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import datetime

class ExpenseTracker:

    def __init__(self):
        self.expenses = []

    def add_expense(self, amount, description, category):
        self.expenses.append({'amount': amount, 'description': description, 'category': category, 'date':
datetime.datetime.now()})

    def view_monthly_summary(self, month, year):
        total_expenses = 0
        category_expenses = { }

        for expense in self.expenses:
            if expense['date'].month == month and expense['date'].year == year:
                total_expenses += expense['amount']

                category_expenses[expense['category']] = category_expenses.get(expense['category'], 0) +
expense['amount']

        print(f"Total Expenses for {datetime.date(year, month, 1).strftime('%B %Y')}: ${total_expenses:.2f}")
        print("Category-wise Expenses:")
        for category, amount in category_expenses.items():
            print(f"{category}: ${amount:.2f}")

    def display_expenses(self):
        for expense in self.expenses:
            print(f>Date: {expense['date'].strftime('%Y-%m-%d')} | Amount: ${expense['amount']:.2f} | Category:
{expense['category']} | Description: {expense['description']}")

def main():
    tracker = ExpenseTracker()

    while True:
        print("\nExpense Tracker Menu:")
        print("1. Add Expense")

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print("2. View Monthly Summary")
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print("3. View All Expenses")
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print("4. Exit")
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choice = input("Enter your choice: ")
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if choice == '1':
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    amount = float(input("Enter the amount spent: "))
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    description = input("Enter a brief description: ")
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    category = input("Enter the category (e.g., food, transportation, entertainment): ")
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    tracker.add_expense(amount, description, category)
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    print("Expense added successfully!")
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elif choice == '2':
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    month = int(input("Enter the month (1-12): "))
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    year = int(input("Enter the year: "))
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    tracker.view_monthly_summary(month, year)
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elif choice == '3':
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    tracker.display_expenses()
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elif choice == '4':
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    print("Exiting...")
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```
    break
```

```
else:
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```
    print("Invalid choice. Please try again.")
```

```
if __name__ == "__main__":
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```
    main()
```