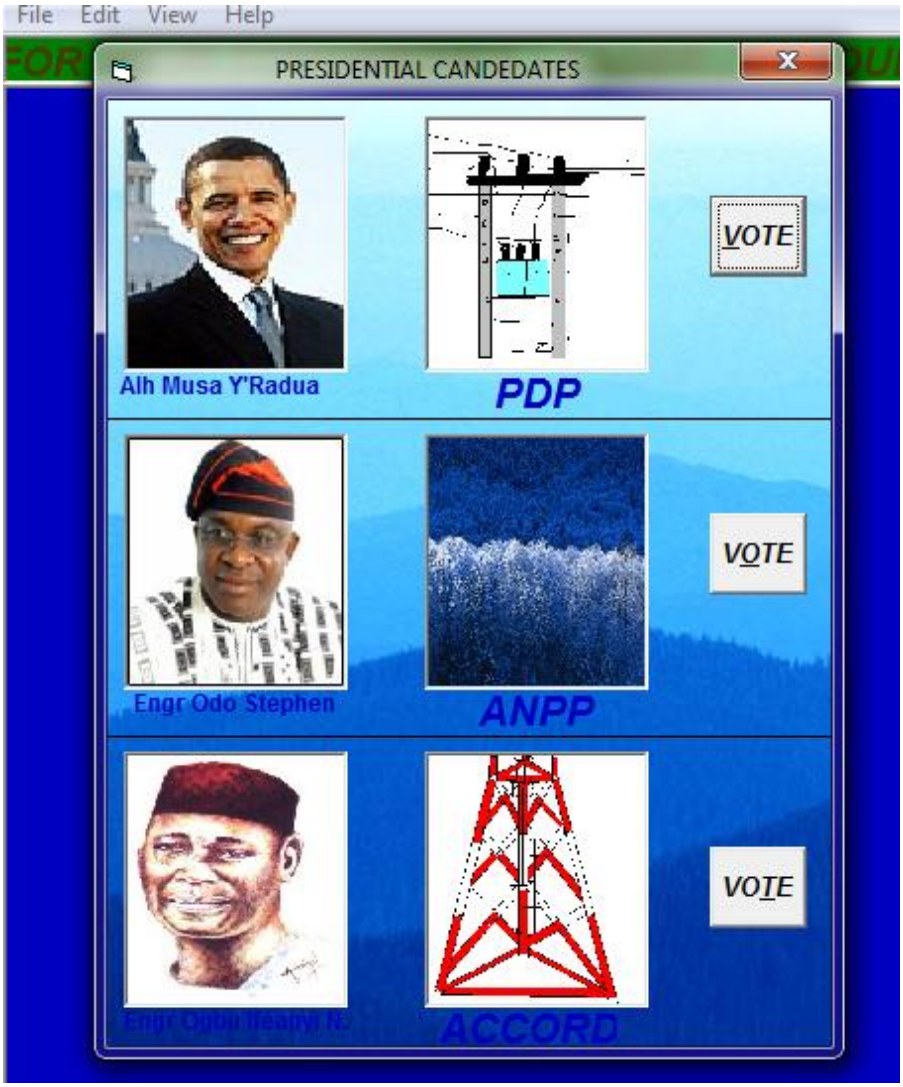
Secretary……

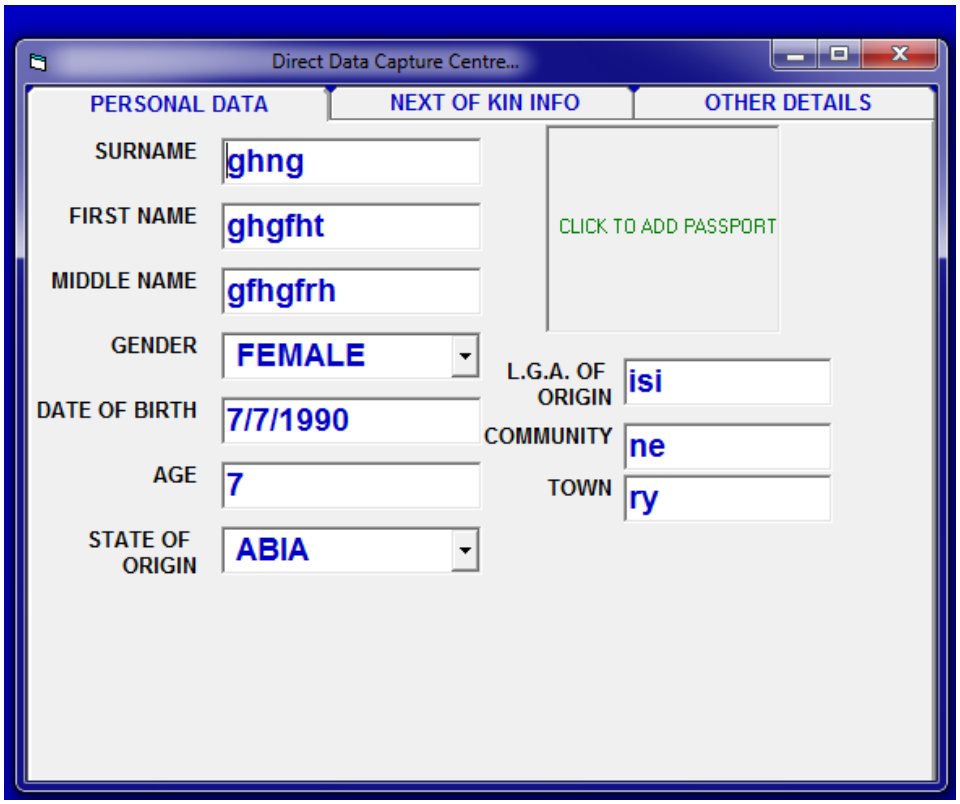
4.3 Output Specification

The output forms are designed to give detailed reports on voter's register.

