

A WEB-BASED STUDENT COMPLAINT SYSTEM - CAMPUS SAFETY AND WELL-BEING

BY

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2017/1/66002CT

DEPARTMENT OF COMPUTER SCIENCE FEDERAL

UNIVERSITY OF TECHNOLOGY MINNA

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**PROJECT SUBMITTED TO THE DEPARTMENT OF COMPUTER SCIENCE,
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UNIVERSITY OF TECHNOLOGY, MINNA, NIGERIA IN PARTIAL FULFILLMENT
OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF BACHELOR OF
TECHNOLOGY IN COMPUTER SCIENCE.**

DECEMBER, 2023

DECLARATION

I hereby declare that this project titled: “CampusGuard: A Web-Based Student Complaint System for Ensuring Campus Safety and Well-being” is a collection of my original project work, and it has not been presented for any other qualification anywhere. Information from other sources (published or unpublished) has been duly acknowledged.

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2017/1/66002CT

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CERTIFICATION

The project titled: “CampusGuard: A Web-Based Student Complaint System for Ensuring Campus Safety and Well-being” by: Abolaji Ezekiel Femi (2017/1/66002CT) meets the regulations governing the award of the degree of Bachelor of Technology of the Federal University of Technology, Minna.

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DEDICATION

I dedicate this project to the almighty God, my Father, my King, my Friend, the source of my strength whose grace, mercy and faithfulness are abundant in my life. I also want to dedicate this project to my parents, Mr. and Mrs. Abolaji for their unwavering support and love throughout my life. I am forever grateful for your congratulations and commitment to my growth.

ACKNOWLEDGEMENT

I would like to express my gratitude to God Almighty for granting me the strength, wisdom, and perseverance and for the privilege to have worked on this campus as a full-time student; the training process I believe will be worth the while.

In heartfelt remembrance, this project is dedicated to the cherished memory of my late mother, Yemisi Robert. May her soul rest in eternal peace. My dad, Mr. Abolaji Joushua Robert for always been there for me through thick and thin, providing me with unwavering love, support, and guidance. Your tireless efforts in raising me to become the person I am today are immeasurable. My sincere appreciation to my Supervisor Professor John K. Alhassan, I consider myself fortunate to have had you as my supervisor. I sincerely appreciate the Head of Department, Computer Science Dr. (Mrs.) Opeyemi AderikeAbisoye, 500 level Adviser Dr. Enesi Aminu Femi and the entire staff of the Computer Science Department, Prof. John K. Alhassan, Dr. Solomon Adelowo Adepoju, Mr. Ugwuoke Cosmas Uchenna, Mr. Shehu Ibrahim Shehi, Dr. Abdullahi Muhammad Bashir, Dr. Ojerinde Oluwaseun Adeniyi, Mr. Adama Ndako Victor, Mr. Muhammad Kudu Muhammad, Dr. Ameen Ahmad Oloduowo, Dr. Bashir Sulaimon Adebayo, Mr. Saliu Adam Muhammad, Dr. Mohammed Danlami Abdulmalik, Mr. Lawal Kehinde Hussein, and Mr. Sani Alkali Umar for their tireless efforts towards imparting me with the knowledge required to excel in my studies.

ABSTRACT

CampusGuard is a dedicated student complaint management system, ensuring a secure and seamless channel for students to confidentially report grievances, enhancing the data pool accessible to campus authorities. Developed with HTML, CSS, and JavaScript for the frontend, supported by Django for the backend, and utilizing SQLite for the database, the platform prioritizes crime prevention and resolution. Users have the liberty to report various types of issues, providing crucial information like date, time, location, and detailed descriptions. This system prioritizes user data privacy through robust security measures and authentication protocols, with exclusive database access granted solely to the Super Administrator. It stands as a pivotal resource, fostering safety and cooperation between the campus community and administration. CampusGuard's user-friendly interface ensures accessibility while fortifying safety measures, thereby contributing to a safer and more secure environment for everyone involved.

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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background to the Study

In the vibrant tapestry of higher education, where minds ignite with curiosity and passions flourish, universities and colleges stand not just as bastions of learning but as communities where safety, well-being, and personal growth intertwine (Gura and Philip 2023). Yet, amid the pursuit of knowledge and self-discovery, a shadow looms large - the haunting specter of unreported human rights violations.

In the Nigerian educational landscape, a cloak of silence often veils these violations, shrouding incidents of harassment, discrimination, and injustices in a suffocating silence. Behind closed doors and hushed whispers, students grapple with fear, distrust, and a profound lack of confidence in existing channels for justice. The consequence? A pervasive culture of underreporting, leaving countless tales of injustice buried and unaddressed (Maier et al, 2020). CampusGuard - an audacious endeavor birthed from the crucible of necessity, a beacon amidst this darkness. Born not from mere bits and bytes but from a fervent desire to dismantle the walls of silence, this web-based sentinel emerges as a sanctuary, a digital haven where students wield the power of their voices without fear of reprisal.

In the churning cauldron of software development, CampusGuard took shape, drawing its essence from the guiding principles of the revered Waterfall methodology. Its architecture, a symphony of seamless design and intuitive interface, beckons students to navigate its corridors with ease, to unfurl their grievances in digital whispers that echo loud in the halls of justice.

This is no mere platform; it's a revolution draped in code and pixels. CampusGuard stands tall,

a lighthouse in the tumultuous sea of human rights violations, where a simple click morphs into a roar against injustice. With its user-centric design, it becomes the harbinger of change, weaving a narrative of empowerment for the student populace.

Through the labyrinthine corridors of complaint submission, CampusGuard orchestrates a ballet of efficiency. Students, once voiceless, now find solace in reporting incidents, each click a testament to their courage. Administrators, the custodians of justice, receive these digital missives, wielding their virtual quills to pen responses that promise action, closure, and above all, acknowledgment.

But CampusGuard is not just a repository of grievances; it's a catalyst for transformation. Through meticulous trials and acceptance testing, its efficacy stands validated, a testament to its prowess in dismantling barriers to reporting. It's not merely a system; it's the embodiment of hope, a catalyst for a cultural shift that transcends binary digits, fostering an ethos of transparency, accountability, and safety.

CampusGuard isn't confined to the ivory towers of academia; its clarion call resonates beyond, urging governments and human rights organizations to embrace its potential. It's a clarion call for change, a plea for a more just and secure educational landscape. Its adoption heralds a new dawn where reporting human rights violations becomes not just a duty but an act of empowerment.

In the ever-evolving saga of safeguarding rights and fostering well-being, CampusGuard emerges not just as a software but as a catalyst for societal metamorphosis. It's the embodiment of a vision where every student's voice reverberates, where justice isn't a lofty ideal but a tangible reality. Through its digital corridors, it forges a path where campus safety and the sanctity of student well-being stand as unwavering pillars.

1.2 Statement of Problem

In the context of Nigerian higher education, a pervasive challenge confronts the sanctity and safety of campus environments—a prevalent culture of underreported human rights violations (Odejide et al, 2006). These violations encapsulate a spectrum of misconduct, ranging from subtle biases and discrimination to overt acts of harassment, often veiled in silence and reluctance to report.

Central to this issue is the reticence of students in bringing these violations to light, stemming from multifaceted concerns. Students express apprehension and distrust in the efficacy of existing reporting mechanisms, compounded by the apprehension of potential backlash from perpetrators, leading to a significant underreporting of incidents. Consequently, a climate of secrecy and vulnerability persists among students, fostering an environment where grievances remain unaddressed.

Compounding this challenge is the inadequacy of current reporting systems, lacking in user-friendliness, secure channels for complaint submission, and efficient resolution processes. These deficiencies not only dissuade students from reporting but also impede the pursuit of justice, leaving both victims and perpetrators without proper recourse and accountability.

Beyond immediate consequences, the ripple effects of underreported violations reverberate throughout the academic community. They undermine the foundation of trust and respect, impeding the holistic development and well-being of students. This perpetuation of underreporting cultivates an environment where misconduct thrives, eroding the fundamental principles of safety and dignity within educational settings.

Addressing this intricate challenge requires a transformative approach—an innovative, confidential, and empowering platform that fosters a safe space for reporting human rights violations without fear of reprisal. Such a solution should not only facilitate a streamlined

reporting process but also ensure responsiveness, confidentiality, and agency for individuals reporting these incidents.

Given these multifaceted challenges, there exists an urgent need for a comprehensive system that not only empowers students but also redefines the framework underpinning campus safety and well-being.

1.3 Motivation of Study

The impetus driving this study emanates from the critical need to address the pervasive underreporting of student rights violations within Nigerian educational institutions. The motivation stems from a profound concern for the well-being and safety of students, coupled with the imperative to cultivate an environment conducive to holistic academic and personal growth.

At the heart of this motivation lies a commitment to fostering an atmosphere where students feel empowered to voice their grievances without fear of reprisal or marginalization. It stems from an acute awareness of the detrimental effects of unchecked misconduct on the individual and collective psyche of the academic community.

Moreover, the motivation to delve into this realm is deeply rooted in the aspiration to uphold fundamental human rights and dignity within educational settings. It arises from a moral imperative to dismantle barriers inhibiting the reporting and resolution of violations, thereby safeguarding the rights and safety of all members of the educational community.

The study's motivation further resonates with a broader societal aspiration for transparency, accountability, and justice. It aligns with the pursuit of societal norms where the reporting of human rights violations becomes not only feasible but an integral component in fostering a culture of respect, equality, and trust within educational institutions.

Furthermore, the study's motivation draws inspiration from the transformative potential of technology. Leveraging technological advancements to develop a robust, user-centric reporting system presents an opportunity to bridge the existing gaps in reporting mechanisms. It represents a proactive step towards fostering a campus environment where every voice is heard and every concern is addressed.

In essence, this study is driven by an earnest desire to catalyze a paradigm shift—to engender a cultural transformation wherein reporting human rights violations becomes not only accessible but also instrumental in ensuring a safer, more inclusive, and nurturing educational environments for all.

1.4 Aim and Objectives of Study

The aim of this study is to develop, implement, and evaluate an innovative web-based system, named CampusGuard, dedicated to enhancing the reporting and management of student's rights violations within Nigerian educational institutions.

The study endeavors to achieve the following specific objectives:

- i. Design a web-based student application.
- ii. Implement the design in (i) using.
- iii. Evaluate the system in (ii) with met

Through the pursuit of these objectives, this study aims to introduce an innovative and transformative solution, CampusGuard, which redefines the landscape of reporting human rights violations, fostering a culture of accountability, transparency, and respect within Nigerian educational institutions.

1.5 Significance of the Study

The significance of this study extends far beyond the confines of academia, resonating deeply within the societal fabric of Nigerian educational institutions and the broader landscape of human rights advocacy. The implementation and utilization of CampusGuard hold multifaceted significance:

1. **Enhanced Campus Safety and Well-being:** CampusGuard stands as a pivotal tool in fostering a safer and more secure environment within educational settings. By empowering students to report human rights violations without fear of reprisal, the system cultivates an atmosphere conducive to personal growth, academic excellence, and overall well-being.
2. **Empowerment and Agency:** This study underscores the importance of empowering students with the agency to voice their concerns and seek redress for injustices. CampusGuard serves as a vehicle through which individuals can assert their rights, fostering a sense of empowerment and active participation in creating a culture of accountability.
3. **Cultural Transformation:** The introduction of CampusGuard marks a fundamental shift in the reporting culture within educational institutions. It aims to disrupt the prevalent culture of underreporting by instilling trust in the reporting process, thus fostering an environment where all community members are encouraged to speak out against injustices.
4. **Accountability and Transparency:** By streamlining the reporting and resolution process, CampusGuard promotes accountability among administrators and ensures transparency in handling reported incidents. This not only holds perpetrators accountable for their

actions but also instills confidence in the fairness and effectiveness of institutional responses.

5. **Contribution to Human Rights Advocacy:** The implementation of CampusGuard contributes significantly to the broader human rights advocacy landscape. It exemplifies an innovative approach to addressing human rights violations, serving as a model for educational institutions and human rights organizations seeking to enhance reporting mechanisms.
6. **Policy Recommendations and Best Practices:** The outcomes and insights garnered from this study provide a foundation for policy recommendations and best practices. These recommendations are poised to guide educational authorities and policymakers in adopting similar systems, thereby influencing systemic changes that prioritize student safety and rights.

