DESIGN AND IMPLEMENTATION OF AN ONLINE NATIONAL DATABASE FOR BIRTH AND DEATH REGISTRATION (A CASE STUDY OF NATIONAL POPULATION COMMISSION, BENIN CITY)

BY

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BEING A PROJECT SUBMITTED TO THE DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE, IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF A BACHELOR OF SCIENCE DEGREE (B.SC HONOURS) IN COMPUTER SCIENCE, COLLEGE OF NATURAL AND APPLIED SCIENCES, WESTERN DELTA UNIVERSITY, OGHARA, DELTA STATE, NIGERIA

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CERTIFICATION

This is to certify that this project was carried out by OSHOMOH HARRISON MIZENOBIME (CNA/13/14/1046) under the supervision in the Department of Mathematics and Computer Science, in partial fulfillment for the award of Bachelor of Science (B.Sc) Degree in Computer Science.

_____ _____

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_____ _____

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DEDICATION

This work is dedicated to God Almighty my creator and source of all inspiration, wisdom, knowledge and understanding.

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This project has been a joint effort of many individuals whose presence, encouragement, time and support has been of immense aid to me. I would like to take this opportunity to show my profound gratitude towards them all.

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ABSTRACT

The conventional method of birth and death registration is by human inspection. Manual birth and death registration is complex and impractical for large increase in population. The cost of registering a child, loss of registration certificate by the parent and child, inaccurate population statistics are possible problems which inaccurate birth and death registration records can cause. Birth and death registration became an issue of utmost importance as a result of difficulties encounter while obtaining accurate population statistics essential in social services planning for any government and in ensuring that adequate resources and budgets are made available to address the needs of the populace. The use of globally accessible device for birth and death registration has shown great potential in this field. The performance of the Online National Database for Birth and Death Registration was evaluated in terms of accessibility, speed, cost and capacity; and the result confirmed that the proposed Online National Database for Birth and Death Registration will be able to assist government officials in terms of having a globally accessible system, speeding up birth and death registration process, reducing cost of registering a child and capable of keeping registration details for future use. This study therefore aims to address the challenges facing National Population Commission in the area of birth and death registering by using Online National Database for Birth and Death Registration. The system implementation is achieved using MySQL as the backend database, and object oriented PHP as the application programming interface.

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF STUDY

Birth registration is the official recording of the birth of a child by a state administrative process of the country, and coordinated by a particular branch of government. Lalitha and Ameerah (2015). It is the permanent and official record of a child's existence and is fundamental to the realization of children's rights and practical needs. Securing children's rights to a nationality will allow them to get a passport, open a bank account, vote and find employment. It helps ensure access to basic services, including immunization, health care and school enrolment at the right age. At present it is estimated that millions of Nigerian children are not being registered at birth, meaning that these children are being denied the right to a name and nationality, a situation that may also lead to barriers in accessing other rights including health care and education.

One important area where data collection is essential on human population is vital registration; which according to Lalitha and Ameerah (2015) is "the continuous, permanent, compulsory and universal recording of the occurrence and characteristics of vital events pertaining to the population as provided through decree or regulation in accordance with the legal requirements of a country." collecting data on human population is, therefore, a complex series of related activities. There is no gainsaying the fact that accurate population statistics is vital to sound development planning and economic management. This explains the seriousness attached to the assemblage of population and vital statistics in the country today. Apart from the information on the stock of country's population, it is essential to know the rate at which the population is changing, structurally and in the aggregate. Vital statistics as computable from registration of important

events (especially births and deaths), constitute an important set of data for studying the dynamics of a country's population.

According to Zubema (2008), the Department of Vital Registration is one of the core department of the National Population Commission mandated to undertake the continuous and compulsory registration of Births, deaths, and still birth in Nigeria, through an Act titled "Births, deaths, etc for the national population planning and for estimating the number of children that is born into the country every year." (Compulsory) Registration no 69 of 1992 dated 14th December, 1992. (The Registration of Births and Deaths Act, (1969)), this act empowers the Commission to register such vital events nationwide. The Act clearly spelt out the registration hierarchy, responsibilities, and establishment of centers, procedure for Registration, time limit for registration and documentation of vital events such as, Births, Deaths Stillbirths, Marriage, Divorces, and the penalties for various offences among other issues. The authority is given to the Commission to perform these statutory functions of Registrations of birth and death in every locality, Local Government Area (LGA) and State of Nigeria. The Data collected can therefore be processed and analyzed for government to use for planning and also as a data source to other research bodies, non-governmental bodies and also agencies that require such data.

1.2 STATEMENT OF THE PROBLEM

It was observed that the present system made use of manual process for birth and death registration. The data are collected using an A4 paper that is divided into five sections. Each section contains the details of the child, mother, father, informant and registrar respectively. These collected data is then sent to the National Population Commission (NPC) head office monthly.

This requires substantial resources in terms of staff, equipment and storage space for these records at the state level. As such registration of birth and death in Nigeria is still manual this process has many drawbacks which include:

i. It is subject to delays in data transfer from place of birth or death to the National Population Commission (NPC).
ii. Subject to keying errors.
iii. Duplications and Inconsistencies of data arose.

An online database of vital registration is being developed. Opting for a centralized online record storage, processing and retrieval system for the vital registration in which the complete certificate data-birth, death-are keyed and stored on database server. This approach affords the greatest degree of flexibility in terms of total document processing. Copies of the record can readily be prepared, corrected and mailed; complete indexing parameters are available for record matching and retrieval; updating of data is fully automated; information is readily available to multiple users and for multiple uses; and statistical processing and analysis is readily accommodated.

1.3 AIM AND OBJECTIVES OF THE STUDY

The aim of this project is to design a National Database of Birth and Death Registration; its objectives include to:

i. Design and Implement of an online database for birth and death registration
ii. Support access to centralised database.
iii. Develop an online system that automatically stores and retrieve data.

1.4 RESEARCH METHODOLOGY

Source of the data necessary for this project work will be collected from the National Population Commission office, Benin City, Edo State. Developers and software writers were consulted for technical and fundamental support. The design will be done using an architecture with a database server for information storage, a middleware and a client side application. The design would be done with a UML diagram (Unified Modeling Language). The UML include a set of graphic notation techniques to create visual models of object-oriented-software-intensive systems.

The system has a user friendly interface that makes it easy for use to all users. The client side will be designed using HTML (Hyper Text Mark-Up Language) and will be viewed with a web browser while the middleware application will be implemented using PHP (Hypertext Preprocessor) which is a powerful computer language for making dynamic and interactive Web pages. PHP is a server-side scripting language. I chose PHP due to its ease of connection and manipulation with many databases. Also, MySQL will be used, to help reduce data redundancy and also control the security by setting up permission on different levels where only specified users can add, delete and update the data.

1.5 SIGNIFICANCE OF THE STUDY

The significance of this project work is to proffer solutions to current backdrops experienced in the registration of birth and death thereby fostering a more effective and efficient data collection, storage, processing and retrieval method. This project would also provide a means for nation planning and population forecasting.

1.6 SCOPE OF THE STUDY

The National Population Commission (NPC) is a large organization that covers thirty-six (36) state, and Federal Capital Territory, Abuja. This shows the enormity of this project.

The scope of this project covers the registration of birth and death of vital registration unit of National Population Commission (NPC), Benin City, Edo State.

1.7 LIMITATION OF THE STUDY

i. User interface is only in English i.e. no other language option is available.

ii. A study like this nature is expected to be carried out on a broader base due to financial constraints the study is concentration on the National Population Commission, Benin City.

iii. Confidentiality of information and limited access to documents and paper works about the manual procedure of the existing system.

CHAPTER TWO

LITERATURE REVIEW

2.1 WHAT IS POPULATION?

According to Ugwu (2013), Population is the total number of people living in a particular area, city or country.

2.2 OVERVIEW OF NATIONAL POPULATION COMMISSION (NPC)

The National Population Commission (NPC) of Nigeria was established by the Federal Government in 1988. It has the statutory powers to collect, analyze and disseminate population/demographic data in the country. It is also mandated to undertake demographic sample surveys, compile, collate and publish migration and civil registration statistics as well as monitor the country's population policy. The Commission was reconstituted in 2011 with a Chairman and 37 members representing each state of the federation and the Federal Capital Territory. The Commission has a network of offices covering all the administrative tiers of the country: Federal, State and Local Government Areas (LGAs).

