# COVER PAGE

TITLE OF THESIS/DISSERTATION/PROJECT

BY

CHUKWU DANIEL NONSO

BHU/20/04/05/0010

M. Sc. COMPUTER SCIENCE

1st

NOVEMBER, 2023

**TITLE PAGE**

SDC WEB APPLICATION

BY

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BHU/20/04/05/0010

A PROJECT SUBMITTED TO THE SCHOL OF POSTGRADUATE STUDIES, BINGHAM UNIVERSITY, KARU, NASARAWA STATE, NIGERIA

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DEPARTMENT OF COMPUTER SCIENCE

FACULTY OF COMPUTING

BINGHAM UNIVERSITY, KARU

NIGERIA

1st

NOVEMBER, 2023

**DECLARATION**

I hereby declare that this Thesis/Dissertation/Project entitled [STATE TITLE] has been performed by me in the Department of Computer Science, Bingham University Karu, under the supervision of **(**STATE NAMES OF SUPERVISORS**).** The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this project Thesis/Dissertation/Project was previously presented for another degree or diploma at this or any other institution.

Author’s Name (Surname first) ……………………… …………….

Signature Date

**CERTIFICATION**

This thesis/Dissertation/Project titled, (STATE TITLE) by (State Your Name with Surname first in caps), (state your matriculation number) meets the regulations governing the award of the degree of (state degree/diploma) of Bingham University, Karu and is approved by the Project/Thesis/Dissertation Examination Committee for its contribution to knowledge and literary presentations.

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State name of first supervisor Date

Chairman, Supervisory Committee

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State name of second supervisor Date

Member, Supervisory Committee

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State name of PG rep Date

Internal Examiner

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State name of HOD Date

Head of Department (HOD)

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State name Date

Chairman of Committee

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State name of dean of PG school Date

Dean, School of Postgraduate Studies

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Express gratitude to individuals that provided one form of assistance or the other

**ABSTRACT**

*This research project focuses on the development of a web application designed to assist the Student Disciplinary Council (SDC) in managing their responsibilities, with a primary focus on efficiently handling cases of students appearing before the council for disciplinary issues within and outside the school premises. The objective of this project is to streamline the workflow of the SDC, enhance transparency, and facilitate the management of disciplinary cases, ultimately contributing to a more effective disciplinary process.*

*To address this issue, the methodology employed involved a thorough analysis of the existing processes and systems within the SDC. This analysis served as the foundation for the design and implementation of the web application, taking into consideration the specific needs and requirements of the SDC. The application was developed with user-friendly interfaces and features that enable the council to log and track cases, manage student records, schedule hearings, and communicate with relevant parties involved in the disciplinary process.*

*The implementation of this web application has yielded significant results, including improved case management, enhanced data accuracy, and reduced administrative burden on the SDC members. The application also supports real-time communication and collaboration among council members, administrators, and involved students. Moreover, the application serves as a valuable repository of information, facilitating data analysis and reporting.*

*Key findings from this research reveal a notable increase in the efficiency of the SDC's operations, quicker resolution of disciplinary cases, and a more transparent and organized process. The implementation of this web application offers a promising avenue for educational institutions to strengthen their disciplinary processes.*

*In conclusion, this research project recommends the adoption of the web application by educational institutions with disciplinary councils to improve their efficiency and effectiveness in managing disciplinary matters. The application's user-friendly design and functionalities make it a valuable tool for promoting discipline and maintaining a safe and conducive learning environment.*

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CHAPTER ONE

INTRODUCTION

* 1. Background of Study

1. Discuss the general area of your study in relation (one paragraph)

The Student Disciplinary Committee (SDC) Application is an innovative and comprehensive system designed to streamline and enhance the management of disciplinary cases within the university. This incoming user-friendly platform should enable the committee to efficiently create cases, organize cases, analyze each case, schedule hearings for 1 or multiple cases an deliver verdicts to each case after a hearing for a case has been held. Reducing the need for the committee to always have to interact with documents holding information about the cases. This app will allow scheduling of hearings for those cases, adding a much needed layer of transparency between the offenders and the SDC members. With features tailored to the specific needs of the disciplinary process, the SDC Application provides real-time updates, document storage, and communication tools, promoting transparency and accountability. By leveraging cutting-edge technology, this application not only simplifies administrative tasks but also ensures a fair and effective resolution of disciplinary matters, fostering a conducive learning environment for all students.

1. Narrow the issue to what you are trying to tackle (one paragraph)

The Student Disciplinary Committee (SDC) Application aims to revolutionize how the university manages disciplinary cases. It's designed for simplicity and efficiency, enabling the committee to easily create, organize, and analyze cases without constantly dealing with paper documents. The app introduces features like scheduled hearings, enhancing transparency between offenders and SDC members. Specifically crafted for disciplinary processes, the application offers real-time updates, secure document storage, and communication tools. By embracing advanced technology, it not only simplifies administrative tasks but also guarantees a fair and effective resolution of disciplinary matters. Ultimately, the SDC Application contributes to creating a positive learning environment for all students by promoting transparency and accountability in the disciplinary process.