The forms are designed using data grid controls in visual basic. The reports can be printed out on a hard copy.


ONLINE VOTING SYSTEM
e Edit View Help
INDEPENDENT NATIONAL ELECTORAL COMMISSION (INEC) NIGERIA
SETTING THE
PROUDLY NIGERIAN


File Edit View Help
PRESIDENTIAL CANDEDATES
VOTE
Alh Musa Y'Radua
PDP
VOTE
Engr Odo Stephen
ANPP
VOTE
ACCORD


Direct Data Capture Centre...
PERSONAL DATA
NEXT OF KIN INFO
OTHER DETAILS
SURNAME
ghng
FIRST NAME
ghgfht
MIDDLE NAME
gfhgfrh
GENDER
FEMALE
DATE OF BIRTH
7/7/1990
AGE
7
STATE OF ORIGIN
ABIA
CLICK TO ADD PASSPORT
L.G.A. OF ORIGIN
isi
COMMUNITY
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INDEPENDENT NATIONAL ELECTORAL COMMISSION (...
PRESIDENTIAL ELECTION RESULT
PARTY
COUNT
PDP
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ANPP
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ACCORD
0
TOTAL COUNT
0
INEC
INDEPENDENT NATIONAL


Direct Data Capture Centre...
NIGERIA ELECTRONIC VOTING SYSTEM (e_ELECTION): PROUDLY NIGERIAN
REGISTRATION
MOVING NIGERIA TO ANOTHER LEVEL OF GREATNESS
ELECTION

4.4 Database Specification

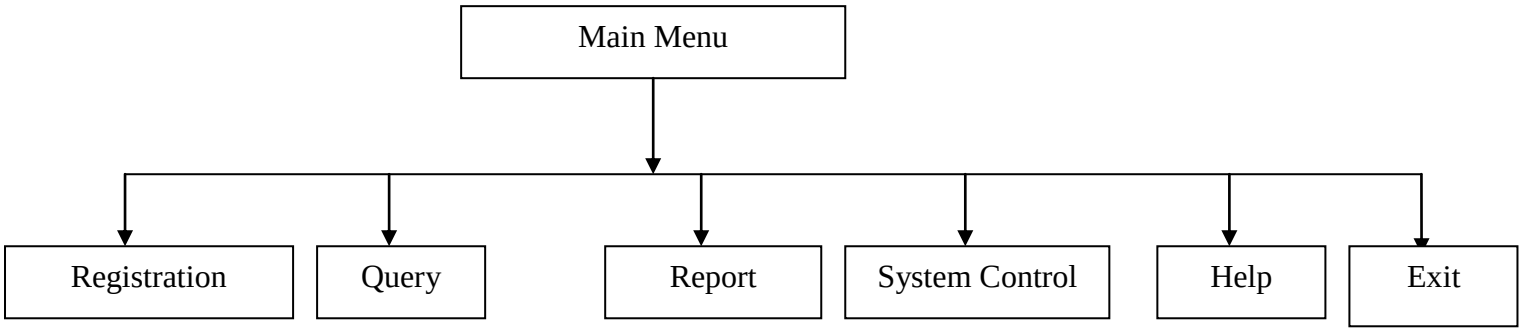
Access database was used in the design of the new system database. The structure of the data tables in the database includes:

Structure of Voters Database

Field Name	**Type**	**Size**
Voters Reg No	Integer	2
Name	Text	50
Sex	Text	7
Address	Text	50
Age	Integer	2
Ward	Text	30
LGA	Text	50
Zone	Text	50
State	Text	40
Occupation	Text	20
Status	Text	30
State ID	Integer	2
Form No	Integer	2
Passport	Picture	0

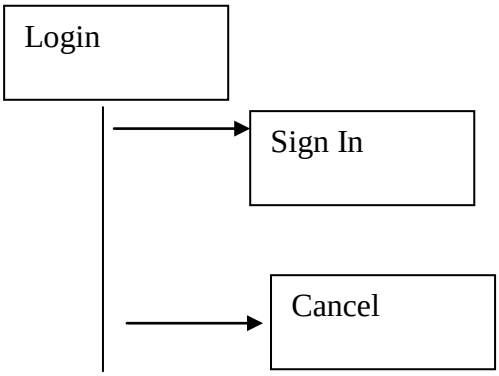
4.5 Main Menu Design

Top down system was used in the design of the new system. The main menu houses all other sub systems. Hence access to the sub systems are made through the main menu. Bellow is the diagram of the main menu.

