

**DESIGN AND IMPLEMENTATION OF AN ONLINE DEPARTMENTAL DUE
(FEES) FOR THE SCHOOL OF INFORMATION AND COMMUNICATION
TECHNOLOGY.**

BY

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**BEING A PROJECT WORK SUBMITTED TO THE DEPARTMENT OF COMPUTER
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IN COMPUTER SCIENCE.**

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CERTIFICATION

We, the undersigned, certify that this project work was carried out by **OGIDI BLESSING OGHAE** with Mat. No: **ICT/2252060194** of the Department of Computer Science.

We also certify that the work is adequate in scope and quality in partial Fulfillment of the requirements for the award of Higher National Diploma (HND) in Computer Science.

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DEDICATION

This project is dedicated to God Almighty, for HIS LOVE and PROTECTION in my life.

ACKNOWLEDGEMENT

It gives me great pleasure to express my gratitude to Almighty God for aiding me to accomplish the task he sets before me and to those who in special measures have aided me in this project.

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ABSTRACT

At the beginning of each session every student is required to pay a due or fee for the smooth running of the department. However making this payment is usually done by using cash payment which results into long queues which waste so much of student time in the process, then students are made to visits these venues at various times to collect their signed receipts. These challenges has led the researcher to develop an online dues payment system which will enable the student pay their due using any convenient paid method and the due can be verified online by an administrator. The software platform is design using PHP programming language and MySQL as a database server which is user friendly.

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

According to Investopedia; “A fee is a fixed price charged for a specific service. Fees are applied in a variety of ways such as costs, charges, commissions, and penalties.” Simply put, departmental fee is that fixed interval payment made by a student(s) to the department for he or she’s continued stay in the institution and for the smooth running of the department. This research looks into the challenges faced by the students in four departments in the School of Information and Communication Technology (ICT) in Auchi Polytechnic Auchi. The focus of this research therefore is to provide a reliable and transparent system devoid of

personal inclinations and interest, to eliminate the stress of queuing for long hours during departmental fee payment in the study polytechnic. (Amanze et. al., 2020)

The School of Information and Communication Technology was established in October, 2010. Interestingly, the department of Mass Communication and Office Technology and Management were carved out from the School of Business Studies while the department of Statistics and Computer Science were carved out from school of Applied Science. The School is headed by a Dean (currently Dr. Obomeghie) who also functions as the Administrative head. The Office of the Dean is complemented by a School Officer, Secretary and other non-academic staff who oversees the day to day affairs of the Registry. The school runs National Diploma (ND) and Higher National Diploma (HND) programme. (auchipoly.edu.ng, 2022)

Departments

Computer Science

Mass Communication

Office Information and Communication Technology (OTM)

Statistics

Library Science

1.2 STATEMENT OF THE PROBLEM

The process of department fees payment is characterized with many challenges which include:

- i. Long queues causing too much waiting time by the students.
- ii. Students miss their lectures while they are queuing to make their payments.
- iii. Process involves a lot of stress and manual record keeping for those who had paid.

1.3 AIM AND OBJECTIVES OF THE STUDY

The aim of this study is to develop an online departmental fee management system. The objectives are:

- i. To develop a new system using hypertext preprocessor (PHP), hypertext markup language (HTML) and Object Oriented Analysis and Design Methodology (OOADM).
- ii. The new system gives a quick access to data and modification of records if necessary.
- iii. To reduce the problems and stress of queuing up of students during payment due to manual process of payment.

- iv. To ensure safety of the documents, because the system would be passworded to enhance security

1.4 SIGNIFICANCE OF THE STUDY

Automated payment of student's departmental fees in the school of ICT would boost the school productivity and lessen the burden students go through to pay their departmental dues.

1.5 SCOPE OF THE STUDY

This research covers the review of related works pertaining to the research work and the development of a new system design and its implementation using PHP and MySQL server.

1.6 LIMITATIONS OF THE STUDY

This study is limited by the following factors:

- i. **Time:** Time allotted for project development and research is limited as this research runs in parallel to school lectures.
- ii. **Financial:** Research requires some funding to be more robust. Not enough money to carry out the research.

1.7 DEFINITION OF TERMS

Department: A specific area of study in a school. Eg. Department of Computer Science.

Polytechnic: An institution of higher education offering courses at degree level or below, especially in vocational subjects.

OOAD: It stands for Object-Oriented Analysis and Design which is a technical approach used in the analysis and design of an application or system.

Prototype: A first or preliminary version of a device or software from which other forms are developed.

Student: A person who is studying at a university or other place of higher education.

Electronic Payment: It entails the transfer of funds through electronic or digital mediums.

Bank Wallets: It securely stores virtual versions of debit and credit cards, so you do not need to enter your card details or carry a physical card at all to make payments.

CHAPTER TWO

LITERATURE REVIEW

2.1 OVERVIEW OF PAYMENT SYSTEM

The payment system is an operational network governed by laws, rules and standards that links bank accounts and provides the functionality of monetary exchange using bank deposits (Summers, 2012). The payment system is the infrastructure consisting of institutions, instruments, rules, procedures, standards and technical means established to effect the transfer of monetary value between parties discharging mutual obligations. Its technical efficiency determines the efficiency with which transaction money is used in the economy and risk associated with its use (Biago & Massimo, 2011).

What makes it a “system” is that it employs cash substitutes with the use of electronic money and other ICT related equipment in its operations. Traditional payment systems are negotiable instruments such as draft-cheques and documentary credits such as letter of credits. With the advent of computers and electronic communications a large number of alternative electronic payment systems have emerged. These include debit cards, credit cards, electronic funds transfers, direct credits, direct debits, internet banking and e-commerce payment systems. Some payments include credit mechanisms, but that is essentially a different aspect of payment. Payment systems are used in lieu of tendering cash in domestic and international transactions and consist of a major service provided by banks and other financial institutions.

Payment systems may be physical or electronic and each has its own procedures and protocols. Standardization has allowed some of these systems and networks to grow at global scale, but there are still many countries and product-specific systems. Examples of payment systems that have become globally available are credit card and automated teller machine networks.

Specific forms of payment systems are also used to settle financial transactions for products in the equity markets, bond markets, currency markets, futures markets, derivatives, option markets and to transfer fund between financial institutions both

domestically using clearing and Real Time Gross Settlement (RTGS) Systems and internationally using the SWIFT network.

Electronic Payment Systems (EPS) apart from their convenience and safety also have a significant number of economic benefits which include mobilizing savings and ensuring most of the cash available in the country are with banks. This will make funds available to borrowers both businesses and individuals. Furthermore, an electronic payment system has the ability to track individual spending; to facilitate the design of products by the banks. This information is also useful to the government when making decisions. EPS also have the ability to reduce cash handling and printing costs. According to Moody's Analytics (2020) real global GDP grew an extra 0.2% a year on average beyond what it would have without card usage. Simply put card usage increases a country's GDP by 0.2% annually.

Moving from a society where 90% of cash is held outside of the banks to a cashless society is a big change. It is therefore an enormous challenge for the government, financial institutions, individuals and other stakeholders responsible for making this system achieve its economic benefits. There are likely to be operational, financial, economic and marketing changes that need to be managed properly (Delali, 2020).

Since the overcoming of barter in the history of mankind, trade usually involve the exchange of goods and services and an equivalent abstract value such as money. Asaolu, Ayoola & Akinkoye (2021) noted that since money was invented as an abstract way of representing value, system for making payments have been in place. In the course of time, new and increasingly abstract representations of value were introduced. A corresponding progression of value transfer systems, starting from barter, through bank notes, payment orders, cheques and credit cards has finally culminated in electronic payment system. As the transition to electronic payment systems take place, the stock of currency hold outside the banking system which constitutes a potential source of unproductive economic resources because they are not available for credit expansion is integrated into it thereby expanding the deposit base of the money system.

Nigeria payment system has been predominantly cash-based for both positive and negative reasons positive because of its instant convertibility to other forms of value without intermediation of any financial institution and negative because of its anonymity and intractability in unethical electronic payment was introduced because government was inundated with allegations of corruption in the Federal Civil Service. The Federal Government through its treasury circular reference NO TRY/A8 & B8/2008 of 22nd October 2008 directed that payments from all funds from it be made electronically as from 1st January, 2009. The policy

has been condemned by all and sundry for lack of planning, inefficiencies and delay in the payment for goods and services (Asaolu, Ayoola & Akinkoye, 2021; Ogedebe & Babatunde, 2012).

2.2 TYPES OF E-PAYMENT

In Nigeria context, there are two types of e-payment namely;

i. End to End processing:

Here, all the processes from approvals to the receipt of value by the beneficiary are done electronically.

ii. Manual e-payment or use of Mandate:

It is the mixture of manual and electronic process where the available infrastructures cannot support the End to End processing.