In summary, this study holds profound significance as it spearheads a transformational approach to addressing human rights violations within educational institutions. CampusGuard emerges not only as a technological solution but as a catalyst for cultural change, fostering an environment where every voice is valued, and every individual's rights are protected.

1.6 Scope and Limitations of Study

The scope of this study encompasses the design, development, implementation, and evaluation of CampusGuard—a web-based system dedicated to enhancing the reporting and management of human rights violations within Nigerian educational institutions. The study focuses on the following key aspects:

- i. **System Design and Development:** The study entails the conceptualization, design, and development of CampusGuard, emphasizing user-friendliness, confidentiality, and accessibility in reporting incidents.
- ii. **Functionality and Implementation:** It involves the practical implementation of CampusGuard within select educational institutions, ensuring seamless integration and usability within existing infrastructures.
- iii. **Efficiency and Responsiveness:** The study evaluates the functionality of CampusGuard in facilitating a streamlined complaint management process, emphasizing promptness, responsiveness, and accountability in addressing reported incidents.
- iv. **Evaluation and Impact Assessment:** It encompasses comprehensive evaluations to measure the effectiveness, user acceptance, and impact of CampusGuard on increasing reporting rates and addressing human rights violations within the chosen institutions.

However, the study is not without limitations:

- i. **Resource Constraints:** The study's comprehensive implementation across a wide spectrum of educational institutions may be constrained by resource limitations, potentially limiting the extent of implementation and evaluation.
- ii. **Contextual Variations:** The findings and recommendations derived from the study may be influenced by the specific contexts and characteristics of the chosen educational institutions, potentially limiting the generalizability of results.
- iii. **Adoption and Acceptance:** The successful adoption and acceptance of CampusGuard within educational settings may be subject to cultural, organizational, or behavioral barriers, impacting the overall efficacy of the system.

- iv. Technological Challenges: Potential technological constraints or limitations in terms of infrastructure, connectivity, or accessibility could impact the system's usability and reach within certain institutions.
- v. Ethical Considerations: Ensuring the ethical handling of reported incidents while preserving confidentiality poses challenges, necessitating a robust ethical framework to govern the system's operations.

While acknowledging these limitations, the study aims to maximize its contributions within the specified scope, offering valuable insights and recommendations for the advancement of reporting mechanisms for human rights violations within Nigerian educational institutions.

1.7 Organization of Study

Chapter One introduces the genesis of "CampusGuard: A Web-Based Student Complaint System for Ensuring Campus Safety and Well-being." It outlines the urgent requirement for a robust reporting system concerning campus safety. This chapter delineates the goals and objectives of CampusGuard, emphasizing its pivotal role in empowering students to report human rights violations without fear.

Moving forward, Chapter Two explores web-based complaint management systems extensively, drawing comparisons to CampusGuard's mission. It surveys existing systems in Nigeria and analogous scholarly projects, providing crucial insights that inform CampusGuard's development.

Chapter Three acts as the architectural blueprint, detailing the systematic analysis and design approaches utilized in shaping CampusGuard. It rationalizes the selected methodologies, aligning them intricately with the project's aim of ensuring a robust system that promotes campus safety and student well-being.

Chapter Four constitutes the core where CampusGuard materializes. It encapsulates the thorough modeling process, employing chosen methodologies to translate the initial vision into a concrete plan to protect students' rights and establish a secure campus environment.

Finally, Chapter Five synthesizes CampusGuard's journey, presenting the study's findings and highlighting its potential as a transformative tool for campus safety. It concludes by paving the way for future advancements, cementing CampusGuard's role in fostering a safer and more empowered educational environment.

CHAPTER TWO

2.0

LITERATURE REVIEW

2.1 Concept of Report in Nigeria

i. Sociocultural Perspectives: In Nigerian society, reporting incidents or grievances often intersects with cultural norms and societal expectations. The tradition of communal living and reliance on community structures influences the perception of reporting. There exists a dichotomy between the desire to seek resolution for issues and the apprehension stemming from potential repercussions or social stigmatization associated with reporting sensitive matters.

ii. Legal and Institutional Framework: Nigeria boasts a complex legal and institutional framework designed to address grievances and ensure justice. However, challenges persist in the accessibility and efficacy of these mechanisms. The Nigerian Constitution guarantees the right to report grievances and seek redress, emphasizing the importance of a fair and impartial system.

iii. Challenges and Barriers: Despite constitutional provisions, several challenges impede the effective reporting of grievances in Nigeria. These encompass issues such as fear of reprisals, distrust in law enforcement agencies, bureaucratic hurdles, and a lack of faith in the confidentiality of reporting systems.

iv. Emerging Trends and Technological Interventions: In recent times, technological advancements have introduced innovative avenues for reporting in Nigeria. Digital platforms, mobile applications, and online portals have been developed to provide avenues for reporting grievances anonymously, aiming to mitigate some of the barriers encountered in traditional reporting methods.

v. Cultural Sensitivity and Ethical Considerations: Cultural nuances and ethical considerations significantly impact the reporting culture in Nigeria. The concept of confidentiality and anonymity in reporting systems often conflicts with communal values, requiring a delicate balance between protecting identities and ensuring communal trust and support.

The concept of reporting grievances in Nigeria encapsulates a blend of societal, legal, and cultural intricacies. While the legal framework guarantees the right to report, the effective utilization of reporting mechanisms remains a challenge. Advancements in technology have opened new avenues, yet striking a balance between anonymity and community values remains a critical consideration in fostering a robust reporting culture.

2.2 Crime in Nigeria

In Nigeria, the specter of various crimes looms large, casting a shadow of insecurity across the nation. Both locals and foreigners grapple with heightened levels of uncertainty, where armed groups threaten even the sanctity of military installations. Menaces like rape, abduction, molestation, and car theft continue to haunt the populace. The north, in particular, contends with the persistent scourge of bandit assaults, amplifying the sense of vulnerability (Bukarti, 2021).

Operational challenges, compromised intelligence, and suspicions of ulterior motives within security forces compound the predicament. Efforts to combat abduction, cattle rustling, and banditry are hampered by these systemic shortcomings, exacerbating the security crisis. Ethnic and communal conflicts have gained momentum, further adding to the complexity of Nigeria's security landscape.

The alarming rise in kidnapping cases has transcended regional boundaries, evolving into a grave national security concern. Incidents of banditry, especially in the northern regions, have

surged, epitomized by the brazen abduction of over 300 schoolboys from Kankara, Katsina State, in December 2020. The North-West grapples with escalating rural banditry, with marauders wreaking havoc and establishing ominous footholds in states like Kaduna, Katsina, Zamfara, and Niger.

The post-democracy era since 1999 has seen a disturbing upswing in violent crimes, often characterized by their malevolent nature and the use of lethal weaponry. The democratic environment, while a beacon of progress, paradoxically served as a breeding ground for certain segments of the youth involved in violent activities. Destruction of traditional structures has also been linked to the rise in criminal activities, amplifying the social distress (Ukoji, 2023).

The democratic processes, entailing elections and party systems, have unwittingly provided a stage for manipulation and mobilization of the youth, exacerbated by their access to weapons. This nexus has catalyzed a surge in violent crimes, encompassing murder, rape, abduction, homicide, cattle rustling, armed robbery, cult clashes, insurgency, militancy, and the recent spike in banditry assaults, particularly in Northern Nigeria (Piccone, 2017).

Government responses have been insufficient, failing to curtail the escalating violence perpetrated by increasingly audacious and unpredictable bandits. The current surge in violent crimes, inflicting psychological trauma on innocent citizens nationwide, is deeply troubling. Banditry assaults, assassinations, kidnappings for ransom, and livestock rustling have become distressingly pervasive, instilling a pervasive sense of insecurity across Nigeria (Adeola & Alese, 2014).

2.2.1 Concept of Crime Reporting

The concept of crime reporting serves as a critical link between the public and security

agencies, encapsulating the dissemination of crime-related information through journalistic channels. It encompasses detailed journalistic pieces, whether in print or broadcast form, that elucidate criminal activities (NIMCJ, 2022).

Crime reporting, in essence, involves divulging information about committed crimes or events that contravene community regulations to the relevant governing bodies tasked with upholding these norms. While crime prevention aims to curtail criminal occurrences, its efficacy doesn't guarantee the eradication of crime, necessitating robust reporting mechanisms.

Various methods facilitate crime reporting (David, 2019):

- i. Face-to-Face (Manual) Reporting
- ii. Telephone Hotlines
- iii. Online Platforms

This research, however, centers on the online reporting method, emphasizing the integration of anonymity within the system. This approach proves pivotal given the vast expanse to be covered, the multitude of individuals within the landscape, and the inherent risks associated with reporting criminal activities.

An information system, as elucidated by (Emeritus, 2022), comprises an amalgamation of hardware, software, data, procedural, and human components. It functions collaboratively to generate, gather, store, retrieve, process, analyze, and distribute information, forming the foundational structure for effective crime reporting methodologies.

2.3 Concept of Complaint

The concept of a complaint within the context of various societal frameworks and legal systems encapsulates the expression of discontent, dissatisfaction, or grievances by an individual or a group. It signifies the formal or informal articulation of concerns regarding a perceived

injustice, violation of rights, or an unsatisfactory experience, often addressed to an entity responsible for redress or resolution.

- i. **Societal Perceptions:** Complaints serve as a mechanism for individuals to voice dissatisfaction or discontentment, reflecting the societal expectation of addressing grievances to seek rectification or justice. They underscore the significance of transparency, accountability, and fairness within communities.
- ii. **Legal and Administrative Frameworks:** Within legal and administrative structures, complaints are recognized as formal statements or assertions highlighting perceived injustices or violations of rights. They play a crucial role in ensuring adherence to laws, regulations, and ethical standards, often triggering investigations or corrective actions.
- iii. **Types and Scope:** Complaints span a wide spectrum, ranging from consumer grievances, workplace disputes, human rights violations, to administrative discrepancies. They can encompass various issues such as service dissatisfaction, misconduct, discrimination, contractual disputes, or ethical misconduct.
- iv. **Channels for Resolution:** Entities receiving complaints typically have established channels or procedures for lodging and addressing them. These may include formal complaint submissions, helplines, ombudsman services, online platforms, or legal recourse, aiming to provide a structured mechanism for resolution.
- v. **Role in Improvement and Accountability:** While complaints highlight areas of concern, they also contribute to systemic improvements. By addressing grievances,

organizations and institutions can identify shortcomings, rectify flaws, and reinforce accountability measures.

The concept of a complaint signifies an avenue for individuals or groups to articulate dissatisfaction or perceived injustices, prompting actions to address concerns. It serves as a cornerstone in societal, legal, and administrative frameworks, fostering transparency, accountability, and continuous improvement within various spheres of interaction.

2.3.1 Categories of Complain

Complaints span a wide spectrum of categories, reflecting diverse concerns encountered in various spheres of life. These encompass grievances lodged by individuals or groups, aiming to address issues of dissatisfaction, injustice, or perceived violations.

Consumer-related complaints arise from dissatisfaction with purchased goods or services, encompassing issues like product defects, poor service quality, billing errors, or false advertising. Employment and workplace complaints revolve around disputes with employers, harassment, discrimination, unsafe working conditions, or wage disputes.

Human rights complaints highlight violations of fundamental rights, including discrimination based on race, gender, religion, or ethnicity, as well as denials of freedoms or civil liberties.

Administrative and governmental complaints focus on maladministration, bureaucratic hurdles, corruption, or misconduct within administrative bodies.

Environmental complaints address concerns regarding environmental degradation, pollution, inadequate waste management, or violations of environmental regulations. Healthcare-related complaints involve issues of substandard care, malpractice, negligence, billing disputes, or lack of access to adequate healthcare services.

Education-related complaints encompass academic misconduct, unfair grading, discrimination,

inadequate facilities, or bullying within educational institutions. Financial and banking complaints arise from disputes in financial services, banking errors, mis-selling of financial products, or unfair debt collection practices.

