EXPENSE TRACKER SYSTEM

Zin Min Htut
Student, 5th Year, B.C.Sc
University of Computer Studies, Hinthada

Supervised by
Daw Khaing Thazin Nwe
Department of Information Technology Supporting and Maintenance
University of Computer Studies, Hinthada

Abstract. An expense tracker system is a comprehensive tool designed to monitor, categorize, and analyze personal or business expenditures, offering users detailed insights into their spending patterns through automated data collection, intuitive categorization, real-time reporting, and advanced analytics, ultimately aiding in effective financial management and budgeting by highlighting trends, identifying potential savings, and facilitating informed financial decisions.

Keywords: expense, tracker, monitor, business, financial

INTRODUCTION

In the contemporary landscape of financial management, an efficient expense tracker system has become an essential tool for both individuals and organizations. This system offers a comprehensive suite of features designed to facilitate meticulous monitoring, categorization, and analysis of expenditures. By leveraging advanced algorithms and a user-centric interface, the expense tracker system transforms the traditionally cumbersome process of expense management into a streamlined, intuitive experience. Key functionalities of the system include automatic categorization of expenses through machine learning techniques and customizable reporting tools that provide users with detailed insights into their spending patterns. Users can set financial goals, create budgets, and receive alerts and reminders to stay on track, fostering disciplined financial habits.

PROBLEM

The system's design prioritizes data security and privacy, employing robust encryption protocols to ensure that sensitive financial information is protected against unauthorized access. Additionally, the system offers multi-platform accessibility, allowing users to manage their finances from their preferred devices, desktop computer.

APPROACH

Incorporating predictive analytics, the expense tracker system can forecast future expenses based on historical data, helping users to anticipate and plan for upcoming financial obligations. This predictive capability is augmented by personalized recommendations aimed at optimizing spending and enhancing savings. By providing a holistic view of financial health,

Accepted Date: 25.10.2024
www.ucsh.edu.mm

the expense tracker system empowers users to make informed decisions, reduce unnecessary expenditures, and achieve their financial objectives. In the context of organizational use, it enables more precise budgeting, improved financial reporting, and enhanced accountability. Ultimately, this expense tracker system is a vital tool that supports better financial management, promotes sustainable financial practices, and contributes to overall financial well-being.

