AI-Based Smart Saving & Expense Management System for Students

PROBLEM STATEMENT

Due to lack of financial awareness and planning tools, students often overspend on food, entertainment, online shopping, and subscriptions.
Traditional expense tracking apps only record transactions but do not provide intelligent insights or personalized saving recommendations.
There is a need for an AI-powered system that can:

- Track student expenses
- Analyze spending behavior
- Predict future expenses
- Suggest smart saving strategies
- Provide real-time alerts for overspending

PROJECT OVERVIEW

AI Smart Saving is a web-based application designed to help students manage their finances efficiently using Artificial Intelligence and Data Analytics.

The system allows students to:

- Register and login securely
- Add daily expenses
- Categorize spending (Food, Travel, Shopping, Education, etc.)
- View expense summaries
- Get AI-based saving suggestions
- Track monthly savings goals

The AI model analyzes user spending patterns and provides:

- Budget predictions
- Overspending alerts
- Personalized saving tips
- Financial insights dashboard

SOLUTION OFFERED

The proposed system is an **AI-Based Smart Saving and Expense Management System** designed to help students manage their daily expenses effectively.

The system allows students to:

- Add and track daily expenses
- Categorize spending (Food, Travel, Shopping, etc.)
- Set monthly budget limits
- Monitor savings progress

Using basic data analysis with tools like Pandas and machine learning techniques from Scikit-learn, the system analyzes spending patterns and predicts future expenses.

It also provides:

- Budget alerts for overspending
- Personalized saving suggestions
- Simple dashboard with expense summary

Overall, the system helps students develop better financial habits and improve their savings through intelligent insights.

END USERS

- College students
- Hostel students
- Freshers with limited income
- Scholarship students

TECHNOLOGY USED

Frontend: HTML**,** CSS**,** JavaScript
Backend: Python**,** Flask Framework
Database: MySQL
AI / ML: Python (Pandas, Scikit-learn)**,** Predictive analysis model
Authentication: Bcrypt for password hashing, JWT / Session-based authentication