However, there are many forms of e-payments these include cards, internet mobile payments, financial services kiosks, biometric payments, electronic payment networks (Osibote, 2020; Asaolu, Ayoola & Akinkoye, 2021).

2.3 ECONOMIC BENEFITS OF ELECTRONIC PAYMENT SYSTEM IN NIGERIA

Delali (2010) in Fiallos & Wu (2015) noted that the arrival of the internet has taken electronic payments and transactions to an exponential growth level. Consumers could purchase goods from the internet and send unencrypted credit card numbers across the network, which did not provide much security and

privacy. But a wide variety of new secure network payments schemes have been developed as consumers became more aware of their privacy and security.

Digital money has significant benefits for financial institutions, banks and merchants (Fiallos & Wu, 2015). Digital Money is an electronic payment technology, which can provide anonymous flexible electronic payment, like paper cash, but with added security requirements needed for internet transactions. In a related work by Lee, Choi & Rhee (2013), a secure electronic cash system can guarantee anonymity of legitimate users but also provides traceability about illegally issued cash or laundered money. If illegal activity did take place, it can cancel anonymity of the digital cash in order to protect the bank. Lee, Oh & Lee, (2014) added that since digital money can trace double spending, and double spending protects content by exposing the double spender's identity, digital cash is a fool proof way of guarding against illegal redistribution of intellectual property and materials. Digital money can also be used to deter illegal content copying and distribution by inserting tracing content factors into the digital cash payment scheme that prevents users from individual replication activity, (Lee, Oh & Lee, 2014). By using this function, legal, anonymous purchasers can spread contents to other paying anonymous users while abiding by copyright laws. Using digital money in industries like digital entertainment can increase the demand for products through easier and safer dissemination channels. Digital money can trace who is

illegally reproducing and distributing copyrighted intellectual material, therefore increasing security for authors and at the same time deferring lost revenue and sales for digital media entertainment companies (Lee, Oh & Lee, 2014).

Digital Media entertainment, as well as property providers and distributors, can also implement this technology and its safety features in order to ensure greater copyright compliance between consumers (Fiallos & Wu, 2015). By adopting such a method of payment and distribution, software and intellectual property piracy can be halted and eventually eliminated. Digital money can provide financial institutions with decentralized structures, faster transaction and decision making processes, and more cost effective ways of doing business.

Electronic payments as argued by (Taddesse & Kidan, 2015) have a significant number of economic benefits apart from their convenience and safety. These benefits when maximized can go a long way in contributing immensely to economic development of anation.

Automated electronic payments helps deepen bank deposits thereby increasing funds available for commercial loans- a driver of all of overall economic activity. According to Taddesse & Kidan (2015), efficient, safe and convenient electronic payments carry with significant range of macro- economic benefits. “The impact of introducing electronic payments is akin to using the gears on a bicycle. Add an efficient electronic payments system to an economy, and you kick

it into a highergear. Add better controlled consumer and business credit, and you notch up economic velocity even further” (Taddesse & Kidan 2015).

While the high level of cash transactions creates an opportunity for the electronic payment industry, it also imposes a cost on local economics. Cash has to be minted, securely transported, counted and reconciled, kept secure and maintained for re-use time and time again. The per-payment cost is high, and will always remain high whereas the costs of electronic system are fixed. Once the infrastructure has been built, the costs per-transactions is very low.

When cardholders use their cards at the point of sale they are helping to keep money in the banking system. EPS can help displace shadow economies, bring hidden transactions into the banking system and increase transparency, confidence and participation in the financial system. Taddesse & Kidan (2015) observed that there is a correlation between increase in point of sales volumes and rise in demand deposits. “Automated electronic payments act as a gateway into the banking sector and as a powerful engine for growth. Such payments draw cash out of circulation and into the bank accounts, providing low cost funds that can be used to support bank lending for investment- a driver of overall economic activity. The process creates greater transparency and accountability, leading to greater efficiency and better economic performance.

Electronic payment is very convenient for the consumer. In most cases, you only need to enter your account information- such as your credit card number and shipping address- once. The information is then stored in a database on the retailer's web server. When you come back to the website, you just log in with your username and password. "Completing a transaction is as simple as clicking your mouse: All you have to do is confirm your purchase and you are done." Worku (2020) emphasized the fact that electronic payment lowers costs for businesses. The more payments that is processed electronically, the less money is spent on paper and postage. Offering electronic payment can also help businesses improve customer retention. "A customer is more likely to return to the e-commerce site where his or her information has already been entered and stored".

According to Taddesse & Kidan (2015), electronic payments can thus lower transaction costs stimulate higher consumption and GDP, increase government efficiency boost financial intermediation and improve financial transparency". They further added that "Governments play a critically important role in creating an environment in which these benefits can be achieved in a way consistent with their own economic development plans".

The introduction and use of electronic payment instruments holds the promise of broad benefit to both business and consumers in the form of reduced,

greater convenience and more secure reliable means of payment and settlement for a potentially vast range of goods and services offered worldwide over the internet or other electronic networks. One such benefit is that electronic payments enable bank customers to handle their daily financial transactions without having to visit their local bank branch. Electronic payments products could save merchants time and expense in handling cash (Appiah& Agyemang, 2017).

The resource cost of a nation's payment system can account for 13% of its GDP. Since most electronic payments cost only about one-third to one-half as much as paper-based non-cash payment, it is obvious that the social cost of a payment system could be considerably reduced if it is automated (Appiah & Agyemang, 2017).

Automating and streamlining electronic payments made from self-serve channels such as ATMs, branch office terminals and point-of-sale (POS) systems can reduce paper-based errors and costs. A research work carried by Visa Canada Association in collaboration with Global Insight revealed that electronic payments provide transactional efficiency to consumers, merchants, banks and the economy. Electronic payments have contributed \$107billion to the Canadian economy since 1983 and represents nearly, 25% of the \$C437 billion cumulative growth in the Canadian economy over the same period (Delali, 2020). Over the same two decades, \$C60 billion of the increase in personal consumption expenditures was

directly attributable to electronic payments, with credit card holding a commanding share of this growth (\$C49.4 billion) over debt cards (\$C10.4 billion) (Delali, 2020).

Nigeria is lagging way behind most of the world in the general quest to boost micro economic activity by reducing the role played by physical cash in daily transactions and by encouraging the creation of cashless society, this can be averted (Dankwambo, 2019).

However, experts in the financial sector have stressed that unless something radically innovative, functional and savvy is introduced, which accounts for attitudes as well as the huge un-banked population, the country's dream of building a functionally cashless society in the shortest possible time could be elusive (Dankwambo, 2019).

2.4 CHALLENGES OF ELECTRONIC PAYMENTS

Electronic payments despite its numerous benefits come with its own challenges even in the developed world. The problems militating against e-payment as listed by Ogedebe & Babatunde (2012) in Sumanjeet (2019) generally revolve around.

- Integrity: to ascertain that transmitted financial information is unchanged in transit.

- Non-reputation: to ascertain that all parties have non-deniable proof of receipt.
- Confidentiality: to ascertain that transactions are protected from possible eavesdroppers.
- Reliability: to ascertain that there is reduced possibility of failure.
- Authorization: to ascertain that individuals are recognized and granted the desired rights and privileges.

The system which is still in its early stage requires a lot of information and education of the public to enable them appreciate the laudable programme put together by government to protect their interests. If they are properly and adequately educated, the chances of total acceptance of the programme can be assured. The banks also need to be carried along in the implementation process as they play a crucial role. Furthermore, many see e-payment as an imposition.

Lack of Uniform Platform of Banks and MDAs

There is no compelling law mandating the banks to use common software platform. Every bank is left to use whatever platform that they felt will perform the e-payment services on behalf of the clients. There is the problem of switches in effecting transfer from one bank to another. Interconnectivity has been a problem. No uniformity of account numbers since different banks different numbering systems. Happily enough, the Federal Government according to Dankwambo

(2019) through the Office of Accountant General of the Federation will be rolling out a common platform configuring soon.

Lack of Adequate Infrastructure

The e-payment system is being partially implemented. If it is to be fully implemented, a number of IT infrastructures will have to be put in place. These include but not limited to laptop, desktop, scanners, good internet connectivity, training and global software. The provision of basic Information Technology infrastructures according to Ovia (2012) is a major challenge.

Platform Security

Atanbasi (2015) pointed out that the major challenges of e-payment in the country are security. Security in terms of platform, hackers and virus attacks. This will ensure that output from the system are reliable and accurate. The MDAs still carry their schedule(s) to the banks with compact disks (CDs), flash drives or e-mail attachments.

Lack of Seriousness by Banks

While a number of banks have deployed the necessary infrastructure in place to ensure effective implementation, it is sad to note that some banks are still not fully ready for this new payment regime.

Resistance to changes in technology among customers and staff due to:

- (i) Lack of awareness on the benefits of new technologies

- (ii) Fear of risk
- (iii) Lack of trained personnel in key organizations
- (iv) Tendency to be content with the existing structures, and
- (v) People are resistant to new payment mechanisms.
- (vi) Security. Where disclosed of private information, counterfeiting and illegal alteration of payment data may be rampant (Daukwambo, 2019).

