

PROJECT-3

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CODE:

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import datetime

class ExpenseTracker:

    def __init__(self):
        self.expenses = {}

    def add_expense(self, category, amount, description):
        date = datetime.date.today()
        if date not in self.expenses:
            self.expenses[date] = []

        self.expenses[date].append({
            'category': category,
            'amount': amount,
            'description': description
        })

    def view_summary(self):
        for date, expenses in self.expenses.items():
            print(f"\nDate: {date}")
            total_expense = 0
            category_expenses = {}

            for expense in expenses:
                total_expense += expense['amount']

            if expense['category'] not in category_expenses:
                category_expenses[expense['category']] = 0

            category_expenses[expense['category']] += expense['amount']
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    print(f"Total Expense: ${total_expense:.2f}")
    print("Category-wise Expenses:")
    for category, amount in category_expenses.items():
        print(f"{category}: ${amount:.2f}")

def show_menu(self):
    print("\nExpense Tracker Menu:")
    print("1. Add Expense")
    print("2. View Monthly Summary")
    print("3. Exit")

def run(self):
    while True:
        self.show_menu()
        choice = input("Enter your choice (1/2/3): ")

        if choice == '1':
            category = input("Enter expense category: ")
            amount = float(input("Enter expense amount: "))
            description = input("Enter expense description: ")
            self.add_expense(category, amount, description)
            print("Expense added successfully!")

        elif choice == '2':
            self.view_summary()

        elif choice == '3':
            print("Exiting Expense Tracker. Goodbye!")
            break

        else:
            print("Invalid choice. Please enter 1, 2, or 3.")

if __name__ == "__main__":
    tracker = ExpenseTracker()

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tracker.run()
'''
We are importing library datetime to get the current date and time.
We are defining a class ExpenseTracker to manage the expenses.
In the __init__ method, we initialize an empty dictionary
self.expenses to store the expenses.
In the add_expense method, we add an expense to the expenses
dictionary.
In the view_summary method, we calculate the total expense for each
date and display it along with the category-wise expenses.
'''
```