Zubema (2008), stated that, the Act No. 69 of 1992 provides at the apex of the registration hierarchy, the office of the Registrar General who shall exercise the powers and perform the duties conferred on him pursuant to the Act, the Registrar General may issue such general directions regarding registration of births and deaths as may be necessary for the efficient implementation of the Act and shall take steps to coordinate and unify the activities of all registration officials involved in the implementation of the Act. There shall also be a Chief Registrar in every state and the federal capital territory (FCT) who shall be subject to the Registrar General is responsible for

overseeing the activities relating to the registration of births and deaths within the State or the Federal Capital Territory, Abuja to which he is appointed. There shall also be appointed for each Local Government Area within a State or each Area Council in the Federal Capital Territory Abuja, a Deputy Chief Registrar. The Deputy Chief Registrar shall be subject to the general direction of the Registrar-General and the Chief Registrar and be responsible for the implementation of the Act within the Local Government Area or Area Council to which he is appointed. Zubema (2008)

The law also provides for the appointment of registrars as the National Population Commission (NPC) may consider necessary for the enforcement of the provisions of the Act.

In summary, the Act establishing the Vital Registration Programme makes provision for the posts of Registrar General (Chairman, NPC), Chief Registrars (State Directors), Deputy Chief Registrar (Comptrollers of LGA) and Registrars.

The registration instruments used in National Population Commission includes;

i. The Birth Registration form (B1) – all information about births is captured using this form. It covers information on the characteristics of the child, the mother, the father and the informant. Either of the parents of the child or any person with the necessary information {informant} could give information about the birth to the registrar.
ii. The Death Registration Form (D1) – all information about deaths is recorded on this form. These information include, age at death, cause of death, place of death and place of usual residence. Information about the informant is also recorded.
iii. The Stillbirth Registration Form (SB1) – Information about the still birth is recorded in this form. This covers information about the deceased and the mother.

iv. The Birth Certificate (B2) – This is the certificate issued after the registration of birth. It contains the name of the child, date and place of birth, name of the mother and that of father amongst other information.

v. The Death Certificate (D2) – This is the certificate issued after the registration of the deaths. It contains information on the personal characteristics of the deceased, cause and place of death and information about the informant amongst other things.

vi. Birth, Death and Stillbirth Registers (B3, D3 and SB2) – These are permanent records kept by the registrar of events registered. Each event (births, deaths and stillbirths) have separate registers and kept primarily for future references.

2.3 RELATED LITERATURE

An online birth and death registration system is a computerized vital registration system that collects, stores and displays population information. It deals with birth registration, death registration. They are a means to create legible and organized population data and to access vital information about individuals. An online birth and death registration systems are intended to complement existing (often paper based) vital registration records which are already familiar. Vital registration records have been stored in paper form for centuries and, over this period of time; they have consumed increasing space and notably delayed access to efficient development planning. In contrast, an online birth and death registration system store vital registration information electronically and enable instant availability of this information and so assist in providing coherent and consistent development plan.

According to Moshtaq (2002) the electronic Birth Registration Information System (BRIS) was introduced on a pilot basis in Rajshahi City Corporation (RCC), one of the oldest municipalities in Bangladesh. Birth Registration Information System (BRIS) is based on

distributed application architecture, with four clients and one server connected via a local area network. Birth Registration Information System (BRIS), as its name suggests, registers births electronically, providing a basic citizen identity, and building this with other data into a population database that can be shared with other public agencies. For example, the Department of Health uses the system to help ensure immunization of all children, with vaccination lists provided for health workers and immunization schedules provided for parents on the basis of registration data. The system could also be used to assist with the process of school enrolment. Birth Registration Information System (BRIS) works in Bengali, although it can also generate certificates and reports in English.

Birth registration is seen as a fundamental right for all children, and is part of the mandate of Rajshahi City Corporation (RCC). Since Rajshahi City Corporation (RCC) was established as a municipal entity, registration has been carried out (for example in a major campaign during the 1997 Child Rights week). However, this data was all registered manually. Thus, a simple query such as the number of girls registered took a very long time to answer, since all register books had to be searched and separate tally sheets prepared. The manual process was subject to delays and, in transferring data, errors, duplications and inconsistences arose. The electronic system was therefore proposed, with financial assistance from UNICEF Bangladesh.

Under the manual system, government agencies for immigration, elections, education, statistics, and health services were all undertaking separate registration activities. Those agencies, together with local government (i.e. Rajshahi City Corporation (RCC)) all form potential stakeholders in an integrated birth registration system. At present, the main stakeholders in Birth Registration Information System (BRIS) are the health and the statistics agencies of government, and Rajshahi City Corporation (RCC). Birth Registration Information System (BRIS) has removed

duplication and redundancy from birth/registration records through centralized storage of data. It has automated searching, sorting, processing and reporting tasks (such as those associated with immunization) and very significantly reduced the time taken for such tasks. Error rates have also been reduced, with a combined ID number and barcoding system. Both registration and immunization rates have increased since the introduction of the system.

Vito (1990), move further to explain the automated registration system in the United States is a decentralized system in which each state has total responsibility for the administration and operation of the system. Each state has its own laws, rules and regulations which govern registration processes and functions. Within the state organizational structure, the vital registration program is located in the state health agency. This reflects the early uses of birth and death records in identifying health problems and assessing the health status of the population. Vito (1990) the major area of development at the present time in the vital registration area in many states in the United States is the electronic birth certificate. Births account for the largest volume of records and require the greatest amount of registration activity, thus representing the single most cost-effective record for automation. The amount of information collected on the birth certificate, the number of copies issued annually, the amount of processing for corrections and updating, and the variety of applications for use of this record far exceed those of all the other types of vital records. It is because of these characteristics that states are going to the electronic birth record as the first record to be computerized in the registration system Vito (1990).

According to Vito (1990), there are a number of advantages to computerizing the birth record. First and foremost is the fact that the birth record is completed at the originating source i.e., the hospital. This affords a convenient location to place equipment, provide training, and to establish standards for operation of the system. In doing so, immediate benefits are realized with

significant reductions in transcription errors, incomplete reporting of data, the need for follow back queries, and in lost certificates. Once the data are entered at the hospital, the data are immediately available to the hospital for its own use, as well as in a format for printing and for transmission to the state agency. The printed paper copy may take any route necessary; for example, it may be routed through a series of local agencies prior to final storage at the state level. However, since the data are transmitted electronically there is no delay in the availability of the record at the state agency. Records which become lost can be instantly regenerated either at the hospital or at the state registration office without the need to reenter any of the data. Vito (1990).

The security afforded by the electronic system is not readily reproducible in a manual system. Information received only via the electronic system are validated as official records. Fraudulent paper copies of certificates cannot be added to the system and when attempted can be identified through cross-matching of the paper and electronic documents. Entry of data into the records can be done only by authorized staff through a series of controls on identification and password access to the computer system. Any irregularities in the system related to registration data can be quickly identified as to the terminal used and the staff authorized access to the computer. All changes to the record are controlled through the computer entry system, and can easily be restricted in terms of what changes can be made and by whom.

Vito (1990) stated that, the electronic record system also affords a number of processing features which reduce the need for subsequent record corrections or changes. The audit/edit features built into many of the systems described include spelling checks, data validation, auto-coding of selected variables such as institution and geographic locality, single entry of common data elements such as dates, and automatic calculation of variables such as length of gestation (based on the dates of delivery and last menses) or conversions (e g. pounds and ounces to grams)

Each of these features saves significant processing time, reduces the need for subsequent changes to the record, and minimizes many types of errors. In decentralized registration programs where local registration offices can issue copies of records, the computerized system provides the flexibility for local access to computer-based records. Many of the states with automated systems will permit electronic access to the state's central database for the purpose of issuing record copies. Communication networks have been established whereby an authorized local registration office can access the central computer, initiate a search for a record and have the information transmitted and printed on a form in the local office. In some cases, regional offices of the state agency have been established in various locations throughout the state and can issue copies of records utilizing the central state computer system. This is a growing area of development -decentralized access and retrieval of electronic records for registration purposes. Vito (1990).