High rates of illiteracy:

Low literacy rate is a serious impediment for adoption of e-payments as it hinders the accessibility of banking services. For citizens to fully enjoy the benefits of e-payments, they should not only know how to read and write but also possess basic ICT literacy.

High cost of internet:

The cost of internet access relative to per capital income is a critical factor. Compared to developed countries, there are higher costs of entry into the e-payments and e-commerce market. These include high start-up investments costs, high costs of computers and telecommunication and licensing requirements.

Frequent power interruption:

Lack of reliable power supply is a key challenge for smoothly running e-payments and e-banking.

According to Microfinance Nigeria (2010), urban dwellers are not receptive to the efforts of ICT investors to migrate payment system through substantial investments in crucial infrastructure like Point of Sale (POS) terminal in thousands of supermarkets, fuel stations, hotels, recreational centers and many others.

2.5 EVALUATION OF E-PAYMENT IN NIGERIA

In achieving the mission of introducing e-payment system in Nigeria it is crystal clear that only a few of the objectives have been achieved. These include among others the following:

- Elimination of many risks involved in carrying large sums of money such as armed robber, fraud, theft and others.
- At least government organizations no longer pay cash to “contractors” and civil servants.
- Elimination of the use of cash to facilitate speedy payments for all transactions.

But to a very large extent, the following objectives have not been met.

- Fast tracking the implementation of government policies through the elimination of delays in government payment system. There are instances of delay in payment to contractors who are not ready to play bale. There has been a complaint from

some contractors handling projects in the rural areas over difficulties associated with the e-payment model.

- Minimize interaction of government, officials and contractors to eliminate opportunity for corruptive tendencies. It will be difficult to eliminate this as interaction at which every level will continue formally or informally if Nigerians are to be honest with themselves. In which ever case, there is need to ask the question. Who are the contractors? Is the due process of government working or not? Who are the officials subverting this and other laudable programme of government? Can corruption really be stamped out of the system?

- Achievement of economy and efficiency in government financial transactions. For as long as corruption remains within the polity, there can be no efficiency in the system. The EFCC and the judiciary will have to find a common ground to tackle this cankerworm that has defiled all solution. China's example could be the best solution but for tribal and religions sentiment among some Nigerians.

- Enhancement of real time reporting and improve quality of financial reporting system in the public sector it has been observed that since the implementation of the policy, there have been late returns or no response in respect of unapplied funds. The existing system cannot guarantee real-time reporting of

finances. As result there can be no good financial reporting (Ogedebe & Babatunde, 2012).

2.6 AUTOMATED STUDENTS SCHOOL FEES PAYMENT: AN OVERVIEW

According to Tamuno (2003), change is inevitable especially in a rapidly evolving world but as the growth, pace, and structure of an economy change so do the payment systems required to facilitate transactions in that economy. This is in line with Nigeria push to keep its payment system far with international practices and standards by leveraging on technology.

To meet up with developed nations, automated payment becomes the answer. According to Nwankpa (2009), automated or electronic payment is defined as a subset of e-commerce or computerized transaction to include machine payment for buying and selling of goods and services offered through the internet.

Generally, people think of automated payment as referring to online transactions on the internet, these are forms of e-payments. As technology is developing the range of devices and processes for electronic transactions continues to increase while the percentage of cash and cheque continues to decrease.

Andrian (2008) posits that in the US, for example, the cheque has declined from 85% of non-cash payment in 1979 to 59% in 2002, and automated or e-payments have grown to 41%. The internet has the potentials to become the most active trade intermediary within a decade. Also, internet shopping revolutionizes by allowing customers to sit in their homes and buy an enormous variety of products and services from all over the world.

Commenting on automated payment system; Adeyinka (2008) postulates that automated payment system intermediation in Nigeria has continued to make steady progress towards ensuring full banking transaction automation with the value of automated payment system rising to N 360 million in 2008. He noted that the increase in the adoption of the electronic model is not only driven by the need for electronic services but also by the core and speedy update of new technologies by Nigeria.

Experts say that with the mass market in Nigeria constituting about 70 percent of the nation's gross domestic product (GDP) the impact of deploying cards and other electronic modes of banking operation in the country has led to increased reach, as customers can now have access to their bank account even at the location where banks are not located through electronic banking models.

According to Eboh (2009), the introduction of various electronic models has led to low operational costs, increased operation efficiency, removing the cost of cash transactions, multi-card, and multiplication availability reduced congestions in banking halls amongst others. Speaking to business day in an interview Mitchel Elegbe, managing director, Interswitch, a payment solution platform provider with Nigerian banks on its platform confirmed that, the network has witnessed increased transactions with the high level of adoption of technology by Nigerians.

In payment of school fees, an automated system has also been one of the immense benefits in that through the school's bank account, money (student fees paid) are automatically transferred irrespective of the school bank. Here, there is no physical involvement of cash which makes it safer and dependable.

According to Oduyemi (2009), automated payment of student's school fees show cases the joy over the trends in that the student has been relieved of the stress of having to visit bursary and queue to pay their school fees. Now, the trends are just the transport to the bank location to pay their fees and taking the teller to the bursary to exchange for a receipt which will properly indicate evidence that the fee has been paid by the student.

2.7 BRIEF HISTORICAL BACKGROUND OF POLYTECHNIC EDUCATION IN NIGERIA

A review of the related literature reveals that there was no formal technical education in Nigeria during the pre-colonial period (Afolayan, 2011). Nevertheless, a few privileged Nigerians who desired to acquire technical and vocational skills and knowledge during that period had to go abroad. The formal technical education started when the British colonial masters established technical schools to address the problem of shortage of manpower with technical and vocational skills and knowledge in the country. In the views of Afolayan (2011), whether or not the schools were established for the benefits of the colonial masters, as some Nigerians have strongly argued, is a matter for debate. Accordingly, Yaba, Kaduna, Ibadan, Auchi and Enugu Technical Colleges, among others were established between 1901 and 1938 (Awodi, 2019).

The Federal Government in realization of the role of polytechnic education in nation building upgraded the former technical colleges to the status of polytechnics. Thus, Yaba Technical Institute, Lagos, was renamed Yaba College of Technology in 1963; Technical College, Kaduna, became Kaduna Polytechnic in 1968; Technical College, Ibadan, became the Polytechnic Ibadan in 1970; Mid-Western College, Auchi, transformed to Auchi

Polytechnic in 1972 and Technical College, Enugu, became Institute of Management and Technology (IMT) in 1973 (Awodi, 2019).

Subsequently, the Federal Government enacted the Federal Polytechnics Act on the 25th of July, 1979, through the National Assembly and many federal polytechnics were established (Ebele, 2014; Federal Polytechnics Act, 1979). According to the Act, the functions of the Federal Polytechnic shall be:

- a) to provide full-or part-time courses of instruction/training;
 - i. in technology, applied science, commerce and management, and
 - ii. in such other fields of applied learning relevant to the need of the development of Nigeria in areas of industrial and agricultural production and distribution and for research in the development and adaptation of techniques as the Council may from time to time determine;
- b) to arrange conferences, seminars and study groups relating to the fields of learning specified in paragraph (a) above; and
- c) to perform such other functions as in the opinion of the Council may serve to promote the objectives of the polytechnic.

The need for additional polytechnics grew and more polytechnics were established. Currently, there are 28 federal polytechnics, 43 state polytechnics and 52 private polytechnics, thereby bringing the total number of polytechnics in Nigeria to 123 (Olusegun, 2019)

Education is a process of developing knowledge ability in leaders in such a way that they use this knowledge to improve themselves and their societies. It is also the act of methodic development on training of the mind, capabilities or character by means of instruction or study. It is a way of socializing people into the community, for sustaining customs and traditions in addition to the modification or changing of same in line with extant ideologies, ideological expansion or reformation.(Oluwatusin & Daisi,2017).The National Policy on Education (2013) described education as an instrument for national development and social change which also maximizes the creative potentials and skills of the individual for self-fulfillment and general development of the society. Education is expected to be qualitative, comprehensive, functional and relevant to the needs of the society at large. Thus, education must be seen as surpassing schooling and certification.

According to Doern (2008), a polytechnic is a higher education institution that is established to focus on education concerning applied technology. Polytechnics Canada defines polytechnic education in this twenty-first century as a “career-focused applied education that spans trades through

advanced degrees, delivered in an environment where students receive hands-on training that enables them to apply more their skills” (Doern, 2008). Basically, polytechnics are regarded as technological institutions that produce technological manpower for technological advancement of a country. Polytechnic education emphasizes personal development in the areas of teamwork, leadership, communication, practical problem-solving, critical thinking and analytical skills.

