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##### APT/IST 4900 FINAL-TERM PROJECT

## Ethical Whistleblowing Web Application

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This final project report is submitted in partial fulfillment of the requirements of the Applied Information Technology (APT) 

## Declaration

I declare that this is my original work through my own effort and that it has not been presented in any form for academic or any other reason, to the best of my knowledge. Contributions to this work by any other person or literature have been duly cited.

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## 

## Acknowledgement

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## Definition of central terms

**Products:** In this case they are car spare parts.

**Supplier:** Is a person who owns and sells the products.

**Client:** Is a person who buys the products.

**Nairobi online car spare parts shop:** Is a computerized system where car spare parts can be bought through the internet.

**Nairobi**: Derived from a Swahili word meaning ‘spare part’.

## **Abstract**

**Summary of back ground, problem statement, objectives, LR, Methodology, Results and Conclusion and Recommendation] –one page maximum**

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**CHAPTER ONE**

**INTRODUCTION**

1.0 Introduction

In today's global landscape, combating corruption is of paramount importance for the well-being of societies. The Ethical Whistleblowing Web Application represents a significant leap forward in empowering individuals to contribute actively to this cause. This chapter provides an overview of the app's fundamental purpose, emphasizing the critical features that ensure secure, anonymous reporting and the safeguarding of whistleblowers.

1.1 Background of the study

The pervasive nature of corruption has positioned itself as a formidable hindrance to the overall welfare of communities on a global scale. This deeply ingrained societal ill undermines trust, and hampers progress, necessitating concerted efforts to combat its deleterious effects. In response to this urgent and complex challenge, whistleblowing has emerged as a transformative force, offering a ray of hope in the ongoing battle against corruption.  
  
The United States, widely recognized as a pioneer in whistleblower protection, has established a robust legislative framework to safeguard individuals who expose corruption within public and private sectors. Central to this commitment is the Whistleblower Protection Act, a landmark piece of legislation that serves as a cornerstone in the nation's efforts to encourage transparency. The Whistleblower Protection Act (enacted in 1989) is a comprehensive federal law designed to shield federal employees from retaliation when they disclose information about misconduct, fraud, or any form of wrongdoing within their organizations. This legislative initiative reflects the U.S. government's dedication to fostering an environment where whistleblowers can come forward without fear of adverse consequences.  
  
The United Kingdom has demonstrated a strong commitment to whistleblower protection, employing legal frameworks and dedicated entities to create an environment that encourages individuals to expose wrongdoing without fear of reprisal. One noteworthy organization in this regard is Protect(formerly Public Concern at Work), a leading independent authority on whistleblowing. Protect operates as an independent charity in the UK, specializing in promoting whistleblowing as a valuable tool for addressing and preventing misconduct within organizations. Established in 1993, the organization has played a crucial role in shaping the landscape of whistleblower protection in the country. It provides guidance, resources, and support to both whistleblowers and organizations, aiming to foster a culture that values ethical conduct and accountability.  
  
Australia has implemented comprehensive measures to ensure whistleblowers their safety and confidentiality. One key element of Australia's approach to whistleblower protection is the integration of secure reporting platforms. These platforms serve as confidential channels through which individuals can report instances of corruption, fraud, or other forms of misconduct. Also several government agencies and organizations in Australia have established dedicated whistleblower hotlines and reporting channels. These channels are often managed by independent bodies to guarantee impartiality and confidentiality. The Australian Securities and Investments Commission (ASIC), for example, operates a whistleblower protection program that allows individuals to disclose information about corporate misconduct while safeguarding their identity.  
  
In South Africa, The Whistleblower Act, officially known as the Protected Disclosures Act (PDA) of 2000, establishes a crucial legislative framework aimed at affording legal protection to individuals divulging information on unlawful or corrupt activities within the workplace. The primary objective of the Act is to facilitate the reporting of such activities without the looming fear of reprisals or victimization.   
  
