

# Daily Expense Management System

Author: Zhiqi Zhang

Auburn University at Montgomery

zzhang4@aum.edu

## Abstract

Many people find it difficult to track daily expenses effectively, resulting in poor budgeting and financial management. To address this, I developed a Daily Expense Management System to help users record, categorize, and analyze their expenses, enhancing financial visibility and supporting more efficient budgeting decisions.

## 1. Project Overview

Many existing financial tools have complex interfaces, lack real-time feedback, and weak categorization capabilities. The system addresses these issues with the following features:

- Simple expense recording
- Automatic classification
- Real-time reports and charts
- Alerts for budget control
- Cloud backup and data security

## 2. Literature Review

- Gupta et al. (2018) emphasized that user-friendly interfaces and visual charts are key to higher adoption of financial management systems.
- Chen & Liang (2020) introduced an NLP-based classification method that significantly improved accuracy in expense categorization.
- Singh et al. (2021) highlighted the effectiveness of visual dashboards and budget tracking on user behavior.
- Kumar & Ray (2019) focused on the importance of encryption and cloud storage for financial data [4].

This project integrates these insights to improve classification, visualization, and security.

## 5. References

- [1] Gupta, R. et al. (2018). Mobile-Based Personal Finance Management System. IEEE.
- [2] Chen, Y. & Liang, J. (2020). Expense Categorization Using NLP. Elsevier.
- [3] Singh, A. et al. (2021). Budget Monitoring Dashboards. Springer.
- [4] Kumar, N. & Ray, S. (2019). Data Security in Finance Apps. IEEE.