This type of education is vital to the technological growth and development of any country (Ebele, 2014). There is no nation that can grow and develop technologically without technical education. It is important to note that polytechnic education is designed to blend theory and practice in order to solve real-life problems for the benefit of the society (Mercer and Ponticell, 2012). Polytechnics are established to produce high quality technical manpower required for technological development and self-reliance of the country (Ebele, 2014).

Moreover, polytechnic education is key to industrial growth. It has industrial orientation. Most practicals conducted in the polytechnics have industrial applications. Polytechnic education provides prospective employees with hands-on practical experience, skills and knowledge that meet industrial needs (Amedorme et al., 2014). In other words, polytechnics students are trained to fit into the industry.

Polytechnic graduates are marketable. This is because they are equipped with hands-on skills that are needed to solve practical or real-life problems. This makes them highly marketable in the labour market. Additionally, polytechnic graduates are prepared to become self-employed (Mercer & Ponticell, 2012). They are equipped with the skills necessary to create jobs for themselves and for other people, thus contributing to the economic growth and development of their country. (Otache, 2019)

Development is a multidimensional phenomenon directed towards man's physical, political, economic and social environment. Development therefore is the cardinal point of the vision of any government. As defined by Christopher (2008), developments seen as a process of capital accumulation and allocation of resources over a long period to raise aggregate productivity, in the social, political and economic spheres. According to him, it is measured in terms of visible increase in the living standard of the people, the total involvement of the working population in the process, the increase design towards self-confidence. Economic development is the expansion of the production capacity and improving the overall welfare of the citizens. According to Akambi (2001) as cited in Christopher (2008), economic growth is characterized by increase in employment opportunities and wave of improvement in social services and general improvement in the general level of applied technology, and of human skills for increasing the

production of goods and services. These definitions relate economic development to high productivity and services.

Therefore, polytechnic education is indispensable if the production of the workers should improve. The objectives of polytechnic education in the National Policy on Education (NPE, 2004) recognize this fact. One of the objectives for example, states that polytechnic education provides training and impart the necessary skills for the production of technicians, technologist and other skilled personnel who shall be enterprising and self-reliant. The implication of this fact is that if polytechnic education is made functional, it would contribute immensely to the economic development of the nation. The national development issues can be addressed by polytechnic education if polytechnic education programmes are properly funded and it objectives strictly implemented. (Elegbe, 2014)

CHAPTER THREE

SYSTEM ANALYSIS AND DESIGN

3.1 ANALYSIS OF EXISTING SYSTEM

Analysis phase is the step that is concern with first studying the existing system, then using the information gathered to define the requirements for a new system. Analysis follows the problem recognition and feasibility phases and must be completed before the design phase can begin.

Here the researcher made a fact finding and was able to identify procedures and operations mapped out for the existing system. In the case of the current study, payments are made for departmental dues at a physical location and receipts are issued sometime later due to fact that they have to be signed. Names of those who had paid are registered in a book register. The process is repeated for other dues to be paid, in the case of computer science three dues are to be paid in different locations. All of this requires the students who receive the payment to manually opening and checking book registers to ascertain payment before issuing receipt and majority of the time there are long queues which takes a big deal of time and energy to complete the process.

3.2 DISADVANTAGES OF THE EXISTING SYSTEM

Due to the fact that payments are made manually, it gives room for the following identified problems:

- Existing system is totally on a manual system which requires keeping book records which is difficult in searching and updating the records.
- The issue of security as cash could be stolen.
- Too much time required by the process due to waiting and queues.
- The process requires too much paperwork which is often difficult in filing.
- The signing of the receipt is tedious as it has to be done on each receipt produced.

3.3 ANALYSIS OF THE PROPOSED MODEL

The proposed model requires the operations to be carried out online. The students would register in the system using their full details. Later then carry out payment using the designated account and bank by association for each of the dues. The students would then have to upload evidence of payment for the administrator to verify the payment. Once the payment has been verified the student could then generate receipt for the payment. The administrator is the user that has modules to manage various aspects of the system. The administrator manages the student's record, approves payment, manages departmental records etc.

3.3.1 OBJECT-ORIENTED ANALYSIS AND DESIGN (OOAD)

Object-oriented analysis and design (OOAD) is a software engineering approach that models a system as a group of interacting objects. Each objects

represents some entity of interest in the system being modeled, and is characterized by its class, its state (data elements), and its behavior. Various models can be created to show the static structure, dynamic behavior, and run-time deployment of these collaborating objects. There are a number of different notations for representing these models, such as the Unified Modeling Language (UML). Object-oriented design (OOD) elaborates the analysis models to produce implementation specifications.

The software development life cycle has five phases, which are:

1. **Requirement phase:** This phase has to do with collection of user's requirement as to how they want the system to function. Its involve producing a requirement document which must be strictly follow during the design phase.

2. **Design phase:** This phase is done by the system architects who produce a blueprint of the system to be programmed i.e. how the system is going to work, number of users that will operate the system and the platform the system will operate on, etc.

3. **Implementation phase:** This is the stage where the program is written usually done by the programmer who follows the design made by the software architect

4. **Verification phase:** This involves testing to see if the software program has met the requirements used by the individual.

5. **Maintenance phase:** This has to do with the inclusion or the removal of certain functionalities to the system after reviewing a new set of requirement made for software upgrade.

3.4 RESEARCH METHODOLOGY

It is generally a guideline for solving a problem with specific components such as phases, tasks, methods, techniques and tools. It can be defined as the analysis of the principles of methods, rules and postulates employed by a discipline. It could also be seen as a documented process for the management of projects that contains procedures, definitions and explanations of techniques used to collect, store, analyze and present information as part of a research process in a given discipline. The study adopts SSADM (Structural system Analysis and Design Methods) for development which follows definite steps to achieve a given task.

3.5 SYSTEM INVESTIGATION FOR THE EXISTING SYSTEM

System study aims at establishing requests for the system to be acquired, development and installed. It involves studying and analyzing the ways in which the payment and recording is done in the existing system. Analyzing the problem thoroughly forms the vital part of the system study. In system analysis, prevailing situation of problem is carefully examined by breaking them into sub-problems. essential to any analysis of requests. It is necessary that this analysis familiarizes

the designer with objectives, activities and the function of the organization in which the system is to be implemented.

METHOD OF DATA COLLECTION

This involves gathering facts about the existing system. The purpose of this analysis is to identify the inefficiencies associated with the existing system and the requirement analysis for the proposed system. There are many fact-gathering techniques that can use in gathering the information such as interview, observation, questionnaires and other method.

- **OBSERVATION METHOD**

This method is a technique used to obtain an overall virtual impact of a system environment. This takes into the study of details relating to customers and the traditional reservation system, the speed of operations, number of staff, bottlenecks and delays. Etc. The researcher took time to examine the factors that are detrimental to students satisfaction. This method helped the researcher to know the problem encountered by the traditional system that will be eliminated by the computerized system.

- **INTERVIEWS**

This method was engaged so as to get detailed understanding of the system and clearer insight to the system and policies were also gathered. Summarily, this method gave up some integral dynamics and uses of the system.

3.6 OVERVIEW AND EXPECTATIONS OF THE PROPOSED SYSTEM

After carrying out the analysis on the present system and thus highlighting its shortcomings, the researcher considered the option of introducing an innovative, efficient and effective system to implement the payment and verification of payment process. The system is very simple in design and to implement. The system requires very low system resources and the system will work in almost all configurations. It has got following features

- Ensure data accuracy.
- Records are efficiently maintained by DBMS.
- DBMS also provides security for the information.
- Any person across the world, having internet can access this service.
- Minimum time needed for the various processing.
- Better Service.
- Minimum time required.
- This would help the associations to prepare and organize its schedules more efficiently on the basis of its demand.
- Personalized services.
- Optimization of manpower available.

OBJECTIVE OF THE PROPOSED SYSTEM

Amongst the objective of the system design is the implementation of a system that integrates the function of the existing system yet modifying and proffering innovation methods superior to the previous system. Being a little specific, the new system is expected to be;

- Timely and reliable
- Scalable – The new system should be able to be moved into a larger and more demanding environment with ease.
- Security enabled – This is vital in the design and expectation of any system. It should contain mechanism to protect the integrity and avoid changes or access by unauthorized users.
- Flexible – As a result of the huge resources expected to be invested into the system, the system is expected to be extensible to accommodate changes in infrastructure, business policies of the Transport Company in the future.
- Easily maintainable, easy to upgrade and make adjustments to.

3.7 HIGH LEVEL MODEL OF THE PROPOSED SYSTEM

The system is designed using the object oriented methodology. It has various sets of diagrams. This project makes use of the Use Case diagrams and the Class diagrams diagrams. There are two users in the system namely the Administrator and the Students.

- i. Students:** These type of users would register in the system using their full details. Later then carry out payment using the designated account and bank by association for each of the dues. Then upload evidence of payment for the administrator to verify the payment. Once the payment has been verified the student could then generate receipt for the payment.
- ii. Administrator:** The administrator is the user that has modules to manage various aspects of the system. The administrator manages the student's record, approves payment, manages departmental records etc.