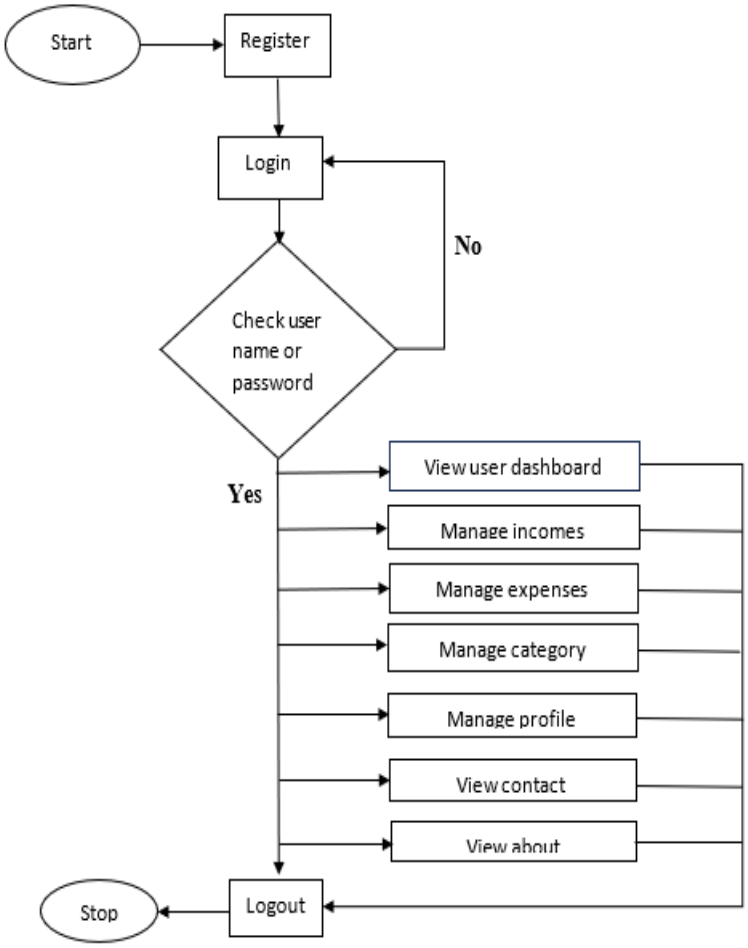

Figure 1: System Flow Diagram for User

Figure 1 diagram is a flowchart diagram representing a user interaction flow for an application or system, likely related to managing personal finances or user information. Here's a breakdown of the flow: The process begins here, indicated by the oval shape labeled "start". Here’s an explanation of the flow: The process begins at the "start" point, indicated by the oval shape labeled "start." The user is prompted to log in, shown by the rectangle labeled "Login." This is a standard step where the user enters their credentials. allows the user to view their income records. This diagram show user’s expense and income calculate daily. Manage profile page can change user’s email, password, user name and currency type. Contact page can connect to admin. This option likely takes the user to the main dashboard where they can see an overview of the user functions.

Accepted Date: 25.10.2024
www.ucsh.edu.mm

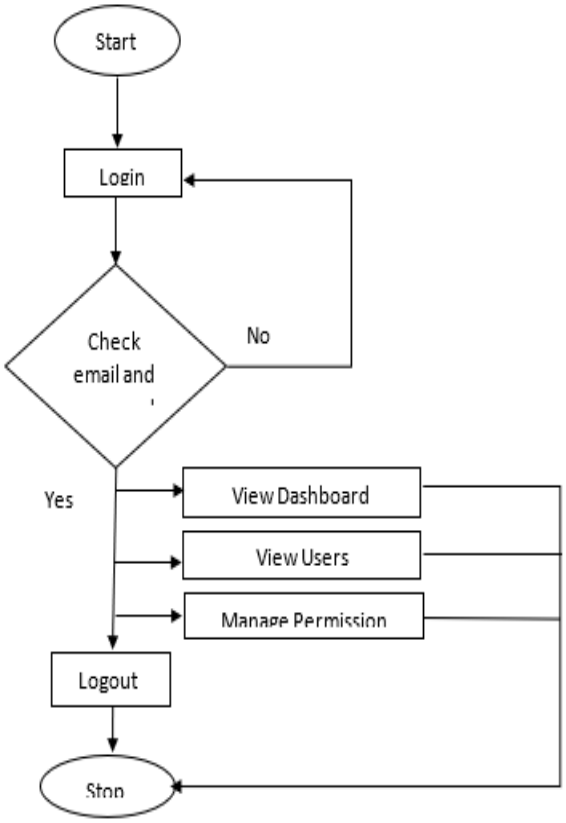

Figure 2: System Flow Diagram for Admin

Figure 2 diagram is a flowchart representing the user interaction flow for an admin interface or a system with administrative functionalities. Here's an explanation of the flow: The process begins at the "start" point, indicated by the oval shape labeled "start." The user is prompted to log in, which is represented by the rectangle labeled "Login." This step involves entering the user's credentials (email and password).

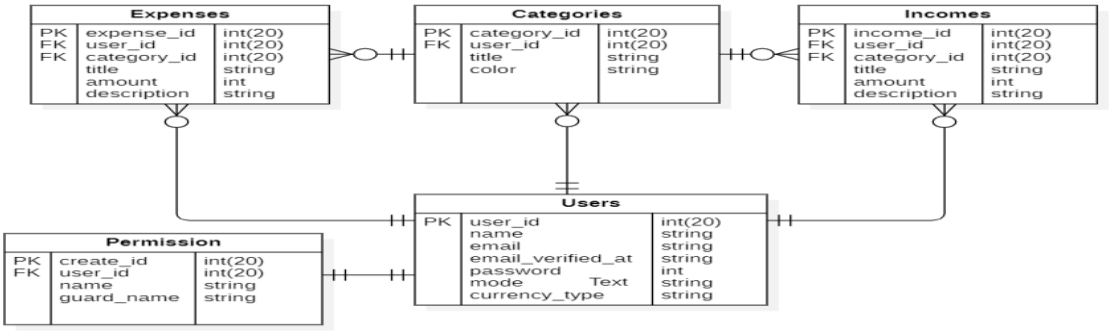

Figure 3: Database Design

Figure 3 diagram is represents a structured approach to managing user data, financial transactions, and administrative controls within the system. Users are at the center of this database, and each user can have multiple expenses, incomes, categories, permissions, and roles. Categories are used to categorize both expenses and incomes, making it easier to organize

Accepted Date: 25.10.2024
www.ucsh.edu.mm

financial data. Roles and Permissions are linked to users to manage access control within the system. This ER diagram outlines a robust foundation for a financial management system, focusing on flexibility, user customization, and data integrity.