2.4 FACTORS INFLUENCING BIRTH AND DEATH REGISTRATION

Birth and death registration is very important to every person since it is a human right. In the first place, according to World Health Organization (WHO, *2013*), birth and death registration brings multiple benefits. An individual's right to be counted at both extremes of life is fundamental to social inclusion. Without insurance or inheritance, death registration and certification are often required prerequisites for burial, remarriage, or the resolution of criminal cases. In the second place, according to United Nations Children Fund (UNICEF, 2013), registering children at birth is the first step in securing their recognition before the law, safeguarding their rights, and ensuring that any violation of these rights does not go unnoticed. Birth registration also serves a statistical purpose. Universal birth registration is an essential part of a system of vital statistics, which tracks the major milestones in a person's life - from birth to marriage and death. Such data are essential for planning and carrying out development policies and programmes, particularly in health,

education, housing, water and sanitation, employment, agriculture and industrial production. In 2002, the General Assembly resolution 'A World Fit for Children' reaffirmed governments' commitment to ensure the registration of all children at birth and to invest in, care for, educate and protect them from harm and exploitation. To achieve these goals, governments must have accurate data from which they can plan. Birth registration is not only a fundamental right in itself but also a key to ensuring the fulfillment of other rights. A variety of factors including; government commitment, a country's legislative framework and whether existing infrastructure can support the logistical aspects of birth registration, influence birth registration levels, especially in remote areas. Mothers with some education are more likely to know how to register a child than their uneducated peers, and the proportion of registered children is highest between those whose mothers have a secondary education.

According to Abdul-Aziz et al., (2015) in Nigeria, for example, data show that 21 per cent of children whose mothers have no education, 42 per cent of children whose mothers have a primary education, and 67 per cent of children whose mothers have a secondary education are registered. Likewise for India, birth registration levels increase with a mother's education, at 24 per cent, 47 per cent and 63 percent, respectively. In Ethiopia, where national birth registration is only 7%, birth registration levels increase substantially as a mother's education level rises - from no schooling (4 percent of children registered) to primary education (7 per cent registered) to secondary education or higher (33 per cent registered).

The disparities persist even as national levels of birth registration rise. In Cameroon, where 61 per cent of children under five is registered, children whose mothers have a primary education are more than twice as likely to be registered as those whose mothers are uneducated. In the third place, according to United Nations (UN, *2012*), birth and death registration is an integrated

information system that primarily generates legal, administrative and statistical information that benefits individuals, households, communities, government institutions and non-governmental, regional and international organizations engaged in various socio-economic and other human development endeavours. Every nation, whether developed or developing, has built such a system or is striving to build one as an integral part of their efforts for human development. In Africa, some countries have histories of birth and death registration dating back over 100 years. However, in most cases, the system intended to serve the interests of the colonizers. In Some instances, birth and death registration served as an instrument aimed at controlling the movement of people and a source of information for managing the people under colonial rule. (Abdul-Aziz et al., 2015)

2.5 CONTRIBUTION OF BIRTH AND DEATH REGISTRATION TO HEALTH SERVICE DELIVERY

According to World Health Organisation (WHO, *2012*), decision-makers in the health sector - including managers and practitioners such as physicians and others - require an up-to-date understanding of levels and causes of mortality. This information is essential for monitoring trends, evaluating the impact and effectiveness of health programmes, and forecasting the burden of disease. Planners and managers need to be able to report reliably on key indicators and targets set out in national health-sector and poverty-reduction plans, including reporting on progress towards the Millennium Development Goals (MDGs). They also need to be able to understand emerging health challenges, such as the prevention and management of non-communicable diseases. The data produced by facility-based information systems can help to meet these information needs, but such systems are insufficient as they only generate data on the users of health-care services, not on those who need but do not use them. For example, data on mortality and causes of death are mainly drawn from hospital records, but in settings where many deaths occur outside hospitals

these data are not representative of the whole population. Also, Isabel and Ruth (2008) show that the third Global Partners Forum (GPF) meeting in 2006 was convened to provide input into the United Nations General Assembly Special Session on HIV/AIDS (UNGASS) review of achieving universal access to prevention, treatment, care and support for children affected by HIV and AIDS. The Global Partners Forum (GPF) identified birth and death, and particularly birth registration to be one strategic area of importance to building a comprehensive response for children affected by HIV and AIDS.

Isabel (2008) contends that birth and death registration is a significant statistical and legal tool as it helps policy and decision-makers meet the challenges of HIV and AIDS by monitoring the number of AIDS related deaths, HIV infected adults and children, and the number of orphaned and other children made vulnerable by HIV and AIDS. This help States and donors to design, plan and programme for effective interventions, including allocating appropriate funds and effectively distributing prevention, treatment, care and support services for both adults and children. The data compiled by birth and death registrations further provides the foundation for achieving the Millennium Development Goals, such as MDG 4, reducing child mortality, and MDG 6, combating HIV and AIDS.

2.6 CHALLENGES ASSOCIATED WITH BIRTH AND DEATH REGISTRATION

Furthermore, according to World Health Organization (WHO, 2013), many barriers prevent people from registering births and deaths. Many countries do not have the necessary laws or infrastructure to make it obligatory to register births and deaths. In some countries, only people who live in cities have access to registration services. Also, according to United Nations Children Fund (UNICEF, *2013*), a significant barrier to birth registration is the distance to the nearest registration facility.

Distance is influenced by location and terrain, existing infrastructure and the availability of transportation. The greater the distance to the registration centre, the higher the financial and opportunity costs for the family. Urban populations are less subject to such constraints, as confirmed by the differences in urban and rural registration rates for almost all regions. Globally, children living in urban areas are one and a half times more likely to be registered than their rural counterparts. Beside, Kingsley (2009) contends that major challenges associated with birth and death registration include:

i. Low utilization of vital statistics for policy decisions
ii. Limited access to registration facilities
iii. Low public knowledge about importance of registration
iv. Inadequate staff and inability to attract and retain highly qualified personnel due to low pay and poor service conditions.

Also, inadequate funding for the Registry in Ghana, difficulty in motivating registration volunteers, lack of logistics such as accommodation, vehicles, required statistical software and programmes, absence of training opportunities for sector staff and weak monitoring and supervision mechanisms all hamper effective birth and death registration.

CHAPTER THREE

SYSTEM ANALYSIS AND DESIGN

3.1 SYSTEM ANALYSIS

System analysis involves the process of investigating a system to know how it actually works in order to make it more effective and efficient.

According to Chiemeke and Egbokare, (2006), it is the practice of evaluating an existing system to see how well it meets users' needs. It ensures the proper collection of data needed for the system design and can also be referred to as the investigation of existing system design or a new system to be designed.

3.2 DATA COLLECTION METHOD

Research methodology involves the specification of procedure for collecting and analyzing data necessary to define or solve the problem for which the research is embarked upon. The scope of this project covers the registration of birth and death of vital registration unit of National Population Commission (NPC).

1. **Primary Source:** This involves oral interview conducted with some personnel in the vital registration unit of National Population Commission (NPC), Benin City, Edo State, reviewing and sharing their experience about the difficulties they undergo in the storage and retrieval of birth and death registration record.
2. **Secondary Source:** This includes the use of textbook, dictionary, newspaper and internet downloads to collect data in order to understand the workings of the National Population Commission.

3.3 BRIEF INSIGHT INTO THE EXISTING SYSTEM

From the investigation and data obtained from the present system, it has been observed that the present system made use of manual processes. The data are collected using an A4 paper that is divided into five section. Section one contains the details of the child, section two contain the details of the mother, section three contains the details of the father, section four contains the details of the informant and section five contains the details of the registrar after the information has been taken, the registrar transfer the data to a small tab given to them from the office then the registrar use a pen drive to copy the data and sends the data to the head office monthly.

3.3.1 DESIGN TOOLS OF THE PRESENT SYSTEM

The present system is design with Microsoft visual studio. Mircosoft Visual Studio is an integrated development environment (IDE) from Microsoft, it is used to develop computer programs for Microsoft Windows, as well as web sites, web application and web services. Visual Studio uses Microsoft software development platforms such as Windows API, Windows Forms, Windows Presentation Foundation, Windows Store and Microsoft Silverlight. It can produce both native code and managed code. (http://en.wikipedia.org/wiki/microsoft_Visual_Studio) Visual Studio includes a code editor supporting intellisense (the code completion component) as well as code refactoring.