Nigeria has implemented robust protective measures and legal frameworks to fortify whistleblowers in their pivotal role of reporting violations and misconduct. The Whistleblower Protection Act serves as a foundational legal instrument, affording crucial safeguards to individuals bravely exposing wrongdoing. The Act serves to reassure whistleblowers that their disclosures will be met with protection rather than reprisal.   
  
In Kenya, the Ethics and Anti-Corruption Commission (EACC) takes a leading role in the fight against corruption, with whistleblowing as a pivotal strategy. As the primary agency for investigating and prosecuting corruption cases, the EACC integrates whistleblowing into its approach, considering it a powerful tool for uncovering corrupt practices and fostering a culture of accountability. The commission has established mechanisms to encourage whistleblowing, providing secure and confidential reporting channels to allow individuals to disclose information about corruption without fear of reprisal.   
  
1.2 Problem Statement

The Whistleblower Protection App aims to address the following four critical problems:

* **Lack of Secure and Anonymous Reporting Channels:**

Many potential whistleblowers are deterred from reporting corruption due to concerns about the security and confidentiality of their identity. Traditional reporting mechanisms may not provide a secure and anonymous platform, leading to hesitancy among individuals to come forward with crucial information.

* **Inadequate Case Tracking and Transparency:**

The absence of a robust case tracking system results in a lack of transparency in addressing reported corruption. Whistleblowers often remain unaware of the progress of their reports, diminishing their confidence in the reporting process.

* **Administrative Challenges:**

The absence of a centralized dashboard poses challenges for administrators in effectively managing and tracking reported cases.

* **Complex Reporting Process:**

Existing reporting processes may not be user-friendly, hindering individuals from easily submitting details about corruption securely.

1.3 Project Objectives

1.3.1 Overall Goal

To design and develop an Ethical Whistleblowing Web Application.

1.3.2 Systems design and development objectives

The Ethical Whistleblowing Web Application contains the following unique features:

* **Centralized Administrative Dashboard:**

A centralized dashboard for administrators (police and anti-corruption officials) to effectively manage and track reported cases.

* **Real-time Case Tracking System:**

The implementation of a comprehensive case tracking system with real-time updates to provide whistleblowers updates on the progress of their reports.

1.3.3 Specific Research Objectives

1.3.3.1 To find out the traditional challenges with the old Whistleblowing Systems.

1.3.3.2 To determine the benefits of the new Ethical Whistleblowing Web Application.

1.4 Project Questions  
What are the traditional challenges with the old Whistleblowing Systems?

What are the benefits of the new Ethical Whistleblowing Web Application?

1.5 Scope of the Project

The Ethical Whistleblowing Web Application works in the following manner:

* **User Registration and Anonymous Account Creation:**

Individuals access the web application through a secure portal.

Users create an anonymous account without revealing personal information.

* **User-friendly Reporting Process:**

The system provides a user-friendly reporting form where individuals can submit details about corruption securely.

The form is designed to be intuitive, guiding users through the process of providing necessary information.

* **Case Tracking System (Real-time Case Tracking):**Once a report is submitted, whistleblowers can monitor the progress of their reports through a Real-time Case Tracking System.

Regular updates are provided to ensure transparency and assurance that their concerns are being addressed.

* **Centralized Administrative Dashboard:**

Authorized administrators, such as law enforcement and anti-corruption commissions, have access to a Centralized Administrative Dashboard.

The dashboard consolidates information on reported cases, providing a comprehensive overview.

* **Security Measures:**
* **Anonymity Emphasis:**

The application emphasizes its commitment to protecting the anonymity of whistleblowers, fostering trust in the reporting process.

* **Secure Encryption Implementation:**

All user communications and information are encrypted, safeguarding the confidentiality of the reported data.

