

# Mini Project – Personal Expense Tracker using Python

```
import json

from datetime import datetime

# Load existing data or start fresh
def load_expenses(filename="expenses.json"):
    try:
        with open(filename, "r") as file:
            return json.load(file)
    except FileNotFoundError:
        return []

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

# Add a new expense
def add_expense(expenses):
    amount = float(input("Enter amount: ₹"))
    category = input("Enter category (Food, Transport, etc.): ")
    date = input("Enter date (YYYY-MM-DD) or press Enter for today: ")
    if date == "":
        date = datetime.today().strftime("%Y-%m-%d")

    expenses.append({"amount": amount, "category": category, "date": date})
    save_expenses(expenses)
    print("✅ Expense added successfully!\n")
```

# View summary

```
def view_summary(expenses):
```

```
    total = 0
```

```
    category_summary = {}
```

```
    for exp in expenses:
```

```
        total += exp["amount"]
```

```
        cat = exp["category"]
```

```
        category_summary[cat] = category_summary.get(cat, 0) + exp["amount"]
```

```
print("\n 📊 Summary by Category:")
```

```
for cat, amt in category_summary.items():
```

```
    print(f" {cat}: ₹{amt}")
```

```
print(f"\n 💰 Total Spending: ₹{total}\n")
```

# Menu

```
def main():
```

```
    expenses = load_expenses()
```

```
while True:
```

```
    print("----- Personal Expense Tracker -----")
```

```
    print("1. Add Expense")
```

```
    print("2. View Summary")
```

```
    print("3. Exit")
```

```
    choice = input("Enter your choice: ")
```

```
    if choice == "1":
```

```
        add_expense(expenses)
```

```
    elif choice == "2":
```

```
        view_summary(expenses)
```

```
    elif choice == "3":
```

```
print("Thank you! 🙌")
```

```
break
```

```
else:
```

```
    print("Invalid choice. Try again.\n")
```

```
if __name__ == "__main__":
```

```
    main()
```