Furthermore, Microsoft excel is used as the backend to store all the data inputted from the front end. Microsoft Excel is a spreadsheet application developed by Microsoft for Microsoft Windows, Mac OS X, and iOS. It features calculation, graphing tools, pivot tables, and a macro programming language called Visual Basic for Applications. The Windows version of Excel supports programming through Microsoft's Visual Basic for Applications (VBA), which is a dialect of Visual Basic. Programming with VBA allows spreadsheet manipulation that is awkward

or impossible with standard spreadsheet techniques. Programmers may write code directly using the Visual Basic Editor (VBE), which includes a window for writing code, debugging code, and code module organization environment. The user can implement numerical methods as well as automating tasks such as formatting or data organization for Visual Basic Applications (VBA) and guide the calculation using any desired intermediate results reported back to the spreadsheet.

3.3.2 PROBLEMS OF THE EXISTING SYSTEM

Based on the information gathered from the existing system, it showed that the manual process of birth and death registration which is used in the National Population Commission is faced with a number of problems.

1. The system is prone to errors:

   This is due to the fact that no human is above mistake. When wrong information are entered, it is bound to affect the overall registration process.

2. Time consuming:

   Getting the require information from the available data takes a lot of time. Changing, editing and updating the information contained in several files is a slow and time consuming process.

3. Data Security:

   There is no security in the manual registration process as anyone who lays hands on the system can easily change the information provided on the A4 paper. Data can be damaged or lost and unauthorized persons can access it easily.

3.4 THE PROPOSED SYSTEM

This project looks to address this key problem by implementing an online database system which will be used for record storage, processing, retrieval, and certification. This approach has a significant data entry cost associated with it, particularly if multiple years of data are to be inputted into the system for both registration and statistical purposes. However, it does afford the greatest degree of flexibility in terms of total document processing. Copies of the record can readily be prepared, corrected and mailed; complete indexing parameters are available for record matching and retrieval; updating of data is fully automated; information is readily available to multiple users and for multiple uses; and statistical processing and analysis is readily accommodated.

3.4.1 SIGNIFICANCE OF THE PROPOSED SYSTEM

The Proposed system is simple to implement and use. The system require very low system resource and the system will work well in Microsoft window XP, Window 7 platform and Window 8 etc. The system will be able to avoid user transferring data into pen drive or flash drive and sending the pen drive down to head office. The rate at which the data could be accessed would be maximal, collection of data that used to be tedious will now be easy task, it will eliminate transportation problem, estimate delay in delivery of data to the head office, elimination stolen or misplacing of pen drives etc.

The commission is made up of different departments and as such is faced with different tasks or activities. Birth and Death registration is one category out of so many categories of tasks of the commission. The system may not work well with data collected by other department other than the vital registration department.

3.4.2 BENEFITS OF THE PROPOSED SYSTEM

There are much advantages of the proposed system than the manual registration process. Some are as follows:

i. Data Consistency: In the proposed system one data item is stored at one place. So, whenever data is retrieved, always current value of data is used

ii. Better Data Accessibility: Data can be retrieved more easily in a database system. It provides special access language and techniques to store data.

iii. Data Security: It is the protection of the database from unauthorized access. The system provides several procedures to maintain data security.

iv. Less Effort: The data maintenance in the system needs less effort in the proposed system as compared to the manual registration process.

v. Compactness: The system maintains data in a compact and efficient manner. It needs less space than the manual storage currently been used.

3.4.3 OBJECTIVES OF THE PROPOSED SYSTEM

The objectives of the proposed system include to;

i. Support access to a centralized database

ii. Develop an online database system that automatically stores and retrieve data

iii. Present a cost effective method of data statistic for national population

iv. Strong security by the use of password and user name control access to certain privileges.

3.5 SYSTEM DESIGN

The system design is a logical representation which abstracts the features of a real system. It involves the design and the use of model to predict the characteristics of any system i.e, it is concerned with the overall architecture of the system. It is particularly valuable when the designed system or prototype is large and complex. If a model is properly designed, the result obtained from it may be used within a high degree of confidence in predicting the performance of the prototype. Models are widely used in design of engineering systems.

A good user interface design is critical to the success of the system. An interface that is difficult to use will at best, result in a high level of user error. If information is presented in a confusing way, users may misunderstand the information. They may initiate a sequence of actions that can corrupt data or cause catastrophic system failure.

3.5.1 OBJECTIVES OF THE DESIGN

The main objectives of the system design is to demonstrate a model for the implementation of an online database for birth and death registration in the vital registration unit of National Population Commission.

3.5.2 ARCHITECTURAL DESIGN

The architectural design is concerned with the architecture of the system. The online database for birth and death registration will make use of the client-server architecture in which the work of the system is divided between client and servers. The Online Database System for Birth and Death Registration is divided into the three tiers: the client tier, middle tier and the backend tier.

The client tier is responsible for presenting the data to the user, interacting with the user and communicating with the backend tier of the system. Client tier is the only part of the system visible to the user.

The middle tier is responsible for processing. The XAMPP server (Cross-Platform Apache MySQL and Perl) provides control to the traffic within the system. It acts as the interface between the client tier and backend tier.

The backend tier is the system information infrastructure. This tier includes relational database management system. In such case, the Online Database System for Birth and Death Registration make use of MySQL as the Database Management System (DBMS).

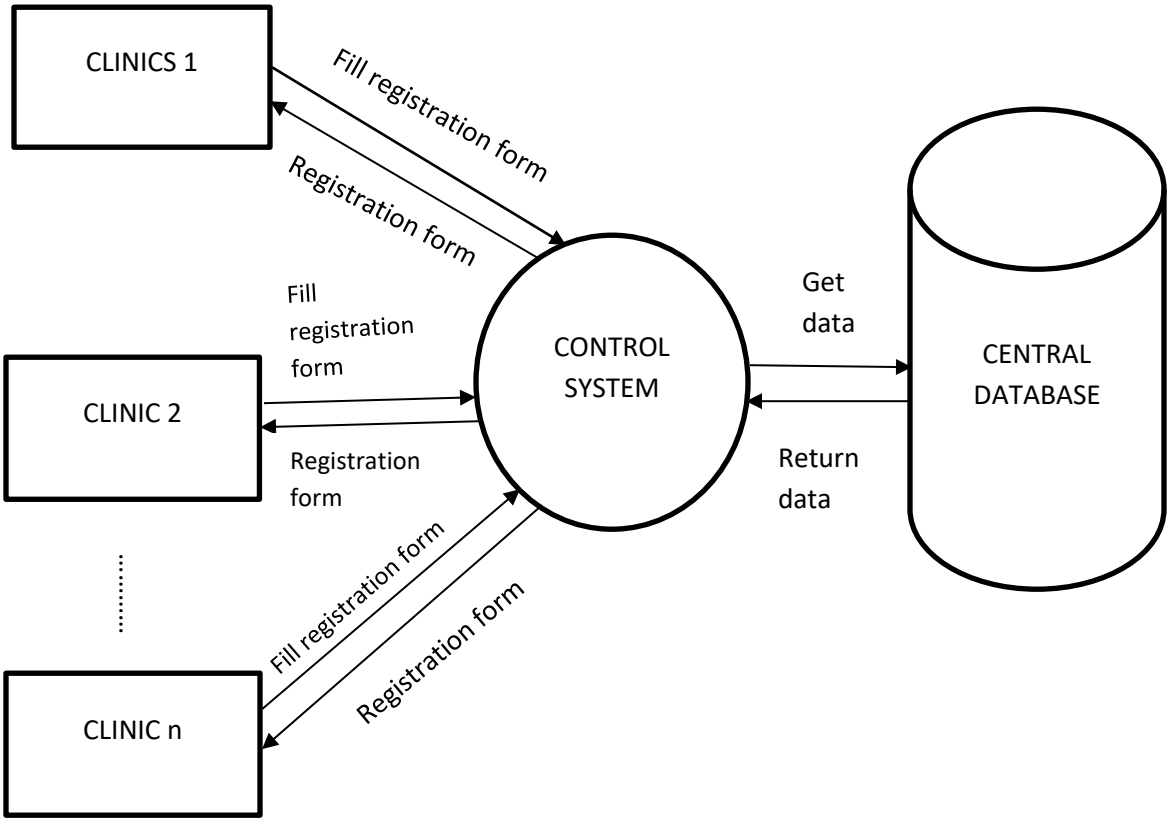

FIGURE 3.1: System Architectural Design

3.5.3 DETAILED DESIGN

The detailed design is concerned with designing individual components to fit the architecture of the system (i.e, the system design) using object oriented analysis. The detailed design of the system would lay more emphasis on information management, birth and death registration and printing of birth certificate or death certificate. The Unified Modeling Language (UML) is used for detailing the design.

