Massage Business Expense Tracker

I.   Background

The Budget Tracking Program is designed for small massage business owners who require a straightforward and effective method to monitor their financial transactions. Managing various expense categories and sources of income can often be overwhelming. This program streamlines the process by offering a centralized platform for logging and analyzing financial data, allowing for better financial decisions and a clear understanding of the business's financial status.

II. Business Rules

a.) The Problem at Hand

The challenge is to provide a simple yet comprehensive system for recording and reviewing expenses and income. The solution must cater to the specific needs of small businesses in the massage industry, where varying costs and revenue streams can make budget management complex.

b.) Describing Inputs and Outputs

Inputs:
- Categories for Income: Service and Product Sales
- Categories for Expenses: Rent, Salary, Supplies, and Utility
- Monetary amounts for each category

Outputs:
- The total for each expense and income category
- The overall balance of income minus expenses.

III. Develop a "Hand" Calculation

Manual Calculations:

Test 1:

Income

Service	3000
Product Sales	1000

Expenses

Rent	500	
Salary	1000	
Supplies	200	
Utility	500	
Total Income	4000	
Total Expenses	2200	
Current Balance	1800	

Test 2:

Income

Service	2000	
Product Sales	1500	

Expenses

Rent	500	
Salary	500	
Supplies	200	
Utility	200	
Total Income	3500	
Total Expenses	1400	
Current Balance	2100	

Test 3:

Income

Service	7000	
Product Sales	3000	

Expenses

Rent	2000	
Salary	1500	
Supplies	500	
Utility	500	
Total Income	10000	
Total Expenses	4500	
Current Balance	5500	

```
Start
  │
  ▼
Welcome to the
Budget Tracker
Program
  │
  ▼
Menu
  │
  ▼
Add Expense ──Yes──▶ Ask Category ──▶ Ask Amount ──▶ Return to Menu
  │
  No
  │
  ▼
Add Income ──Yes──▶ Ask Category ──▶ Ask Amount ──▶ Return to Menu
  │
  No
  │
  ▼
View Budget ──Yes──▶ Display Current Financial Summary ──▶ Return to Menu
  │
  ▼
Exit Message
  │
  ▼
End
```
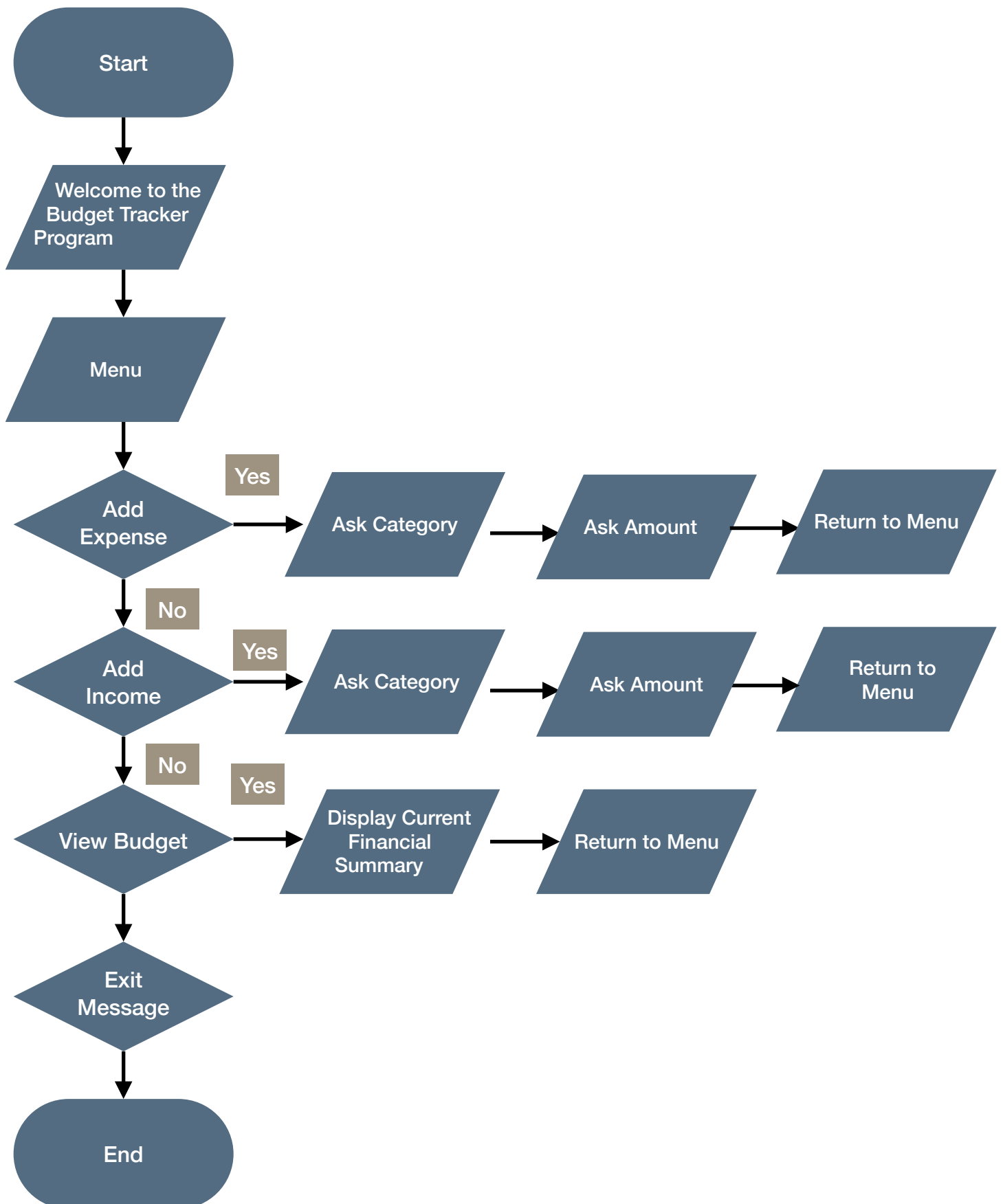
Pseudocode

```
START
    PRINT "Welcome to the Budget Tracking Program for Small Massage Businesses"
    INITIALIZE expense_records, income_records
    WHILE true
        DISPLAY menu (Add Expense, Add Income, View Budget, Exit)
        USER_INPUT choice
        IF choice == "Add Expense"
            USER_INPUT category, amount
            UPDATE expense_records
        ELSE IF choice == "Add Income"
            USER_INPUT category, amount
            UPDATE income_records
        ELSE IF choice == "View Budget"
            DISPLAY calculate_balance(expense_records, income_records)
        ELSE IF choice == "Exit"
            EXIT program
        ELSE
            PRINT "Invalid choice. Please select again."
    END WHILE
END
```