Use case diagrams are used to show the interactions of the actor(s) with the system. The actors in this case are the administrator and the student user. These actors are illustrated with their functionalities below:

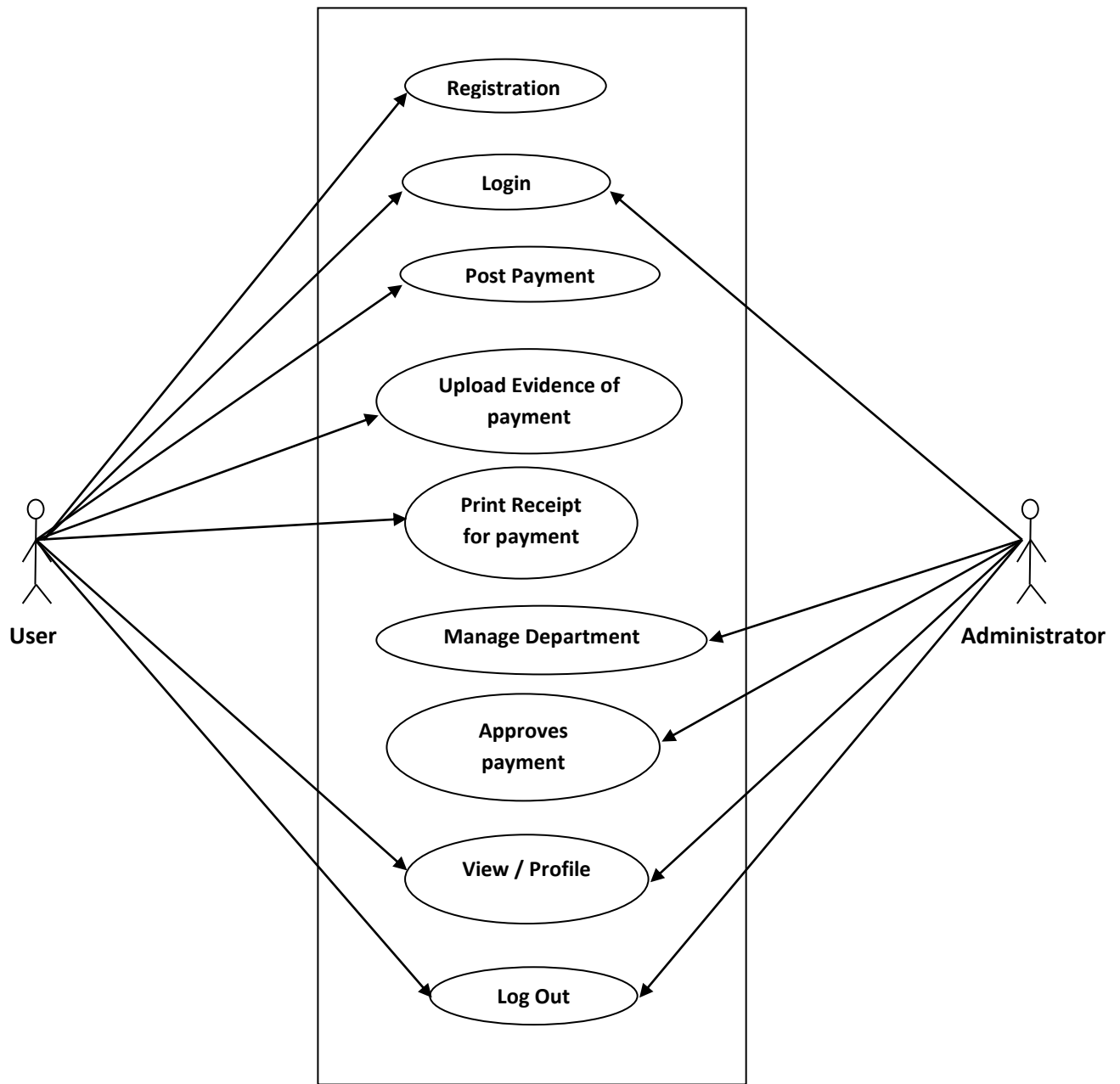
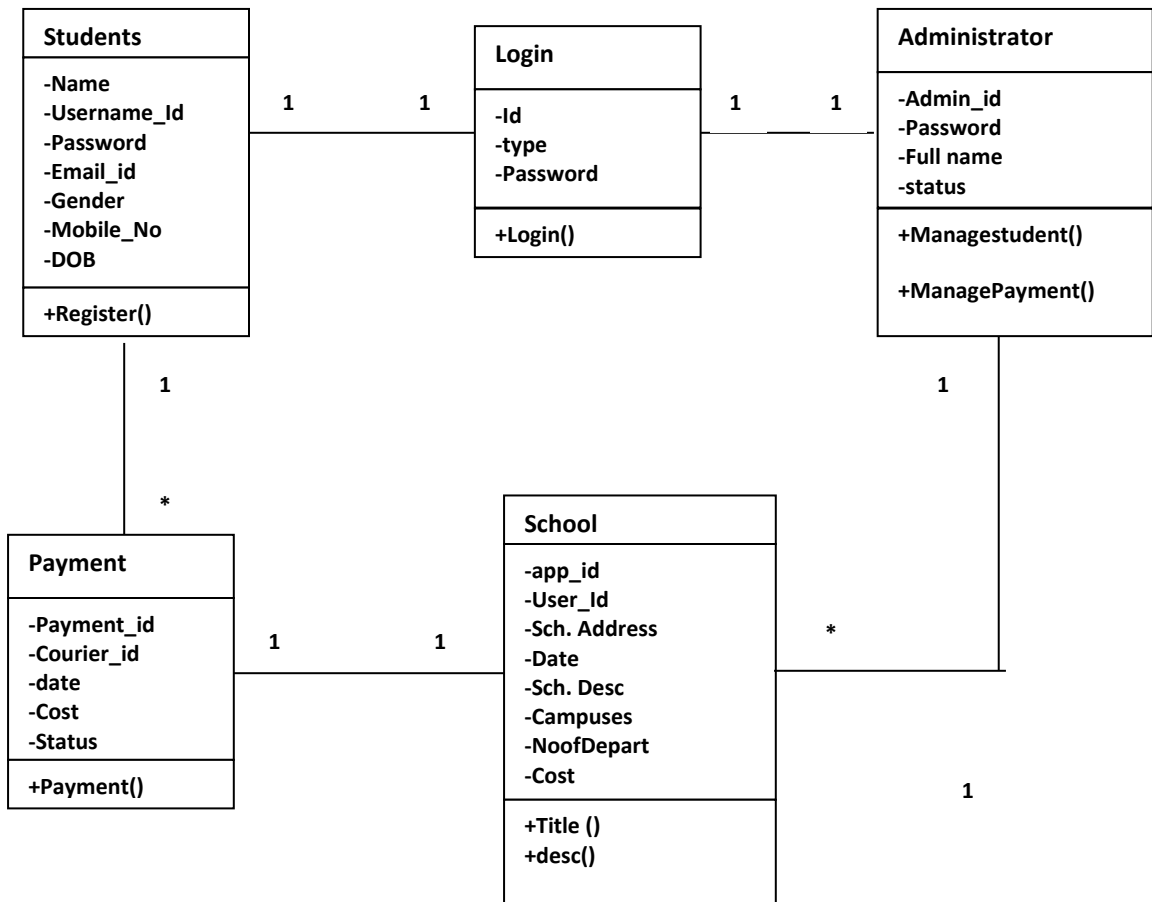


Fig. 3.1 Use Case diagram of the entire System

3.8 CLASS DIAGRAMS

The following class diagrams illustrate the interactions between all the objects in the system, showing its multicity and relationships. Fig 3.2 shows these diagrams below:



3.2 Class Diagrams indicating the interactions of the objects

3.9 DATABASE DESIGN

Admin Table: This table keeps the Information on the admin profile.

Field Name	Data Type	Constraint	Size	Description
adminId	Integer	Primary Key	11	Id of The user
adminName	Varchar	Not Null	255	Name of the user
adminUser	Varchar	Not Null	255	User name of the admin
adminEmail	Varchar	Not Null	255	Email address
adminPassword	Varchar	Not Null	255	Stores password

Payment Table: This table is used for to information about the ambulance.