The Unified Modeling Language (UML) is a language for visualizing, specifying, constructing and documenting object-oriented software systems. It has been widely accepted as a standard for modeling software systems and is supported by a great number of CASE tools (Computer Aided Software Engineering tools).

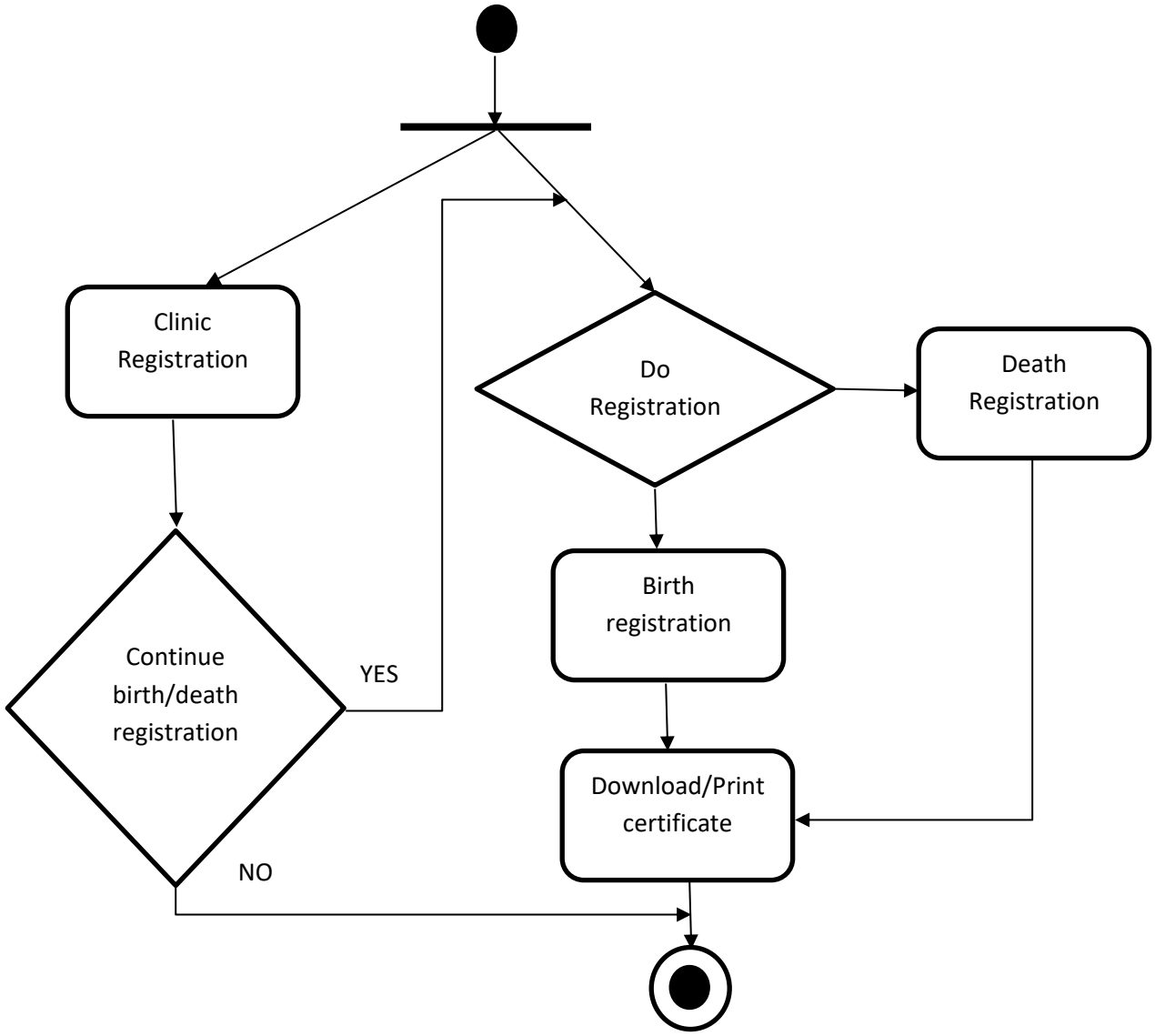

FIGURE 3.2: A UML Diagram for an Online Database for Birth and Death Registration

3.6 PSEUDOCODE FOR SYSTEM MODULES

3.6.1 CLINIC REGISTRATION

Begin

1. Process Clinic Registration form
2. Submit Registration Form
3. If Registered

4. Do Until

5. birth or death registration is complete

6. EndDo

7. Return Line 10

8. else

9. Return Line 1

10. Endif

End Begin

3.6.2 BIRTH REGISTRATION

Begin

1. Input username and password

3. If username and password is correct

4. process birth registration

5. submit birth registrstion

6. If birth registration is correct

7. print birth certificate

8. else

9. Return Line 4

10. Endif

11. else

12. Return Line 1

13. Endif

End Begin

3.6.3 DEATH REGISTRATION

Begin

1. Input username and password
2. If username and password is correct
3. process death registration
4. submit death registrstion
5. If death registration is correct
6. print death certificate
7. else
8. Return Line 3
9. Endif
10. else
11. Return Line 1
12. Endif

End Begin

3.7 DESIGN SPECIFICATION FOR THE PROPOSED SYSTEM

Specification is the detailed documentation of the system behavior and constraints. The model of system's desired output can be developed by the formation of set of input processes/specifications and output specifications.

3.7.1 INPUT SPECIFICATION

The input design specifies how data/inputs are entered by the user and converted to a computer based format that would be accepted by the system for processing. The design specifies how the user interacts with the system to direct the action to be taken.

The following are the major input screen for the online database for birth and death registration;

i. Login screen: the clinic or NPC personnel provides a valid username and password that enables user to access the online birth and death registration form, view or print birth and death certificates.

ii. Registration from: this page enables user to register for birth and death.

3.7.2 OUTPUT SPECIFICATION

This specifies the results that are generated by the system. The output design involves specifying how production of on-screen reports and paper-based reports will occur.

The following is the major output screen used for the online database for birth and death registration;

i. Birth or Death Certificate: This is generated automatically after the user information have been filled in the registration form and submitted, these could be downloaded and printed.

3.8 DATABASE SPECIFICATION

The name of the Database created during the implementation is “birth” and the names of the tables created are “login”, “personnaldt” and “reg_deaths”.

Table 3.1: Shows the table “personnaldt” from the database named “birth”

FIELD NAME	DATA TYPE	FIELD SIZE
ID	INT	100
DVC	VARCHAR	100
c_surname	VARCHAR	200
c_firstname	VARCHAR	200
c_date	VARCHAR	100
c_pbirth	VARCHAR	200
c_gender	VARCHAR	200
f_names	VARCHAR	200
m_names	VARCHAR	200
p_number	VARCHAR	200
h_number	VARCHAR	200

Table 3.2: Shows the table “reg_deaths” from the database named “birth”

FIELD NAME	DATA TYPE	FIELD SIZE
Id	INT	45
DDVC	VARCHAR	100
d_firstname	VARCHAR	100
d_surname	VARCHAR	100
d_mname	VARCHAR	100

d_dob	VARCHAR	100
d_dod	VARCHAR	100
d_gender	VARCHAR	100
r_name	VARCHAR	100

Table 3.3: Shows the table “login” from the database named “birth”

FIELD NAME	DATA TYPE	FIELD SIZE
Id	INT	150
username	VARCHAR	100
password	VARCHAR	100

Table 3.4: Shows the table “hospital” from the database named “birth”

FIELD NAME	DATA TYPE	FIELD SIZE
Id	INT	45
cmd	VARCHAR	40
hosp_name	VARCHAR	20
username	VARCHAR	50
password	VARCHAR	50

CHAPTER FOUR

SYSTEM IMPLEMENTATION AND DOCUMENTATION

4.1 SYSTEM IMPLEMENTATION

System implementation is to set the entire system and test it using data design in the system design phase. The test is to ensure that the system is working and that it meets the desired specifications. According to Ekanem (2005), system implementation has to do with the coordination of the system's components in order to make it not only just workable but highly successful. To implement any system design into a computer programme, the most important consideration is first and foremost the computer programming language as it is a major factor of determining the cost, complexity, and user operability of the program or software. Implementation is the process of bringing the developed system into operational use and turning it over to the user.