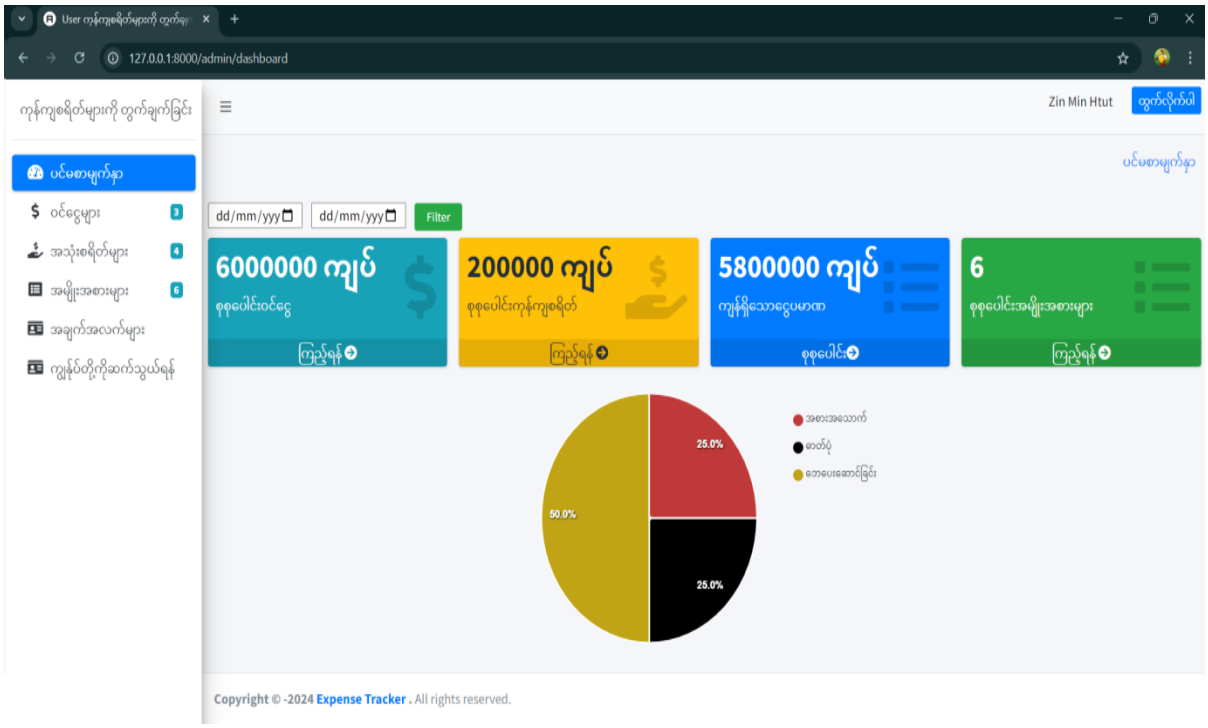

Figure 4: Implementation of the System

Figure 4 diagram is a dashboard from a web application. The interface language is Burmese, and it seems to be a financial or business management system. The top bar shows the URL 127.0.0.1:8000/admin/dashboard', indicating that the dashboard is running on a local server, commonly used for testing purposes. On the right side of the top bar, there is a user profile section displaying the username "Zin Min Htut" along with the associated email "zmhtut12@gmail.com".

REFERENCES

[1] Jennifer Robbins, Learing Web Design: A Beginner's Guide to HTML,CSS JavaScript And Web Graphics

[2] Mathew MacDonlald, HTML5: The Missing Manual, 2nd Edition, 2013 available at https://www.thriftbooks.com

[3] Jon Duckett, CSS: Design and Build Websites, 2011 available at https://htmlandcss.com

[4] Marijn Haverbeke, Eloquent JavaScript, 3rd Edition, 2018 available at https:// eloquentjavascript.net

[5] Jim Gray and Andreas Reuter, Transaction Processing: Concepts and Techniques

Accepted Date: 25.10.2024
www.ucsh.edu.mm