Field Name	Data Type	Constraint	Size	Description
PaymentId	Integer	Primary Key	4	Id of the payment
Type	Varchar	Not Null	20	Mode of payment
Amount	Integer	Not Null	20	Amount Paid
TrnNo	Varchar	Not Null	20	Registration number
StudentID	Integer	Not Null	3	Student Matric No
Desc	Integer	Not Null	3	Payment Description
Date_Paid	Date	Not Null	10	Date of payment

Student Table: This table stores the information about the hospitals

Field Name	Data Type	Constraint	Size	Description
Studentid	Varchar	Primary Key	20	Id of the student
Departid	Varchar	Reference key	20	Departmental ID
Class	Varchar	Not Null	20	Class
Name	Varchar	Not Null	20	Student fullname

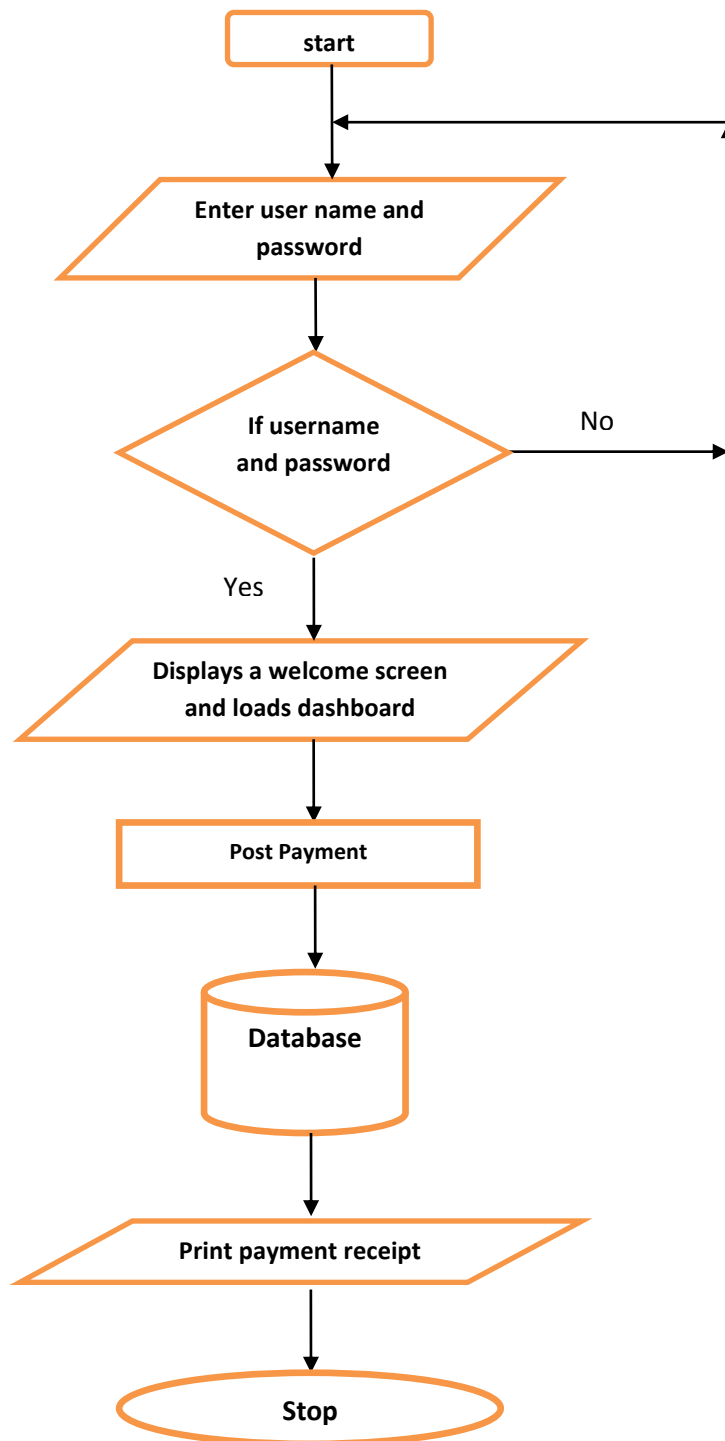
Department Table: Records the different departements.

Field Name	Data Type	Constraint	Size	Description
DepartId	Integer	Primary Key	11	Id of The case
Departdesc	Varchar	Not Null	255	Description of the department
Dues	Varchar	Not Null	200	Dues to pay

Log Table: Records all login activities of the various users.

Field Name	Data Type	Constraint	Size	Description
LogId	Integer	Primary Key	11	Id of Log
User	Varchar	Not Null	255	Users of the system
DateLog	Date	Not Null	200	Date of the log

3.10 FLOWCHART OF THE SYSTEM



3.3 Flowchart Diagram for the payment of the students

CHAPTER FOUR

PROGRAM AND SYSTEM IMPLEMENTATION

4.1 CHOICE OF PROGRAMMING LANGUAGE

In software engineering, a web based application-sometimes called a webapp and much less frequently a web application is an application that is accessed with a web browser over a network such as the internet or intranet. Web applications are popular due to the ubiquity of the browser as a client, sometimes called a thin client. The ability to update and maintain web applications without distributing and installing software on potentially thousands of client computers is a key reason for their popularity. Web applications are used to implement web mail, online retail sales, online auctions, wikis, discussion boards, web logs, MMORPGs, video logging and perform many other functions. Though many variations are possible, a web application is commonly structured as a three-tiered application. In its most common form, a web browser is the first tier, an engine using some dynamic web content technology (e.g. CGI, PHP, Java servlets or Active Server Pages) is the middle tier, and a database is the third tier. The web browser sends requests to the middle tier, which services them by making queries and updates against the database and generating a user interface. Therefore, the web based application is chosen in the development of this system.

HYPERTEXT PRE-PROCESSOR (PHP):

It is a general-purpose scripting language that is especially suited to server-side web development where PHP generally runs on a web server. Any PHP code in a requested file is executed by the PHP runtime, usually to create dynamic web page content. It can also be used for command-line scripting and client-side GUI applications. PHP can be deployed on most web servers, many operating systems and platforms, and can be used with many relational database management systems (RDBMS). It is available free of charge, and the PHP Group provides the complete source code for users to build, customize and extend for their own use.

ADVANTAGES OF PHP

1. It is fast; this is because it is embedded in HTML code, the time to process and load a Web page is short.
2. It is free; PHP is proof that free lunches do exist and that you can get more than you paid for.
3. It is easy to use; The syntax is simple and easy to understand and use, even for non-programmers. PHP code is designed to be included easily in an HTML file.

4. It is versatile; PHP runs on a wide variety of operating systems, like Windows, Linux, Mac OS, and most varieties of UNIX.
5. It is secure; As long as your scripts are designed correctly, the user does not see the PHP code.
6. It is customizable: The open source license allows programmers to modify the PHP software, adding or modifying features as needed to fit their own environments.

My SQL

MySQL is a popular choice of database for use in web applications, and is a central component of the widely-used LAMP web application software stack — LAMP is an acronym for "Linux, Apache, MySQL, and PHP". Its popularity is closely tied to the popularity of PHP. MySQL is used in some of the most frequently visited web sites on the Internet, including Flickr, Facebook, Wikipedia and Google— though not for searches.

JAVA SCRIPT PROGRAMMING LANGUAGE

JavaScript is a programming language that can be included on web pages to make them more interactive. You can use it to check or modify the contents of forms, change images, open new windows and write dynamic page content. You

can even use it with CSS to make DHTML (Dynamic HyperText Markup Language). This allows you to make parts of your web pages appear or disappear or move around on the page. JavaScripts only execute on the page(s) that are on your browser window at any set time. When the user stops viewing that page, any scripts that were running on it are immediately stopped. The only exception is a cookie, which can be used by many pages to pass information between them, even after the pages have been closed.

4.2 SYSTEM REQUIREMENTS

These requirements are those facilities that need to be put in place for the system to be functional. They are categorized into two main requirements. Namely; Hardware and Software requirements.

HARDWARE REQUIREMENTS

- i. A hard disk minimum size of 60GB
- ii. A minimum of 600 MHZ Pentium processor.
- iii. The minimum RAM requirement is 1GB
- iv. A web server with robust storage device

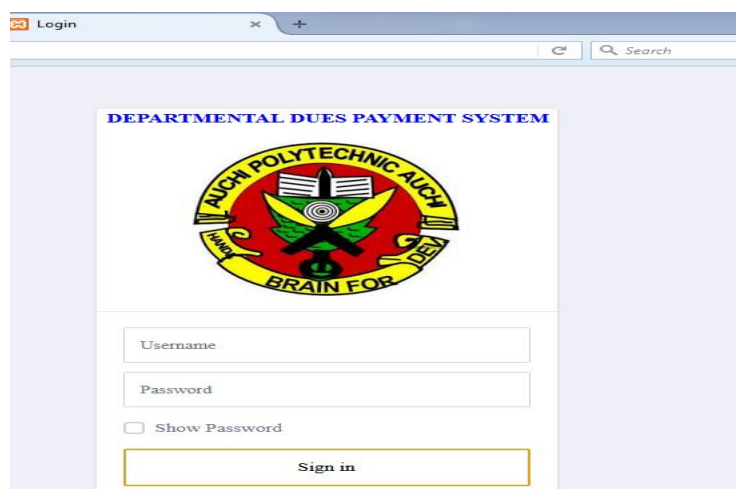
SOFTWARE REQUIREMENTS

This includes both system software and application software. For optimal performance the following software was used:

- i. Database Management System (MySQL)
- ii. WAMP Server
- iii. PHP and PHP editor (WAMP server and Macromedia Dreamweaver 8 handle this)

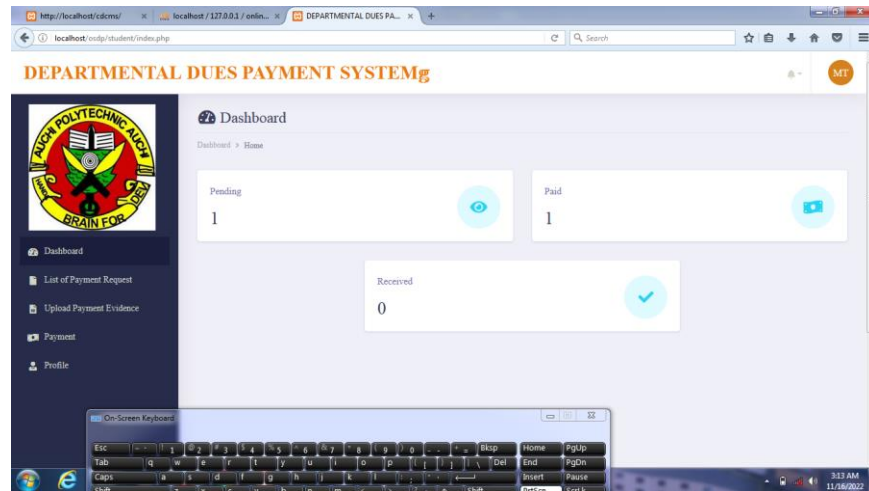
4.3 PROGRAM INTERFACES

The Login Page: This page is for the users to enter their username and password to get access into their various modules. The Administrator, and Students can login through this page.



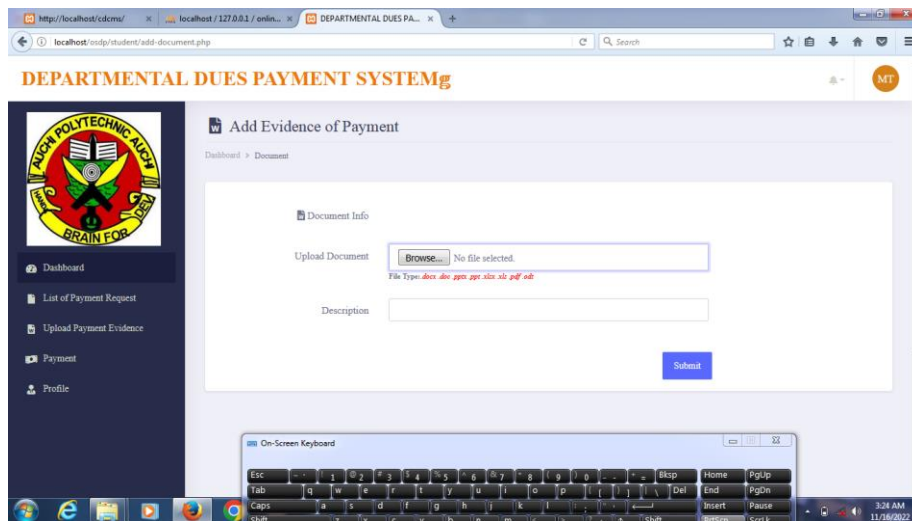
Login page of the program

Students Dashboard: This page is accessible only to the individual students of the program. This is the page where the students can access all the modules for payment and printing of their receipts.



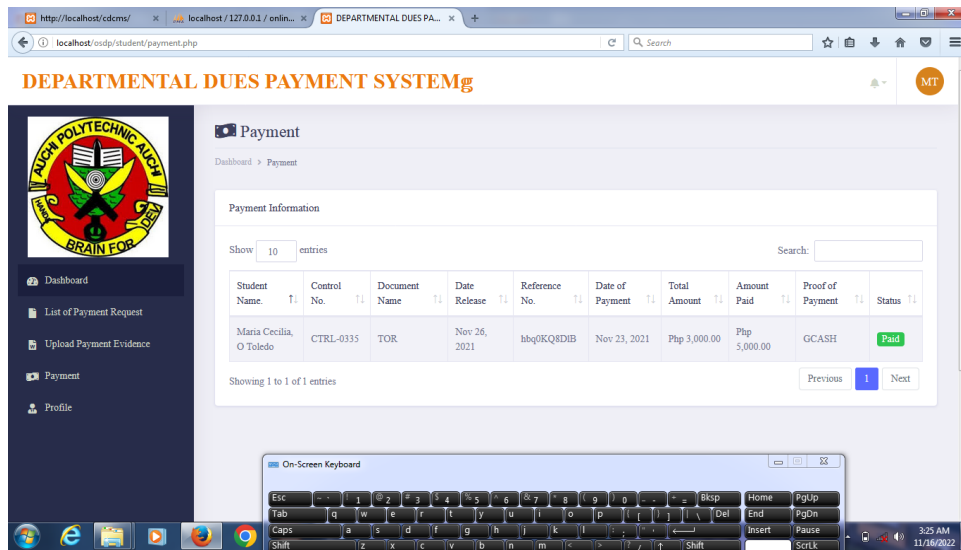
Students Dashboard

Add Evidence Page: This page is used to upload evidence of payment so that it could be accessible by the administrator.



Uploading Evidence page

Payment Page: This page is used to view all payment made by the students



Approved payment page

4.4 PROGRAM INSTALLATION

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

- i. Install WAMP (Windows Apache MySQL and PHP) Server on the server machine where other client machine can have access to the application.
- ii. Install any web browser of your choice on each machine that would have access to the application.
- iv. Copy and paste the application into the WWW folder in the root drive to the server machine.

- v. You can launch the application via the web browser on the client machine.

4.5 SYSTEM CHANGE OVER

After the design of a new system, it is expedient to change to the new system. System changeover is simply the turning over from the manual system to the newly designed system. This changeover process can be achieved through parallel changeover and Pilot changeover.

The pilot run is the recommended method for the implementation of the system. This is a more economical method for the organization can do the conversion for as long a period as it deem fit. This also allows the organization to computerize the organization unit by unit.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 SUMMARY

This project work looks into the challenges that are been faced by students when paying their dues for the different departments in ICT. There were serveral challenges identified during the process of system investigation some of which are; manual filling of records, long queues during payment, time wasting, some students miss lectures etc. This research helps to see how ICT facilities can turn things around. A design was made for a new system using the object oriented design and during this project which was implemented using PHP programming language and MySQL database server.

5.2 CONCLUSION

The system was designed using PHP programmng language which is very effective for an online software design. The records are stored on an online web server (MySQL) which is very robust to handle many users login into the system. The use of computer technologies would eliminate the waiting time for the students during receipt collection, preserve the data or records of payments. The computerization of the process would overall improve the system both for the students and the associations executives.

5.3 RECOMMENDATIONS

Considering the research made so far and the situation facing the school of ICT as to due payment the followings are the recommendations:

The polytechnic should invest into ICT in order to acquire the necessary equipment that will facilitates a smooth implementation.

It is imperative that a special training be done for all students in the school of ICT so as to enable easy change over.

Mobile payment could also be incorporated for students with android mobile phones to do a direct payment.

