

**TRANSCRIPT PROCESSING SYSTEM (CASE STUDY FEDERAL POLYTECHNIC,  
MUBI)**

**BY**

**ABUBAKAR MUHAMMED  
(ST/CS/ND/21/040)**

**DEPARTMENT OF COMPUTER SCIENCE,  
SCHOOL OF SCIENCE AND TECHNOLOGY,  
FEDERAL POLYTECHNIC, MUBI, ADAMAWA STATE.**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF  
NATIONAL DIPLOMA (ND) IN COMPUTER SCIENCE.**

**SEPTEMBER, 2023**

## DECLARATION

I hereby declare that the work in this project titled “**Transcript Processing System (case study Federal Polytechnic, Mubi)**” was performed by me under the supervision of Mal. Umar Bello. The information derived from literatures has been duly acknowledged in the text and a list of references provided. The work embodied in this project is original and had not been submitted in part or in full for any other diploma or certificate of this or any other institution.

Abubakar Muhammad  
(ST/CS/ND/21/040)

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Signature

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Date

## CERTIFICATION

This project titled “**Transcript Processing System (case study Federal Polytechnic, Mubi)**” was meets the regulations governing the award of National Diploma (ND) in Computer Science, Federal Polytechnic Mubi, Adamawa State

Mal. Umar Bello  
(Project Supervisor)

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Sign/Date

Mr. Mustapha Kassim.  
(Head of Department)

---

Sign/Date

Mal. Abdulrahman Saidu  
(External Examiner)

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Sign/Date

## **DEDICATION**

This project is dedicated to my beloved parents for their advice, encouragement and financial support towards my academic pursuit.

## **ACKNOWLEDGEMENTS**

I want to acknowledge Almighty God for his infinite mercy and protection throughout my academic activities. And for the understanding in achieving our academic success.

I also recognize my Supervisor Mal. Umar Bello who took time, despite his busy schedule to direct and guide me throughout this research work.

I also acknowledge the Head of Department Computer Science Mr. Mustapha Kassim for his moral encouragement throughout my period of study. I also acknowledge all Staff of Computer Science Department for their support and encouragement and the knowledge they've impacted on me throughout my studies.

I also want to appreciate my lovely parents for their love and care and for giving me the opportunity to be trained and achieve my dreams.

Finally, I appreciate the efforts of my Uncles and aunties, for their encouragement and support throughout the course of my study and also my friends and relatives, course mates and all well-wishers. I love you all, may the Almighty God bless you abundantly, Amen.

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## ABSTRACT

*This research delves into the design and implementation of a Transcript Processing System, focusing on the specific case of the Federal Polytechnic, Mubi. The efficient management of academic transcripts is paramount for institutions of higher learning, as it directly impacts students' academic progression, alumni engagement, and administrative processes. In response to the increasing demand for streamlined and digitized transcript services, this study presents an innovative approach to optimize the transcript processing system, thereby enhancing the overall efficiency and effectiveness of the institution. The research employs a multi-faceted methodology encompassing interviews, surveys, and system development to assess the existing manual transcript processing system at Federal Polytechnic, Mubi. By engaging with stakeholders, including students, staff, and administrators, this study identifies the shortcomings and challenges of the current system, such as delays, errors, and resource intensiveness. The findings reveal that the implementation of the Transcript Processing System has resulted in substantial improvements. Students now experience faster turnaround times, reduced errors, and increased transparency throughout the transcript request and issuance process. The institution benefits from streamlined administrative tasks, enhanced data accuracy, and improved resource allocation. This research contributes to the discourse on the digital transformation of educational institutions and the pivotal role of technology in enhancing administrative processes. The case study of Federal Polytechnic, Mubi, serves as a practical demonstration of how academic institutions can leverage modern solutions to optimize their transcript processing systems and better serve their students and alumni. In conclusion, the Transcript Processing System implemented at Federal Polytechnic, Mubi, exemplifies the potential for technological innovation to revolutionize academic record management. By addressing the unique needs and challenges of the institution, this study underscores the importance of embracing digital solutions to improve the overall academic experience and administrative efficiency in Nigerian higher education institutions.*

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background to the Study**

In today's rapidly evolving digital age, educational institutions are continuously seeking innovative ways to streamline administrative processes and enhance overall efficiency. One such area that often demands attention is the management of academic transcripts. Transcripts, being official records of a student's academic achievements, play a pivotal role in their educational journey and subsequent career opportunities. The conventional paper-based transcript management systems often present challenges related to storage, retrieval, and timely distribution of transcripts, especially in larger academic departments like Computer Science.

In the realm of modern academia, the management of academic records and transcripts has become a critical aspect of efficient administrative operations. Traditional methods of paper-based record-keeping and manual transcript issuance have proven to be cumbersome, error-prone, and time-consuming. These challenges are particularly pronounced in academic departments with a large student population, such as the Computer Science Department. In an era marked by digital transformation and data-driven decision-making, there is a growing need to leverage technology to address these inefficiencies and enhance the overall student experience. Recent research underscores the significance of transcript management systems in higher education institutions. A study conducted by Smith and Johnson (2020) highlighted that outdated, paper-based processes for managing academic records contribute to prolonged processing times, data inaccuracies, and a lack of transparency in the transcript issuance process. Such issues can impede students' timely access to their official records, potentially hindering their academic progress and future career opportunities (Smith & Johnson, 2020).

Moreover, the COVID-19 pandemic has accelerated the adoption of digital solutions across various sectors, including education. With a surge in remote learning and online interactions, academic institutions have been prompted to rethink their administrative strategies. Online transcript management systems have emerged as a viable solution to ensure seamless access to important records and services for students, regardless of their physical location. A study by Brown and Williams (2021) emphasized that institutions that transitioned to digital transcript management systems during the pandemic experienced improved administrative efficiency, reduced paper usage, and increased accessibility for students and alumni (Brown & Williams, 2021).

In the context of the Computer Science Department, Federal Polytechnic, Mubi, the existing challenges related to transcript management have been identified through discussions with faculty, staff, and students. Delays in transcript processing, difficulties in tracking the status of transcript

requests, and the potential for errors in manual data entry have prompted the department to seek a more streamlined and technologically advanced solution. The proposed Transcript Management System aligns with the department's commitment to providing a modern, efficient, and user-friendly experience for its students. By leveraging the power of technology, the department aims to enhance data accuracy, reduce processing times, and empower students with convenient access to their academic records. This system is not only aligned with the broader trends in higher education but also tailored to the specific needs of the Computer Science Department.

## **1.2 Problem Statement**

The Computer Science Department at Federal Polytechnic, Mubi currently faces a multitude of challenges in the management of academic transcripts, necessitating the development of an efficient and modernized Transcript Management System.

- i. **Processing Delays and Inefficiencies:** The manual nature of transcript generation and distribution leads to significant processing delays.
- ii. **Inaccurate data entry** can lead to discrepancies in students' academic records, resulting in incorrect transcripts being issued. Such errors not only undermine the credibility of the department but also have the potential to negatively impact students' academic progression and future endeavors.
- iii. **The absence of a centralized and automated system** makes it challenging for students to track the status of their transcript requests. Students are left in the dark regarding the progress of their requests, leading to frustration and uncertainty.
- iv. **The reliance on paper-based transcripts** necessitates the allocation of physical storage space for record-keeping.
- v. **The paper-intensive nature of the current transcript management process** is environmentally unsustainable.

Given these challenges, there is an urgent need to develop and implement a Transcript Management System tailored to the unique requirements of the Computer Science Department. The proposed system aims to leverage technology to address the existing inefficiencies, streamline the transcript issuance process, enhance data accuracy, provide real-time tracking, and offer students a user-friendly interface for accessing their academic records. By doing so, the department aspires to improve administrative efficiency, enhance the student experience, and align with the evolving landscape of digital education and administrative practices.

### **1.3 Aim and Objectives**

The aim of this project is to develop a Transcript Management System (case study of Computer Science Department). The specific objectives are:

- i. Automate the process of generating, storing, and distributing official academic transcripts for students.
- ii. Enhance the accuracy and reliability of transcript-related information, reducing the occurrence of errors and discrepancies.
- iii. Improve the accessibility of transcripts for both students and authorized administrative staff.
- iv. Expedite the process of requesting and issuing transcripts, thereby reducing processing times.

### **1.4 Significance of the Study**

The development and implementation of the proposed Transcript Management System for the Computer Science Department, Federal Polytechnic, Mubi hold considerable significance for various stakeholders, including students, department, administrative staff, and the university as a whole. The automation of transcript generation, processing, and distribution will significantly reduce the administrative burden on departmental staff. By eliminating manual data entry and verification, administrative personnel can allocate their time and expertise to more value-added tasks, such as academic advising and student support.