Housing and property complaints involve disputes with landlords, housing code violations, lack of repairs, wrongful eviction, or property damage. Public services and utilities complaints concern inadequate public services, unreliable utilities, poor infrastructure maintenance, or excessive fees.

Legal and judicial complaints revolve around misconduct by legal practitioners, unfair trials, delays in court processes, or issues with legal representation. These categories reflect the diverse range of grievances individuals or groups may encounter, prompting the need for structured mechanisms for resolution and redress.

2.4 Related works

In a study conducted by Sharma and Naik (2019), they advocate for the development of an online automated system geared towards managing complaints and addressing criminal incidents, accessible through a user-friendly web-based platform. This proposed system aims to facilitate easy filing of complaints or reporting of crimes within specific areas by citizens. The process entails individuals creating an account and logging in before submitting a complaint, with system administrators verifying each login for authenticity. Upon filing a complaint, the complainant receives regular notifications updating them on the status of their case.

The system's functionality extends to aiding law enforcement in crime management by digitizing certain manual tasks. It integrates a module that enables swift access to information about missing persons, wanted criminals, and pertinent cases directly from the website,

potentially expediting investigative processes. Sharma and Naik suggest that this application could revolutionize policing by creating a virtual platform for community engagement, allowing law enforcement to stay abreast of criminal activities, offenders, and ongoing cases without the necessity for physical visits to police stations.

This proposed online system, as outlined in Sharma and Naik's research, demonstrates potential in enhancing the efficiency of crime management, fostering community involvement, and providing law enforcement with a streamlined approach to accessing crucial information pertinent to crime investigation and resolution.

In June of 2019, Tomas and his team pioneered the development of a versatile Crime Management and Reporting System, designed to operate seamlessly both online and offline, with a core emphasis on active citizen participation. Motivated by the inconvenience of physically visiting police stations and the perception of limited capabilities among authorities in addressing minor crimes and disseminating crucial crime-related information within communities, this innovative system was conceptualized.

The primary objective of this project is to revolutionize the landscape of crime detection and prevention. By leveraging technology and citizen engagement, Ganiron and team aim to bridge the gap between law enforcement and the community. Their system intends to empower citizens by providing them with accessible means to report incidents and crimes, eliminating the barriers associated with physical visits to police stations.

The ethos driving this Crime Management and Reporting System is rooted in facilitating a more efficient and transparent approach to addressing crime. By actively involving citizens and leveraging both online and offline capabilities, the project seeks to enhance the overall detection, reporting, and prevention of criminal activities within communities. This initiative

represents a promising stride towards fostering a more collaborative and responsive approach to law enforcement and community safety (Ganiron et al., 2019).

A study by Zou et al., (2019) introduces a proposal for the implementation of a secure and anonymous reporting system called ReportCoin. This innovative system utilizes blockchain technology and incentives to ensure the privacy of user identities and the reliability of reported messages. ReportCoin enables mobile users in an untrusted network to vote on reports anonymously, thereby encouraging reporting without the fear of retaliation or identity exposure. By utilizing cryptographic signing and anonymous announcements, ReportCoin offers a solution for nondeterministic mobile users to report securely (Zou et al., 2019).

The study introduces a proposal for a secure and anonymous Complaint Management System named ReportCoin. This innovative system leverages blockchain technology and incentivization to protect user identities and ensure the credibility of reported messages. ReportCoin facilitates mobile users within an untrusted network to anonymously vote on complaints, fostering reporting without the risk of retaliation or identity exposure. Through cryptographic signing and anonymous announcements, ReportCoin presents a solution for nondeterministic mobile users to securely report grievances.

In the fabric of modern society, criminal activity weaves a persistent challenge that nations grapple with incessantly. Advancements in technology have stood as stalwarts in the ongoing battle against crime, introducing tools like GPS tracking, tagging systems, and the omnipresent eye of video surveillance. This study, riding the wave of technological progress, sets sail to explore a curated collection of cutting-edge hardware and software.

Within these pages, a tapestry of innovation unfolds, charting a course toward a future where crime faces new hurdles. Through an intricate examination of diverse technologies and

immersive workshops conducted in tandem with key organizations, this research unveils the potential for contemporary tech to strike at the heart of criminal activities.

This study ventures beyond the realms of conventional solutions, painting a canvas where vulnerable individuals, champions in victim support, and the guardians of law enforcement wield a new arsenal. Here lies the proposition: the embrace of ingenious technologies holds the key to a landscape where the clutches of criminality loosen, where innovation stands as the beacon toward a safer, more secure tomorrow (Anderez et al., 2021).

The initiative outlined in Obe (2021) centers around crafting a cutting-edge Geographical Information System (GIS) tailored for a real-time crime reporting application. The genesis of this endeavor stems from a necessity to depart from antiquated manual crime reporting methodologies reliant on physical record-keeping. Harnessing the potency of the internet, computers, and mobile devices, the integration of crime reporting applications emerges as a catalyst poised to revolutionize the efficacy and potency of law enforcement agencies.

At its core, this project endeavors to birth a crime reporting application that embodies efficiency and reliability. Its envisioned capability extends beyond mere digitization, seeking to seamlessly handle tasks that were once laboriously managed through manual means. The paramount aim here is to orchestrate a system that not only expedites reporting but also enhances the dependability and robustness of crime data management and analysis.

The Nigerian Police Force made headlines on March 27, 2022, with the announcement of an upgraded version of their crime reporting application, "NPF Rescue Me," originally launched in November 2019. Engineered for compatibility with Android and Apple devices, this app is tailored to address emergency situations, facilitate crime reporting, allow for reporting police officers, and summon ambulance services. Its core functionality includes an emergency button

to instantly alert police operatives.

Olunuyiwa Adejobi, the Force Relations Officer, emphasized the imperative of registration to unlock the application's features, ensuring prompt assistance for victims irrespective of their location across the country. However, the application encountered teething issues. A critical aspect necessitates users to disclose their location for seamless operation; failure to do so leads to the abrupt termination of the application's function. Furthermore, numerous Nigerian users have raised concerns about delays or complete failures in receiving the one-time password (OTP) required for accessing the application (Ayitogo, 2022).

Merang, Ibrahim, and Jamaluddin (2022) introduced a web-based Water Supply Complaint Management System, offering a streamlined avenue for community members to lodge water supply-related grievances effectively. This innovative system provided a user-friendly platform for registering complaints concerning water supply issues within their locality. Beyond complaint submission, the system facilitated access to comprehensive information regarding submitted complaints and their status.

A noteworthy feature of this system was its adaptability to users' accessibility challenges, catering to areas with limited internet coverage. Users could either log into the system or opt for SMS notifications to stay informed about their complaint's progress—a crucial element in areas with internet connectivity constraints.

Recognizing the indispensable nature of clean water in daily life, the system aimed to prompt swift action from local authorities in resolving water supply concerns. However, feedback from select respondents underscored potential areas for improvement. Suggestions included enhancing the user interface for a more seamless experience and incorporating support for multiple languages, fostering inclusivity and ease of use for a diverse user base.

Luat and Hossain (2021) spearheaded the development of a bespoke Complaint Management System tailored specifically for the Sarawak Rural Area Water Supply Department. This innovative system revolutionized the handling and documentation of complaints, empowering the Corporate Communication Unit staff and Division Water Engineers to efficiently manage and document grievances around the clock. The implementation of this system notably mitigated challenges previously encountered in the complaint-handling process.

The system's core aim revolves around monitoring areas grappling with severe water supply issues, thereby streamlining investigations and facilitating targeted improvements within specific divisions. This strategic monitoring mechanism serves as a catalyst for enhancing the water supply infrastructure in critical areas.

Compared to the traditional method of manually managing complaints and laboriously creating tables and graphs using Microsoft Excel, this web-based platform emerges as a beacon of efficiency in complaint management. Its implementation signifies a pivotal shift toward a more effective and streamlined approach, offering a centralized and systematic solution for managing water supply-related grievances within Sarawak's rural areas.

Rahman, Azam, and Chowdhury (2022) innovatively crafted a web-based system, harnessing the potential of blockchain technology, known as the Secure Complaint Management System against Women Harassment at Workplace. This system is purpose-built to offer a secure and dependable platform for victims to register their grievances, capitalizing on blockchain's key attributes like decentralization, anonymity, immutability, transparency, reliability, and security. This two-tier hierarchical system enables victims to file anonymous complaints initially, followed by the facilitation of validated complaints, including evidence documentation, to higher authorities. Notably, this approach fortifies the security and

efficiency of the complaint management system while safeguarding the anonymity of victims, ultimately streamlining the process for HR and higher authorities to handle complaints more effectively.

The proposed system's profound impact extends beyond the workplace, envisaging the creation of a safer working environment for women, making substantial strides in societal transformation. Addressing the scarcity of focus on this critical issue, the study serves as a significant contribution toward supporting working women by proposing a groundbreaking solution leveraging blockchain technology.

Blockchain stands as a revolutionary decentralized ledger with potential applications across diverse industries, spanning finance, healthcare, and supply chain management. Its intrinsic capabilities eliminate the necessity for intermediaries, ensuring heightened security and transparency, and paving the way for new advancements across sectors. However, in Nigeria, blockchain faces limitations, chiefly tied to infrastructure deficits. The inadequacy of robust and rapid internet connectivity in various parts of Nigeria restricts the potential reach of blockchain-based solutions, particularly in rural areas.

Moreover, the absence of clear regulations from the Nigerian government hampers blockchain adoption. The lack of a regulatory framework poses challenges for businesses and investors alike, impeding market growth and hindering widespread adoption of blockchain technologies.

Cost poses another hurdle, as the implementation and maintenance of blockchain solutions can be financially burdensome for businesses in Nigeria, especially amidst economic challenges faced by the country.

2.5 Summary of Literature Review

Title	Author	Methodology	Result	Strength	Weakness
The most worrying aspect of the Kankara kidnapping	Bukarti, A. B.	Opinion article	Analysis of a specific event	Provides expert opinion	Lack of empirical data
A Study of Crime Reporting in Nigeria	Ukoji Vitus Nwankwo, B.	Literature review	Examination of crime reporting	Provides a comprehensive overview	Potential bias in literature selection
Democracy, gender equality, and gender security	Piccone, T.	Opinion article	Discussion of democracy and gender issues	Offers expert insight	Lack of empirical evidence
Crime Prevention Strategies	Kapur, R.	Literature review	Review of crime prevention strategies	Provides comprehensive overview	Potential bias in literature selection
National Crime Intelligence System	Adeola, O. S., & Alese, B. K.	Case study	Evaluation of a crime intelligence system	Provides specific insights	Limited generalizability
Crime Reporting: The First Form of Journalism	NIMCJ	Opinion article	Discussion of crime reporting	Provides historical context	Lack of empirical data
What is an Information System? Definition, Examples, & Facts	Emeritus	Opinion article	Discussion of information systems	Provides educational content	Lack of empirical data
Reporting crime	David Ingram, P. H.	Opinion article	Discussion of crime reporting	Provides expert insight	Lack of empirical data
Crime Management System	Sharma, S., & Naik, R.	System design	Development of a crime management system	Addresses a specific need	Lack of evaluation
Development of an Online Crime Management & Reporting System	Ganiron, T. U. J., Chen, J. S., Dela Cruz, R., & Pelacio, J. G.	System design	Development of an online crime management system	Addresses a specific need	Lack of evaluation
Reportcoin: A Novel Blockchain-	Zou, S., Xi, J., Wang, S.,	System design	Development of a blockchain-	Innovative approach	Lack of real-world implementation

Based Incentive Anonymous Reporting System	Lu, Y., & Xu, G.		based reporting system		
A Crime reporting system application using geographic information system	Obe, I. O.	System design	Development of a GIS-based crime reporting system	Addresses a specific need	Lack of evaluation
The Rise of Technology in Crime Prevention: Opportunities, Challenges and Practitioners Perspectives	Anderez, D. O., Kanjo, E., Amnwar, A., Johnson, S., & Lucy, D.	Literature review	Discussion of technology in crime prevention	Provides insights from practitioners	Potential bias in literature selection
Rescue Me App: Police receive 10,122 fake alerts in four days – Spokesperson	Ayitogo, N.	News article	Reporting on a specific event	Provides current information	Lack of in-depth analysis
Development of a Web-based Water Supply Complaint Management System	Merang, E. K., Ibrahim, A. F., & Jamaluddin, M. N. F.	System design	Development of a web-based complaint management system	Addresses a specific need	Lack of evaluation
Complaint Management System for Sarawak Rural Area Water Supply Department	LUAT, S., & HOSSAIN, E.	System design	Development of a complaint management system	Addresses a specific need	Lack of evaluation
Secure Complaint Management System against Women Harassment at Workplace Using Blockchain Technology	Rahman, M., Azam, M., & Chowdhury, F. S.	System design	Development of a blockchain-based complaint management system	Addresses a specific need	Lack of evaluation

CHAPTER THREE

3.0 SYSTEM ANALYSIS AND DESIGN

3.1 Analysis of the Existing Manual System

The examination of the existing manual system zeroes in on Nigeria's current crime management and reporting system, predominantly operated by the Police Force nationwide. This analysis delves into the manual documentation of crime cases alongside the utilization of the 'NPF Rescue Me' application. Assessment parameters revolve around operational execution, with insights drawn from consultations, interviews, and interactions associated with the mobile application tailored for crime reporting purposes.

