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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.

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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.

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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

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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.

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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

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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.

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CHAPTER FIVE SUMMARY, RECOMMENDATION AND CONCLUSION 5.1 SUMMARY

The pr

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 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.

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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.

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kup 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.