The Transcript Management System will empower students with a user-friendly online platform to request, track, and access their academic transcripts. This enhanced accessibility will alleviate frustration and anxiety caused by the current lack of transparency in the transcript issuance process. Students will benefit from faster processing times, accurate records, and the convenience of digital access. The system's automated data entry and verification processes will enhance the accuracy and integrity of academic records. By minimizing human errors, discrepancies in transcripts will be reduced, bolstering the credibility of the department and the university as a whole.

### **1.5 Scope of the Study**

The scope of this project encompasses the design, development, and implementation of the Transcript Management System for the Computer Science Department, Federal Polytechnic, Mubi. The system will encompass the following features; The system will include secure and comprehensive student profiles, containing personal and academic information. The system will automate the process of generating official transcripts based on accurate and up-to-date academic records. Students will be able to submit transcript requests through an intuitive online interface,

specifying the number of copies required and delivery preferences. Authorized administrative staff will have access to a centralized dashboard for managing transcript requests, generating transcripts, and maintaining records. Stringent security measures will be implemented to ensure the confidentiality and integrity of student data, aligning with data protection regulations.

## **1.6 Definition of Some Operational Terms**

**Academic Record:** An academic record is a comprehensive collection of documented information about a student's educational activities, including courses taken, grades received, attendance, and other relevant details (Pascarella & Terenzini, 2015).

**Automation:** In the context of the Transcript Management System, automation involves automatically generating transcripts, verifying data accuracy, and sending notifications to stakeholders (Robson & Thompson, 2020).

**Data Verification:** In the Transcript Management System, data verification ensures that the academic records used to generate transcripts are complete and error-free (Smith & Williams, 2018).

**Management:** In the context of the Transcript Management System, management involves overseeing the various processes related to transcript generation, requests, and distribution (Fayol, 2019).

**Result:** In the context of the Transcript Management System, a result could refer to the generated transcript after processing a student's academic record (Kaplan & Northon, 2016).

**System:** In the context of the Transcript Management System, a system refers to the integrated software application and processes designed to automate and optimize transcript-related activities (Bertalanffy, 2018).

**Transcript:** A transcript is an official document that provides a comprehensive record of a student's academic achievements, including courses completed, grades earned, and other relevant information (Landis & Koch, 2017).

**User Interface (UI):** In the context of the Transcript Management System, the UI includes the online platform through which students request transcripts and administrative staff manage requests (Nielsen & Molich, 2019).

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents a comprehensive review of the relevant literature on Transcript Management System and related topics. The literature review aims to explore existing studies, research, and best practices in the field of academic record management, highlighting the benefits, challenges, and key considerations associated with Transcript Management System implementation. The findings from the literature review will inform the development and implementation of an advanced Transcript Management System in educational institutions.

#### **2.2 Transcript Management System**

Transcript Management Systems have evolved from traditional manual processes of handling student records and transcript requests to efficient, automated platforms. The primary purpose of TMS is to provide educational institutions with a streamlined and user-friendly mechanism for managing, processing, and delivering official transcripts to students, alumni, and other relevant parties. TMS are designed to improve operational efficiency, reduce administrative workload, enhance data accuracy, and ensure the security of sensitive student information. Transcript Management Systems (TMS) have become essential tools in the modern educational landscape. These systems offer educational institutions and organizations the ability to efficiently manage and distribute student transcripts, enhancing administrative processes and improving overall user experiences. One of the key strengths of TMS is their ability to streamline transcript requests and processing. Through online platforms, students and alumni can easily request official transcripts, eliminating the need for manual paperwork and reducing administrative workload. Additionally, TMS often provide secure authentication methods, ensuring the confidentiality and integrity of sensitive student records (Adekiigbe & Amosa, 2019).

Another noteworthy feature of TMS is their integration capabilities. Many systems offer seamless integration with Student Information Systems (SIS) and other institutional databases, facilitating the automatic transfer of student data. This integration minimizes data entry errors and enhances data accuracy, ultimately improving the quality of transcripts. Furthermore, TMS often offer self-service portals that allow students to track the status of their transcript requests, providing transparency and reducing anxiety around the transcript delivery process. This real-time tracking feature contributes to a positive user experience and can also help institutions meet compliance and accountability requirements.

### **2.3 Review on Information Management**

The introduction of computer into information technology has massively improved the information need of organization; the success of this machine is dependent on the knowledge base. Therefore, one can be prompted to ask aloud “what is a computer”? a computer as an electronic device that can perform automatically and at a high speed a sequence of logical operations according to instructions given to it in form of a pre-arranged program (Funk, 2018).

Computers are looked upon as obedient servants who are ever ready to free man from tedious procedures and produce results as compared with human computing time (Chimezie, 2019). A computer as a machine that is capable of accepting input data, store and process the data based on instructions given by the computer user and in this way produce expected results, generally called output. (Obilikwu, 1995) These definitions of computer would lead us to answer the question “what is a program? defined a program as a sequence of instructions given to the computer to perform a specific operation (Obilikwu, 2019).

A company needs information in which to base decisions concerning the current operations and future plans. It requires the information to be timely and accurate. He then cited the example of the use of computer in the area of management control to production and stated “production must be able to respond quickly to changes in demand and other circumstances to do so requires the provision of up to date information which is accurate and timely”. In virtually any job whether clerical, technical, business or professional, whether it is a banking, medicine, education etc. Computers are useful tools and that “computers are tools with which we calculate, measure, assess, store, retrieve, regulate and monitor information. Hence, the blood and life wire of any system is information. A typical system (Education, management etc) cannot survive without good management information system (MIS) (Aluko, 2021).

Management information system (MIS) are information systems, typically computer-based that are used within an organization. The concept of management information system is a complex variable although been simplified “there is probably no more challenging and diversified subject than management theory, system theory and computer science”. Computer-based education includes both computer-assisted instruction programs that interact with students in a dialogue and a broader array of educational computer applications such as simulations or instruction. In computer programming, there is major national push for extended application of computer-based education at educational levels (Taylor, 2020).

Computer-based education has been promoted with two different underlying ideologies in all levels of education. Some educators argue that computer-based instructional approaches can help.



Fulfill the traditional values of progressive education. The simulation of intellectual curiosity, initiative and democratic experience (Kling,1983). For examples, computerized universities are qualitatively different than traditional universities. College students with micro computers in their dorm room will be more stimulated to learn because they will have easy access to instructional materials and more interesting problems to solve (Cyert, 2019).

A new computer base school cultivate, students will no longer simply be taught mathematics. These visions portray an enchanted social order transformed by advanced computing technologies. Other advocates are a bit less romantic, but not less enthusiastic. For example, Because of the insatiable desire of students for more and more information at a higher level of complexity and more sophisticated level of utilization. More effective means of communication must be used. Computers can provide a unique vehicle for this transmission. Others emphasize a labour market pragmatism that we label “vocational matching.” In this view people will need computer skills, such as programming, to compete in future labour markets and to participate in a highly automated society; a responsible school will teach some of these skills today (Kling, 2016).

Advocate of computer-based education promote a utopian image of computer-using schools as places where students learn in a cheerful, cooperative setting and where all teachers can be supportive, enthusiastic mentors. Hence, it is important to note that computer-based education goes a long way in helping the students as well as the staff to effectively make use of the computerized management system. It also helps in convincing the stakeholders of the importance and need for adopting the computerized transcript management system as it provides effective and accurate handling of student’s files. Therefore, a computerized transcript management system is usually a system, which is implemented with a computer to achieve the utmost efficiency and desired goals. In well developed countries, where education system are computerized. Thus, a personalized software that captures the entire education business process and makes all operation accessible via the web, thus allowing schools to effectively serve all stakeholders students, lectures, administrators and percent. But in this case (Transcript Management System) it provides functionalities including Grading, Records keeping, information management within the school, easy retrieval and data security (Kling, 2016).

## **2.4 Problems Facing Transcript System**

The increase in the number of students in Nigerian universities has posed great challenges for university administration. These challenges include, delay in computation and issuance of results, certificates, transcripts and absence of real time services/information dissemination etc. Commenting on the challenges facing Nigerian Universities, Nigerian University education needs reformation for it to meet the societal needs. Nigerian universities must seek to remove the

constraints that prevent them from responding to the needs of rapidly changing society (Ogu, 2008). This can only be achieved by introducing democratic university structures and management style. Writing on transcript request from Nigerian universities, if you have ever attempted to secure academic transcripts from any Nigerian University, or from other institutions of higher learning, you will know how difficult and frustrating it can be. And in fact such difficult experiences are not limited to schools. Procuring medical records or government documents can also be an uphill task. Although securing documents and transcripts may be easier if you live in Nigeria, attempting to do so from abroad can be annoying, traumatic and time consuming. I am inclined to believe that it is easier to rob a bank than to secure transcripts and other official documents (Abidde, 2018).

