

Draft Proposal Final Year Project (Caleigh Susan Anak Jeffry - 82476)

Project Title

“Spendette” – A Web-Based Expense Analyzer with Machine Learning Support.

Introduction

Managing personal finances and splitting group expenses can be difficult especially for students or young professionals living communally or on a budget. Spendette is a web-based expense analyser designed to manage both personal and group expenses in one platform. It helps users track their daily spending, organize shared costs with friends or housemates, and gain a deeper understanding of their financial habits. By integrating Machine Learning, Spendette analyses historical spending patterns to offer personalized budget suggestions, detect unusual expenses, and generate monthly trends & comparisons to make smarter financial decisions.

Problem Statement

Users often struggle with:

- Tracking both personal and shared expenses in one place
- Staying within budget due to lack of insights
- Difficulty in keeping track of group expenses
- Delays in repayments and group conflicts

Objective

The main objectives of the project are:

- To develop a responsive web application that enable users to record individual expenses.
- To allows users to create and join groups for shared expenses.
- To automate the process of recording expenses and splitting the cost fairly among participants.
- To provide clear records and balance sheets.
- To enable smooth tracking and settlement of debts between users.
- Use Machine Learning to analyse spending habits and suggest monthly budgets

Project Scope

This project will cover:

- A web-based platform accessible via browser (desktop and mobile)
- Registration and login system with basic authentication
- Personal and group expense tracking
- Group creation and member management
- Viewing of individual balances and group-wise summaries
- Simple interface for marking payments as settled
- Smart spending insights via ML

Core Features

1. Group Expense Tracker

- Create and join group
- Add shared expenses and split with members
- View the group expenses

2. Personal Expense Tracker

- Add individual expenses and income
- Assign categories and payment methods
- View personal expenses

3. Machine Learning

- Monthly expense trends & comparison
- Top Spending categories
- Budget suggestions

4. Notifications

- Email or popup notifications

5. Responsive Design

- Works on mobile, tablet, and desktop

Outcome

Spendette will provide users with a centralized platform to manage both personal and group expenses, eliminating the need for multiple apps or manual tracking methods. By combining individual and shared financial management in one system, users can experience greater convenience and efficiency. The system also promotes improved financial awareness by offering automated tracking and detailed category breakdowns, helping users gain clear insights into their daily, weekly, and monthly spending habits. In addition, Spendette ensures fair and transparent handling of group expenses by accurately calculating and dividing shared costs, reducing the chances of conflict or misunderstanding among group members.