4.2 CHOICE OF PROGRAMMING LANGUAGE AND JUSTIFICATION

PHP: PHP is known as Hypertext Preprocessor. PHP is probably the most popular scripting language on the web. It is used to enhance web pages. With PHP, you can do things like create username and password login pages, check details from a form, picture galleries, and a whole lot more. If you've come across a web page that ends in PHP, then the author has written some programming code to liven up the plain, old HTML (Hypertext Mark-up Langauge).

PHP is known as a server-side language. That's because the PHP doesn't get excuted on your computer, but on the computer you requested the page from. The result are then handed over to you, and displayed in your browser.

PHP was chosen as the programming because of its interactive nature or role it plays with databases like MySQL, since my project stores and retrieves data.

i. It is a programming language

ii. It is meant for generating dynamic web pages

iii. It can communicate with database and it can generate secure web pages

iv. It is highly reliable and maintainable

v. It has much online support community

vi. PHP language is machine independent

PHP has full access to the information that the server has, and very little access to information that the client has. In fact, it only has information that the client tells the server and that the server passes on. Because it is on the server however, PHP cannot be modified by the client.

MySQL SERVER: This is a robust database management system that can handle large sums of data. This server is used for business management like query, update and maintain a MySQL database of the system.

MySQL Server was chosen as the main database tool because of the following reasons:

i. It is highly secure

ii. It is neither free nor open source

iii. It is fast, stable and relative easy to deploy

iv. It has a strong relationship with PHP language

4.3 SYSTEM REQUIREMENTS

The system requirement for running an Online Database for Birth and Death Registration involves both the hardware and software parameter.

4.3.1 HARDWARE REQUIREMENTS

The table below shows the minimum hardware requirement specification for implementing the system:

TABLE 4.1: MINIMUM HARDWARE REQUIREMENT

Hardware	**Minimum Hardware Requirement**
Processor	Pentium III, 2.5Ghz(Processor Speed)
Memory	2GB(Recommended)
Hard Disk Space	250GB
Display	1024x768 High color recommended
Uninterruptible Power Supply (UPS)	650 VA, 100 – 240VAC, APC OR MERCURY
Printer	HP Laser Jet printer 2015 or HP Desk Jet printer

4.3.2 SOFTWARE REQUIREMENTS

The table below shows the minimum software requirement specification for implementing the system:

TABLE 4.2: MINIMUM SOFTWARE REQUIREMENT

Software	**Minimum Software Requirement**
Operating System(Server)	Microsoft Windows 2003 Server
Operating System (Client)	Microsoft Windows XP and Windows 7 or higher
Database (RDBMS)	MySQL database

4.4 HOW TO RUN AND OPERATE THE SOFTWARE

Before this online database for birth and death registration system can be implemented for its intended use, the entire system will have to be uploaded to a remote server on the internet which will act as a host server.

First the account on the remote server must be created with the domain name that will be used to access the online database for birth and death registration homepage. Then the files are then uploaded to the server via HTTP (Hyper Text Transfer Protocol) file upload. When the system has been uploaded to the remote server, the document can now be accessed using the domain name assigned to it in the server. A user intending to make use of this model has to type in the domain name into his/her web browser's address bar.

If a user wishes to use this system, he/she must have an account with this online database for birth and death registration site. Any of the user has a particular way of acquiring account. Once a clinic registers with the system, a username and a password is allocated to it. Only then a person can register either for birth or death.

When a user account is created, it is stored in the database and with it a user can then access the database after login to fill the birth or death registration form. When the user provides the correct login details (username and password), he/she is authenticated by the database which has that account and after then, the user is redirected to his/her own session. This is the same for all the users of this system.

4.5 SYSTEM TESTING

Prior to the actual implementation of the system, it had to be tested comprehensively and every possible error discovered. Since the system cannot be tested exhaustively, the black box testing method was used for system testing. The black box testing usually demonstrates that software

functions are operational; that the input is properly accepted and the output is correctly produced; and that integrity of external information (database) is maintained.

It is pertinent to note that though all the program modules have been debugged, this does not mean that they are completely error free as logical errors might develop at any time later during the usage of the system. System testing can be divided into;

4.5.1 UNIT TESTING

Unit testing was carried out on individual modules of the system to ensure that they are fully functional units. I did this by examining each unit, for example the login page. It was checked to ensure that it functions as required and that it adds data and other details and also ensured that this data is sent to the database. The success of each individual unit gave us the go ahead to carryout integration testing. All identified errors were dealt with.

4.5.2 INTEGRATION TESTING

I carried out integration testing after different modules had been put together to make a complete system. Integration was aimed at ensuring that modules are compatible and they can be integrated to form a complete working system. For example we tested that when a user is logged in; he/she is linked to the appropriate module, and also could access the database.

4.5.3 SYSTEM VALIDATION

As one of the specific objectives of this study, validation of the system was very important. Validation of the system was done by comparing it to the question asked by the users National Population Commission (NPC), Benin City. Most of their answers matched with what the system can do. PHP was use to validate user's input and other respective inputs.

4.6 SYSTEM MAINTENANCE

The process of modifying an information system to meet changing needs is known as system maintenance. System maintenance is a primary task or obligation any computerized organization must take up in order to ensure efficiency and continuity of the developed system. It is a routine activity, which is to say that the maintenance of the system is very essential to the smooth running of the system.

The following practices and measure must be taken to ensure that the new system does not breakdown and achieve its proposed aims and objectives:

i. **Password Management:** Each user (clinic) is required to enter an individual username and password when accessing the software; this keeps the data in the database secured. For maximum security, each user must protect their password.

ii. **Regular Database Backup:** This involves the creating duplicates of data which acts as an insurance copy should in case the active copy is damaged or destroyed. The backup is usually stored in an external storage device. Recovery involves the use of specialized utility programs to rebuild or replace damaged files. The best way to recover a file or program is to restore it from a backup copy.

iii. **Virus Protection:** This requires the use of a program that protects a system from malicious software called a virus. A virus is a program that infects a computer and could damage a system depending on its nature. Because new viruses must be analyzed as they appear, the antivirus must be updated regularly to be effective.

iv. **Training End Users:** In order for the new system to work properly, proper training has to be provided for the hospital staff and data entry clerk on the use of the new system. Training

this category of users is necessary so as to acquaint them with the working of the system, before it is fully developed. This would minimize errors from hospital staff or National Population Commission staff.

v. **Proper use of the system:** These include starting (booting) and shutting down the system in the right manner to prevent the system from hanging or data corruption and file loss.

vi. Regular servicing of the computer hardware and peripherals when due to prevent unforeseen breakdown.

4.7 DOCUMENTATION

Documentation involves all the function performed by the system and how the system is to be used. Documentation describes how the program is used and it also clarifies any obscurities in the design. Documentation usually shows how to use the system, how to install and operate the system, system implementation and test procedure so that it may be maintained.

To initiate the program execution, we launch the browser (Google Chrome or Mozilla Firefox) then browse the file index. At this point, the content displays the user login interface. On clicking the link, the browser takes him/her to corresponding web page. With the way the site is organized, one browses through all the available links without any hitch. To close the program, first the user logs out to close all connections to the MySQL database and then the window is closed just like any windows application.

CHAPTER FIVE

SUMMARY, RECOMMENDATION AND CONCLUSION

5.1 SUMMARY

The project "an online National Database for Birth and Death Registration; a case study of National Population Commission, Benin City" has been designed and implemented. The new system was designed using PHP programming language and MySQL as the database. This language was chosen because of its easy syntax and features for developing web based applications.

The existing system was studied and this new system has been designed to take care of the inefficiencies of the old system. The database that is proffered with your result application is important. It is important that it works well (reliably, efficiently and flexibly), can respond to the up-coming changes in the computer and information handling world and is commercially viable.

5.2 RECOMMENDATION

Since the aim of this project is to produce an enhanced record keeping, which has been tested and approved, I therefore, recommend this package (software) to the National Population Commission (NPC), Benin City, Edo State and all other states that needs efficient, time saving, security of data.

In other to successfully implement this new system, the following recommendations are made in the light of the above findings:

i. Training of the members of the staff in the vital registration unit to get accustomed to the system.
ii. Management of the vital registration unit should educate the staff on how this system will operate and how it will supplement / complement their efforts.

iii. For efficiency, users of the system need to be thoroughly educated about the use of their username and password, not only that but also should be informed that such information should be kept confidential.

iv. Also access to the database should be physically and logically guarded against unauthorized person.

v. Backup media like CD/DVD's drives can be used for backup and storage of data.