There are administrative problems in the issuance of transcripts in our tertiary institutions of high learning. According to them, one of the top challenges for institutions and students of higher learning in Nigeria today is the issuance and collection of transcripts. Students sometimes apply for transcripts from their respective institutions and it takes several months before such transcripts could be issued to the applicants. These scenarios do cost the applicant a number of failures. Admission process is not complete without including the transcripts with the admission forms especially for students going for higher degrees in other institutions. So, in some cases students lose admission due to late arrival of transcripts (Adekiigbe & Amosa, 2019).

Presently, there are great potentials of its as tools for enhancing people's daily lives. It can act as a facilitator for government development programmes such as cassava and rice initiative programmes that have been introduced to combat the food problems that are currently facing the citizens of Nigeria. It is the belief of the researchers that information technology could be used to change universities administrative system in terms of result, transcript processing and issuance for the better.

## **2.5 Decentralized Transcript Result Processing**

The system was carried out by Henry and Osaula (2018), decentralized data processing each locality or department is provided with a computer system and doesn't necessarily have anything in common. Each centre handles its own data processing needs and generally doesn't interact with any other division or centres. It quickly responds to divisional needs and suits a decentralized management scheme. However, it is expensive on account of duplication of facilities and files. (Osaula, 2018).

## 2.6 Review of Transcript Management System

Transcript management system emerges from the requirement of tertiary institution to get performance of a student seeking admission into higher degree program in their school. These documents are transferred from school to school or even from school to an organization that needs to know area of strength and weakness of the staff to be recruited. Institutions which practices a similar case of the facilities of the transcript management system are university of Lagos, Ekiti state university etc. This transcript management system aims towards serving university of Ilorin, computer science department for postgraduate diploma to prepare student transcript with the stipulated formula method implemented in a web-based system. End user's privacy is imperative to the system. It restricts unauthorized user from gaining access to the system. It does not share other people's personal identifiable information with any third party or other users without the user. Transcript Management Systems (TMS) are specialized software platforms designed to streamline the process of managing and distributing student transcripts within educational institutions. These systems offer a range of features that enhance efficiency, accuracy, and user experience (Adekiigbe & Amosa, 2019).

### 2.6.1 Features of Transcript Management System

**Online Transcript Requests:** TMS enable students and alumni to submit transcript requests online, eliminating the need for manual, paper-based processes. This feature enhances convenience and accessibility for users, allowing them to initiate transcript requests from anywhere at any time.

**Secure Authentication:** TMS employ robust authentication mechanisms to ensure that only authorized individuals can access and request transcripts. Multi-factor authentication and single sign-on (SSO) are often used to enhance data security.

**Integration with Student Information Systems (SIS):** Many TMS offer seamless integration with an institution's SIS or other databases. This integration automates the retrieval of student data, reducing the likelihood of errors and ensuring the accuracy of transcript information.

**Electronic Transcript Delivery:** TMS facilitate the electronic delivery of transcripts to recipients, whether they are educational institutions, employers, or other organizations. Electronic transcripts are secure, tamper-proof, and delivered instantly, saving time and resources compared to traditional mail.

**Real-Time Tracking:** TMS provide students and requesters with the ability to track the status of their transcript requests in real time. This transparency eliminates uncertainty and reduces the need for follow-up inquiries, contributing to a positive user experience.

**Digital Signatures:** Some TMS support digital signatures, allowing institutions to electronically sign official transcripts. Digital signatures enhance the authenticity and integrity of transcripts, making them legally valid and secure.

**Data Privacy and Compliance:** TMS prioritize data privacy and compliance with regulations such as the Family Educational Rights and Privacy Act (FERPA). They provide mechanisms to securely store, transmit, and handle sensitive student information (Adekiigbe & Amosa, 2019).

## **2.7 Management Information System**

Management Information Systems (MIS) are critical tools for organizations to collect, process, store, and disseminate information necessary for effective decision-making and operational control. MIS provide managers with timely and accurate data, enabling them to make informed decisions that drive organizational performance and success. Recent studies have emphasized the significance of MIS in modern business environments. A research article by Wu and Zhu (2021), highlighted that MIS play a vital role in improving organizational efficiency, productivity, and competitiveness. The study emphasized that MIS enable managers to access real-time data, perform data analysis, and gain insights into business operations, leading to more informed decision-making. One of the key functions of MIS is data collection and processing. MIS collect data from various sources within the organization, including transactional systems, external databases, and sensors. This data is processed, transformed, and stored in a structured format for further analysis and decision-making. A study by Turban *et al.* (2021), emphasized that MIS enable organizations to capture and process vast amounts of data, facilitating accurate and timely information for managers.

Moreover, MIS provide tools for data analysis and reporting. These systems employ various analytical techniques, such as data mining, statistical analysis, and predictive modelling, to identify patterns, trends, and relationships within the data. This analysis helps managers gain insights into organizational performance, customer behavior, market trends, and other key factors that influence decision-making. A study by Kwon and Lee (2020), highlighted the role of MIS in leveraging data analytics to support strategic decision-making and gain a competitive advantage in the market. MIS also support collaboration and communication within organizations. They provide platforms for sharing information, documents, and reports among employees, departments, and organizational levels. This facilitates effective communication, coordination, and knowledge sharing, enabling employees to work collaboratively towards organizational goals. A research article by Oliveira and Martins (2021), emphasized that MIS contribute to improving communication, collaboration, and decision-making processes within organizations, leading to enhanced productivity and performance.

## 2.8 Database Management System

Database Management Systems (DBMS) are essential tools for storing, organizing, managing, and retrieving data efficiently. DBMS provide a structured approach to store and retrieve data, ensuring data integrity, security, and scalability for organizations.

Recent studies have highlighted the significance of DBMS in various domains. A research article by Ramakrishnan and Gehrke (2020), emphasized that DBMS are crucial for managing the increasing volumes of data generated in today's digital world. The study highlighted that DBMS enable organizations to handle diverse data types, ensure data consistency, and support complex data queries.

One of the key functions of DBMS is data storage and organization. DBMS provide a structured framework for storing data in tables, defining relationships between tables, and enforcing data integrity through constraints. These systems often employ relational models, such as the widely-used SQL (Structured Query Language), to manage data in a tabular format. A study by Elmasri and Navathe (2019), emphasized that DBMS enable efficient data storage, normalization, and indexing to optimize data retrieval performance.

Moreover, DBMS offer tools for data retrieval and manipulation. These systems allow users to query the database using SQL or other query languages to retrieve specific data based on specified criteria. DBMS also support complex operations such as joining multiple tables, filtering data, and aggregating results. A research article by Rizvi *et al.* (2021), highlighted the role of DBMS in enabling efficient and accurate data retrieval, facilitating decision-making and analysis.

DBMS also provide mechanisms for data security and access control. These systems enable organizations to define user roles and permissions, ensuring that only authorized users can access and modify the data. DBMS also offer features such as data encryption, backup, and recovery to protect against data breaches and system failures. A study by Motahari-Nezhad *et al.* (2021), emphasized the importance of DBMS in ensuring data privacy, integrity, and availability, particularly in the context of sensitive and regulated data.

The advent of advanced technologies has further enhanced the capabilities of DBMS. Distributed DBMS enable data storage and processing across multiple servers, providing scalability, fault tolerance, and high availability. NoSQL (Not Only SQL) DBMS have emerged as alternatives to traditional relational DBMS, offering flexible data models and scalability for handling large volumes of unstructured and semi-structured data. A research article by Ghazal *et al.* (2020), discussed the benefits and challenges of NoSQL DBMS in big data environments.

## **2.9 Summary of Literature Review**

This chapter reviewed the existing literature review on the topic "Transcript Management System for Computer Science Department" explores existing research, developments, and trends related to the implementation of transcript management systems within the context of computer science departments. This summary provides a condensed overview of key findings and themes from the reviewed literature; The reviewed literature underscores the increasing significance of Transcript Management Systems (TMS) in modern educational institutions, particularly within computer science departments. The adoption of TMS has gained traction due to its potential to streamline administrative processes, enhance student services, and improve overall operational efficiency. Several studies highlight the challenges associated with traditional paper-based transcript management systems, such as manual data entry errors, delayed processing times, and difficulties in maintaining data integrity. TMS offers a digital solution that automates transcript generation, distribution, and record-keeping. This not only reduces administrative workload but also minimizes errors and improves data accuracy.

## **CHAPTER THREE**

### **SYSTEM ANALYSIS AND DESIGN**

#### **3.1 Introduction**

This chapter contains the system design and analysis of the proposed system, the disadvantages of the existing system, the advantages of the proposed system over the existing system, the requirements (Hardware and Software), the design and the system architecture.