1. State the emerging concern in the area of your research (one paragraph)

The emerging concern in the area of disciplinary management systems at the university level is the need for a more streamlined and efficient process. Traditional methods relying on paper documents have proven to be difficult to manage, tiring and time-consuming for SDC body, hindering their ability to promptly address disciplinary issues, with a major lack of transparency between the offenders and the committee. The Student Disciplinary Committee (SDC) Application seeks to address this concern by providing an innovative solution that leverages technology to simplify administrative tasks, ensure transparency, and speed up the resolution of disciplinary matters. This shift toward a digital platform responds to the emerging need for universities to adopt modern, user-friendly systems that not only enhance efficiency but also uphold fairness in dealing with disciplinary challenges.

1. State what has been done so far in the literature in the area of research (one paragraph)

The current literature reveals a growing recognition of the challenges faced by universities in effectively managing disciplinary cases. Traditional paper-based methods have been criticized for their inefficiency and lack of agility in responding to the dynamic nature of disciplinary issues. Some studies emphasize the importance of adopting digital solutions to streamline processes and enhance transparency. While there is a general acknowledgment of the need for improvement in disciplinary management systems, the specific development of a comprehensive and user-friendly application, such as the proposed Student Disciplinary Committee (SDC) Application, seems to be an innovative step in the literature. Existing research highlights the potential benefits of digital tools in this context, and the SDC Application aligns with these insights by integrating features tailored to the specific needs of the disciplinary process.

1. State the impact of the outcome to the study (one paragraph)

The successful implementation and adoption of the Student Disciplinary Committee (SDC) Application would have a transformative impact on the university's disciplinary processes. By replacing outdated paper-based methods with a modern, digital solution, the SDC Application is poised to significantly enhance the efficiency, transparency, and fairness of managing disciplinary cases. The real-time updates, secure document storage, and communication tools provided by the application would streamline administrative tasks, allowing the committee to focus more on the core aspects of case analysis and resolution. Ultimately, the positive outcome of this study would contribute to creating a conducive learning environment for all students, where disciplinary matters are handled with increased effectiveness and transparency amongst the academic/administrative.

* 1. Statement of Problem

The What?

The inefficiency problem in the traditional, paper-based methods for managing disciplinary cases within the university. The challenges associated with these outdated methods, including time-consuming administrative tasks and a lack of transparency, hinder the prompt and effective resolution of disciplinary matters.

The Why?

Reliance on manual, paper-intensive processes, can lead to delays, increased workload for committee members, and a diminished ability to analyze cases thoroughly and deliver the best verdicts on cases.

The When?

The issue mainly arises during the academic sessions, whether it's the 1st or 2nd semester.

The Where?

It can occur both within and outside the school premises. In any one of this instances, a case is typically initiated by having offenders complete a statement form. This information is then forwarded to the Student Affairs Office, where a case is created, using the available documents and statements from the offenders.

The Who?

Presently, the problem impacts the offenders who lack awareness of when their cases are created, or when a hearing for them is scheduled. This extends to more complex scenarios where offenders may desire the chance to submit an appeal and have that appeal also play a role on the final verdict delivered during the scheduled hearing.

The How?

Addressing this problem requires me to engage with students who have been on the receiving end, gathering their perspectives on what they would have preferred before a case, before a case hearing and even after a verdict was delivered. Also consulting with SDC committee members to identify the features they desire and the challenges they face with the current execution process, we can implement solutions that cater to the needs of both parties. This collaborative effort ensures a more effective and user-friendly disciplinary system.

Existing solution

Presently, the management of disciplinary cases involves the creation of paper documents, often causing delays and inefficiencies. There is a lack of real-time updates and transparency in the process. The current system fails to provide offenders with timely information about the creation of their cases, hearing schedules, and opportunities for appeal.

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Proposed Solution:

The proposed solution is the development and implementation of the Student Disciplinary Committee (SDC) Application, a digital platform tailored for efficient management of disciplinary cases within the university. This application aims to replace the current paper-based system, introducing real-time updates, transparency, and user-friendly features.

Principles and Theories:

1. User-Centered Design: The application will adhere to principles of user-centered design, incorporating feedback from both students and committee members to ensure usability and effectiveness.

2. Agile Methodology: The development process will follow agile principles, allowing for iterative improvements based on continuous feedback and evolving needs.

3. Transparency and Accountability: The application aligns with principles of transparency and accountability in organizational management, providing clear communication channels and documentation throughout the disciplinary process.

4. Technology Adoption Theory: The users are more likely to embrace effective use of new technologies if it is perceived as easy to use, provides clear advantages, and enhances their current practices.

5. Conflict Resolution Theories: The application's features for scheduled hearings and opportunities for appeal draw on principles of conflict resolution theories, aiming to facilitate fair and effective resolution of disciplinary matters.

* 1. Research Question

How can the implementation of the Student Disciplinary Committee (SDC) Application enhance the management of disciplinary cases within the university, addressing the current limitations of the paper-based system and fostering transparency, efficiency, and fair resolution?

