Title: BudgetMate

**Description:** BudgetMate is a straightforward budgeting app that allows users to track their expenses. Users can add income and expense entries, categorize them, and view a summary of their spending habits. The app provides a simple overview of how much users have left in their monthly budget and highlights their top expense categories.

## BudgetMate User stories:

# 1. Story: Add a Budget

- o As a user,
- o I want to add a budget,
- o so that I can keep track of my budget.

#### **Acceptance Criteria:**

- o A form allows the user to input budget.
- After submission, the budget is saved and displayed.

## 2. Story: Add Income to Budget

- o **As a** user,
- o I want to add an income entry with its amount, category and date,
- o so that I can keep track of all my income sources within my budget.

#### **Acceptance Criteria:**

- A form allows the user to input income details (amount, category, date).
- After submission, the income entry is saved and displayed under the user's budget.
- $\circ$  The total income in the budget is updated to reflect the new entry.

## 3. Story: Add Expense to Budget

- As a user,
- o I want to add an expense entry with its amount, category and date,
- o so that I can keep track of all my expense sources within my budget.

## **Acceptance Criteria:**

- o A form allows the user to input expense details (amount, category, date).
- After submission, the expense entry is saved and displayed under the user's budget.
- o The total income in the budget is updated to reflect the new entry.

#### 4. Story: Track Expenses by Category

- o **As a** user,
- I want to categorize each expense I add,
- o **so that** I can see where I am spending the most money in my budget.

## **Acceptance Criteria:**

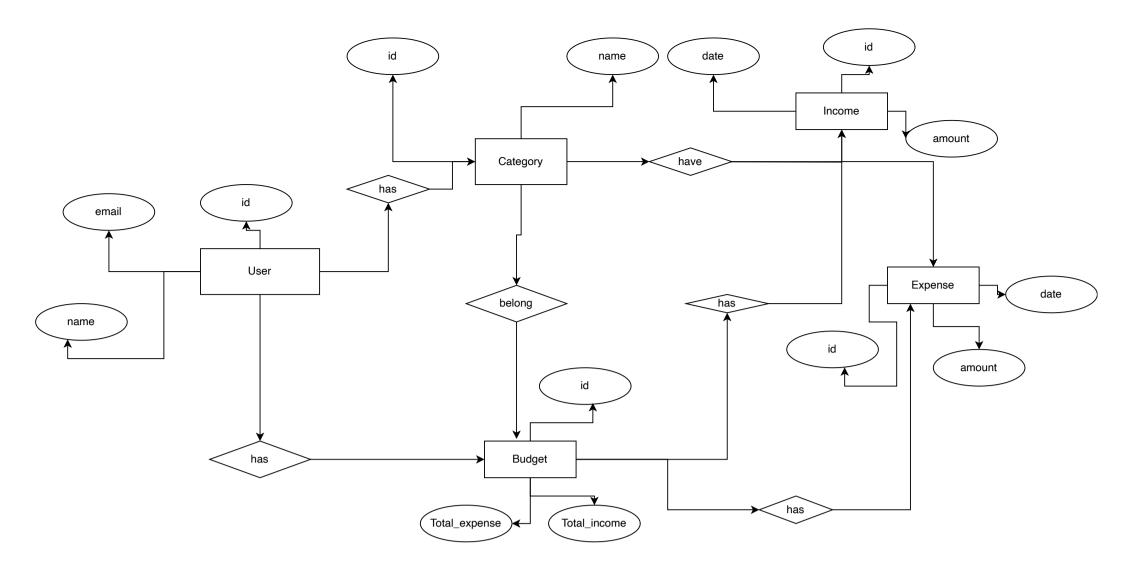
- A dropdown or selection allows the user to assign a category (e.g., food, transport) when adding an expense.
- o The expense is saved with its category and displayed under the budget.
- o The app provides a breakdown of expenses by category.

## 5. Story: View Monthly Budget Overview

- a. As a user,
- b. I want to see an overview of my monthly budget,
- c. **so that** I can track my total income, total expenses, and remaining balance for the month.

## **Acceptance Criteria:**

- d. A summary view shows the total income, total expenses, and balance (income expenses) for the selected month.
- e. The overview is automatically updated when new income or expenses are added.

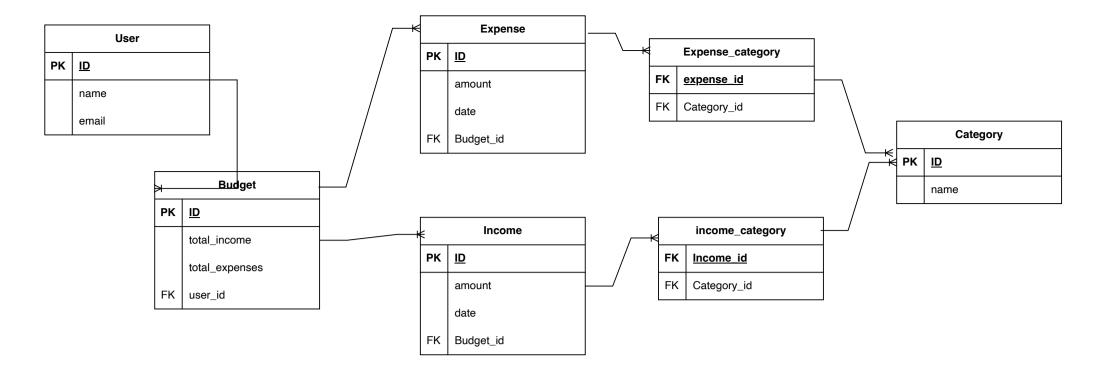


#### One-to-Many:

- A User can have many Budgets (One User → Many Budgets).
- A Budget
   can have many Incomes and Expenses (One Budget → Many Incomes and Many Expenses).

# • Many-to-Many:

- An Income
   can belong to multiple Categories (e.g., categorized as
   "Salary" and "Bonus").
- An Expense
   can belong to multiple Categories (e.g., categorized as
   "Food" and "Entertainment").



# Relationships in Logical Model:

- User → Budget: user\_id in Budget table links to id in User table (One-to-Many).
  Budget → Income: budget\_id in Income table links to id in Budget table (One-to-Many).
  Budget → Expense: budget\_id in Expense table links to id in Budget table (One-to-Many).
  Income → Category: Many-to-many, represented by the Income\_Category table.
  Expense → Category: Many-to-many, represented by the Expense\_Category table.