#### **3.2 Disadvantages of the Existing System**

- i. **Manual Data Entry:** The existing system likely involves manual entry of student transcript data, which can be time-consuming and prone to errors.
- ii. **Data Inaccuracy:** Human errors in data entry can lead to inaccuracies in student transcripts, which might cause confusion and disputes.
- iii. **Limited Accessibility:** Physical records can only be accessed on-site, making it difficult for authorized personnel to access student transcripts remotely.
- iv. **Inefficient Search:** Locating specific student transcripts or information requires manual searching, leading to inefficiency and delays.
- v. **Lack of Timeliness:** Generating transcripts manually can result in delays, affecting students' ability to access their records promptly.
- vi. **Limited Data Analysis:** The existing system might lack tools for data analysis, making it challenging to identify trends and patterns in student performance.

#### **3.3 Advantages of the Proposed System**

- i. **Automated Data Entry:** The proposed system automates data entry, reducing the risk of errors and saving time.
- ii. **Data Accuracy:** Automation ensures data accuracy, minimizing discrepancies in student transcripts.
- iii. **Timely Record Generation:** Automated transcript generation ensures timely availability of student records, benefiting both students and administrative staff.
- iv. **Security:** The system can offer robust security measures to protect sensitive student data from unauthorized access.
- v. **Reduced Paper Usage:** By transitioning to digital records, the proposed system contributes to environmental sustainability.
- vi. **User-Friendly Interface:** The system can offer an intuitive and user-friendly interface for easy navigation and use.
- vii. **Cost Savings:** Over time, the automation and efficiency gained from the system can lead to cost savings for the department.

### 3.4 The Proposed Method

We proposed the use of Iterative Waterfall Model in this project. This is because the model provides feedback paths for error correction as and when detected later in a phase. Though errors are inevitable, but it is desirable to detect them in the same phase in which they occur. If so, this can reduce the effort to correct the bug.

Several unified modelling language approaches are available and, in this research, I embark on the use of activity and data flow diagram for system design. The server scripting language for this system is Hypertext Pre-processor (PHP) and the database is MySQL. HTML5 is the proposed Front-end program. I proposed to contact the project coordinator of the department and study the achievement and shortcoming of the system then finally analyze the data and draw a conclusion for which the system will be designed to fill those gaps sighted.

### 3.5 Methods of Data Collection

The Method adapted for eliciting information to this system is the secondary source of data collection. This includes the use of Journals to review the previous research materials, surfing the internet for related conceptual highlights and related articles on Transcript Management System to enlighten the understanding with a clear view.

### 3.6 System Design

#### 3.6.1 Algorithm Diagrams

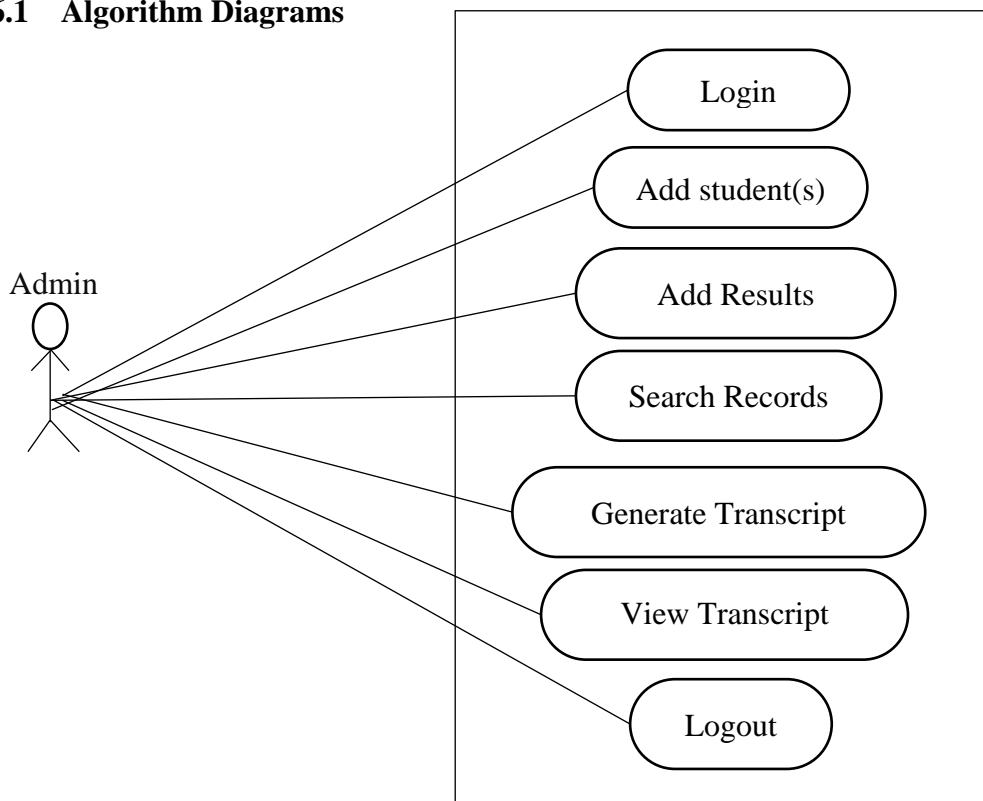


Figure 3.1: Use Case Diagram



### 3.6.2 System Architecture

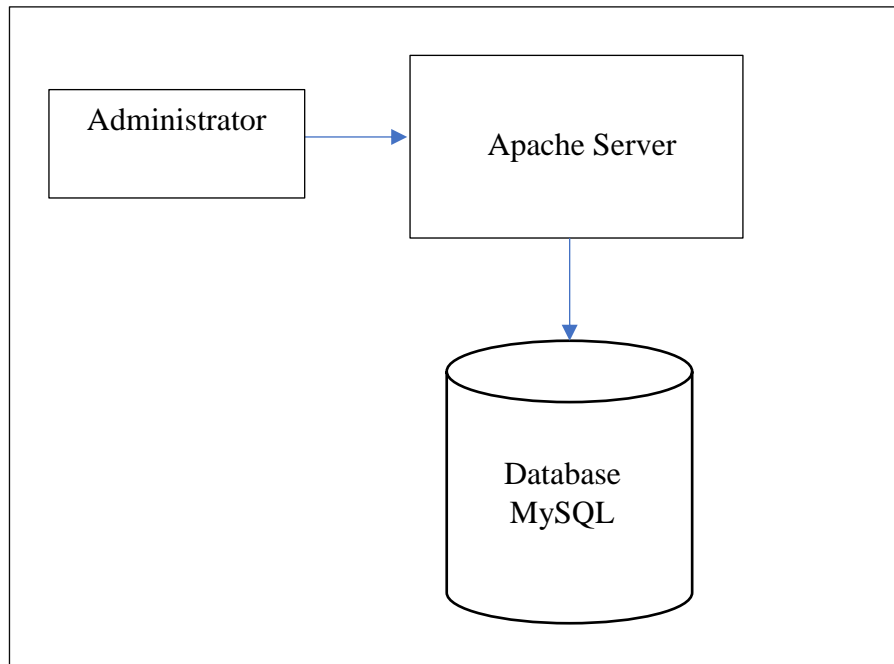


Figure 3.2: System Architecture

### 3.6.3 Database Tables/Queries Structures

**Table 3.1: Admin Table**

| Name     | Type         | Extra          |
|----------|--------------|----------------|
| id       | int(11)      | AUTO_INCREMENT |
| Username | varchar(255) |                |
| Password | varchar(255) |                |
| Role     | varchar(50)  |                |

**Table 3.2: Scores Table**

| Name          | Type        | Extra          |
|---------------|-------------|----------------|
| id            | int(11)     | AUTO_INCREMENT |
| Matric number | varchar(50) |                |
| Level         | varchar(50) |                |
| Session       | varchar(50) |                |
| Semester      | varchar(50) |                |
| Course        | varchar(50) |                |
| Course code   | varchar(50) |                |
| Unit          | varchar(50) |                |
| Score         | varchar(50) |                |