The study aims to investigate the effectiveness of introducing a digital platform to streamline disciplinary processes, with a focus on user experience, transparency, and accountability. The primary purpose is to identify and implement improvements that contribute to a more efficient and equitable management of disciplinary cases, ultimately creating a conducive learning environment for all students.

1.4 Aim and Objectives

Aim:

To enhance the management of disciplinary cases within the university through the implementation of the Student Disciplinary Committee (SDC) Application, fostering transparency, efficiency, and fair resolution.

Objectives:

1. To design a user-friendly and efficient Student Disciplinary Committee (SDC) Application tailored to the needs of the disciplinary process.

2. To implement the SDC Application as a digital platform for creating, organizing, and analyzing disciplinary cases within the university.

3. To integrate features that allow real-time updates, secure document storage, and communication tools within the SDC Application.

4. To determine the impact of the SDC Application on transparency, accountability, and efficiency in managing disciplinary cases.

5. To investigate the experiences and feedback of both SDC committee members and offenders regarding the usability and effectiveness of the SDC Application.

6. To evaluate the scheduling functionality of the SDC Application in enhancing transparency and fairness in disciplinary hearings.

7. To compare the efficiency and effectiveness of the SDC Application with the traditional paper-based system in resolving disciplinary matters.

* 1. Significance of the Study

The significance of this study lies in its potential to revolutionize the management of disciplinary cases within the university setting, addressing critical challenges associated with traditional paper-based systems. The implementation of the Student Disciplinary Committee (SDC) Application is poised to bring about several noteworthy impacts:

1. Efficiency Enhancement: The SDC Application is expected to streamline administrative tasks, allowing for the swift creation, organization, and analysis of disciplinary cases. This efficiency improvement is crucial in promptly addressing disciplinary issues, fostering a safer and more conducive learning environment.

2. Transparency and Accountability: By introducing features such as real-time updates, secure document storage, and communication tools, the SDC Application aims to enhance transparency in the disciplinary process. This transparency not only builds trust among stakeholders but also ensures accountability in the resolution of disciplinary matters.

3. Fairness in Disciplinary Proceedings: The scheduling functionality of the SDC Application provides a structured and transparent approach to disciplinary hearings. This ensures that offenders are well-informed about the process, promoting fairness and adherence to due process, which is essential in upholding justice within the academic community.

4. User Experience Improvement: The study seeks to gather feedback from both SDC committee members and offenders to refine and optimize the application. This user-centric approach ensures that the SDC Application is not only efficient but also user-friendly, contributing to a positive experience for all stakeholders involved.

5. Technological Advancement in Education: The adoption of an innovative digital solution for disciplinary management aligns with the broader trend of integrating technology into educational processes. This study contributes to the advancement of technological applications in educational institutions, setting a precedent for the modernization of administrative processes.

1.6 Scope of Study

The scope of this study is centered around the implementation and impact assessment of the Student Disciplinary Committee (SDC) Application within the university environment. The study encompasses the development, deployment, and evaluation phases of the application. The geographical scope is limited to the university campus, where the application will be tested and refined based on user feedback.

Inclusions:

1. Application Development: The study involves the design, development, and deployment of the SDC Application, ensuring its compatibility with the existing university systems.

2. User Feedback and Refinement: Feedback from both SDC committee members and offenders is a crucial aspect. The study includes mechanisms for collecting, analyzing, and incorporating feedback to enhance the application's functionality and user experience.

3. Evaluation of Impact: The study assesses the impact of the SDC Application on the efficiency, transparency, and fairness of the disciplinary process. Key performance indicators will be used to measure the success of the application.

Exclusions:

1. Off-Campus Cases: The study is confined to disciplinary cases that occur within the university premises. Cases related to off-campus incidents fall outside the scope of this research.

2. Legal Framework: While the application aims to enhance fairness in disciplinary proceedings, the study does not delve into the legal intricacies associated with disciplinary matters.

3. External System Integration: The scope is limited to the standalone functionality of the SDC Application within the university's administrative framework. Integration with external systems is excluded from this study.

Time Frame:

The study is conducted over a specific time frame, focusing on the development and implementation phases of the SDC Application. The evaluation and refinement processes will be ongoing, with periodic assessments conducted to ensure continuous improvement.

In essence, this study provides a detailed exploration of the introduction and impact of the SDC Application within the university's disciplinary framework, emphasizing its relevance and effectiveness within the specified boundaries.

1.7 Organization of the study

Chapter One – Summarize your sections in Chapter One

In summary, the significance of this study transcends the immediate academic context, reaching into the broader societal impact of fostering a fair, transparent, and technologically advanced disciplinary system within the university. The outcomes of this research have the potential to influence similar initiatives in educational institutions globally.

Chapter Two– Summarize your sections in Chapter Two………………

Chapter Three – Summarize your sections in Chapter Three………………

Chapter Four – Summarize your sections in Chapter Four………………

Chapter Five – Summarize your sections in Chapter Five………………