**Stakeholders:**

The primary stakeholders in this project include:

* **Whistleblowers:** Individuals reporting corruption seeking a secure and anonymous platform.
* **Administrators:** Law enforcement (Police), anti-corruption bodies (EACC), and other relevant authorities responsible for managing and investigating reported cases.
* **Developers:** The team responsible for designing, developing, and maintaining the web application.

**Proposed Location for Implementation:**

The Ethical Whistleblowing Web Application is specifically tailored for use in Kenya, providing accessibility to diverse agencies within the country.

1.6 Limitations of the study

Some of the challenges that we foresee to complete the project in 14 weeks include:

* **Limited Time Frame:**Completing the project within the allocated 14-week period may be challenging due to the complexity of the web application and the need for thorough testing and refinement.
* **Technical Expertise:**We may lack extensive experience in web development, particularly in building complex systems like an Ethical Whistleblowing Web Application.

1.7 Significance of the study

This study holds significant importance in addressing the pressing issue of corruption and the need for effective whistleblowing mechanisms. The Ethical Whistleblowing Web Application is designed to bring about positive change, and its significance can be summarized as follows:

* **Contribution to Sustainable Development Goals (SDGs):**

The study aligns with SDG 16 by promoting peace, justice, and strong institutions. It aims to create a system that facilitates the reporting of corruption, thereby contributing to the establishment of accountable and transparent institutions.

* **Corruption Mitigation:**

The study directly contributes to the global effort in combating corruption. By providing a secure and anonymous platform for reporting, the Ethical Whistleblowing Web Application aims to mitigate corruption by encouraging individuals to come forward with vital information without fear of reprisal.

* **Empowerment of Whistleblowers:**

Whistleblowers play a crucial role in exposing corruption, and this study empowers them by ensuring their safety and anonymity. The significance lies in fostering a culture where individuals feel confident and protected when disclosing instances of corruption.

* **Transparency and Trust Building:**

The implementation of a Real-time Case Tracking System and a Centralized Administrative Dashboard contributes to transparency. This transparency builds trust among whistleblowers, administrators, and the public, ensuring that reported concerns are addressed promptly and efficiently.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Whistleblowing stands as a pivotal strategy in the global battle against corruption, empowering individuals to expose misconduct and contribute to transparent and accountable institutions. This chapter reviews existing literature, examining international efforts in countries like the United Kingdom and Australia. The focus is on understanding the challenges within traditional systems and introducing the key features and objectives of the proposed Ethical Whistleblowing Web Application.

2.1 Analysis, comparison and criticism of existing projects with an assessment of strengths and weaknesses of existing projects

2.1.1 **System One Name:** Protect (formerly Public Concern at Work) **country:** United Kingdom

2.1.2 **System Two Name:** Transparency International **country:** Germany

2.1.3 **System Three Name:** The Australian Securities and Investments Commission (ASIC) **country:** Australia

2.1.4 Summary of comparison of the systems

| **Features** | **Protect, United Kingdom** | **Transparency International, Germany** | **Australian Securities and Investments Commission, Australia** |
| --- | --- | --- | --- |
| Cost | X | tick | tick |
| Easy to Install | X | tick | X |
| Easy to use | tick | tick | X |
| Efficient Database | tick | tick | X |
| Good Security | tick | tick | X |
| Vulnerability assessment | tick | tick | X |

2.2 Literature review on based on the specific research objectives

2.2.1 challenges of the old Whistleblowing Systems.

Some of the challenges of the old Whistleblowing Systems include:

* **Insufficient Public Awareness:**

Lack of awareness impacted user adoption. Many potential whistleblowers were not = aware of the existing systems, leading to underutilization. This lack of awareness hindered the effectiveness of the whistleblowing process.

* **Complex Reporting Process:**

Existing reporting processes were not user-friendly. The complexity of the reporting process acted as a barrier, making it challenging for individuals to submit details about corruption securely.