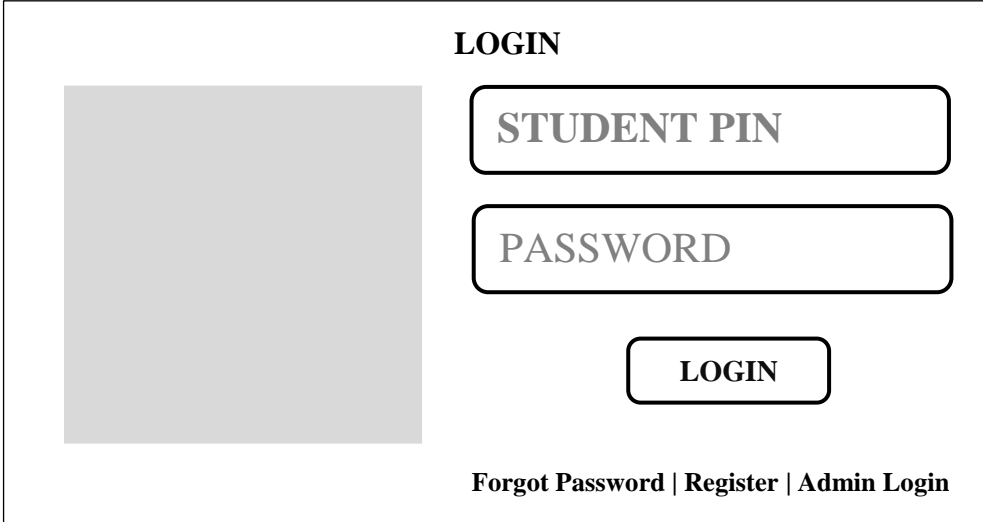
**Table 3.3: Students Table**

| <b>Name</b>         | <b>Type</b>  | <b>Extra</b>   |
|---------------------|--------------|----------------|
| id                  | int(11)      | AUTO_INCREMENT |
| First Name          | varchar(100) |                |
| Middle name         | varchar(20)  |                |
| Last name           | varchar(20)  |                |
| Level               | varchar(20)  |                |
| Department          | varchar(20)  |                |
| Registration Number | varchar(20)  |                |
| Email               | varchar(20)  |                |
| Password            | varchar(20)  |                |
| Passport            | varchar(20)  |                |
| Date of Birth       | varchar(20)  |                |
| Gender              | varchar(20)  |                |
| Address             | varchar(20)  |                |
| LGA of Origin       | varchar(20)  |                |
| State of Origin     | varchar(20)  |                |
| Date                | Timestamp    |                |

**Table 3.4: Student Login Table**

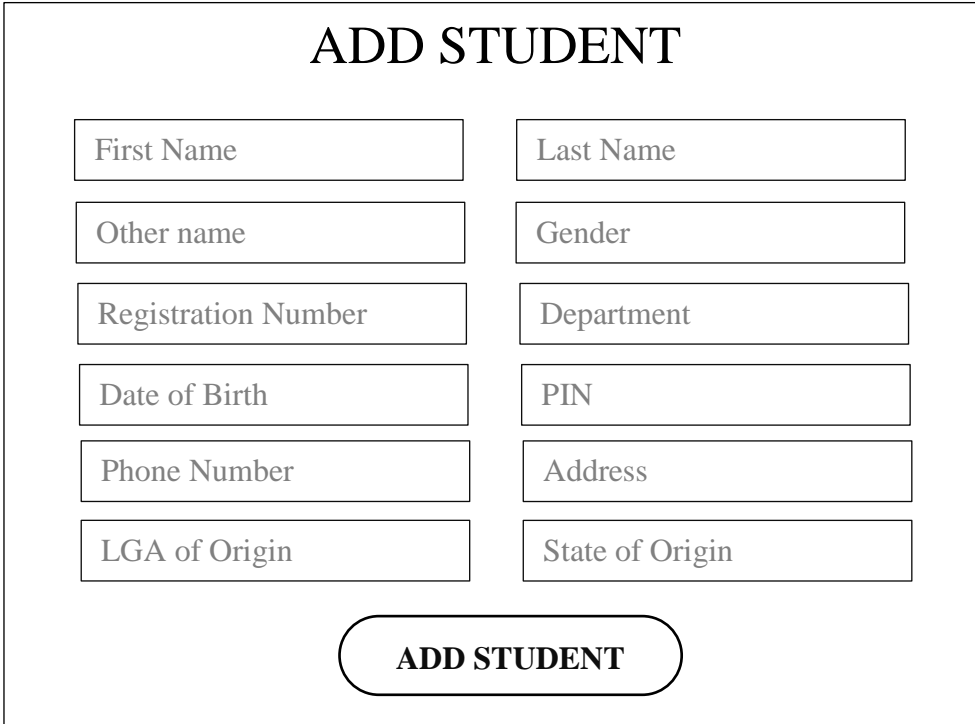
| <b>Name</b> | <b>Type</b>  | <b>Extra</b>   |
|-------------|--------------|----------------|
| id          | int(11)      | AUTO_INCREMENT |
| PIN         | varchar(255) |                |
| password    | varchar(50)  |                |
| Email       | varchar(50)  |                |

### 3.6.4 Input and Output Design



The login form is titled "LOGIN" in bold. On the left is a large gray square representing a profile picture. To the right are two input fields: "STUDENT PIN" and "PASSWORD", both with rounded corners and a light gray background. Below these is a rounded "LOGIN" button. At the bottom right are three links: "Forgot Password", "Register", and "Admin Login".

Figure 3.3: Log in form



The "ADD STUDENT" form is titled in bold. It contains two columns of input fields. The left column includes: "First Name", "Other name", "Registration Number", "Date of Birth", "Phone Number", and "LGA of Origin". The right column includes: "Last Name", "Gender", "Department", "PIN", "Address", and "State of Origin". All fields are rectangular with a light gray background. At the bottom center is a rounded "ADD STUDENT" button.

Figure 3.5: Add Student

**Student Registration**

REGISTER

Figure 3.6: Student Registration

Welcome **210665242**

**Student's Profile**

|             |                   |
|-------------|-------------------|
| Name:       | Abubakar Mohammed |
| Department: | Computer Science  |
| Matric:     | ST/CS/ND/21/045   |

View Transcript

Figure 3.7: Student Profile

### **3.7 System Requirement Specification**

#### **3.7.1 Hardware Requirements**

The hardware component of a computer system refers to the physical part that makes up the computer system. For an effective operation, the system can be implemented provided the following hardware components are at least met. The following hardware components were used for the efficient work of the system;

- i. Storage: 13-20 gigabyte of storage.
- ii. Memory: 128MB of ram and above.
- iii. Keyboard: Enhanced keyboard
- iv. Mouse: Enhanced serial or parallel mouse
- v. CRT: 15" SVGA colored monitor
- vi. Model: Pentium 580 mml and above
- vii. Printer: Optimal (Colored/black and white)

#### **3.7.2 Software Requirements**

Computer software is a collection of computer programs and related data that provides the instructions for telling a computer what to do and how to do it. In other words, software is a set of programs, procedures, algorithms and its documentation concerned with the operation of a data processing system.

The following list of software were used for adequate implementation of the system

- i. Windows 7 /8/10
- ii. XAMP server
- iii. PHP My SQL
- iv. Anti-virus program (updated).

#### **3.7.3 Personnel Requirements**

Any computer literate who has a technical knowhow of internet surfing can use the system because it is user friendly.

## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### 4.1 Introduction

The new system is designed using PHP and MySQL programming language for easy records inserting and updating. This system will help in managing and easily retrieving of information from the system for management purposes. The new Transcript Management System for Computer Science Department, Federal Polytechnic, Mubi.

#### 4.2 Results

##### 4.2.1 Welcome Interface

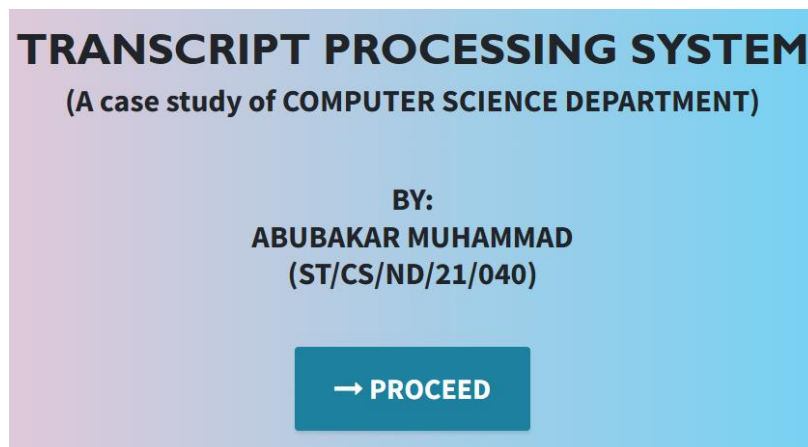


Figure 4.1: Welcome Interface

The above figure 4.1 shows the welcome page of the Transcript Management System, the welcome page is the first page that displays on opening the program.