Within the current system, crime data collection relies on manual input via crime report forms or online forms. Subsequently, the Intelligence unit within the Police Force undertakes the collection and analysis of this acquired data. Utilizing Microsoft Excel, the Intelligence unit processes this data into Excel sheets, forming the basis for comprehensive reports. These reports are then aggregated by the Crime Information Officer (CIO), incorporating warrants, detentions, and conviction reports from various crime units.

The decision-making process concerning the next investigational phase is a collaborative effort between the Crime Information Officer and members of the Intelligence Unit. The resultant analysis culminates in file storage within a study-based format at the command level. Summaries of these reports are periodically compiled and dispatched to Divisional Police Headquarters within the state and subsequently to the National Police Force in Abuja.

Furthermore, the contemporary approach to reporting and managing crime, exemplified by the Nigerian force's "NPF Rescue Me," serves as an adept method for reporting incidents in the current era. The application mandates user registration, gathering basic personal, health, and

next-of-kin details. Following registration, an OTP (One Time Password) is dispatched to the registered email for authentication. Once registered, users gain access to various application functionalities, including crime reporting, flagging unlawful law enforcement by officers, summoning COVID response teams, and an emergency alert feature for immediate police assistance.

However, the prevailing system addressing human rights violations in Nigeria predominantly operates through manual processes, leading to a lack of a comprehensive reporting framework. Instances of human rights violations are commonly reported to law enforcement or human rights organizations, but this process often suffers from sluggishness and ineffectiveness. A conspicuous absence of a centralized database hampers the tracking and monitoring of reported cases, impeding the appropriate resolution of each case.

Moreover, a substantial lack of public awareness concerning rights and the reporting process contributes to the underreporting of human rights violations, resulting in numerous incidents going unreported. The absence of a comprehensive reporting structure, a centralized database, and limited public awareness collectively pose significant challenges in effectively addressing human rights violations in Nigeria.

3.2 Limitations of the Existing Manual System

The existing manual system for crime management and reporting within the Nigerian Police Force is burdened by several limitations that impede its efficiency and effectiveness in addressing contemporary challenges. These constraints are pivotal to understanding the system's shortcomings:

1. **Manual Data Handling:** The reliance on manual data collection, processing, and reporting through study-based forms and Excel sheets is inherently laborious and prone

to errors. This manual approach introduces inefficiencies, slows down processes, and increases the likelihood of inaccuracies or data discrepancies.

2. **Lack of Integration and Centralization:** The absence of an integrated and centralized database obstructs the seamless flow of information across different units and levels of the Police Force. This lack of cohesion hampers real-time access to crucial data, hindering swift decision-making and comprehensive analysis.
3. **Slow and Ineffective Reporting:** The current system's reliance on traditional reporting methods leads to sluggishness and inefficiency in addressing crime and human rights violations. Delays in data compilation, aggregation, and dissemination limit the timely response to incidents, potentially compromising the resolution process.
4. **Limited Accessibility and Public Awareness:** The manual system's limitations in outreach and public awareness undermine its effectiveness. There's a lack of awareness among the populace regarding reporting mechanisms, contributing to underreporting and a lack of comprehensive data.
5. **Inadequate Mechanism for Human Rights Reporting:** The absence of a dedicated, robust mechanism for addressing human rights violations diminishes the system's efficacy. This deficiency leads to underreporting, slow processing, and insufficient monitoring of reported human rights abuses.
6. **Technology Integration Challenges:** While initiatives like the 'NPF Rescue Me' application offer a modernized approach, there are challenges related to technology integration, including limited accessibility, reliance on internet connectivity, and potential barriers for marginalized or remote communities.

In essence, the limitations of the existing manual system encompass issues related to manual

data handling, lack of integration, slow reporting processes, inadequate mechanisms for human rights reporting, and challenges in technology adoption and accessibility. Addressing these limitations is crucial for enhancing the efficiency, transparency, and responsiveness of crime management and human rights reporting within the Nigerian context.

3.3 Design of the Proposed System

The design of the proposed complaint management system aims to revolutionize the current framework, overcoming the limitations of the manual system prevalent in Nigeria. This new system is envisioned to streamline processes, enhance accessibility, and improve efficiency in handling complaints. The key components of this proposed design encompass:

1. **Automated Data Collection:** The system will transition from manual data entry to automated mechanisms for complaint submission. Users will have access to an intuitive online platform or a dedicated mobile application that simplifies the process of reporting complaints.
2. **Centralized Database:** A fundamental aspect of the design involves the creation of a centralized database. This repository will collate and store complaint data systematically, enabling seamless access, tracking, and management of reported incidents by authorized personnel across different levels of law enforcement.
3. **Integrated Reporting and Analysis Tools:** The proposed system will integrate advanced reporting and analysis tools. This integration aims to facilitate real-time data analysis, aiding in swift decision-making and identifying patterns or trends in reported complaints.

4. **User-Friendly Interface:** Emphasis will be placed on developing a user-friendly interface for both complainants and law enforcement personnel. Intuitive navigation, simplified reporting forms, and clear instructions will enhance user experience, encouraging increased participation and accurate reporting.
5. **Security Protocols:** To ensure data confidentiality and integrity, robust security measures will be implemented. Encrypted data transmission, secure storage protocols, and access controls will safeguard sensitive information within the system.
6. **Public Awareness Campaigns:** Recognizing the importance of public awareness, the system design will include strategies for educating the public about the reporting process, their rights, and the functionalities of the complaint management system. This proactive approach aims to increase reporting rates and foster transparency.
7. **Adaptability and Scalability:** The system design will prioritize adaptability and scalability, considering potential technological advancements and the evolving nature of complaints. This will allow for future enhancements and adjustments to accommodate changing needs.

The proposed design for the Complaint Management System will leverage an Iterative Waterfall model as the chosen software development approach. This model represents a modification of the traditional Waterfall methodology, incorporating adaptability to accommodate changes in subsequent stages of development.

In this approach, the development process begins by implementing a fundamental system that aligns with the initial, clearly defined requirements. Following this, subsequent iterations involve the gradual addition of functionalities and features to this foundational software. Each iteration builds upon the existing system, allowing for enhancements and adjustments based on

evolving needs until the final comprehensive system is achieved.

The distinguishing factor of the Iterative Waterfall model lies in its systematic approach to commencing with essential functionalities and iteratively expanding upon the system's capabilities. This methodology ensures a structured yet flexible development process, catering to the evolving demands and requirements of the Complaint Management System.

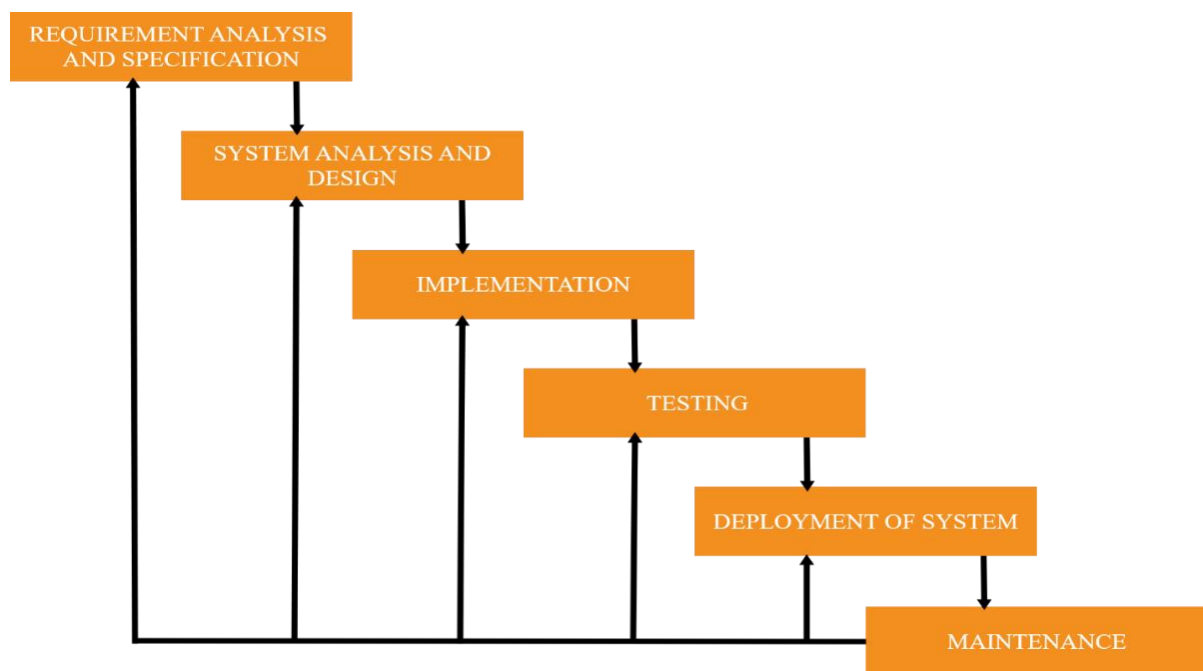


Figure 3.1: Methodology

The proposed design of the complaint management system represents a paradigm shift, integrating technological advancements and user-centric features to create a robust, efficient, and inclusive platform for reporting grievances and enhancing accountability within the Nigerian context.

3.3.1 Input Design

The Input Design for the Complaint Management System focuses on creating an intuitive and

efficient interface for users to input complaint-related information. This phase involves designing forms, screens, and methods that facilitate easy and accurate data entry.

1. **User-Friendly Forms:** The design prioritizes the creation of user-friendly forms with clear labels, instructions, and intuitive layouts. This ensures that users can easily navigate the system and input their complaints without confusion.
2. **Validated Input Fields:** Input fields will be designed with validation checks to ensure the accuracy and validity of the entered data. This includes checks for data type, range, length, and format to prevent erroneous inputs.
3. **Dropdown Menus and Selection Lists:** Where applicable, dropdown menus and selection lists will be incorporated to streamline data entry and reduce errors by providing predefined options for users to choose from.
4. **Error Handling Mechanisms:** The system will include error handling features to prompt users in case of incorrect inputs. Clear error messages and prompts will guide users to rectify any mistakes made during data entry.
5. **Accessibility Features:** The design will consider accessibility features such as keyboard navigation, screen reader compatibility, and contrast for users with disabilities, ensuring inclusivity in data input methods.
6. **Security Measures:** Input design will also encompass security measures to protect sensitive information entered the system, including encryption protocols and access controls to safeguard data integrity and confidentiality.

The Input Design phase ensures that the interface for entering complaint data is user-centric, error-resistant, and secure, enabling seamless and accurate input of information into the Complaint Management System.

