

**BAYELSA STATE POLYTECHNIC ALEIBIRI, PMB168,EKEREMOR**

**SEMINAR ON COMPUER AND SOCIETY**

**TOPIC:**

**DESIGN AND IMPLEMENT OF A COMPUTERIZED TRANSCRIPT**

**GENERATING SYSTEM**

**PRESENTED**

**BY:**

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**ND/COMP.SCI/20/055**

## **INTRODUCTION**

### **Background to the Study**

There were three fundamentally distinct education systems in Nigeria in 1990. The indigenous system, Quranic Schools and formal European-style education institutions. In the rural areas where the majority lived, children learned the skills of farming and other work, as well as the duties of adulthood, from participation in the community, this process was of then supplemented by age based schools in which groups of young boys were instructed in community responsibilities by mature men. By the 1970s, education experts were asking how the system could be integrated into the more formal schooling of the young, but the question remained unresolved by 1990.

Western-style education came to Nigeria with the missionaries in the mid-Nineteenth century. Although the first mission school was founded in 1843 by Methodists, it was the Anglican Church missionary society that pushed forward in the early 1850s to found a chain of missions and schools. Followed quickly in the late 1850s by the Roman Catholics in 1887 in what is now Southern Nigeria, an education department was founded that began setting curriculum requirement and administered grants to the mission societies. By 1914, when North and South were United into one colony, there were fifty-nine government and ninety-one mission primary schools in the South; all eleven secondary schools, except for king's college in Lagos, was run by the missions.

The education system focused strongly on examinations. In 1916 Fredrick Lugard, first governor of the Unified Colony, set up a school inspectorate. Discipline, building and adequacy of teaching staff were to be inspected, but the most points given to a school's performance went to the numbers and ranking of its examinations results. This stress on examination was still used in 1990 to judge educational results and to obtain qualification for jobs in government and the private sector.

As more information is made available in a variety of formats and media and in a variety of locations, the need to manage information/data efficiently becomes more and more critical. Both staff and public users want access to stored information and want to access it more efficiently. It is the polytechnic policy to improve both the efficiency and effectiveness of result processing operations (student record/grades), and services through the implementation of a computerized transcript generating system.

### **Aims and Objectives of the Study**

The aim of this study is to identify the problems inherent in the existing system of transcript generating systems, and to proffer a remedy to the existing problem. The solutions are as follows:

- i. Record and reports of students will be easily retrieved with increased data security.
- ii. There will be reduction in the amount of resources, which in turn will lower the cost of processing of student's transcripts, since information will be stored in a database with reduced data Redundancy.
- iii. School personnel can attend to many students without being over worked.
- iv. There will be reduction in time used in retrieval of student's files.
- v. Reduction in bulkiness of files and record.
- vi. It will make available the storage room that was used for storage of files.

### **Significance of the Study**

The research hasn't identified the problem that was existing in the old system of operation, it is designed specifically to come up with a more resound and effective system that will not only counteract this problem but also provides a detailed future plan that will give room for more information technological improvement in the transcript sector.

## **Analysis of the Old System of f transcript information System.**

the process involves in processing of transcript is a very manual process, that involves movement of files from one location to another, and endless waiting for the authorization of the transcript, the crude process starts from a payment of prescribed fees by the applicant, in the Bursary, and the receipt attached to the application sent to the Registrar. A request for transcript shall be in writing and sent to the Registrar.

### **Problem Associated with Old System**

During my analysis of the existing system of transcript information system in the course of my Research, I observed some problems that were inherent in the existing system and there are listed below as follows:

1. Monotonous storage of record(lacking in variety)
2. Bulkiness and heaviness of files
3. Misplacement of student grade record due to negligence on the part of workers.
4. Slow and strenuous retrieval of records and report of students.
5. The system is not cost effective
6. Inaccurate diagnoses due to wrong record keeping

### **The Need for A New System**

Because of the problems inherent in the existing system in the transcript system, the need for computerization becomes imperatives. These are listed below as follows:

- Record and reports of students will be easily retrieved with increased data security.
- There will be reduction in the amount of resources, which in turn will lower the cost of medical service, since information will be stored in a database with reduced data Redundancy.
- School personnel can attend to students without being over worked.
- There will be reduction in time used in retrieval of student files.
- Reduction in bulkiness of files and record.
- It will make available the storage room that was used for storage of files.

## Input Design

### Overview of Input Design

This involves the steps of algorithm that was used to design the input of the new system i.e. inputting data into the system.