##### 4.2.2 Login Interface

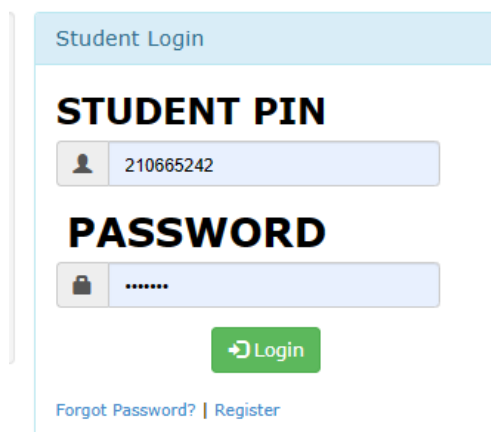
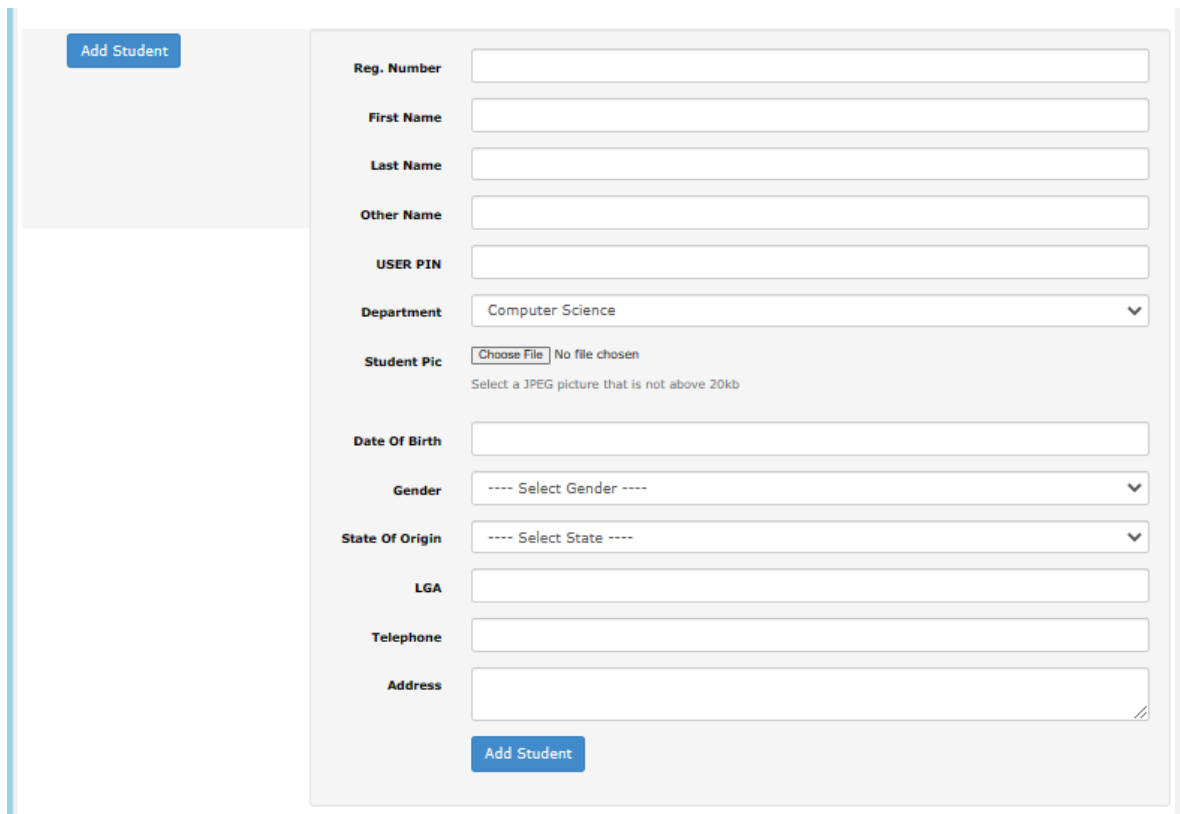


Figure 4.2: Login page interface

Figure 4.2 above shows the system login page interface. The login interface allows the users and Administrator to enter his username and password to get access to the system.

### 4.2.3 Add Student Interface

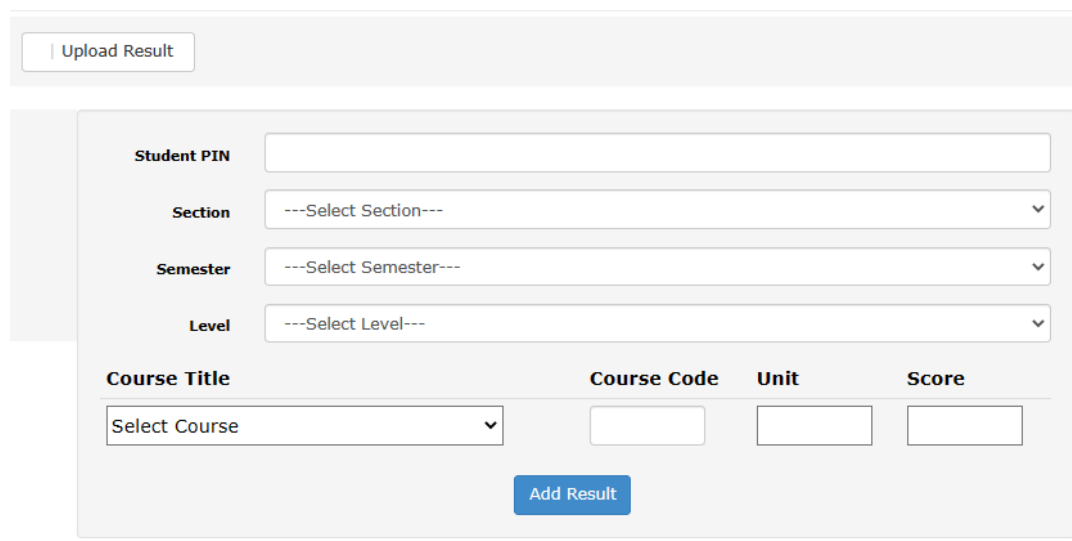


The 'Add Student' interface is a web form for registering new students. It features a sidebar with a blue 'Add Student' button. The main form contains the following fields: 'Reg. Number' (text input), 'First Name' (text input), 'Last Name' (text input), 'Other Name' (text input), 'USER PIN' (text input), 'Department' (dropdown menu with 'Computer Science' selected), 'Student Pic' (file upload area with 'Choose File' button and 'No file chosen' text, and a note 'Select a JPEG picture that is not above 20kb'), 'Date Of Birth' (text input), 'Gender' (dropdown menu with '--- Select Gender ---'), 'State Of Origin' (dropdown menu with '--- Select State ---'), 'LGA' (text input), 'Telephone' (text input), and 'Address' (text input with a clear icon). A blue 'Add Student' button is located at the bottom right of the form.

Figure 4.3: Add Student Interface

Figure 4.2.3 above shows where the admin can register to students in order for the student to gain access into the system using some basic information like the student first name, lastname, othername, level.

### 4.2.4 Upload Result



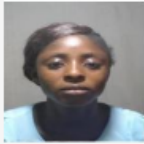
The 'Upload Result' interface is a web form for uploading student results. It features a sidebar with a button labeled 'Upload Result'. The main form contains the following fields: 'Student PIN' (text input), 'Section' (dropdown menu with '---Select Section---'), 'Semester' (dropdown menu with '---Select Semester---'), 'Level' (dropdown menu with '---Select Level---'), and a table for course results. The table has four columns: 'Course Title', 'Course Code', 'Unit', and 'Score'. The 'Course Title' column has a dropdown menu with 'Select Course' selected. The 'Course Code', 'Unit', and 'Score' columns have text input fields. A blue 'Add Result' button is located at the bottom right of the form.

Figure 4.4: Upload Result Interface

Figure 4.4 is used to upload student result for into the system to enable the student view his or her transcript.

### 4.2.5 Transcript Interface

### Student's Academic Records



Name:

EYUAH GABRIEL AKAMSHU

Department:

Computer Science

Matric:

ST/CS/ND/22/002

**ND1 First Semester**

| Course                              | Course Code | Credit Unit | Score |
|-------------------------------------|-------------|-------------|-------|
| Introduction to Computing           | COM113      | 3           | 72    |
| Introduction to Digital Electronics | COM112      | 3           | 88    |

Your GPA For This Semester is: **3.75**

Your CGPA is: **3.75**

**ND1 Second Semester**

| Course | Course Code | Credit Unit | Score |
|--------|-------------|-------------|-------|
|--------|-------------|-------------|-------|

Figure 4.5: Transcript Interface

Figure 4.5 above displays the Academic Records of the student showing all the courses, semesters and GPA.

### 4.3 Discussion

Figure 4.1 shows the Welcome Interface serves as the initial landing page when users access the system. It typically includes a visually appealing design, the system's logo, and a welcoming message. This interface aims to provide users with a positive first impression, set the tone for their interaction with the system, and guide them toward the main functionalities.

Figure 4.2 shows the Login Interface is where users authenticate themselves to access the system. It consists of fields for entering a username and password, possibly with options for password recovery or account creation. This interface is designed to ensure the security of user accounts and limit access to authorized individuals.

Figure 4.3 shows the Add Student Interface allows authorized users, such as administrators or teachers, to input and save information about new students. This interface typically includes fields for the student's name, contact details, enrollment information, and other relevant data. It streamlines the process of adding students to the system's database.