3.3.2 Output Design

The Output Design for the Complaint Management System revolves around presenting processed complaint data in a clear, understandable format to facilitate decision-making and action-taking. Here are the key elements:

1. **Report Formatting:** The design focuses on formatting reports in a structured manner for easy comprehension. It includes organizing data into sections, tables, and graphs, ensuring a coherent and logical flow of information.
2. **Customizable Reports:** The system will offer customizable report options to cater to different user needs. This may involve allowing users to select specific data fields, time frames, or types of reports to generate customized outputs.
3. **Visual Representation:** Utilizing visual elements like charts, graphs, and infographics aids in presenting complex data in a visually appealing and digestible format. These visuals enhance the understanding of trends, patterns, and statistics within the complaint data.
4. **Multiple Output Formats:** The system will support various output formats, including PDFs, Excel spreadsheets, or HTML formats, to accommodate diverse user preferences and compatibility with different devices and software.
5. **Real-Time Updates:** Where applicable, the system will provide real-time updates and notifications to concerned stakeholders regarding the status or resolution of complaints, ensuring timely actions and responses.

6. **Accessibility and Readability:** The design will prioritize accessibility features, ensuring that the output is readable and easily accessible to users of all abilities, including compatibility with assistive technologies.
7. **Security Measures:** Outputs will adhere to security protocols to protect sensitive information, ensuring that only authorized personnel can access and view the generated reports.

By focusing on these aspects, the Output Design aims to present complaint-related information effectively, aiding stakeholders in making informed decisions and taking necessary actions based on the processed data within the Complaint Management System.

3.3.3 Database Design

The Database Design for the Complaint Management System encompasses the structuring and organization of data storage to efficiently manage and retrieve complaint-related information.

Here's an overview of the key components:

1. **Data Schema:** The design begins with defining the structure of the database, including tables, relationships, and fields. It establishes a logical framework to store different types of complaint data, such as complainant details, complaint types, status, timestamps, and related entities.
2. **Normalization:** Applying normalization techniques ensures optimal database organization, minimizing redundancy and improving data integrity. This process involves breaking down data into smaller, interconnected tables to reduce data duplication and maintain consistency.

3. **Indexing and Optimization:** Indexing key fields and optimizing queries are integral for swift data retrieval. Indexes enhance query performance by enabling faster search operations within the database.
4. **Data Integrity Constraints:** Implementing constraints like primary keys, foreign keys, and unique constraints ensures data accuracy and consistency. This prevents invalid or incorrect data from being entered into the system.
5. **Security Measures:** Database design incorporates robust security measures, including user authentication, access controls, encryption, and regular backups, safeguarding sensitive complaint data from unauthorized access, tampering, or loss.
6. **Scalability and Performance:** The design considers scalability requirements to accommodate future growth in data volume and system usage. It also includes strategies for enhancing database performance to ensure responsiveness and efficiency, even with increased data load.
7. **Backup and Recovery:** Implementing backup and recovery strategies is crucial for data resilience. Regular backups and recovery procedures are established to mitigate the risk of data loss due to system failures or unforeseen circumstances.

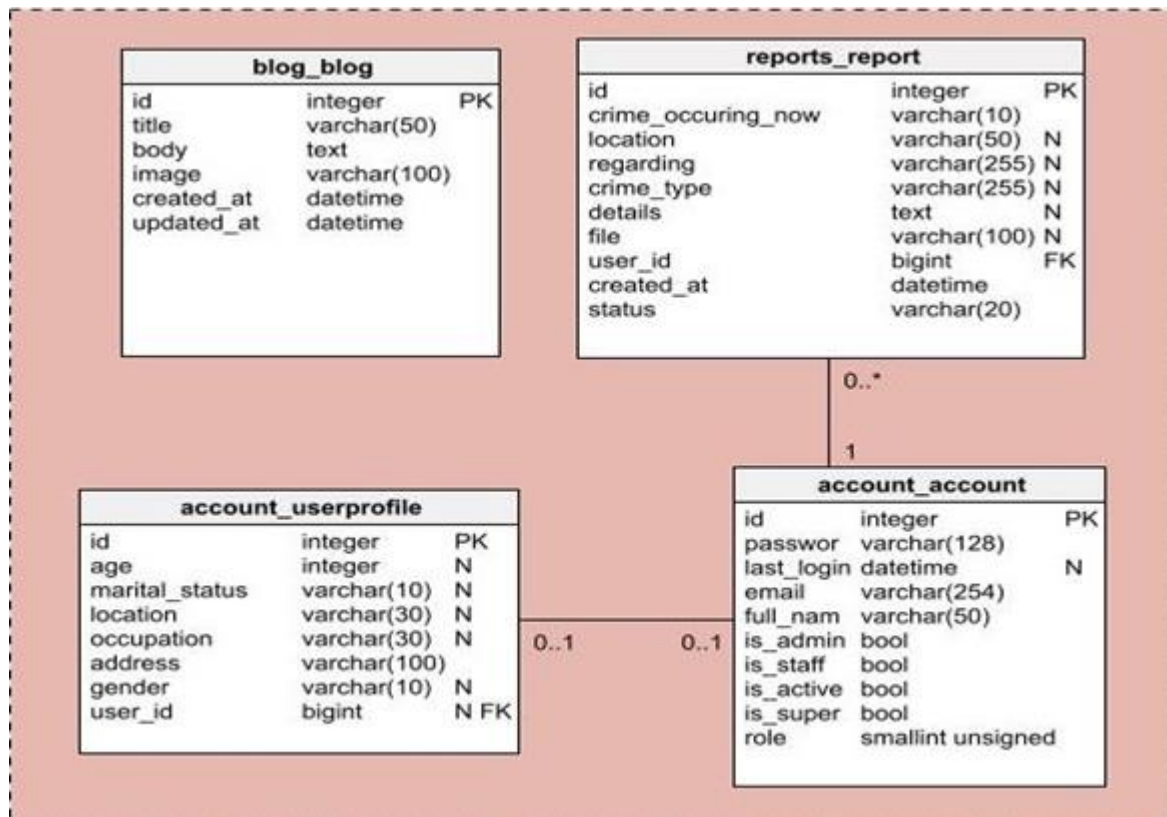


Figure 3.2: Database Schema

By integrating these components, the Database Design aims to establish a robust, well-organized, and secure infrastructure for storing and managing complaint-related data within the Complaint Management System.

3.4 Data Dictionary

Tables 3.1: Report Table

Attribute	Datatype	Description	Primary Key (True/False)
Id	AutoField	Unique identifier for the report	True
User	ForeignKey(Account)	Reference to the user filing the report	False
crime_occurring_now	CharField	Indicates if the crime is occurring now	False
Location	CharField	Location where the crime occurred	False
regarding	CharField	Description regarding the reported incident	False
crime_type	CharField	Type of crime reported	False
Details	TextField	Additional details of the reported incident	False
File	FileField	File uploaded along with the report	False
created_at	DateTimeField	Date and time of report creation	False

Table 3.1 outlines the attributes, datatypes, descriptions, and primary key status for the 'Report' table.

Table 3.1: Account Table

Attribute	Datatype	Description	Primary Key (True/False)
Id	AutoField (Primary Key)	Unique identifier for Account	True
Email	EmailField	Email address of the account	False
full_name	CharField	Full name of the account	False
Role	PositiveSmallIntegerField	User role defined by choices	False
is_admin	BooleanField	Indicates if user has admin status	False
is_staff	BooleanField	Indicates if user has staff status	False
is_active	BooleanField	Indicates if user account is active	False

Table 3.2 represents the attributes, datatypes, descriptions, and primary key status for the 'Account' table.

Table 3.3: User Profile Table

Attribute	Datatype	Description	Primary Key (True/False)
Id	AutoField (Primary Key)	Unique identifier for UserProfile	True
User	OneToOneField(Account)	Reference to the associated user account	False
Age	IntegerField	Age of the user	False
occupation	CharField	User's occupation	False
marital_status	CharField	User's marital status	False
location	CharField	User's location	False
address	CharField	User's address	False
gender	CharField	User's gender	False

Table 3.3 outlines the attributes, datatypes, descriptions, and primary key status for the 'UserProfile' table.

Table 3.4: Blog Table

Attribute	Datatype	Description	Primary Key (True/False)
id	AutoField	Unique identifier for the blog post	True
title	CharField	Title of the blog post	False
body	TextField	Content/body of the blog post	False
image	ImageField	Image uploaded for the blog post	False
created_at	DateTimeField	Date and time of blog creation	False
updated_at	DateTimeField	Date and time of blog update	False

Table 3.4 outlines the attributes, datatypes, descriptions, and primary key status for the 'Blog' table.

3.5 System Algorithm

Complaint Submission Algorithm:

1. User Authentication:

- I Input: User credentials.

- II Process: Verify user credentials against stored records.

- III Output: Valid or invalid user authentication.

2. Complaint Form Submission:

- I Input: Complaint details (e.g., type, description, attachments)

- II Process:

- a. Receive and validate complaint details.
- b. Save complaint information into the database.

III Output: Confirmation message for successful submission or error message for invalid data.

3. Complaint Processing:

I Input: Newly submitted complaint details

II Process:

- a. Assign a unique reference number to the complaint.
- b. Route the complaint to the respective department or personnel for review.
- c. Trigger notifications or alerts for assigned personnel.

III Output: Confirmation of successful assignment or routing of the complaint.

4. Status Management:

I Input: Complaint status updates.

II Process:

- a. Allow assigned personnel to update the complaint status (e.g., pending, in progress, resolved).
- b. Store and update the status in the database.

III Output: Updated status confirmation or error in case of failure to update.

5. Reporting and Analysis:

I Input: Stored complaint data.

II Process:

- a. Generate periodic reports summarizing complaint statistics, types, and resolution times.
- b. Analyze trends and patterns in the complaints received.

III Output: Reports for management review and decision-making.

This algorithm is a simplified representation and doesn't cover all aspects of a complaint management system, but it outlines key steps involved in the submission, processing, and management of complaints within the system.

3.6 Use Case Diagrams

Use case diagrams visualize the interactions between different actors (such as witnesses, reporters, and officers) and the functionalities of a system. In the context of the proposed Anonymous Crime Reporting System, these diagrams (Figures 3.3 to 3.6) illustrates how various users, like witnesses or reporters, interact with the system, showcasing their actions and the system's responses. These diagrams help in understanding the roles of different users and how they engage with the functionalities provided by the system, offering a clear overview of the system's capabilities and user interactions.

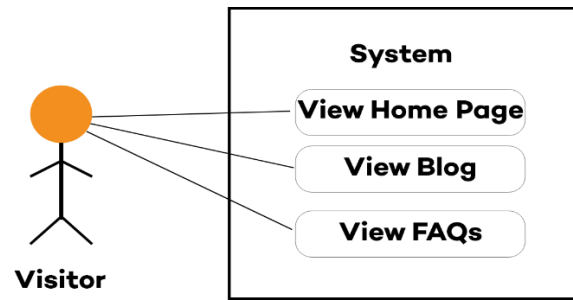


Figure 3.3: Visitor's Use Case

Figure 3.3, visitors (can be student) who visit the web homepage have access to services like reading the blog on how the platform work, view frequently ask questions and surf the web page for more information.

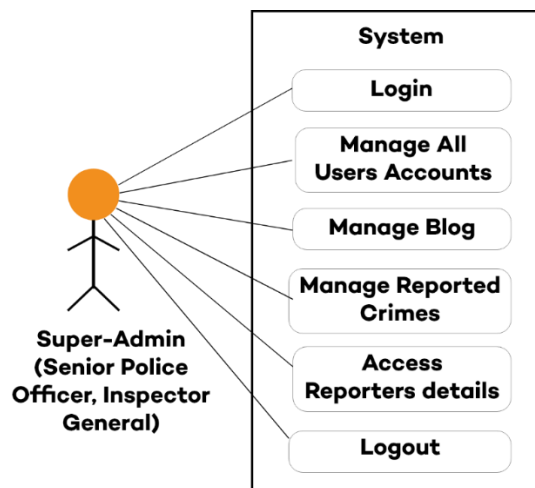


Figure 3.4: Super-Admin's Use Case

Figure 3.4 Above, the super admin has the full access to manage all crime reports, access the reporters details and manage the overall performance of the

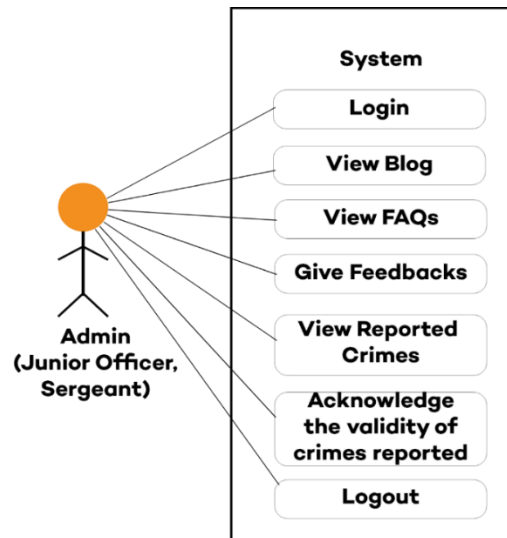


Figure 3.5: User's Use Case

Figure 3.5 above, the admin (junior office in a police settings) logs into the system, views the crimes reported, acknowledge the validity of the report and gives feedback.