* **Administrative Inefficiencies:**

Older systems faced challenges in managing and tracking reported cases efficiently. The absence of a centralized dashboard for administrators posed difficulties in handling and monitoring reported cases effectively, potentially causing delays and inefficiencies.

* **Lack of Anonymity:**

Traditional whistleblowing systems often failed to guarantee anonymity to individuals reporting corruption. The fear of retaliation or exposure prevented many potential whistleblowers from coming forward, as they risked personal and professional consequences.

* **Inadequate Security Measures:**

Insufficient security measures may have exposed whistleblowers and their reports to risks. Without robust encryption and secure communication channels, the confidentiality of whistleblower reports could be compromised, discouraging individuals from coming forward.

* **Limited Whistleblower Feedback Loop:**

Lack of a structured feedback loop from administrators to whistleblowers about the status and outcomes of their reports resulted in dissatisfaction and a perceived lack of transparency. This impacted the willingness of individuals to report in the future.

* **Poor Integration with External Reporting Entities:**

Limited integration with external entities, such as other regulatory bodies, hindered a thorough and collaborative investigation. This lack of collaboration resulted in incomplete resolutions and a failure to address systemic issues.

* **Ineffective Case Prioritization:**

Absence of a clear system for prioritizing reported cases based on severity and urgency lead to delays in addressing critical issues. This impacted the system's ability to respond promptly to high-priority cases.

* **Ineffective Communication Channels:**

Lack of diverse and accessible communication channels for whistleblowers to report corruption limited accessibility. Systems that relied solely on traditional reporting methods exclude individuals who prefered digital or alternative communication channels.

2.2.2 Benefits of the new Ethical Whistleblowing Web Application.

Some of the benefits of the new Ethical Whistleblowing Web Application include:

* **Improved User-Friendly Reporting Process:**

The new reporting form is designed to be intuitive, guiding users through the process of providing necessary information. This simplification encourages more individuals to submit details about corruption securely.

* **Real-time Case Tracking System:**

The implementation of a comprehensive case tracking system with real-time updates provides whistleblowers with continuous insights into the progress of their reports. This transparency boosts confidence in the reporting process.

* **Centralized Administrative Dashboard:**

Authorized administrators have access to a centralized dashboard, enabling effective management and tracking of reported cases. This addresses administrative challenges, ensuring prompt handling of cases.

* **Secure and Anonymous Reporting:**

The new system addresses the challenge of insecure and non-anonymous reporting channels by providing a secure and user-friendly reporting form. This benefit encourages individuals to come forward without fear of compromising their identity, fostering a safer environment for whistleblowers to report corruption.

2.3 Conclusion

The Ethical Whistleblowing Web Application offers a crucial leap in the fight against corruption. It addresses traditional challenges through secure reporting, real-time tracking, and a centralized dashboard. Its significance lies in promoting transparency, accountability, and contributing to Sustainable Development Goal 16.

CHAPTER THREE:

RESEARCH DESIGN AND METHODOLOGY

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3.6 Testing plan for the system

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6.3 Recommedations

6.4 Furture work

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[7.2.1 Hardware Platform](about:blank)[**Error! Bookmark not defined.**](#_tyjcwt)

[7.2.2 Programming Language](about:blank)

[7.2.3 Programming Tools](about:blank)

[7.2.4 Software Platform](about:blank)

[7.3 Features of the Prototype](about:blank)

[7.3.1 Technical Manual Screenshots](about:blank) 1.3.2

7.3.2 User Manual Screenshots:- main activtoty step by step

[7.4 Database Management System](about:blank)

8.0 [References](about:blank)

APA Format

9.0 [Appendix](about:blank)[**Error! Bookmark not defined.**](#_3dy6vkm)

9.1 Questionnaire/Interview schedule

Section A-Respondents bio data

Gender male [ ] female[ ]

Education level primary [ ] high [ ] university [ ]

SECTION B

2.2.2

9.2 Work plan in Grant Chart format

9.3 Budget