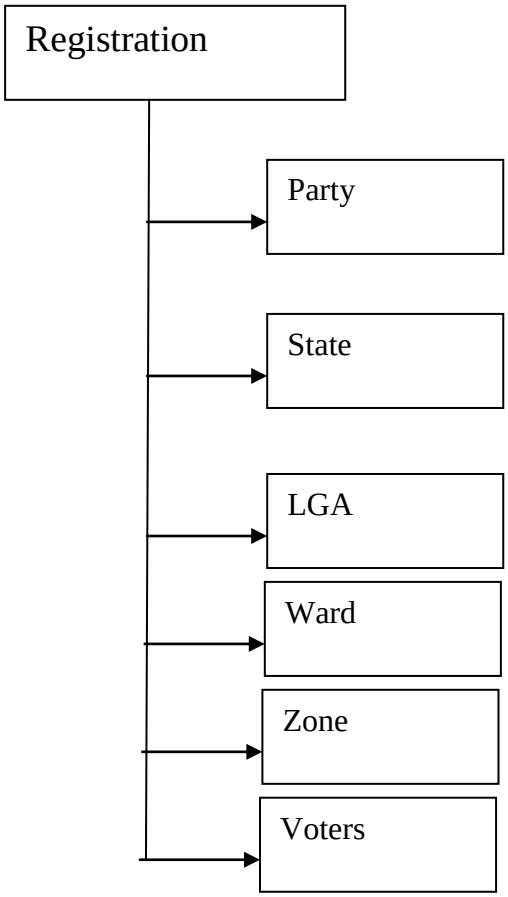


4.6 Subsystem Design

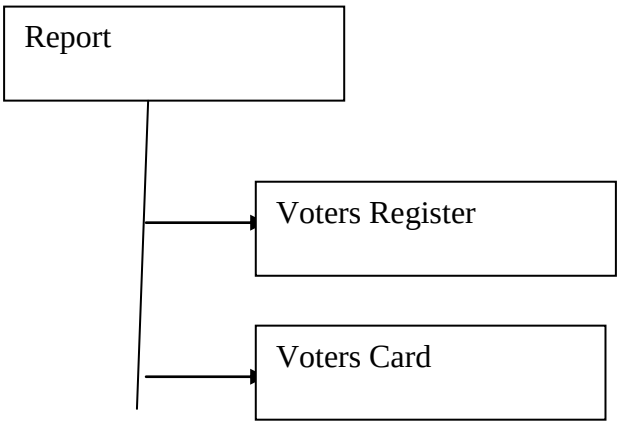
4.6.1 Login Subsystem



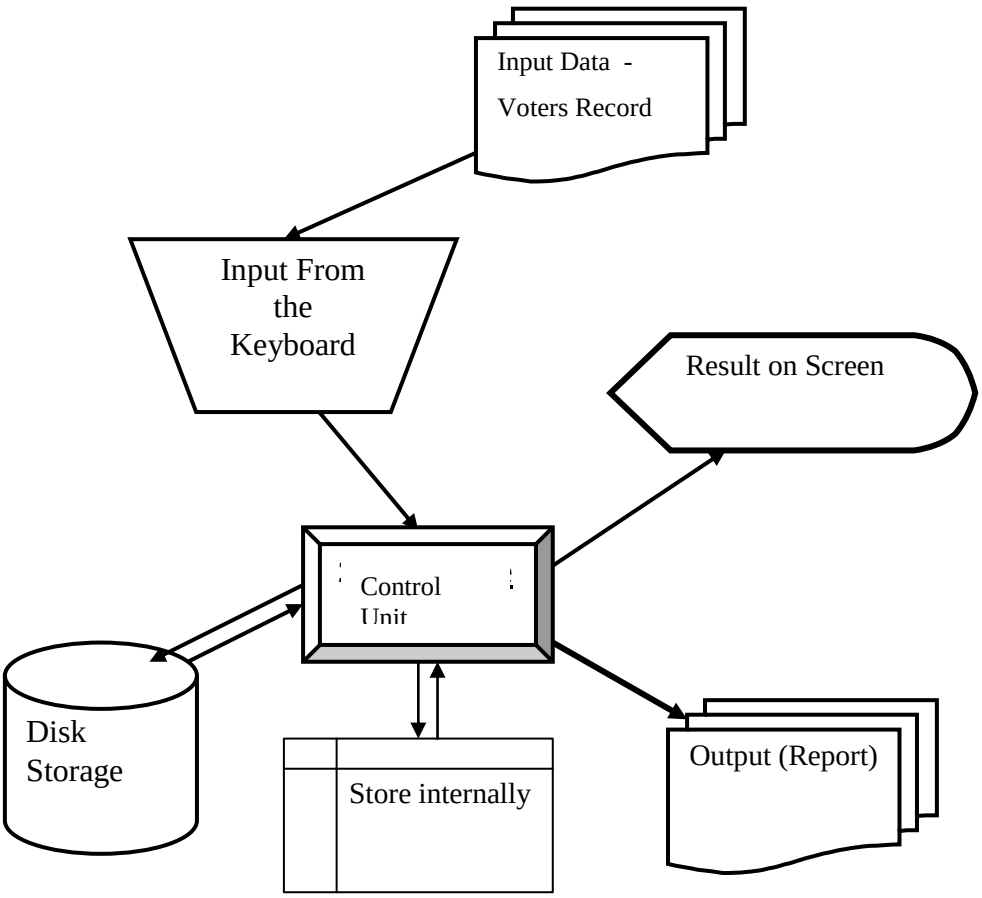
4.6.2 Registration Subsystem Design



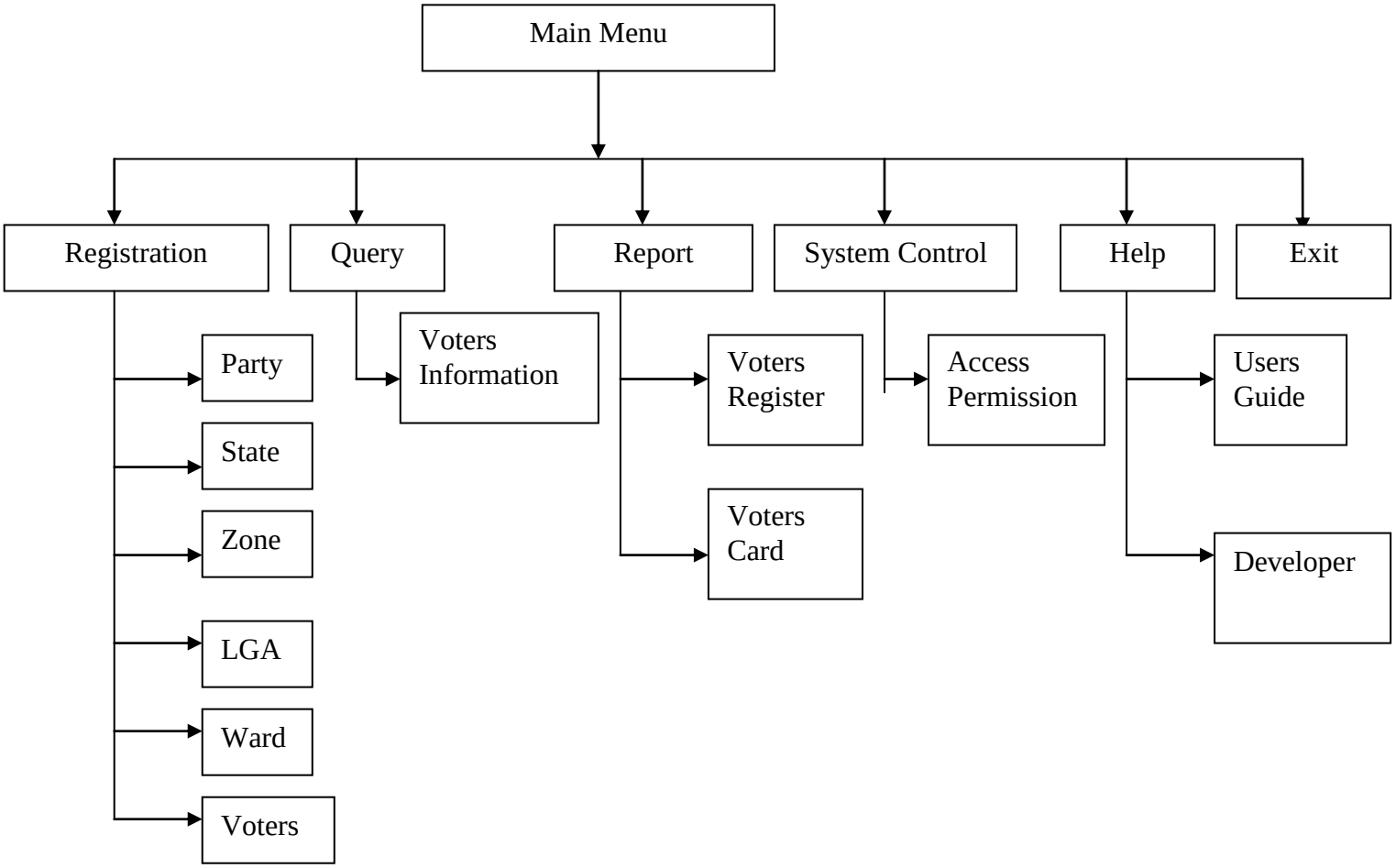
4.6.3 Report Subsystem Design



4.7 System Flowchart



4.8 **Top-Down System**



4.9 Program Modules Specification

The new system developed was divided into program modules. Each module handles a specific operation in the software. We have module for the following operations.

Voter's Registration: This module enables the user to register for voting. People who are bellow 18yrs cannot be allowed to register and multiple registrations are checked.

Query: This module allows registered voters information to be searched for and displayed on the registration form.

Voters Register: This module displays voters register according to the various states.

Access Permission: This module allows system administration to assign user name and password to various users