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APPENDIX

COURSE LISTING

```
<?php require_once('./config.php'); ?>
<!DOCTYPE html>
<html lang="en" class="" style="height: auto;">
<?php require_once('inc/header.php') ?>
<body class="layout-top-nav dark-mode" data-new-gr-c-s-check-loaded="14.991.0" data-gr-ext-
installed="" style="height: auto;">
<div class="wrapper">
<?php require_once('inc/topBarNav.php') ?>
<?php if($_settings->chk_flashdata('success')): ?>
<script>
    alert_toast("<?php echo $_settings->flashdata('success') ?>", 'success')
</script>
<?php endif;?>
<?php if($_settings->chk_flashdata('warning')): ?>
<script>
    alert_toast("<?php echo $_settings->flashdata('warning') ?>", 'warning')
</script>
<?php endif;?>
<?php $page = isset($_GET['page']) ? $_GET['page'] : 'home'; ?>
<!-- Content Wrapper. Contains page content -->
<div class="content-wrapper pt-3 mx-0 px-0" style="min-height: 567.854px;">

<!-- Main content -->
<section class="content mx-0 px-0">
<?php
    if(!file_exists($page.".php") && !is_dir($page)){
        include '404.html';
    }else{
        if(is_dir($page))
            include $page.'/index.php';
        else
            include $page.'.php';
    }
?>
</section>
<!-- /.content -->
<div class="modal fade" id="confirm_modal" role='dialog'>
<div class="modal-dialog modal-md modal-dialog-centered" role="document">
<div class="modal-content">
<div class="modal-header">
<h5 class="modal-title">Confirmation</h5>
</div>
<div class="modal-body">
<div id="delete_content"></div>
</div>
<div class="modal-footer">
<button type="button" class="btn btn-primary" id='confirm' onclick="">Continue</button>
<button type="button" class="btn btn-secondary" data-dismiss="modal">Close</button>
</div>
</div>
</div>
</div>
```

```

</div>
<div class="modal fade" id="uni_modal" role='dialog'>
  <div class="modal-dialog modal-md modal-dialog-centered" role="document">
    <div class="modal-content">
      <div class="modal-header">
        <h5 class="modal-title"></h5>
      </div>
      <div class="modal-body">
      </div>
      <div class="modal-footer">
        <button type="button" class="btn btn-primary" id='submit' onclick="$('#uni_modal
form').submit()">Save</button>
        <button type="button" class="btn btn-secondary" data-dismiss="modal">Cancel</button>
      </div>
    </div>
  </div>
</div>
<div class="modal fade" id="uni_modal_right" role='dialog'>
  <div class="modal-dialog modal-full-height modal-md" role="document">
    <div class="modal-content">
      <div class="modal-header">
        <h5 class="modal-title"></h5>
        <button type="button" class="close" data-dismiss="modal" aria-label="Close">
          <span class="fa fa-arrow-right"></span>
        </button>
      </div>
      <div class="modal-body">
      </div>
    </div>
  </div>
</div>
<div class="modal fade" id="viewer_modal" role='dialog'>
  <div class="modal-dialog modal-md" role="document">
    <div class="modal-content">
      <button type="button" class="btn-close" data-dismiss="modal"><span class="fa fa-
times"></span></button>
      <img src="" alt="">
    </div>
  </div>
</div>
</div>
<!-- /.content-wrapper -->
<?php require_once('inc/footer.php') ?>
</body>
</html>

<?php require_once('./config.php') ?>
<style>
  #uni_modal .modal-footer{
    display:none
  }
</style>
<div class="container-fluid">
  <form action="" id="transaction_form">
    <fieldset id="information">

```

```

<legend class="text-info">Payment Information</legend>
<div class="form-group">
  <label for="company_id" class="control-label text-info">Company</label>
  <select name="company_id" id="company_id" class="form-control form-control-border select2"
required>
    <option value="" disabled selected></option>
    <?php
asc");
      $company = $conn->query("SELECT * FROM `company_list` where status = 1 order by `name`
      while($row = $company->fetch_assoc()):
        ?>
          <option value="<?php echo $row['id'] ?>"><?php echo $row['name'] ?></option>
        <?php endwhile; ?>
      </select>
    </div>
    <div class="form-group">
      <label for="account_name" class="control-label text-info">Account Name</label>
      <input name="account_name" id="account_name" class="form-control form-control-border" required/>
    </div>
    <div class="form-group">
      <label for="account_number" class="control-label text-info">Account Number</label>
      <input name="account_number" id="account_number" class="form-control form-control-border"
required/>
    </div>
    <div class="form-group">
      <label for="amount_to_pay" class="control-label text-info">Amount to Pay</label>
      <input name="amount_to_pay" pattern="[0-9.]+" id="amount_to_pay" class="form-control form-control-
border text-right" required/>
    </div>
  </fieldset>
  <fieldset id="pay-field" class="d-none">
    <h1 class="text-center text-info" id="payable_amount">0.00</h1>
    <hr class="border-light">
    <div class="form-group">
      <dl class="row">
        <dt class='text-info col-4'>Amount to Pay</dt>
        <dd class="col-8 text-right" id="pay_amount"></dd>
        <dt class='text-info col-4'>Service Fee</dt>
        <dd class="col-8 text-right" id="fee"></dd>
        <input type="hidden" name="fee" value='0'>
        <input type="hidden" name="payable_amount" value='0'>
        <input type="hidden" name="payment_code" value="">
      </dl>
    </div>
    <div class="form-group text-center">
      <span id="paypal-button" ></span>
    </div>
  </fieldset>
  <div class="form-group">
    <div class="col-12">
      <div class="d-flex justify-content-end align-items-center">
        <button class="btn btn-primary btn-flat mr-2 d-none" type="button" id="back">Back</button>
        <button class="btn btn-primary btn-flat mr-2" type="button" id="next">Next</button>
        <button class="btn btn-light btn-flat" type="button" id="cancel" data-
dismiss="modal">Cancel</button>
      </div>
    </div>
  </div>

```

```

    </div>
  </div>
</form>
</div>
<script>
  paypal.Button.render({
    env: 'sandbox', // change for production if app is live,

    //app's client id's
    client: {
      // for test only
      sandbox: 'AdDNu0ZwC3bqzdjiiQlmQ4BRJsOarwyMVD_L4YQPrQm4ASuBg4bV5ZoH-
uveg8K_I9JLCmipuiKt4fxn',
      // for live only
      //production: 'AaBHKJFEej4V6yaArjzSx9cuf-
UYesQYKqynQVCdBIKuZKawDDzFyuQdidPOBSGEhWaNQnnvfzuFB9SM'
    },

    commit: true, // Show a 'Pay Now' button

    style: {
      layout: 'vertical',
      color: 'blue',
      shape: 'rect',
      label: 'paypal'
    },

    payment: function(data, actions) {
      return actions.payment.create({
        payment: {
          transactions: [
            {
              //total purchase
              amount: {
                total: $('fieldset#pay-field').find('[name="payable_amount"]').val(),
                currency: 'PHP'
              }
            }
          ]
        }
      });
    },

    onAuthorize: function(data, actions) {
      return actions.payment.execute().then(function(payment) {
        // //sweetalert for successful transaction
        // swal("Thank you!", 'Paypal purchase successful.', 'success');
        var tracking_code = data.paymentID;
        $('fieldset#pay-field').find('[name="payment_code"]').val(tracking_code)
        $('#transaction_form').submit();
      });
    },
    onError: (err) => {
      console.error('error from the onError callback', err);
      alert("Payment Error.")
    }
  }

```

```

}, '#paypal-button');
$(function(){
    $('#uni_modal .select2').select2({
        placeholder:"Please Select Here",
        dropdownParent: $("#uni_modal")
    })
    $('#next').click(function(){
        var check = new Promise((resolve,reject)=>{
            $('#fieldset#information').find('input,select').each(function(){
                if($(this).val() == ""){
                    alert_toast(" All fields are required.", "warning")
                    reject();
                }
            })
            resolve()
        })
        check.then(function(){

            $('#next').addClass('d-none')
            $('#back').removeClass('d-none')
            $("#fieldset#information").addClass('d-none')
            $("#fieldset#pay-field").removeClass('d-none')
        })

    })
    $('#back').click(function(){
        $(this).addClass('d-none')
        $('#next').removeClass('d-none')
        $("#fieldset#information").removeClass('d-none')
        $("#fieldset#pay-field").addClass('d-none')
    })
    $('#amount_to_pay').on('input',function(){
        var amount = $(this).val() > 0 ? $(this).val() :0;
        $.ajax({
            url:_base_url_+"classes/Master.php?f=get_fee",
            method:'POST',
            data:{amount : amount },
            dataType:'json',
            error:err=>{
                console.log(err)
                start_loader()
                alert("An error occured. Try to refresh the page");
            },
            success:function(resp){
                if(resp.status == 'success'){
                    $('#pay_amount').text(parseFloat(amount).toLocaleString('en-US'))
                    $('#fee').text(parseFloat(resp.fee).toLocaleString('en-US'))
                    $('[name="fee"]').val(parseFloat(resp.fee))
                    $('#payable_amount').text(parseFloat(resp.payable).toLocaleString('en-US'))
                    $('[name="payable_amount"]').val(parseFloat(resp.payable))
                }
            }
        })
    })
    $('#transaction_form').submit(function(e){

```

```

e.preventDefault();
var _this = $(this)
$('.err-msg').remove();
start_loader();
$.ajax({
  url: _base_url_+"classes/Master.php?f=save_transaction",
  data: new FormData($(this)[0]),
  cache: false,
  contentType: false,
  processData: false,
  method: 'POST',
  type: 'POST',
  dataType: 'json',
  error:err=>{
    console.log(err)
    alert_toast("An error occured",'error');
    end_loader();
  },
  success:function(resp){
    if(typeof resp =='object' && resp.status == 'success'){
      location.reload();
    }else if(resp.status == 'failed' && !!resp.msg){
      var el = $('<div>')
      el.addClass("alert alert-danger err-msg").text(resp.msg)
      _this.prepend(el)
      el.show('slow')
      $("html, body,.modal").animate({ scrollTop: 0 }, "fast");
      end_loader()
    }else{
      alert_toast("An error occured",'error');
      end_loader();
      console.log(resp)
    }
  }
})
})
})
}
</script>

```