CHAPTER FOUR

4.0 SYSTEM IMPLEMENTATION AND TESTING

4.1 System Requirements for Development

1. Functional Requirements:

- i. **User Authentication:** Users should be able to register, log in securely, and manage their accounts.
- ii. **Complaint Submission:** Enable users to submit complaints, specifying types, descriptions, and attaching relevant files if needed.
- iii. **Complaint Processing:** Assign complaints to respective departments or personnel based on type and urgency.
- iv. **Status Management:** Allow tracking and updating of complaint statuses (e.g., pending, in progress, resolved).
- v. **Reporting and Analytics:** Generate reports summarizing complaint statistics, types, resolution times, etc.

2. Non-Functional Requirements:

- i. **Security:** Implement robust security measures to protect user data and system integrity.
- ii. **Scalability:** Design the system to accommodate increasing user base and complaint volume.
- iii. **Performance:** Ensure efficient response times for complaint submission, updates, and reporting.

- iv. User Interface: Develop an intuitive and user-friendly interface for ease of use.
- v. Reliability: Aim for high uptime and availability of the system.

3. Technical Requirements:

- i. Platform: Develop a web-based platform accessible across various devices.
- ii. Database: Utilize a scalable database structure for efficient data management.
- iii. Programming Language/Framework: Choose suitable technologies (e.g., Django, React.js) for system development.
- iv. Integration: Allow for integration with other systems if necessary.

4. Regulatory and Compliance Requirements:

- i. Data Privacy: Ensure compliance with data protection regulations (e.g., GDPR, HIPAA).
- ii. Reporting Standards: Adhere to industry-specific or governmental reporting standards.
- iii. Accessibility: Implement features for accessibility compliance (e.g., WCAG guidelines).

5. User Requirements:

- i. User Roles: Define roles (e.g., reporters, administrators) and associated permissions.
- ii. Training Needs: Offer user training materials and resources for efficient system use.
- iii. Feedback Mechanism: Provide a means for users to give feedback for system enhancement.

6. Documentation and Support:

- i. User Manuals: Create comprehensive guides for users to navigate the system.
- ii. Technical Documentation: Document system architecture, APIs, and technical aspects for future reference.
- iii. Maintenance and Support: Plan for post-implementation support and maintenance services.

These system requirements aim to cover all aspects needed for the development of a robust and user-friendly Complaint Management System, ensuring it meets both user expectations and regulatory compliance while being technically efficient and secure.

4.1.1 Hardware Requirements

Table 4.1: Hardware requirements

Hardware Component	Minimum Requirement	Recommended Requirement	Description
Processor	Dual-core 1.0 GHz	Quad-core 2.5 GHz or higher	Responsible for executing system operations and handling user requests.
RAM (Memory)	1 GB	4 GB or higher	Supports smooth operation by storing temporary data and facilitating multitasking.
Storage	128 GB HDD	256 GB HDD or higher	Provides space for system files, database storage, and user data.
Network Connectivity	Ethernet/Wi-Fi	Ethernet/Wi-Fi	Allows system access and communication over a network.
Server Infrastructure	Depend on scale of operations	Dedicated server setup	For larger systems, dedicated servers might be necessary to handle increased traffic and data processing.

These hardware requirements serve as a basic guideline to ensure the system's proper functioning. The recommended requirements offer a more optimal setup for improved performance and scalability.

4.1.2 Software requirements

Table 4.2: Software requirements

Software Component	Minimum Requirement	Recommended Requirement	Description
Operating System (OS)	Windows 10 or macOS 10.14 or Ubuntu 18.04 LTS	Latest stable version of OS or Ubuntu 20.04 LTS	Provides the platform for system deployment and execution.
Web Server	Apache HTTP Server	Latest stable version	Hosts the web application, manages HTTP requests, and serves web pages.
Database	SQLite3	Latest stable version of SQLite3	Stores and manages system data efficiently.
Programming Language	Python 3.7 or above	Python 3.9 or above	Primary language for backend development.
Frameworks/Libraries	Django 3.0	Latest stable version of Django	Provides tools and modules for rapid development etc.
Frontend Technologies	HTML5, CSS3, JavaScript	Latest versions	Responsible for creating the user interface, interactivity, and user experience.
Version Control	Git	Latest stable version	Manages source code versions, tracks changes, and facilitates collaboration among developers.
Integrated Development	VS Code	Preferred IDE by developers	Software for coding, debugging, and testing the application code.

These software requirements offer a basis for the development environment and tools necessary for the implementation of the Complaint Management System.

4.2 Choice of Development Environment

The choice of a development environment significantly influences the trajectory and success of software development projects. For the web-based complaint management system, meticulous consideration was given to the selection of a robust stack that ensures efficiency, reliability, and scalability. The chosen development environment comprises:

1. Python Django Framework:

i. Reasons for Selection:

- i. **Robust Backend:** Python Django was chosen for its robustness in backend development, offering security features and a comprehensive set of functionalities.
- ii. **Rapid Development:** Django's "batteries-included" philosophy allows for accelerated development with its built-in tools and libraries.
- iii. **ORM Capabilities:** Django's Object-Relational Mapping (ORM) simplifies database interactions and ensures seamless data handling.

2. Frontend Technologies:

- i. **HTML, CSS, JavaScript:** These fundamental web technologies were chosen for frontend development to ensure structured content, enhanced styling, and interactive user experiences.
- ii. **TailwindCSS:** TailwindCSS was employed to expedite frontend styling with its utility-first approach, fostering modular and scalable design components.

3. Integrated Development Environment (IDE):

A. Visual Studio Code: Selected as the primary IDE due to its extensive support for Python, robust debugging tools, and a vast array of extensions suitable for web development.

4. Database:

- SQLite3: Chosen as the default database management system for its ease of use and seamless integration with Django during the development phase. The choice of a more robust database, such as PostgreSQL or MySQL, could be considered for production environments to handle larger datasets efficiently.

This meticulously chosen development environment ensures a harmonious blend of powerful backend functionality with Django, coupled with a modern, responsive frontend using HTML, CSS, and JavaScript, allowing for an efficient and user-friendly Complaint Management System. The inclusion of TailwindCSS streamlines the frontend design process, optimizing code efficiency and scalability. The deployment platform, testing tools, and further development steps are under consideration as part of the ongoing development strategy.

4.3 System Menus Implementation

In this segment, the primary output of the system and its menu implementation are delineated. This section delves into the system's assessment and the presentation of its outcomes. The system's homepage is depicted as follows.

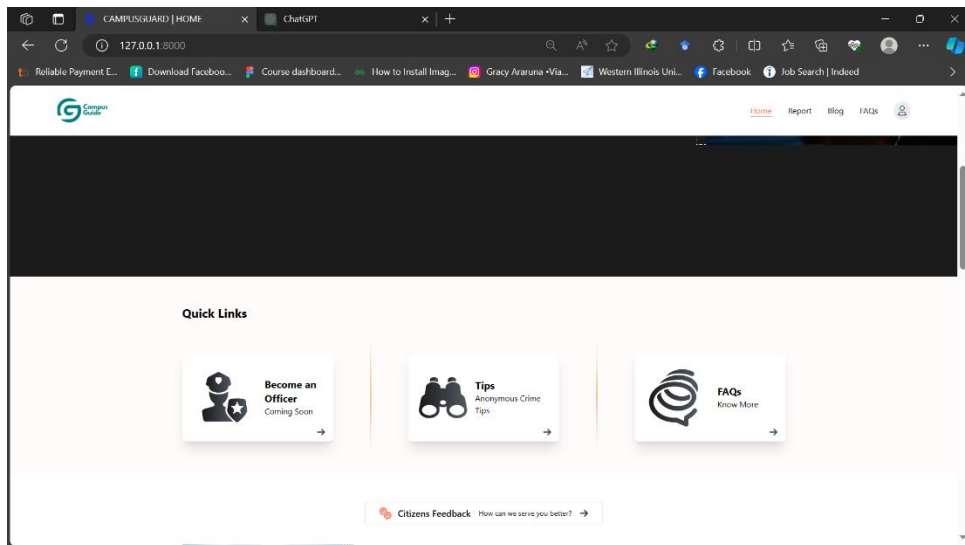


Figure 4.1: Homepage

This webpage comprises fundamental information regarding the application. Every user utilizing this application possesses unhindered access to this page.

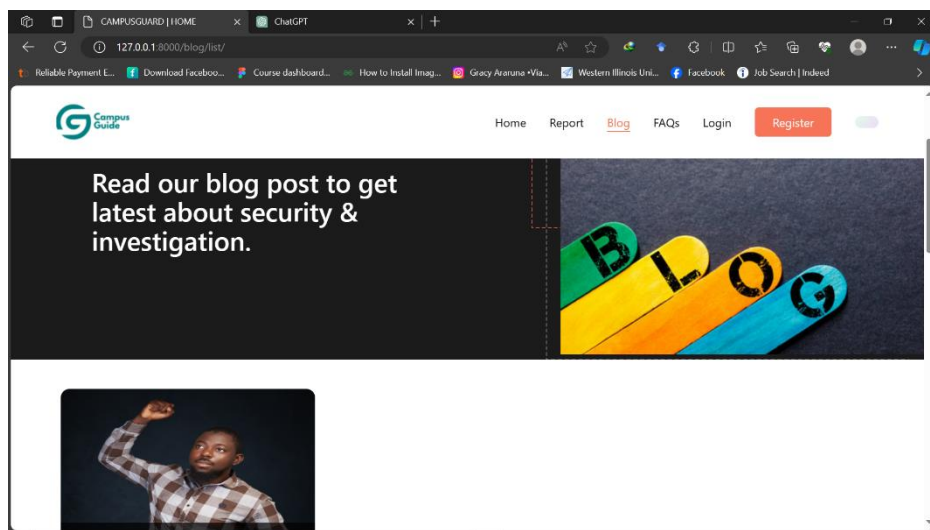


Figure 4.2: The Blog Page

On the blog page, you'll find updates on resolved crimes and apprehended criminals nationwide. This page is accessible to every user.