Voters Card: This module displays voter's card for printing

Help: This module gives information on how to use the software

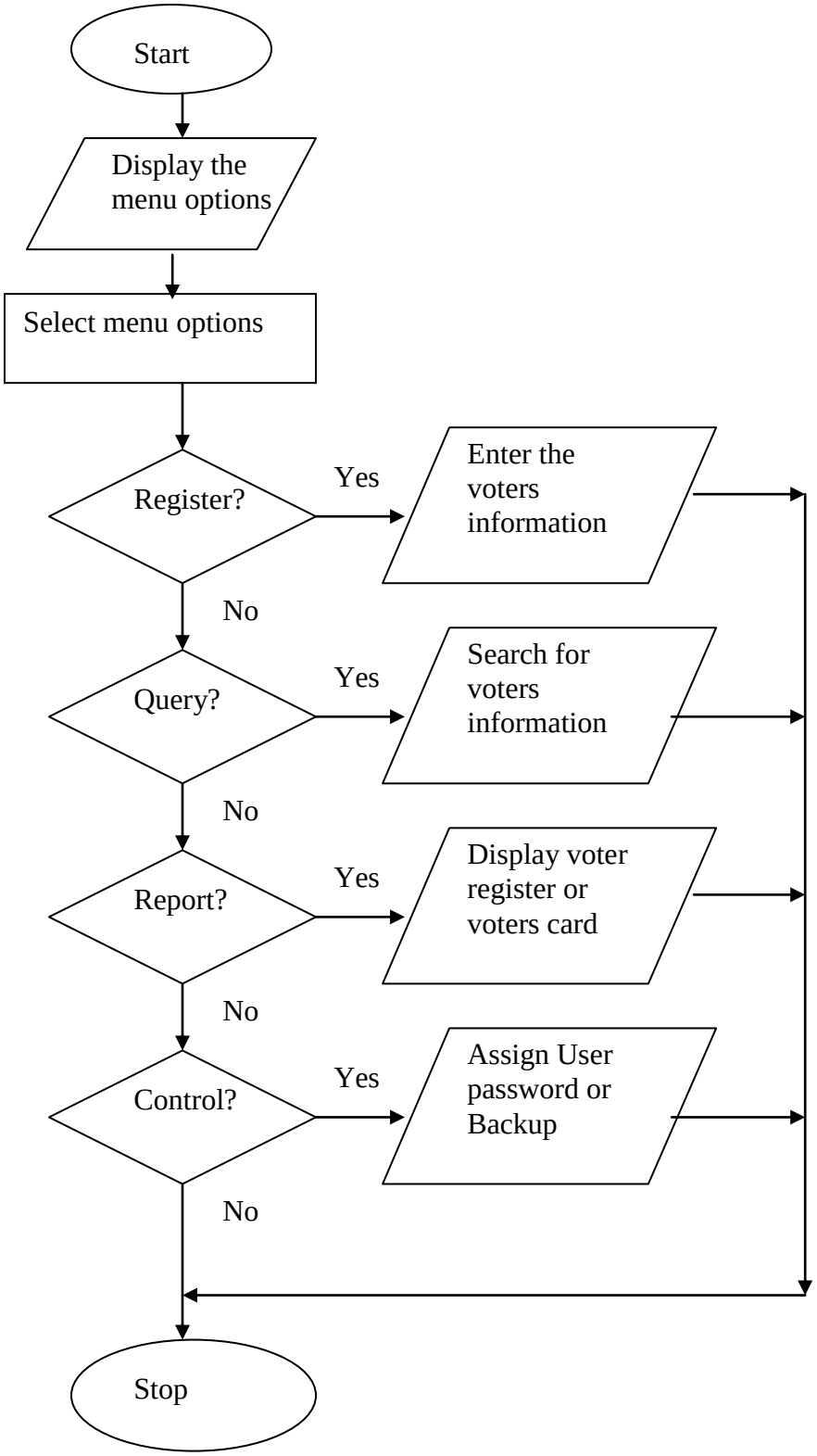
Exit: This module terminates the program

4.10 Choice of Programming Language

So many programming languages were considered in the cause of designing this software. A lot of factors were put into consideration which includes electronic database access, data transmission via networks, database security, database retrieval electronically, multi user network access, electronic data capture, etc.

The choice for (virtual basic) VB 6.0 with Access Database was made to enable us achieves the above set objectives. Moreover, VB 6.0 is very user friendly and enables the design of an interface that can be modified programmatically. Also Access database is a robust database that can guarantee database integrity, database protection, and accommodate large database.

4.11 Program Flowchart



CHAPTER FIVE

5.0 RECOMMENDATION, SUMMARY AND CONCLUSIONS

5.1 Recommendation

It suffices to say that for any meaningful computer based information management to be integrated into any organization, proper training and orientation has to be given to both staff and management. Proper training should be given to the data entry staff on how to handle the computer hardware especially during backup processes. In particular electronic storage media are usually sensitive to change in temperature or pressure and as such data, can be lost very easily. The staff should also be briefed on the need and advantage of the current system and how it will equally assist them in their various field of work.

They should also be informed of the cost of maintaining this new system so that they will handle it with all carefulness. Training materials should not be presented in an informal way but with procedures like policies and form etc,they should be circulated to the personnel. This will at the end, generate the staff appreciation and needed interest to operate the system.

5.2 Summary

At the end of this project work, I was able to design and develop a software that can successfully handle electronic voter's registration system. In the process of the design, fist hand information on voter's registration process was obtained from INEC officials.

This work also will serve as an aid for people who wish to research more on this topic. Other benefits are:

a) Provision of facility for handling text electronically using powerful and sophisticated word processors to produce elegant and error free documents.

b) In addition to storing the data, direct data capture was implemented

The systematic approaches used during each phase of the software development provides a clear insight that would be of immense help to anyone carrying out research works in this area.

5.3 Conclusions

The development electronic voter's registration system involved many phases. The approach used is a top-down one concentrating on *what* first, then *how* and moving to successive levels of details.

The first phase started with a detailed study of the problems and prospects of conducting election in Nigeria. In the course of this study, many problems were discovered to have hindered the effectiveness of the existing manual system. These problems, information needs, and activities were documented and later used as the basis for system design, which immediately followed the first phase. The design phase was concerned primarily with the specification of the system elements in a manner that best met the voter's registration need. During this phase, strict adherence was made on proven software engineering principles and practices. To implement this design, a computer program was then written and tested

It is hoped that effective implementation of this software product would eliminate many problems discovered during systems investigation.