5.3 CONCLUSION

The benefits of using the online database for birth and death registration system cannot be over emphasized. This is because the system will increase the speed of processing birth and death certificates, increase accuracy in registration, eliminate cases of misplacing files of individuals and reduce the piling up of papers in the offices.

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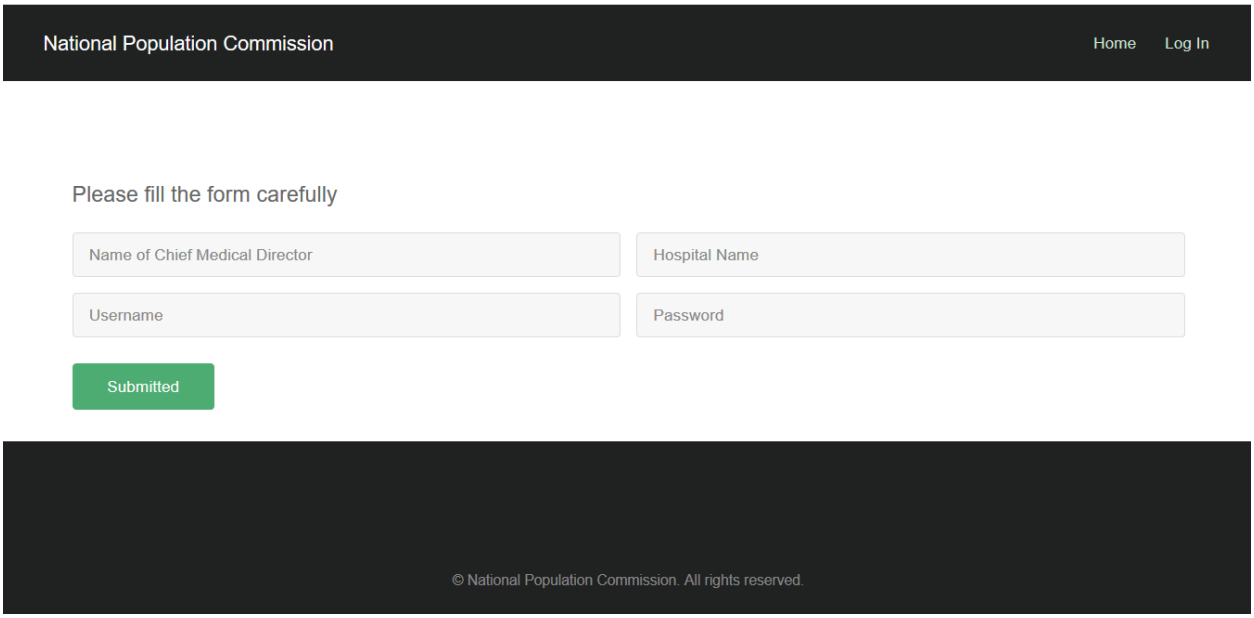
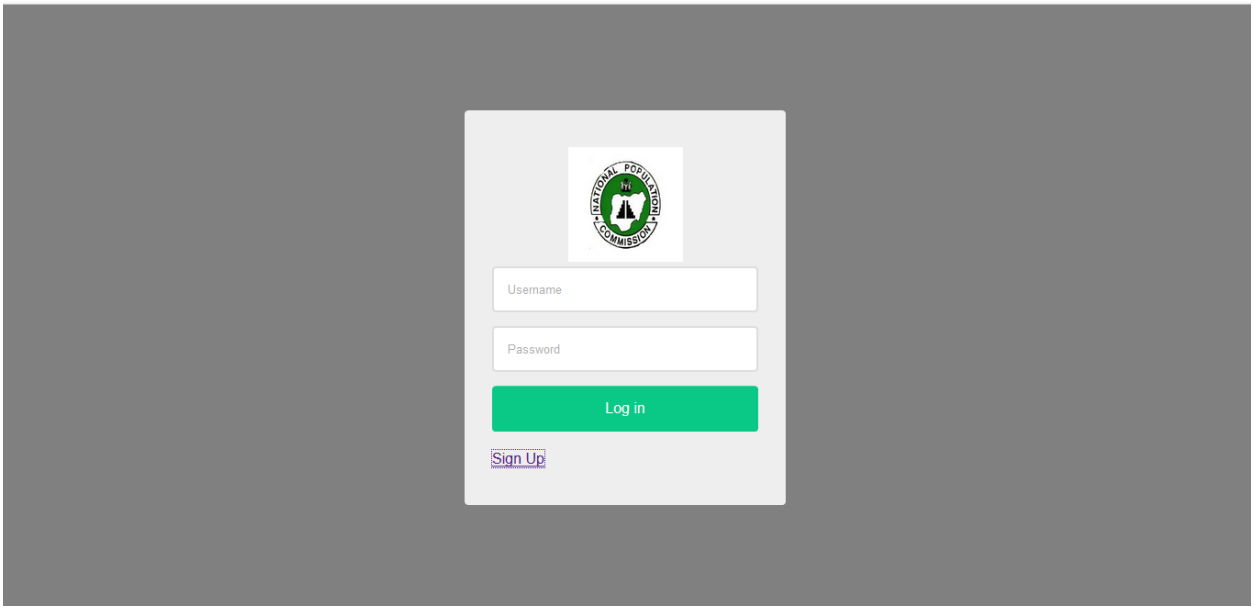
APPENDICES

