Team Project Proposal – Student Budget & Expense Tracker

1. Problem Statement

College students often struggle with managing personal finances due to inconsistent income, variable expenses, and limited financial literacy. Many existing budgeting apps are overly complex, require bank account integration, or do not provide student-specific tools such as tracking meal plan usage, textbooks, or monthly tuition payments. As a result, students lack a simple, accessible way to understand their spending habits and make informed financial decisions.

This project aims to solve that problem by creating a user-friendly web application that helps students track expenses, visualize trends, and build healthy money habits without requiring sensitive banking connections.

2. Target Users

The primary users are:

- **College students** managing personal budgets, part-time income, and recurring expenses.

- **Young adults** seeking a beginner-friendly financial management tool.

- **Students who prefer manual entry** over automated bank account linking.

3. Value Proposition

- **Simple interface** tailored to student budgeting categories (food, housing, textbooks, entertainment).

- **Manual or semi-automated entry** for users who do not want to link their bank accounts.

- **Data visualizations** that make financial patterns easy to understand.

- **Smart alerts** for budget limits, upcoming bills, or overspending.

● **Multi-device access** with secure login and persistent cloud storage.

This application provides clarity, confidence, and control over personal finances in a way that is approachable and non-intimidating.

4. Minimum Viable Product (MVP) Features

The MVP will include:

Core Features

1. **User Registration & Login**

   ○ Secure authentication using email + password

   ○ User profile stored in backend database

2. **Expense Logging**

   ○ Add, edit, and delete manual entries

   ○ Categories: food, rent, utilities, books, transportation, entertainment

   ○ Optional notes per entry

3. **Budget Creation Tools**

   ○ Users set monthly or weekly budgets for each category

   ○ Displays remaining vs. spent amounts

4. **Dashboard with Visualizations**

   ○ Bar charts, pie charts, and weekly breakdowns

   ○ Spending trends over time

5. **Alerts & Notifications (Basic)**

   ○ Warning when nearing a category limit

   ○ Reminder for upcoming recurring expenses

5. External API or Dataset

ExchangeRate API (https://www.exchangerate-api.com/)

- Allows optional conversion of expenses into different currencies

- Useful for international students managing finances in USD and a home currency

- Lightweight, free tier available, and no sensitive banking data involved

The API enhances user experience but is not required for basic functionality.

6. Ethical AI / Data Responsibility Statement

Our team is committed to responsible use of AI and user data.

- AI tools (e.g., ChatGPT, Copilot) will be used **only for brainstorming, debugging, documentation assistance, UI ideas, and text generation**.

- AI-generated code will be reviewed by the team and tested for correctness, security, and fairness.

- No sensitive financial data (e.g., real bank credentials) will be collected or stored.

- User data will be limited to essential fields (name, email, expenses) and stored securely following best practices such as hashed passwords and principle of least privilege.

- All external libraries, APIs, and AI tools used in development will be clearly documented in the AI Usage Log.