Figure 4.4 shows the Upload Result Interface enables authorized users, often teachers or administrators, to upload and store students' academic results or performance data. It may involve options to select the course, semester, and other relevant parameters before uploading the results. This interface streamlines the process of recording and managing student performance data.

Figure 4.5 shows the Transcript Interface offers users access to a student's academic transcript or record. It provides a comprehensive overview of the courses taken, grades obtained, and other relevant academic information. This interface often allows users to view, download, or print transcripts for official purposes like applying for further education or job opportunities.

These interfaces collectively contribute to the functionality and user experience of the web-based system, catering to different user needs and enabling efficient management of student-related data and processes.

#### 4.4 User manual

The following are the necessary steps to take in order to use the system efficiently and effectively.

- i. Load the url of the system <https://localhost/transcript/> the welcome page will be displayed.
- ii. Click on the **Proceed** button to proceed to the main system.
- iii. If you created an account, provide your login details by entering your username and password.
- iv. Depending on the login details provided you will be automatically directed to the dashboard.
- v. The various task that you can perform on the portal will be displayed on the sidebar of the dashboard.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Summary**

The Transcript Management System represents a pivotal advancement in educational administration and student record-keeping. Through the utilization of modern web-based technology, this system streamlines the process of managing and accessing academic transcripts, enhancing efficiency and data accuracy. By providing interfaces for user authentication, student addition, result uploads, and transcript generation, the system offers comprehensive solutions for educational institutions to maintain accurate and accessible academic records. The system's capabilities contribute to improved record-keeping, reduced administrative burdens, and enhanced user experience for both administrators and students.

#### **5.2 Conclusion**

In conclusion, the Transcript Management System is a significant innovation that addresses the challenges associated with manual student record-keeping in educational institutions. The various interfaces and functionalities within the system facilitate efficient data management and retrieval, ensuring that accurate academic records are easily accessible to authorized users. The system's impact on educational administration is notable, offering streamlined processes, reduced errors, and enhanced transparency.

#### **5.3 Recommendations**

To maximize the effectiveness of the Transcript Management System, several recommendations are pertinent. First, ongoing training and support should be provided to users to ensure proper utilization of the system's features. Additionally, efforts should be made to address user concerns related to data privacy and security, reassuring stakeholders about the confidentiality of sensitive student information. Furthermore, periodic updates to the system should be undertaken to incorporate emerging technologies and address potential vulnerabilities.

#### **5.4 Contribution to Knowledge**

The Transcript Management System significantly contributes to the field of educational technology and administration. Its innovative approach to digitizing student records and simplifying administrative tasks demonstrates how modern technology can enhance efficiency and accuracy in academic institutions. Moreover, the development of user-friendly interfaces tailored to educational processes showcases the potential of technology to adapt to specific industry requirements.

## **5.5 Area for Further Work**

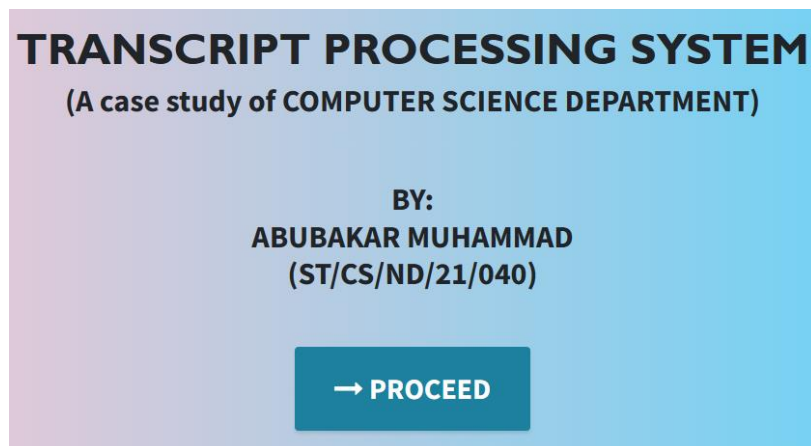
While the Transcript Management System represents a noteworthy achievement, there are areas for further exploration and improvement. Future research could delve into enhancing the system's security measures, ensuring robust protection against unauthorized access and data breaches. Additionally, investigating the integration of artificial intelligence for data analytics could provide insights into academic performance trends, aiding educational institutions in making informed decisions to improve student outcomes.

## REFERENCES

- Bertalanffy, L. V. (2018). *General System Theory: Foundations, Development, Applications*. George Braziller Publication, New York.
- Brown, E. F., & Williams, G. R. (2021). Digital Transformation in Higher Education: Case Studies from the COVID-19 Pandemic. *Educational Technology Research and Development*, 69(1), 335-352.
- Fayol, H. (2019). *General and Industrial Management*. Pitman Publishing.
- Kaplan, R. S., & Norton, D. P. (2016). The Balanced Scorecard: Translating Strategy into Action. *Harvard Business Review*, 74(1), 75-85.
- Landis, J. R., & Koch, G. G. (2017). "The Measurement of Observer Agreement for Categorical Data." *Biometrics*, 33(1), 159-174.
- Nielsen, J., & Molich, R. (2019). "Heuristic Evaluation of User Interfaces." *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 249-256.
- Pascarella, E. T., & Terenzini, P. T. (2015). "How College Affects Students: A Third Decade of Research." Jossey-Bass.
- Robson, K., & Thompson, L. (2020). "The Impact of Automation on Administrative Processes in Higher Education." *International Journal of Educational Management*, 34(5), 734-750.
- Smith, A. B., & Johnson, C. D. (2020). Challenges and Opportunities in Modernizing Academic Record Management. *Journal of Higher Education Administration*, 25(3), 45-62.
- Smith, R., & Williams, E. (2018). "Data Quality Management in Higher Education Institutions." *Journal of Information Systems Education*, 29(3), 195-206.

## APPENDIX A

### Welcome Interface



### Login Interface

The image shows a 'Student Login' form. At the top, it says 'Student Login' in a light blue header. Below that, in large bold black letters, is 'STUDENT PIN'. Underneath is a light blue input field with a person icon on the left and the number '210665242' inside. Below that, in large bold black letters, is 'PASSWORD'. Underneath is a light blue input field with a lock icon on the left and seven dots inside. At the bottom center is a green button with a white right-pointing arrow and the word 'Login' in white. At the very bottom, there are two links: 'Forgot Password?' and 'Register'.

### Add Student Interface

The image shows an 'Add Student' form. On the left, there is a blue button labeled 'Add Student'. The main form area has several fields: 'Reg. Number' (text input), 'First Name' (text input), 'Last Name' (text input), 'Other Name' (text input), 'USER PIN' (text input), 'Department' (dropdown menu with 'Computer Science' selected), 'Student Pic' (file upload button labeled 'Choose File' with 'No file chosen' and a note 'Select a JPEG picture that is not above 20kb'), 'Date Of Birth' (text input), 'Gender' (dropdown menu with '--- Select Gender ---'), 'State Of Origin' (dropdown menu with '--- Select State ---'), 'LGA' (text input), 'Telephone' (text input), and 'Address' (text input). At the bottom right of the form is a blue button labeled 'Add Student'.

## Upload Result

Upload Result

Student PIN

Section

---Select Section---

▼

Semester

---Select Semester---

▼

Level

---Select Level---

▼

Course Title

Select Course

▼

Course Code

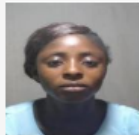
Unit

Score

Add Result

## Transcript Interface

Student's Academic Records



Name:

EYUAH GABRIEL AKAMSHU

Department:

Computer Science

Matric:

ST/CS/ND/22/002

ND1 First Semester

| Course                              | Course Code | Credit Unit | Score |
|-------------------------------------|-------------|-------------|-------|
| Introduction to Computing           | COM113      | 3           | 72    |
| Introduction to Digital Electronics | COM112      | 3           | 88    |

Your GPA For This Semester is: **3.75**

Your CGPA is: **3.75**

ND1 Second Semester

| Course | Course Code | Credit Unit | Score |
|--------|-------------|-------------|-------|
|--------|-------------|-------------|-------|