APPENDIX A – INPUT

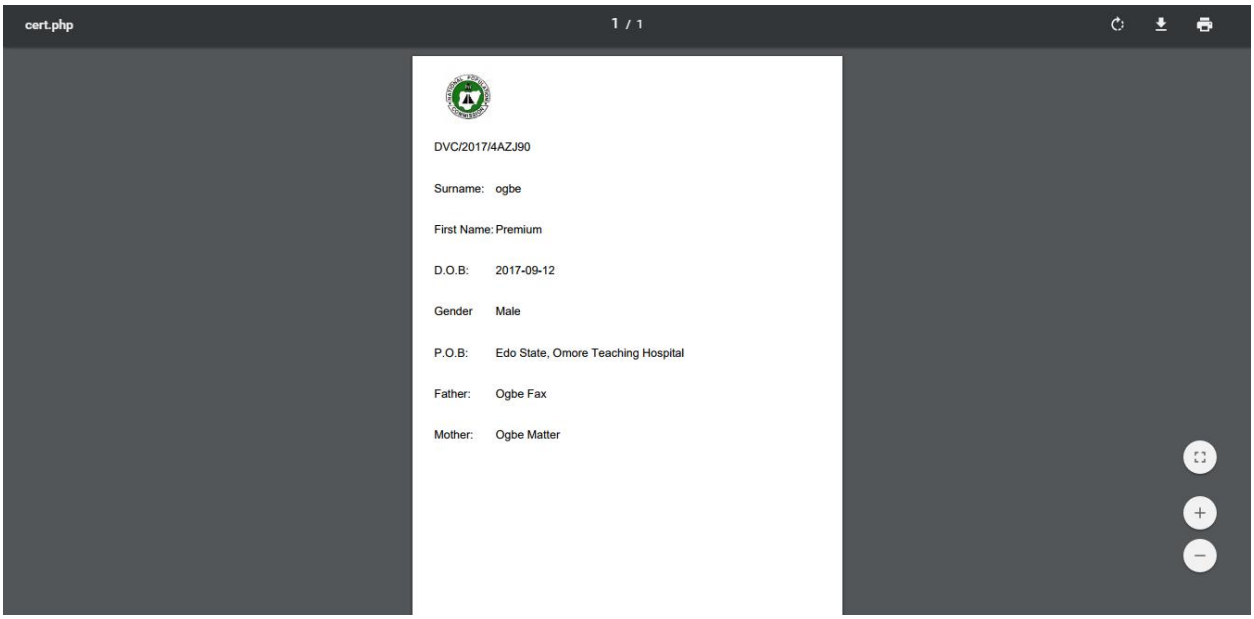


An input screen for clinic registration



A login screen

APPENDIX B – OUTPUT



Birth certificate

APPENDIX C – SOURCE CODE

HOME PAGE

```
<!DOCTYPE html>
<!--
	Interphase by TEMPLATED
	templated.co @templatedco
	Released for free under the Creative Commons Attribution 3.0 license (templated.co/license)
-->
<html lang="en">
   <head>
	<meta charset="UTF-8">
	<title>National Population Commission</title>
	<meta http-equiv="content-type" content="text/html; charset=utf-8" />
	<meta name="description" content="" />
	<meta name="keywords" content="" />
	<!--[if lte IE 8]><script src="css/ie/html5shiv.js"></script><![endif]-->
	<script src="js/jquery.min.js"></script>
	<script src="js/skel.min.js"></script>
	<script src="js/skel-layers.min.js"></script>
	<script src="js/init.js"></script>
	<noscript>
	<link rel="stylesheet" href="css/skel.css" />
	<link rel="stylesheet" href="css/style.css" />
```

```
    <link rel="stylesheet" href="css/style-xlarge.css" />
    </noscript>
    <!--[if lte IE 8]><link rel="stylesheet" href="css/ie/v8.css" /><![endif]-->
  </head>
  <body class="landing">
    <!-- Header -->
    <header id="header">
      <h1><a href="index.php">National Population Commission</a></h1>
      <nav id="nav">
        <ul>
          <li><a href="index.php">Home</a></li>
          <li><a href="portal.php">Administration</a></li>
        </ul>
      </nav>
    </header>
    <!-- Banner -->
    <section id="banner">
      <h2>Online Registry</h2>
      <p>Welcome to The National Population Commission's web based birth and death registration system.<br>
        This system was implemented with a view to fulfilling the mandate <br>
        given to the commission as enshrined in The Registration of Births and Deaths Act of 1969<br>
```

```
and also in partial fulfilment for my Bachelor of Science degree in Computer Science</p>
        <ul class="actions">
            <li>
                <a href="dvc_checker.php" class="button big">New Birth Registration</a>
            </li>
            <li>
                <a href="cert_print.php" class="button big">Get Certificate</a>
            </li>
            <li>
                <a href="dvc_auth_death.php" class="button big">Death Registration and Certificate Print</a>
            </li>
        </ul>
    </section>
    <!-- One -->
    <section id="one" class="wrapper style1 align-center">
        <div class="container">
            <header>
                <h2>Statistics on the Birth and Death Rate of citizens in Nigeria</h2>
            </header>
            <?php
            require 'authentication/connection.php';
```

```
require 'authentication/conn_two.php';

$sql = "SELECT* FROM $tbl_name";

$sqls = "SELECT* FROM $tbl_names";



$run = mysql_query($sql);

$runs = mysql_query($sqls);


$count = mysql_num_rows($run);

$counts = mysql_num_rows($runs);


$count2 = $count + 1700000;


$total_population = 170000000;

$thousand = 1000;


$divides = $counts /$total_population ;


$death_rate = $divides * $thousand;



$divide = $count2 / $total_population;

$birth_rate = $divide * $thousand;
```

```
        ?>
        <div class="row 200%">
            <section class="4u 12u$(small)">
                <i class="icon big rounded fa-bar-chart"></i>
                <h2>Birth Rate</h2>
                <h2><?php echo "$birth_rate"; ?></h2>
            </section>
            <section class="4u 12u$(small)">
                <i class="icon big rounded fa-bar-chart"></i>
                <h2>Death Rate</h2>
                <h2><?php echo "$death_rate"; ?></h2>
            </section>
            <section class="4u 12u$(small)">
                <i class="icon big rounded fa-bar-chart"></i>
                <h2>Total Population</h2>
                <h2><?php echo "$total_population"; ?></h2>
            </section>
        </div>
    </div>
</section>
<!-- Footer -->
<footer id="footer">
    <div class="container">
```

```
            <ul class="copyright">
                <li>&copy; National Population Commission. All rights reserved.</li>
            </ul>
        </div>
    </footer>
</body>
</html>
```

NPC PORTAL

```
<!DOCTYPE html>
<html >
  <head>
    <meta charset="UTF-8">
    <title>NPC- Administrator Login Portal</title>

    <link rel='stylesheet prefetch' href='http://maxcdn.bootstrapcdn.com/font-awesome/4.2.0/css/font-awesome.min.css'>

    <link rel="stylesheet" href="folder/css/style.css">
  </head>

  <body>
    <div class="login-form">
      <form action="authentication/process.php" method="post">
        <center><img src="images/npc.jpeg" alt="" width="125" height="125"/></center>
        <div class="form-group">
          <input type="password" name="username" class="form-control" placeholder="Username" id="UserName" required>
          <i class="fa fa-user"></i>
        </div>
        <div class="form-group log-status">
```

```
                <input type="password" name="password" class="form-control"
placeholder="Password" id="Passwod" required>
                <i class="fa fa-lock"></i>
            </div>
            <button type="submit" class="log-btn" >Log in</button>
          </form>
       </div>
   </body>
</html>
```

DEATH REGISTRATION

```
<?php
session_start();
?>
<!DOCTYPE html>
<!--
	Interphase by TEMPLATED
	templated.co @templatedco
	Released for free under the Creative Commons Attribution 3.0 license (templated.co/license)
-->
<html lang="en">
  <head>
	<meta charset="UTF-8">
	<title>National Population Commission</title>
	<meta http-equiv="content-type" content="text/html; charset=utf-8" />
	<meta name="description" content="" />
	<meta name="keywords" content="" />
	<!--[if lte IE 8]><script src="css/ie/html5shiv.js"></script><![endif]-->
	<script src="js/jquery.min.js"></script>
	<script src="js/skel.min.js"></script>
	<script src="js/skel-layers.min.js"></script>
	<script src="js/init.js"></script>
	<noscript>
	<link rel="stylesheet" href="css/skel.css" />
	<link rel="stylesheet" href="css/style.css" />
	<link rel="stylesheet" href="css/style-xlarge.css" />
	</noscript>
	<!--[if lte IE 8]><link rel="stylesheet" href="css/ie/v8.css" /><![endif]-->
  </head>
  <body>
	<!-- Header -->
```

```
<header id="header">
    <h1><a href="index.php">National Population Commission</a></h1>
    <nav id="nav">
        <ul>
            <li><a href="index.php">Home</a></li>
        </ul>
    </nav>
</header>
<!-- Main -->
<section id="main" class="wrapper">
    <div class="container">

        <!-- Form -->
        <section>
            <h3>Please fill the form carefully</h3>
            <form method="post" action="authentication/store_information.php">
                <b>New Born Details</b>
                <div class="row uniform 50%">
                    <div class="6u 12u$(xsmall)">
                        <?php
                        $informant = $_SESSION['r_name'];
                        $code = $_SESSION['DDVC'];
                        ?>
                        <input type="text" name="d_surname" placeholder="Surname" required/>
                    </div>
                    <div class="6u 12u$(xsmall)">
                        <input type="text" name="d_firstname" placeholder="First Name" required/>
                    </div>
                    <div class="6u 12u$(xsmall)">
                        <input type="text" name="d_mname" placeholder="Middle Name"
required/>
```

```
                </div>
                <div class="6u 12u$(xsmall)">
                    <input type="text" name="DDVC" value="<?php echo "$code"; ?>"
readonly/>
                </div>
                <div class="6u 12u$(xsmall)">
                    Date of Birth
                    <input type="date" name="d_dob" required/>
                </div>
                <div class="6u 12u$(xsmall)">
                    Date of Death
                    <input type="date" name="d_dod" required/>
                </div>
                <div class="12u$">
                    <div class="select-wrapper">
                        <select name="d_gender" id="gender" required>
                            <option value="">- Gender -</option>
                            <option value="Male">Male</option>
                            <option value="Female">Female</option>
                        </select>
                    </div>
                </div>
            </div>
            <br>
            <b>Information Provided By</b>
            <div class="row uniform 50%">
                <div class="6u 12u$(xsmall)">
                    <input type="text" name="r_name" value="<?php echo "$informant"; ?>"
readonly/>
                </div>
                <div class="12u$">
```

```
                    <ul class="actions">
                        <li><input type="submit" value="Submit Form" class="special" /></li>
                        <li><input type="reset" value="Reset" /></li>
                    </ul>
                </div>
            </div>
        </form>
    </section>
</div>
</section>
<!-- Footer -->
<footer id="footer">
    <div class="container">
        <ul class="copyright">
            <li>&copy; National Population Commission. All rights reserved.</li>
        </ul>
    </div>
</footer>
</body>
</html>
```