**PURBANCHAL UNIVERSITY**



**DEPARTMENT OF COMPUTER ENGINEERING**

**KHWOPA ENGINEERING COLLEGE**

**Libali-08, Bhaktapur**

**A Project Report**

**On**

**Account Management System**

A report submitted for the partial fulfillment of requirements for the degree of Bachelor of Engineering in Computer Engineering( Fourth Semester)

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Saurav Dhoju (780340)

# **ABSTRACT**

The Account Management System project aims to develop a comprehensive platform for managing various aspects of an organization's financial activities, including club expenses, membership management, bank transactions, and executive management. The system provides role-based access control to ensure data security and integrity, with different permission levels assigned to different user roles. Features such as user authentication, real-time data updates, and interactive dashboards enhance user experience and efficiency. The project utilizes Streamlit for the user interface and SQLite for database management, enabling seamless integration and scalability. The Account Management System project addresses the need for a centralized and efficient solution for managing financial operations within organizations, providing users with a user-friendly and robust platform for overseeing financial activities.

Keyword: Streamlit, SQLite, integration, scalability

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# **CHAPTER 1: INTRODUCTION**

## Introduction

In the contemporary digital landscape, efficient management of financial activities is imperative for the smooth functioning of organizations across various sectors. The Account Management System project emerges as a solution to address the complexities associated with managing club expenses, membership data, bank transactions, and executive management within an organization. This project aims to streamline financial operations, enhance data security, and improve decision-making processes through the implementation of an integrated and user-friendly platform.

The traditional methods of managing financial activities often involve manual processes, which are time-consuming, prone to errors, and lack scalability. With the advent of digital technologies, there has been a paradigm shift towards automated systems that offer real-time insights, streamlined workflows, and enhanced accessibility. The Account Management System project leverages these advancements to provide organizations with a comprehensive solution for effectively managing their financial affairs.

## Motivation:

The motivation behind the development of the Account Management System project arises from the inherent challenges and inefficiencies associated with traditional methods of financial management within organizations. These challenges include:

1. **Manual Processes**: Traditional financial management methods often rely on manual processes, such as paper-based record-keeping and spreadsheet-based calculations. These manual processes are time-consuming, error-prone, and lack scalability, making them inadequate for organizations with complex financial operations.
2. **Data Fragmentation**: In many organizations, financial data is fragmented across multiple systems and spreadsheets, leading to data silos and inconsistencies. This fragmentation hinders effective decision-making and makes it difficult to obtain a comprehensive view of the organization's financial health.

## 1.3 Objectives:

To provide a convenient and efficient platform for customers to book tickets.

## 1.4 Features:

* Develop a centralized system for tracking finances efficiently.
* Implement secure and versatile payment processing features.
* Provide comprehensive reporting tools for financial insights.
* Design a user-friendly interface for easy financial management.

## 1.5 Limitation:

* Offline Access Only: System accessible only within the local network.
* Limited Scalability: Capacity constrained by host machine resources.
* Data Security: Vulnerable to physical breaches if local environment compromised.
* Dependency on Local Infrastructure: Disruptions affect system accessibility.
* Maintenance Challenges: Updates and backups managed locally.

# **CHAPTER 2: METHODOLOGY**

## 2.1 Methodology

The methodology for developing the Account Management System involved a systematic approach aimed at addressing the challenges associated with manual account management processes and leveraging digital solutions to streamline operations. It began with a comprehensive assessment of the existing manual processes, identifying pain points such as manual record-keeping, data entry errors, and limited accessibility to account information. Stakeholder engagement and requirements gathering were integral components, involving interviews, surveys, and workshops with key stakeholders to understand their needs and preferences.

Based on the gathered requirements, the methodology proceeded to the design and architecture phase. Here, the system architecture, data model, user interface design, and functional specifications were defined. Modern technologies like Python, Streamlit, and SQLite were selected to develop a scalable and user-friendly system. The development process followed an iterative approach, allowing for continuous feedback and refinement.

## 2.2 Flowchart

2.2.1: Flowchart

## 2.3 ER-Diagram

# **CHAPTER 4: RESULT AND DISCUSSION**

## 4.1 Result and Discussion

In the result and discussion section, we evaluate how well the Account Management System works based on user feedback and system performance. We talk about how the system makes things easier, improves user satisfaction, and meets the organization's goals. We also look at any problems we faced and how we plan to fix them. Additionally, we discuss what the system's success means for future plans and improvements.

# **CHAPTER 5: SNAPSHOT**

# **CHAPTER 6:CONCLUSION**

## 5.1 Conclusion

In conclusion, the Account Management System offers a user-friendly platform for managing club finances and membership information efficiently. Despite some limitations, such as internet dependency, it significantly improves the overall management process. With ongoing improvements and user feedback, it aims to continue enhancing user satisfaction and organizational efficiency in the future.

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