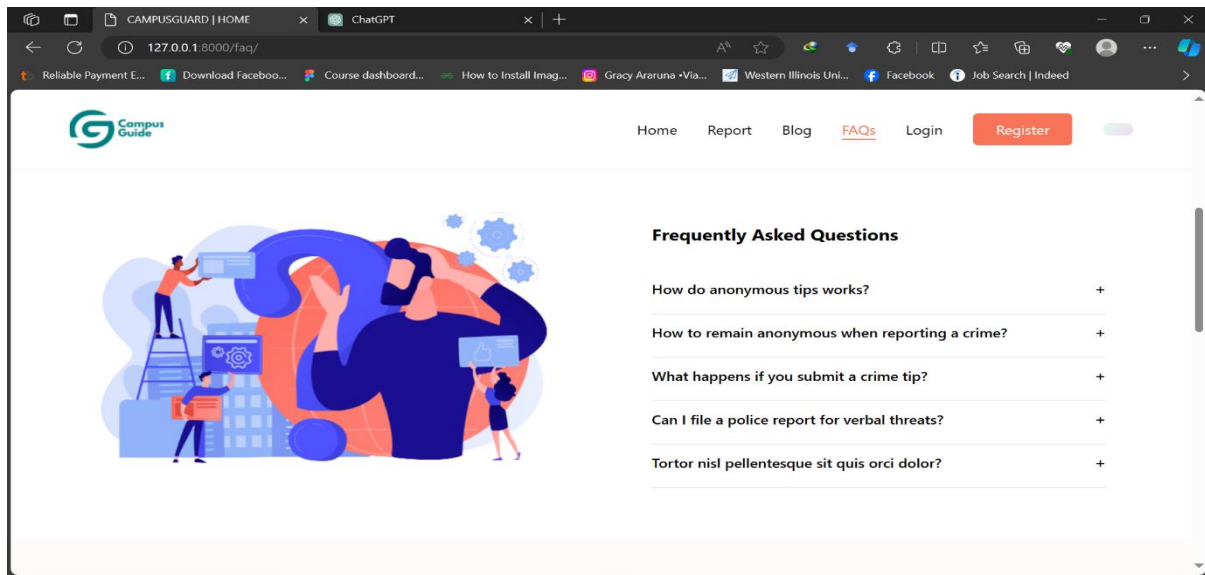


Figure 4.3: Frequently Asked Questions

Within the FAQs (Frequently Asked Questions) section, you'll discover inquiries commonly posed to the Police force regarding crime and the methods employed to maintain system anonymity.

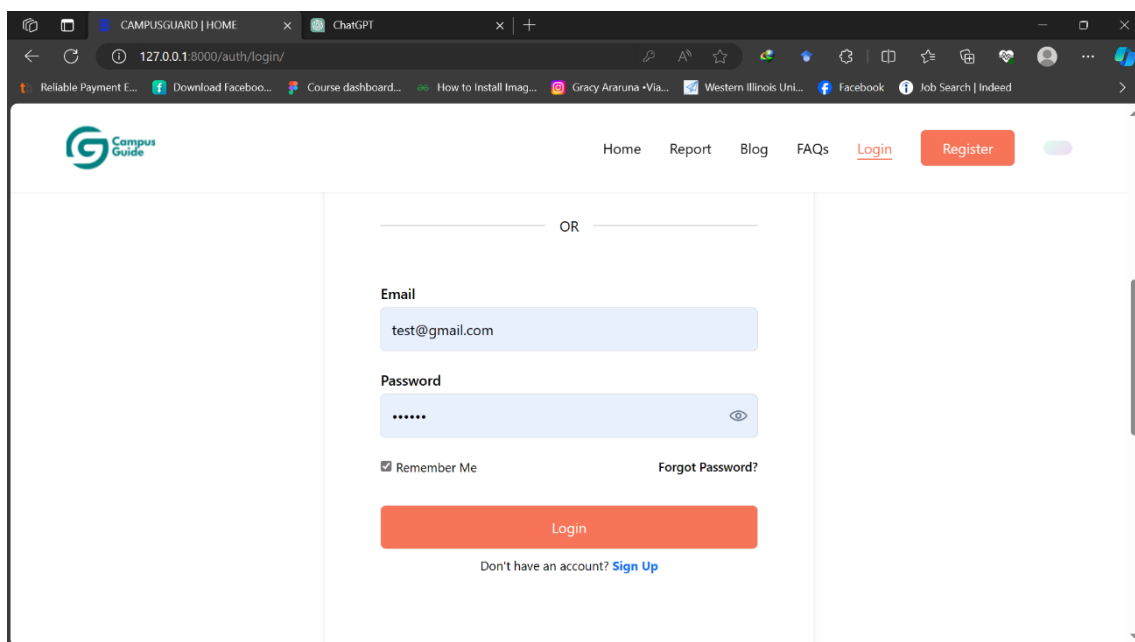


Figure 4.4: Login page

If the supplied login credentials are verified by the system to be invalid, the user would be

denied access. Successful logging would refer the user to Fig.4.6.

CAMPUSGUARD | HOME

127.0.0.1:8000/report/

Reliable Payment E... Download Faceboo... Course dashboard... How to Install Imag... Gracy Araruna •Via... Western Illinois Uni... Facebook Job Search | Indeed

Home **Report** Blog FAQs

Career path | Interest Career path | Interest Experience | Challenges

New Report / Tips

Is this crime occurring right now? *

☒ Yes
☐ No

Which state was this crime committed?

Borno

← Prev Next →

Figure 4.5: Report page I

CAMPUSGUARD | HOME

127.0.0.1:8000/report/

Reliable Payment E... Download Faceboo... Course dashboard... How to Install Imag... Gracy Araruna •Via... Western Illinois Uni... Facebook Job Search | Indeed

Home **Report** Blog FAQs

1 2 3
Career path | Interest Career path | Interest Experience | Challenges

Regarding

What is this tip regarding?

☐ School
☐ Terrorism
☐ Coporation
☐ Welfare Fraud
☐ Others

← Prev Next →

Figure 4.6: Report page II

Crime Information

What is the type of crime? *

Please select all that apply:

- ☐ Drug Related
- ☐ Vandalism
- ☐ Graffiti
- ☐ Theft
- ☐ Self Harm
- ☐ Crime against children
- ☐ Sexual Harrassment
- ☐ Threat
- ☐ Arrison
- ☐ Suspicious Activities
- ☐ Others

Kindly provide brief details of what is happening or have happened *

Type in detail...

Figure 4.7: Report Page III

Figures 4.5 through 4.7 showcase the essential report forms mandated for completion by the reporter or witness when documenting a crime. Each distinct form is designed to gather specific information pertaining to the nature of the crime reported.

Case	Date	Status
memory care patients in the United States has been sentenced to three years in prison.	2021/12/22 09:59 AM	Solved
memory care patients in the United States has been sentenced to three years in prison.	2021/12/22 09:59 AM	Pending
memory care patients in the United States has been sentenced to three years in prison.	2021/12/22 09:59 AM	Solved

Figure 4.8: User Dashboard

Within the user dashboard, you'll find details regarding reported crimes, the status of ongoing investigations, and the distinction between "acknowledged" (indicating investigation and validation) and "not acknowledged" (signifying pending investigation) reports..

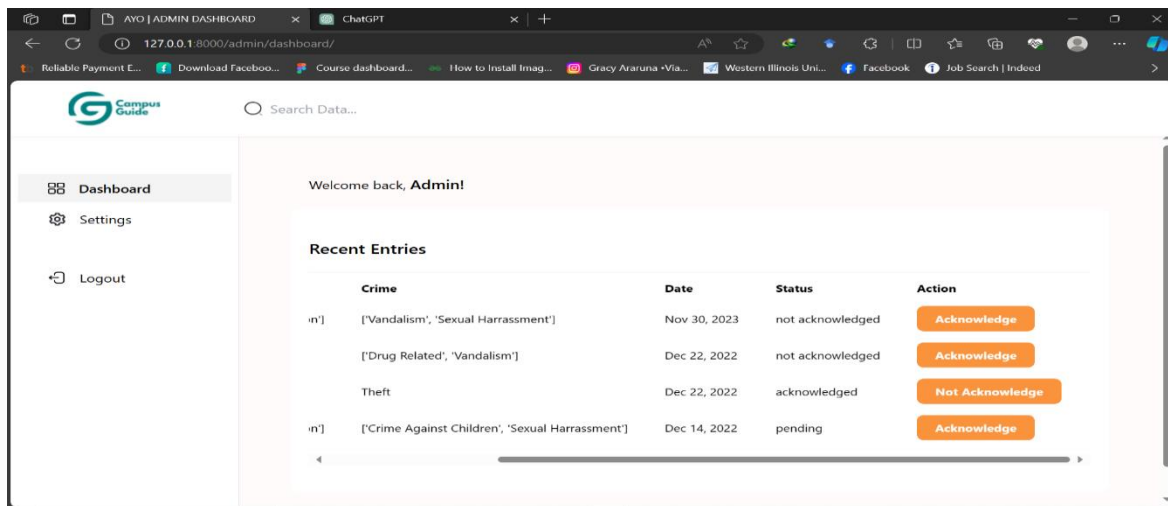


Figure 4.9: Admin Dashboard

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND, RECOMMENDATIONS

5.1 Summary

The Complaint Management System project constitutes a comprehensive endeavor aimed at revolutionizing the handling and resolution of complaints. The project encompasses both an extensive write-up and the development of a sophisticated software solution.

Beginning with an in-depth analysis of existing manual systems prevalent in managing complaints within Nigerian law enforcement, the study identified significant limitations. These findings propelled the need for a modernized, user-centric system capable of efficiently managing and addressing complaints, including human rights violations and criminal activities.

The development phase embraced a robust technological stack, incorporating Python Django, HTML, CSS, JavaScript, and TailwindCSS. This choice ensured a powerful backend with Django, facilitating seamless data handling and robust security measures. The frontend design, employing HTML, CSS, and JavaScript in tandem with TailwindCSS, prioritized a responsive, visually appealing interface for users.

The iterative waterfall model guided the project's development methodology, enabling progressive enhancements aligned with evolving requirements. Meticulous attention was given to input, output, and database designs, ensuring optimal functionality and efficient data management within the system.

The system's algorithm outlined a systematic approach for effectively handling and processing complaints, streamlining the user experience and ensuring the system's reliability. Hardware and software requirements were meticulously considered, fostering an optimal development environment for the system's creation.

In summary, this project encompasses a holistic approach, amalgamating comprehensive research insights and technological innovation. It culminates in the creation of a user-friendly, scalable, and efficient Complaint Management System. The software solution is poised to transform the landscape of complaint handling, addressing the shortcomings of manual systems and ushering in a new era of streamlined, effective complaint resolution.

5.2 Conclusion

This study embarked on a multifaceted endeavor aimed at conceptualizing, developing, and implementing a cutting-edge web-based complaint management system. The focal objectives, not only met but also surpassed, revolved around the creation of a dynamic and adaptable platform. This platform was meticulously designed to facilitate the seamless reporting of complaints through an intuitive online interface, offering users the ability to comprehensively monitor the progression of their complaints. Moreover, it ensured effortless access for the relevant authorities tasked with investigating and resolving these reported issues.

In introspection, this study signifies a paradigm shift in the landscape of complaint management systems. The engineered web-based solution emerges not just as an innovation but as a pivotal force poised to revolutionize the intricate mechanisms of handling an array of complaints. By introducing such a sophisticated system, the potential for transformative impact on the accountability and efficacy of managing complaints across diverse sectors becomes unmistakably apparent. This heralds an era marked by heightened efficiency, streamlined resolution procedures, and a profound enhancement in the responsiveness of institutions handling these critical concerns.

5.3 Recommendations

Based on the study conducted on the 'Complaint Management System,' the following recommendations are proposed for enhancing the system's functionality and effectiveness:

1. **Continuous Enhancement:** Emphasize ongoing improvement by soliciting feedback and implementing updates regularly.
2. **User Education and Awareness:** Conduct comprehensive training sessions and create user-friendly guides to ensure thorough understanding and optimal utilization of the system.
3. **Data Security Measures:** Implement robust encryption and authentication protocols to safeguard sensitive information, coupled with routine security audits.
4. **Scalability and Flexibility:** Design the system to accommodate growth without compromising performance.
5. **Integration with Other Systems:** Explore possibilities for seamless integration with existing organizational systems to streamline data flow and coordination.
6. **Monitoring and Evaluation:** Establish mechanisms for consistent evaluation to identify bottlenecks and implement necessary enhancements.
7. **Accessibility and User Interface:** Prioritize an intuitive interface and ensure compatibility across devices for enhanced user experience.
8. **Regulatory Compliance:** Regularly update the system to align with evolving regulatory frameworks and legal standards.
9. **Public Engagement Strategies:** Develop outreach programs and user-centric interfaces to encourage increased public engagement.

10. Collaboration and Partnerships: Foster collaborations with government agencies, NGOs, and community groups to broaden the system's impact.

By incorporating these recommendations, the 'Complaint Management System' can further improve its efficiency, user satisfaction, and overall impact in managing complaints effectively.