The diagram shows a rectangular box containing a form with the following fields and labels:

- First name, middle name, last name (with a single wide input box below)
- Age, gender, address, nationality (with four separate input boxes below)
- State, occupation, marital, email (with four separate input boxes below)
- Telephone (with one input box below)
- Registration No., Faculty, Department (with three separate input boxes below)
- Current Level, Semester, Grade Point, Class (with four separate input boxes below)

**Fig1.** *Input Interface*

*Source: Field Survey, 2022.*

## Output Design

### Overview of Output Design

This design brings out the feedback of the result of any input that is being made in the system. The design is shown in just one form:

The form is enclosed in a rectangular border and contains the following fields:

- First name, middle name, last name (with a single wide input box below)
- Age, gender, address, nationality (with four separate input boxes below)
- State, occupation, marital, email (with four separate input boxes below)
- Telephone (with one input box below)
- Registration No., Faculty, Department (with three separate input boxes below)
- Current Level, Semester, Grade Point, Class (with four separate input boxes below)

**Fig2. Output Interface**

*Source: Field Survey,2022.*

## **Database Design**

### **Overview of Database Design**

This part actually portrays the database file that was used in this program in order to house and store information in the program, for this program to work effectively, there are many databases that are used for used specifically for managing of the information and data of the program.

The databases that are in the program are stipulated below as follows:

- Department and faculty
- Profile Table
- Semester Record
- User Data

### **Implementation of The New System**

Implementation is the period when the new system is put into use. For the system Implementation to be effective, the following areas of activities were to be carried out effectively. They include:

- Conversion of old files
- Education and training of staff
- Change over procedure

### **Conversion of Files**

This process involves converting records of physical files to electronic files according to the laid down procedures. It requires plenty of time and carefulness because there are many files, where each files contains many records.

### **Education and Training of Staff**

It is vital that the staff of the user department have extensive knowledge of the new system functions. It is important for the effective use of the new system in the school.

### **System Requirement**

System requirement are those things, needed for the efficient working of the new system. These include:

- Software Requirement
- Hardware Requirement

## **Software Requirement**

Software refers to a set of program that is executable by the computer to perform a task. software requirement are those software that are required by the new system for its effective function. Windows 10 operating system is most preferable for the new system to function properly.

## **Hardware Requirement**

Hardware refers to the physical component of the computer. This houses the software, the combinations of hardware and software is vital for the effective running of the new system that was designed for transcript management. The hardware requirements that are needed for the effective running of the new system are stipulated below as follows:

- Monitor (VGA, SVGA or LCD)
- Keyboard
- Pentium IV
- Server
- LAN Network

## **System Installation**

To use the system, the following task should be performed, as listed below as follows:

- Plug the socket very well and all the connectors to the system.
- Boot your computer
- Run the program

## **Software Security**

Software Security is an idea implemented to protect software against malicious attack and other hacker risks. Below are some of the software Security.

- Password
- Fire wall
- Defender software

**Password:** Strong passwords are vital to good online security, make the password difficult to guess by using a combination of capital and lower case letters, number and symbols.

**Fire wall:** Is a network security system that monitors and controls incoming and outgoing network traffic based on predetermined security rules.

**Defender:** Is a software application that safeguards a system from malware.

### **Summary**

In the course of my Research, I found out that a computer aided information management makes it more convenient, efficient and produces an accurate information management generally in all schools. This is opposed to the manual method, which is stressful, time consuming, prone to mistakes due to human nature and inconvenient. This will not only facilitate information processing in the school, but will go a long way in improving the overall general service of the polytechnic, since information in department is the pillar post of the school.

### **Conclusion**

In conclusion, I have carried out a detailed and comprehensive research in the school as an institution, there by laying down the problems that this institution faces as regards to information management and disseminate which in essence is one of the paramount needs of the school, a system was design which encompasses and counteract many of this problems that was observed on the old system, hence the school is now been advice to make use of this valuable tool to improve to a great extent, the information requirements of this information which in essence will improve efficiency.

## **Definition of Terms**

**Software:** these are set of logically related instructions given to the computer to perform some specific tasks.

**Transcript:** it is a paper that outlines all the courses, gradpoints average, cumulative grade point average and final cumulative grade point average of a student.

**Statement of Result:** this contains the final cumulative grade point average (FCGPA) and the class of degree of a student. It is normally issued at the end of one's academic program.

**GradePoint(GP):** this is the corresponding points 0.00 to 5.00 of the grade letters F- A (Failed and Absent) respectively.

**Grade point average (GPA):** this is the point in which the academic performance of a student is measure at the end of every semester. It has the maximum value of 00and minimum 0.00. it can be calculated this:  $GPA = \frac{\sum \text{Quality points}}{\text{Total credit unit}}$

**Cumulative Grade point average (CGPA):-**This is the measure of the students overall academic performance at any given time in his academic program. It is normally calculated at the end of the session. It is calculated this:

$CGPA = \frac{GPA \text{ first semester} + GPA \text{ second semester}}{\text{total credit unit for first semester} + \text{total credit unit for second semester}}$

**Final cumulative grade point average (FCGPA):-**This is the measure of the students overall academic performance at the end of his/her academic program.