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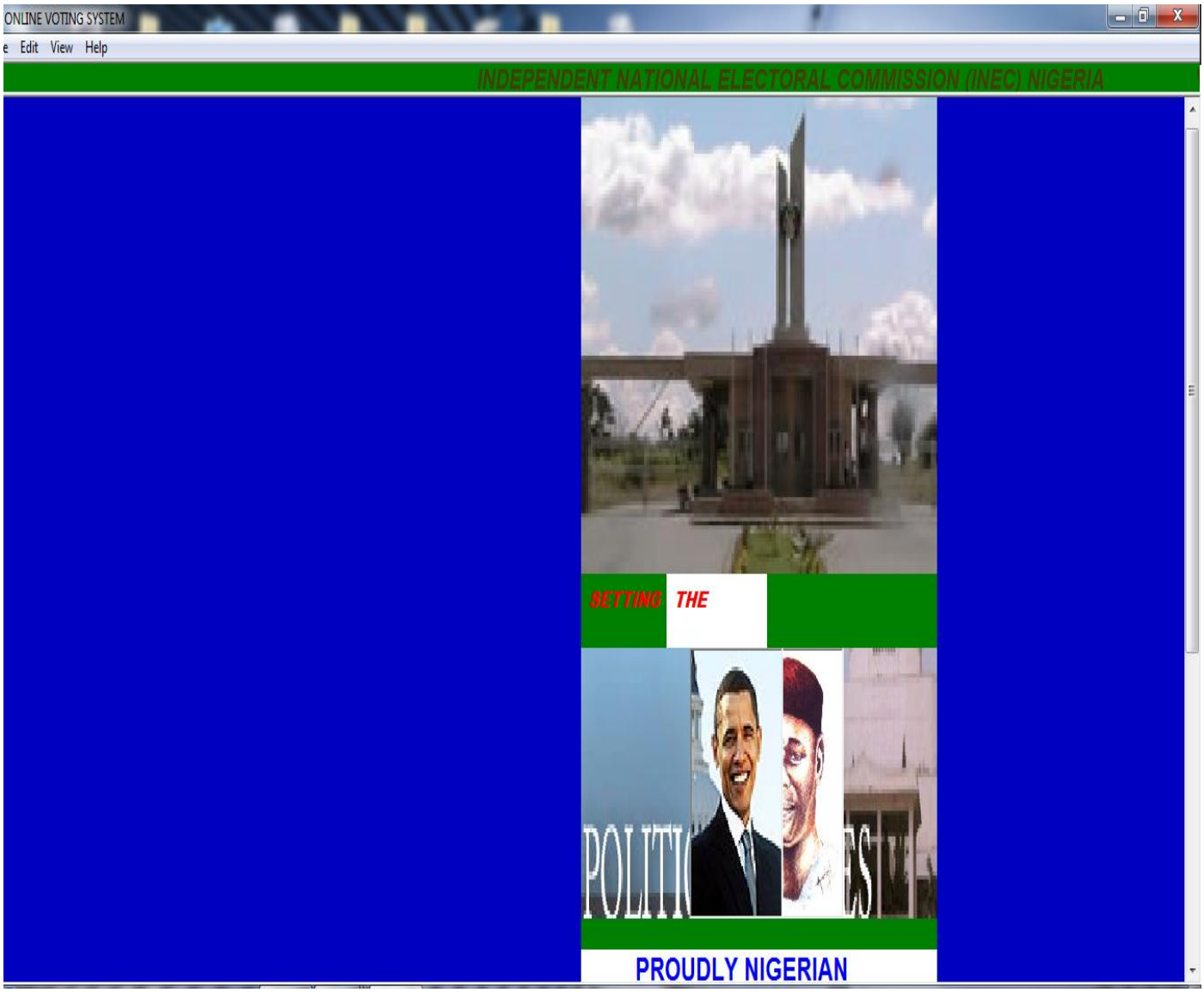
