

Expense Tracker - Python Code and Output

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import json
import os

class ExpenseTracker:
    def __init__(self, filename="expenses.json"):
        self.filename = filename
        self.expenses = self.load_expenses()

    def load_expenses(self):
        if os.path.exists(self.filename):
            with open(self.filename, "r") as file:
                return json.load(file)
        return []

    def save_expenses(self):
        with open(self.filename, "w") as file:
            json.dump(self.expenses, file, indent=4)

    def add_expense(self, amount, category, description):
        self.expenses.append({"amount": amount, "category": category, "description":
description})
        self.save_expenses()
        print("Expense added successfully!")

    def view_expenses(self):
        if not self.expenses:
            print("No expenses recorded yet.")
        else:
            print("\nExpense Records:")
            for idx, exp in enumerate(self.expenses, start=1):
                print(f"{idx}.    {exp['category']}    -    ${exp['amount']}:{
exp['description']}")

    def expense_summary(self):
        summary = {}
        for exp in self.expenses:
            summary[exp["category"]] = summary.get(exp["category"], 0) + exp["amount"]
        print("\nExpense Summary:")
        for category, total in summary.items():
            print(f"{category}: ${total}")

if __name__ == "__main__":
    tracker = ExpenseTracker()
    while True:
        print("\n1. Add Expense\n2. View Expenses\n3. Expense Summary\n4. Exit")
        choice = input("Enter your choice: ")

        if choice == "1":
            try:
                amount = float(input("Enter amount: "))
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        category = input("Enter category: ")
        description = input("Enter description: ")
        tracker.add_expense(amount, category, description)
    except ValueError:
        print("Invalid amount. Please enter a number.")
elif choice == "2":
    tracker.view_expenses()
elif choice == "3":
    tracker.expense_summary()
elif choice == "4":
    print("Exiting Expense Tracker. Goodbye!")
    break
else:
    print("Invalid choice. Please try again.")

```

Expected Output

1. Add Expense
2. View Expenses
3. Expense Summary
4. Exit

Enter your choice: 1

Enter amount: 50

Enter category: Food

Enter description: Lunch

Expense added successfully!

1. Add Expense
2. View Expenses
3. Expense Summary
4. Exit

Enter your choice: 2

Expense Records:

1. Food - \$50: Lunch

1. Add Expense
2. View Expenses
3. Expense Summary
4. Exit

Enter your choice: 3

Expense Summary:

Food: \$50

1. Add Expense
2. View Expenses
3. Expense Summary
4. Exit

Enter your choice: 4

Exiting Expense Tracker. Goodbye!