## APPENDIX B

### PROGRAM CODE

```
<!DOCTYPE html>
<html lang="en">

  <head>

    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-
to-fit=no">
    <meta name="description" content="">
    <meta name="author" content="">

    <title>TRANSCRIPT MANAGEMENT SYSTEM</title>

    <!-- Bootstrap Core CSS -->
    <link href="vendor/bootstrap/css/bootstrap.min.css" rel="stylesheet">

    <!-- Custom Fonts -->
    <link href="vendor/font-awesome/css/font-awesome.min.css" rel="stylesheet"
type="text/css">
    <link
href="https://fonts.googleapis.com/css?family=Source+Sans+Pro:300,400,700,300ital
ic,400italic,700italic" rel="stylesheet" type="text/css">
    <link href="vendor/simple-line-icons/css/simple-line-icons.css"
rel="stylesheet">

    <!-- Custom CSS -->
    <link href="css/stylish-portfolio.min.css" rel="stylesheet">

  </head>

  <body id="page-top" style=" background: linear-gradient(90deg, pink, rgb(67,
207, 250));">

    <!-- Header -->
    <header class="masthead d-flex">
      <div class="container text-center">

        <h1 class="mb-2" style="font-size: 45px; font-weight: bolder; font-
family: 'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS', sans-serif; text-
transform: uppercase;"><span style=" margin-top:15px;"> TRANSCRIPT MANAGEMENT
SYSTEM</span> <br> </h1>
        <h2 class="mb-3" style="">(A case study of COMPUTER SCIENCE
DEPARTMENT)</h2><br><br>
        <h2>BY: <br> ABUBAKAR MUHAMMAD <br> (ST/CS/ND/21/040)</h2> <br>

      </div>

      <br>

      <strong><a class="btn btn-primary btn-xl js-scroll-trigger"
href="system/" style="font-size: 30px;"><span class="fa fa-long-arrow-
right"></span> PROCEED</a></strong>
```

```

        <br> <br> <br>
        <!-- <h4 class="alert alert-success"><a href="onlinefood-
order/admin/index.php">Admin Login Here!</a></h4> -->
        </div>
        <div class="overlay"></div>
    </header>

    <!-- Scroll to Top Button-->
    <a class="scroll-to-top rounded js-scroll-trigger" href="#page-top">
        <i class="fa fa-angle-up"></i>
    </a>

    <!-- Bootstrap core JavaScript -->
    <script src="vendor/jquery/jquery.min.js"></script>
    <script src="vendor/bootstrap/js/bootstrap.bundle.min.js"></script>

    <!-- Plugin JavaScript -->
    <script src="vendor/jquery-easing/jquery.easing.min.js"></script>

    <!-- Custom scripts for this template -->
    <script src="js/stylish-portfolio.min.js"></script>

</body>

</html>

<?php
error_reporting(0);
/*
 * To change this template, choose Tools | Templates
 * and open the template in the editor.
 */
session_start();
require_once 'config.php';

$conn = new mysqli(DB_SERVER, DB_USERNAME, DB_PASSWORD, DB_NAME);
                                if($conn->connect_error){
                                    echo 'Unable to connect
to database'. $conn->connect_error;
                                }
?>
<html lang="en">
<head>
    <meta charset="utf-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>Student Transcript Generation System</title>

    <link href="css/bootstrap.min.css" rel="stylesheet">
    <link href="css/style.css" rel="stylesheet">

    <!-- HTML5 Shim and Respond.js IE8 support of HTML5 elements and media
queries -->
    <!-- WARNING: Respond.js doesn't work if you view the page via file:// -->
    <!--[if lt IE 9]>
        <script src="libs/html5shiv.min.js"></script>

```



```

        <script src="libs/respond.min.js"></script>
    <![endif]-->
</head>
<body>
    <div class="container">
        <header id="site-header" class="row">
            <div id="logo" class="col-md-3">
                
            </div>
            <div id="site-name" class="col-md-9" style="text-align:
center;align-items: center;justify-content: center;">
                <h2>THE FEDERAL POLYTECHNIC MUBI</h2>
                <h4>Department of Computer Science</h4>
                <h5>Student Transcript Generation System</h5>
            </div>
        </header>
        <div id="content" class="row">
            <div id="main" class="col-md-12">
                <div id="breadcrumb" class="row">
                    <div class="col-md-12">
                        <ul class="breadcrumb">
                            <li><a href="index.php">Home</a></li>
                            <li><a href="admin-
login.php" class="btn btn-primary" style="margin: 5px;width: 150px;">Admin
Area</a></li>
                            <li class="btn btn-
default" style="margin: 5px;width: 150px;">Upload Result</li>
                        </ul>
                    </div>
                </div>
                <div id="main-content">
                    <?php
                        if(isset($_POST['result'])){
                            $matric = $_POST['matric'];
                            $section = $_POST['section'];
                            $semester = $_POST['semester'];
                            $level = $_POST['level'];
                            $title = $_POST['title'];
                            $code = $_POST['code'];
                            $unit = $_POST['unit'];
                            $score = $_POST['score'];

                            if($matric == "" || $title == "" ||
$code == "" || $unit == "" || $score == ""){

                                echo "<div class=\"alert
alert-danger alert-dismissible\">
                                    .\"<button
type=\"button\" class=\"close\" data-dismiss=\"alert\" aria-hidden=\"true\"> .
\"&times;\" . \"</button>\" . \"All Fields Must be Filled.\"
                                    .\"</div>\";
                                }else{
                                    $insert = $conn->query("INSERT
INTO scores(matric, level, section, semester, course, code, unit, score)
VALUES('$matric', '$level', '$section', '$semester', '$title', '$code', '$unit',
'$score')");
                                    }
                                    if($insert){

```

```

success.php");
header("location: upload-
}

}
?>
<section id='menu' class="col-md-3">
    <ul>
        <li><a
href="upload.php" class="btn btn-default" style="margin: 5px;width:
150px;">Upload Result</a></li>
    </ul>
</section>
<section class="col-md-9 well">
    <form class="form-horizontal"
action="" enctype="multipart/form-data" method="post" role="form">
        <div class="form-group">
            <label for="matric"
class="control-label col-md-2">Student PIN</label>
            <div class="col-md-10">
                <input type="number"
class="form-control" name="matric">
            </div>
        </div>
        <div class="form-group">
            <label for="section"
class="control-label col-md-2">Section</label>
            <div class="col-md-10">
                <select name="section"
class="form-control">
                    </select>
            </div>
        </div>
        <div class="form-group">
            <label for="semester"
class="control-label col-md-2">Semester</label>
            <div class="col-md-10">
                <select name="semester"
class="form-control">
                    <option>---Select
Semester---</option>
                    <option>First</option>
                    <option>Second</option>
                </select>
            </div>
        </div>
        <div class="form-group">
            <label for="level"
class="control-label col-md-2">Level</label>
            <div class="col-md-10">
                <select name="level"
class="form-control">
                    <option>---Select Level--
-</option>
                    <option>ND1</option>
                    <option>ND2</option>
                    <!-- <option>ND3</option>
-->

```

```

        </select>
    </div>
</div>
<table class="table table-condensed">
    <thead>
        <tr>
            <th>Course Title</th>
            <th>Course Code</th>
            <th>Unit</th>
            <th>Score</th>
        </tr>
    </thead>
    <tr>
        <td><select
            <option>Select
            <option>Introduction to
            <option>Introduction to
            <option>Citizenship
            <option>Technical English
            <option>Introduction to
            <option>Descriptive
            <option>Logic And Linear
            <option>Functions and
            <option>Statistical

            <option>Introduction to
            <option>Computer Packages
            <option>Citizenship
            <option>00 Java</option>
            <option>Introduction to
            <option>Data Structure
            <option>Computer Packages
            <option>System Analysis

            <option>Computer
            <option>Small Business
            <option>00 Basic</option>

```

style="height:35px !important;" name="title">  
 Course</option>  
 Computing</option>  
 Digital Electronics</option>  
 Education I</option>  
 I</option>  
 Computer Programming</option>  
 Statistics I</option>  
 Algebra</option>  
 Geometry</option>  
 Theory</option>  
  
 The Internet</option>  
 I</option>  
 Education II</option>  
  
 Entrepreneurship</option>  
 And Algorithm</option>  
 II</option>  
 And Design</option>  
  
 Troubleshooting I</option>  
 Start-up</option>

```

And Management</option>
And Design</option>
And Design</option>
Troubleshooting II</option>
</select></td>
<td><input style="height:35px
!important;width:100px;" type="text" class="form-control" name="code"></td>
<td><input style="height:35px
!important;width:100px;" type="number"form-control name="unit"></td>
<td><input style="height:35px
!important;width:100px;" type="number"form-control name="score"></td>
</tr>
</table>
<div class="col-sm-offset-5 col-
sm-7">
<button type="submit"
name="result" class="btn btn-primary">Add Result</button>
</div>
</form>
</section>
</div>
</div>
</div>
<footer id="site-footer" class="row">
<section class="col-md-12">
<p>Copyright &copy;<?php echo date("Y"); ?> The Federal
Polytechnic Mubi, Adamawa State</p>
</section>
</footer>
</div>

<!-- jQuery (necessary for Bootstrap's JavaScript plugins) -->
<script src="libs/jquery-1.10.1.min.js"></script>
<!-- Include all compiled plugins (below), or include individual files as
needed -->
<script src="js/bootstrap.min.js"></script>
</body>
</html>

```