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Appendix A

Homepage Front

```
{% extends 'base.html' %}

{% load static %}

{% block content %}

<main class="flex flex-col mt-[100px] " >

    <div class=" bg-customBlack w-full h-[calc(100vh-100px)] ">

        <section class="lg:pl-[5%] flex flex-col-reverse lg:flex-row items-center lg:items-start
text-center lg:text-left justify-between text-white lg:pt-[20vh] " >

            <div class="-mt-10 lg:mt-10">

                <h2 class=" text-2xl lg:text-4xl leading-snug font-semibold">A Student Crime
<br/> Reporting System <br/> (ASRS) </h2>

                <button onclick="window.location.assign('src/pages/report.html')" class="mt-14
text-white bg-primaryRed px-14 py-3 pb-4 rounded-md" ><span><a href="{ % url
'reports:make_report' % }">Report Now</a> </span><span class="text-xl ml-1
">&rarr;</span> </button>

            </div>

            <div class="-mt-4 lg:mt-[unset] ml-5 lg:ml-0 w-[500px] h-[372px] relative
lg:absolute right-0 scale-[55%] sm:scale-[80%] md:scale-[unset] ">

    </div>

</section>

</div>

<div class="bg-faintRed" >

    <section class="pt-14 pb-10 px-[5%] desktop:px-0 ">

        <h2 class="text-2xl font-bold mb-10">Quick Links</h2>

        <div class="flex flex-wrap gap-7 md:gap-10 items-center justify-center lg:justify-
between">

            <div class="relative grid grid-cols-[1fr,1.5fr] md:flex w-full sm:w-[300px] h-44
items-center space-x-4 bg-white rounded-lg shadow-xl p-5 pr-8">

                <div class="">

                    <p class="text-lg lg:text-xl font-bold">Become an <br> Officer</p>

                    <p>Coming Soon</p>

                </div>

            </div>

            <div class=" relative grid grid-cols-[1fr,1.5fr] md:flex !ml-0 md:ml-10 w-full
sm:w-[300px] h-44 items-center space-x-4 bg-white rounded-lg shadow-xl p-5 pr-8">

```

```

<div class="">

    <p class="text-lg lg:text-xl font-bold">Tips</p>

    <p>Student Crime Reporting <br> Tips</p>

</div>



</div>



    <div class="relative grid grid-cols-[1fr,1.5fr] md:flex !ml-0 md:ml-10 w-full
sm:w-[300px] h-44 items-center space-x-4 bg-white rounded-lg shadow-xl p-5 pr-8">

        <div class="">

            <p class="text-lg lg:text-xl font-bold">FAQs</p>

            <p>Know More</p>

        </div>

        <a href="{ % url 'home:faq' % }" >

        </a>

    </div>

</div>

</section>

</div>

```

```

<div>

  <section class="px-[5%] xl:px-0 pt-14 py-10 overflow-x-hidden">

    <div class="mb-10">

      <button class="w-full sm:w-[unset] justify-between sm:justify-[unset] flex items-
center space-x-3 border rounded-md px-3 lg:px-7 py-2 mx-auto">

        <div class=" flex space-x-0 md:space-x-4 items-center flex-col lg:flex-row">

          <p class="font-semibold text-base leading-tight lg:text-lg ">Citizens
Feedback</p>

          <p class="text-xs sm:leading-[unset] lg:text-sm" >How can we serve you
better?</p>

        </div>

        <a href="{% url 'home:faq' %}"></a>

      </button>

    </div>

    <div class="flex flex-col lg:flex-row gap-20 items-center lg:items-start ">

      <div class="relative w-full sm:w-[320px] lg:w-[unset] ">

```

```

</div>

<div class="flex flex-col max-w-[500px] pt-4 lg:pt-10">

  <h2 class="font-bold text-xl mb-4 ">Why We Are The Best</h2>

  <p class=" text-justify lg:text-left ">Lorem ipsum dolor sit amet, consectetur
adipiscing elit. Cursus nibh mauris,

    nec turpis orci lectus maecenas. Suspendisse sed magna eget nibh in turpis.

    Consequat duis diam lacus arcu. Faucibus venenatis felis id augue sit cursus
pellentesque enim Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cursus nibh
mauris, nec turpis orci lectus maecenas. Suspendisse sed magna eget nibh in turpis.
Consequat duis diam lacus arcu. Faucibus venenatis felis id augue sit cursus pellentesque
enim... </p>

    <button class="mt-6 w-fit mx-auto md:mx-[unset] text-white bg-primaryRed px-14
py-3 rounded-md" > Read More <span class="text-xl">&rarr;</span> </button>

  </div>

</div>

</section>

</div>

<div class="bg-faintRed py-10 mt-10" >

  { % include 'partials/_blog.html' % }

</div>

<div class=" h-[580px] overflow-hidden">

  <section class="">

```

```

    <h2 class="text-2xl font-bold text-center mt-14 my-10 ">See What People Are <br
class="block sm:hidden" > Saying.</h2>

    <div class="max-w-[500px] h-auto mx-auto cont ">

        <div class="swiper mySwiper h-[400px] md:h-[350px] scale-[0.9] sm:scale-[unset]
relative">

            <div class="swiper-wrapper mt-10 relative">

                <div class="swiper-slide relative ">

                    <h3 class="text-base font-semibold mb-2">Hannah Smith</h3>

                    <h4 class="mb-1">Victim of Abuse</h4>

                    <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. cursus nibh
mauris, nec turpis orci lectus maecenas. Suspendisse sed magna eget nibh in turpis.
Consequat dui diam lacus arcu. Faucibus venenatis felis id augue sit cursus pellentesque
enim Lorem ipsum dolor sit amet, consectetur adipiscing elit. cursus nibh mauris, nec turpis
orci lectus maecenas. Suspendisse sed magna eget nibh in turpis. Consequat dui diam lacus
arcu. Faucibus venenatis felis id augue sit cursus pellentesque enim </p>

                </div>

                <div class="swiper-slide relative ">

                    <h3 class="text-base font-semibold mb-2">John Doe</h3>

                    <h4 class="mb-1">Victim of Abuse</h4>

                    <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. cursus nibh

```


mauris, nec turpis orci lectus maecenas. Suspendisse sed magna eget nibh in turpis.

Consequat duis diam lacus arcu. Faucibus venenatis felis id augue sit cursus pellentesque enim Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cursus nibh mauris, nec turpis orci lectus maecenas. Suspendisse sed magna eget nibh in turpis. Consequat duis diam lacus arcu. Faucibus venenatis felis id augue sit cursus pellentesque enim </p>

</div>

<div class="swiper-slide relative ">

<h3 class="text-base font-semibold mb-2">Samuel Elijah</h3>

<h4 class="mb-1">Victim of Abuse</h4>

<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cursus nibh mauris, nec turpis orci lectus maecenas. Suspendisse sed magna eget nibh in turpis. Consequat duis diam lacus arcu. Faucibus venenatis felis id augue sit cursus pellentesque enim Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cursus nibh mauris, nec turpis orci lectus maecenas. Suspendisse sed magna eget nibh in turpis. Consequat duis diam lacus arcu. Faucibus venenatis felis id augue sit cursus pellentesque enim </p>

</div>

<div class="swiper-slide relative ">

<h3 class="text-base font-semibold mb-2">Yusuf Ojo</h3>

<h4 class="mb-1">Victim of Abuse</h4>

<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cursus nibh

mauris, nec turpis orci lectus maecenas. Suspendisse sed magna eget nibh in turpis.

Consequat duis diam lacus arcu. Faucibus venenatis felis id augue sit cursus pellentesque enim Lorem ipsum dolor sit amet, consectetur adipiscing elit. Cursus nibh mauris, nec turpis orci lectus maecenas. Suspendisse sed magna eget nibh in turpis. Consequat duis diam lacus arcu. Faucibus venenatis felis id augue sit cursus pellentesque enim </p>

</div>

</div>

</div>

</div>

</section>

</div>

<p class="text-xs mt-5 text-center mb-16">swipe right or left to view more</p>

{% include 'partials/_newsletter.html' %}

</main>

{% endblock content %}

Appendix B

Student Dashboard Front End Code

```
{% extends 'base.html' %}

{% load static %}

{% block content %}

<main class="flex flex-col mt-[100px] " >

    <div data-overlay class=" hide fixed z-[1000] flex items-center justify-center bg-
primaryRed bg-opacity-70 left-0 top-0 right-0 !w-screen h-screen">

        <div data-chooseIdentity class="w-[90%] md:max-w-[700px] px-8 sm:px-14 pt-16 py-8
bg-white rounded-md relative" >

            <h2 class="text-2xl font-semibold mb-3 text-center">Privacy Prompt</h2>

            <p class="mb-8 text-center">Would you like your identity be shared with others?

</p>

            <div class="sm:bg-black w-56 sm:w-80 mx-auto text-sm grid sm:grid-cols-2 gap-3
sm:gap-1 text-white rounded-xl sm:overflow-hidden ">

                <button data-identity="true" class="w-full px-6 py-[10px] rounded-lg hide_identity
text-black font-semibold">Don't Hide</button>

                <button data-identity="false" class="w-full bg-black px-6 py-[10px] rounded-lg
">Hide My Identity</button>

            </div>
```

```

</div>

<div data-success class="hide w-[90%] md:max-w-[600px] px-8 sm:px-14 pt-16 py-8
bg-white rounded-md relative" >

    <h2 class="text-center text-2xl font-semibold mb-4">Success Message</h2>

    <p class="text-center">Thank you. Your report has been submitted <br class="hidden
md:block"> to the relevant quarter.</p>

</div>

</div>

<div class="" data-report="false">

    { % comment % } <div class=" bg-customBlack w-full h-[calc(100vh-100px)] lg:h-
[450px] relative flex justify-around items-center ">

        <section class="!w-full gap-16 lg:gap-0 pb-10 lg:pb-[unset] lg:pl-[5%] xl:pl-0 flex
lg:grid grid-cols-[1fr,1fr] flex-col-reverse lg:flex-row items-center lg:items-start text-center
lg:text-left justify-between text-white " >

            <div class="lg:mt-10">

                <h2 class="text-3xl lg:text-4xl leading-snug font-semibold">Ayo help you
provide <br> security while keeping <br> you safe.</h2>

                <button data-report_case_btn class="mt-14 text-white bg-primaryRed px-14 py-
3 pb-4 rounded-md" ><span> Report Now </span><span class="text-xl ml-1
">&rarr;</span> </button>

            </div>

            <div class="-mt-4 lg:mt-[unset] ml-5 lg:ml-0 relative lg:absolute w-[170%] sm:w-

```

```

[500px] h-[300px] right-0 bottom-0 scale-[55%] sm:scale-[80%] md:scale-[unset] ">
    
    
    
</div>
</section>
</div> { % endcomment % }
<div class="py-14">
    <section class="px-[5%] xl:px-0 max-w-[800px]" >
        <h2 class="text-2xl font-bold mb-5 lg:mb-2 text-center">You are the protector of
your community. <br class="hidden sm:block"> We keep your personal information
private.</h2>
        <p class="text-center">WeTip is dedicated to offering the nation's most effective
anonymous reporting service. When you submit
            a report, we promise and ensure complete confidentiality and anonymity. All
information is shared with
                your company, as well as local, state, federal, and international law enforcement
organizations, in order
                    to communicate information about criminal activities in your area.</p>
        <button data-report_case_btn type='button' class="flex gap-2 mx-auto mt-5
items-center px-10 py-2 h-12 rounded-md bg-primaryRed text-white text-sm lg:text-base "

```

>Report A Crime →

</button>

</section>

</div>

<div class="bg-faintRed py-10 " >

{% comment %} {% include 'partials/_blog.html' %} {% endcomment %}

</div>

{% include 'partials/_newsletter.html' %}

</div>

<div class="hide pt-10 pb-14" data-report="true" >

<form action="{% url 'reports:make_report' %}" method="post"

enctype="multipart/form-data">

{% csrf_token %}

{% include 'partials/_first_page_question.html' %}

{% include 'partials/_second_page_question.html' %}

{% include 'partials/_third_page_question.html' %}

</form>

</div>

</main>

{% endblock content %}