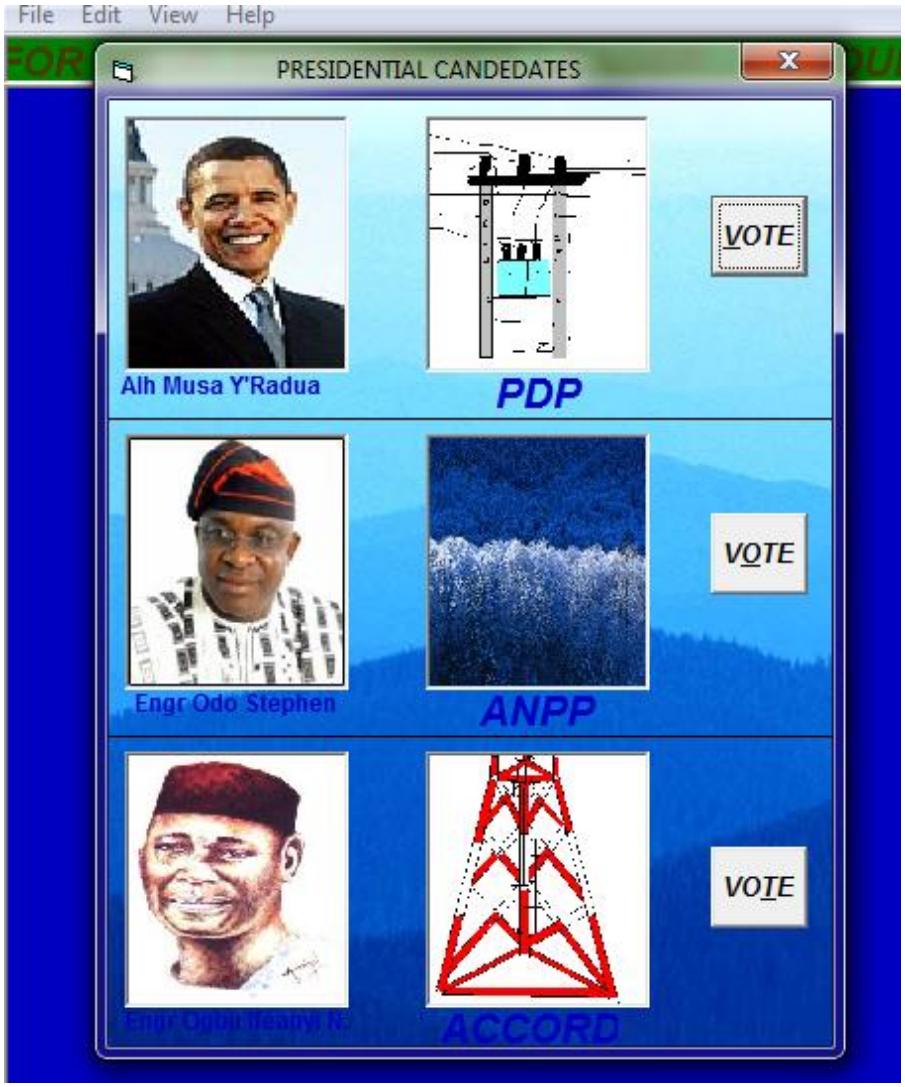
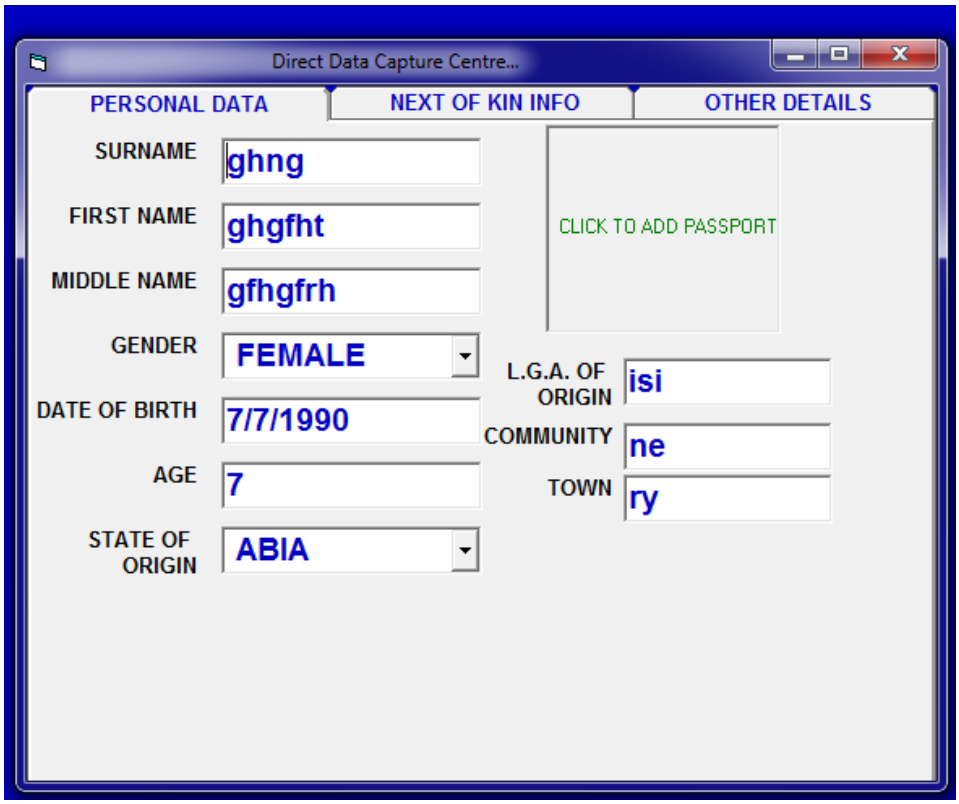
APPENDIX

