# project code :

## streamlit :

```python
import streamlit as st
import pandas as pd


# Initialize session state
if 'expenses' not in st.session_state:
    st.session_state.expenses = []

def add_expense(amount, category):
    st.session_state.expenses.append({"amount": amount, "categor

def view_expenses():
    return pd.DataFrame(st.session_state.expenses)

def main():
    st.title("Simple Expense Manager")

    # Add Expense
    st.header("Add New Expense")
    amount = st.number_input("Amount", min_value=0.01, step=0.0
    category = st.text_input("Category")
    if st.button("Add Expense"):
        add_expense(amount, category)
        st.success("Expense added successfully!")

    # View Expenses
    st.header("Expense List")
```

```python
        df = view_expenses()
        if not df.empty:
            st.dataframe(df)
            st.info(f"Total Expenses: ${df['amount'].sum():.2f}")
        else:
            st.info("No expenses added yet.")

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

# normal code :

```python
expenses=[]

def add_expense(amount, category , description):
    expenses.append({"amount": amount, "category": category, "de


def view_expenses():
    for idx ,expense in enumerate(expenses,1):
        print(f"{idx}. Amount: ${expense['amount']:.2f}, Catego


def total_expenses():
    return sum(expense['amount'] for expense in expenses)


def expenses_by_category():
    categories = {}
```

```python
        for expense in expenses:
            category=expense['category']
            amount = expense['amount']
            categories[category]=categories.get(category,0) +amount
        return categories


def main():

    while True:
        print("\nExpense Manager")
        print("1. Add Expense")
        print("2. View Expenses")
        print("3. View Total Expenses")
        print("4. View Expenses by Category")
        print("5. Exit")


        choice =input("ENter your choice (1-5)")

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

        elif choice =='2':
            view_expenses()


        elif choice == '3':
            print(f"Total Expenses: ${total_expenses():.2f}")

        elif choice == '4':
            categories = expenses_by_category()
```

```python
            for category, amount in categories.items():
                print(f"{category}: ${amount:.2f}")



        elif choice == '5':
            print("Thank you for using Expense Manager. Goodbye
            break

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


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

# modular code :

```python
# expense.py

class Expense:
    def __init__(self, amount, category, description):
        self.amount = amount
        self.category = category
        self.description = description


# expense_manager.py

from expense import Expense
```

```python
class ExpenseManager:
    def __init__(self):
        self.expenses = []

    def add_expense(self, amount, category, description):
        expense = Expense(amount, category, description)
        self.expenses.append(expense)

    def view_expenses(self):
        for idx, expense in enumerate(self.expenses, 1):
            print(f"{idx}. Amount: ${expense.amount:.2f}, Catego

    def total_expenses(self):
        return sum(expense.amount for expense in self.expenses)

    def expenses_by_category(self):
        categories = {}
        for expense in self.expenses:
            categories[expense.category] = categories.get(expens
        return categories


# main.py

from expense_manager import ExpenseManager

def main():
    manager = ExpenseManager()

    while True:
        print("\nExpense Manager")
        print("1. Add Expense")
        print("2. View Expenses")
        print("3. View Total Expenses")
        print("4. View Expenses by Category")
        print("5. Exit")
```

```python
        choice = input("Enter your choice (1-5): ")

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

        elif choice == '2':
            manager.view_expenses()

        elif choice == '3':
            print(f"Total Expenses: ${manager.total_expenses():

        elif choice == '4':
            categories = manager.expenses_by_category()
            for category, amount in categories.items():
                print(f"{category}: ${amount:.2f}")

        elif choice == '5':
            print("Thank you for using Expense Manager. Goodbye
            break

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

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

```python
# main.py
```

```python
from expense_manager import ExpenseManager

# [Previous code remains the same]

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