PROGRAM OUTPUT




File Edit View Help
PRESIDENTIAL CANDEDATES
VOTE
Alh Musa Y'Radua
PDP
VOTE
Engr Odo Stephen
ANPP
VOTE
ACCORD


Direct Data Capture Centre...
PERSONAL DATA
NEXT OF KIN INFO
OTHER DETAILS
SURNAME
ghng
FIRST NAME
ghgfht
MIDDLE NAME
gfhgfrh
GENDER
FEMALE
DATE OF BIRTH
7/7/1990
AGE
7
STATE OF ORIGIN
ABIA
CLICK TO ADD PASSPORT
L.G.A. OF ORIGIN
isi
COMMUNITY
ne
TOWN
ry

SOURCE CODES

```
VERSION 5.00
Begin VB.Form frmElectionType
  BackColor       =   &H00C0E0FF&
MSGBOX “WELCOME TO ONLINE VOTING SYSTEM”
  BorderStyle     =   1  'Fixed Single
  Caption         =   "                                   ELECTION TYPE"
  ClientHeight    =   5040
  ClientLeft      =   45
  ClientTop       =   435
  ClientWidth     =   7815
  ForeColor       =   &H00C0FFC0&
  LinkTopic       =   "Form1"
  MaxButton       =   0   'False
  MDIChild        =   -1  'True
  MinButton       =   0   'False
  ScaleHeight     =   5040
  ScaleWidth      =   7815
  Begin VB.CommandButton Command1
    Caption         =   "&OK"
    Default         =   -1  'True
    BeginProperty Font
      Name            =   "Arial Black"
      Size            =   14.25
      Charset         =   0
      Weight          =   700
      Underline       =   0   'False
      Italic          =   0   'False
      Strikethrough   =   0   'False
    EndProperty
    Height          =   495
    Left            =   3480
    TabIndex        =   7
    Top             =   4560
    Width           =   975
  End
  Begin VB.Frame Frame1
    BackColor       =   &H00C0C0FF&
    Caption         =   "               ELECTION TYPE"
    BeginProperty Font
      Name            =   "Arial"
      Size            =   9.75
      Charset         =   0
      Weight          =   400
      Underline       =   0   'False
      Italic          =   -1  'True
      Strikethrough   =   0   'False
```

```
EndProperty
ForeColor      =   &H000000FF&
Height         =   1575
Left           =   120
TabIndex       =   0
Top            =   2880
Width          =   7575
Begin VB.OptionButton Option1
  BackColor       =   &H00C0C0FF&
  Caption         =   "PRESIDENTIAL"
  BeginProperty Font
    Name            =   "MS Sans Serif"
    Size            =   9.75
    Charset         =   0
    Weight          =   700
    Underline       =   0   'False
    Italic          =   0   'False
    Strikethrough   =   0   'False
  EndProperty
  Height          =   495
  Left            =   240
  TabIndex        =   6
  Top             =   240
  Width           =   2415
End
Begin VB.OptionButton Option2
  BackColor       =   &H00C0C0FF&
  Caption         =   "GUBERNITORIAL"
  BeginProperty Font
    Name            =   "MS Sans Serif"
    Size            =   9.75
    Charset         =   0
    Weight          =   700
    Underline       =   0   'False
    Italic          =   0   'False
    Strikethrough   =   0   'False
  EndProperty
  Height          =   495
  Left            =   2760
  TabIndex        =   5
  Top             =   240
  Width           =   2295
End
Begin VB.OptionButton Option3
  BackColor       =   &H00C0C0FF&
  Caption         =   "SENETORIAL"
  BeginProperty Font
    Name            =   "MS Sans Serif"
```

```
      Size          =   9.75
      Charset       =   0
      Weight        =   700
      Underline     =   0   'False
      Italic        =   0   'False
      Strikethrough =   0   'False
    EndProperty
    Height        =   495
    Left          =   240
    TabIndex      =   4
    Top           =   960
    Width         =   2415
  End
  Begin VB.OptionButton Option4
    BackColor     =   &H00C0C0FF&
    Caption       =   "HOUSE OF REPRESENTATIVE"
    BeginProperty Font
      Name          =   "MS Sans Serif"
      Size          =   9.75
      Charset       =   0
      Weight        =   700
      Underline     =   0   'False
      Italic        =   0   'False
      Strikethrough =   0   'False
    EndProperty
    Height        =   495
    Left          =   2760
    TabIndex      =   3
    Top           =   960
    Width         =   2535
  End
  Begin VB.OptionButton Option5
    BackColor     =   &H00C0C0FF&
    Caption       =   "CHAIRMANSHIP"
    BeginProperty Font
      Name          =   "MS Sans Serif"
      Size          =   9.75
      Charset       =   0
      Weight        =   700
      Underline     =   0   'False
      Italic        =   0   'False
      Strikethrough =   0   'False
    EndProperty
    ForeColor     =   &H00000000&
    Height        =   495
    Left          =   5400
    TabIndex      =   2
    Top           =   240
```

```
      Width          =   2055
    End
    Begin VB.OptionButton Option6
      BackColor      =   &H00C0C0FF&
      Caption        =   "COUNCILLORS"
      BeginProperty Font
        Name         =   "MS Sans Serif"
        Size         =   9.75
        Charset      =   0
        Weight       =   700
        Underline    =   0   'False
        Italic       =   0   'False
        Strikethrough  =   0   'False
      EndProperty
      ForeColor      =   &H00000000&
      Height         =   495
      Left           =   5400
      TabIndex       =   1
      Top            =   960
      Width          =   2055
    End
  End
  Begin VB.Label Label1
    Alignment      =   2  'Center
    Caption        =   "ANIMATION"
    BeginProperty Font
      Name         =   "Arial Black"
      Size         =   48
      Charset      =   0
      Weight       =   400
      Underline    =   0   'False
      Italic       =   0   'False
      Strikethrough  =   0   'False
    EndProperty
    ForeColor      =   &H00C00000&
    Height         =   2655
    Left           =   0
    TabIndex       =   8
    Top            =   0
    Width          =   7815
  End
End
Attribute VB_Name = "frmElectionType"
Attribute VB_GlobalNameSpace = False
Attribute VB_Creatable = False
Attribute VB_PredeclaredId = True
Attribute VB_Exposed = False
```