

Java Expense Tracker Application

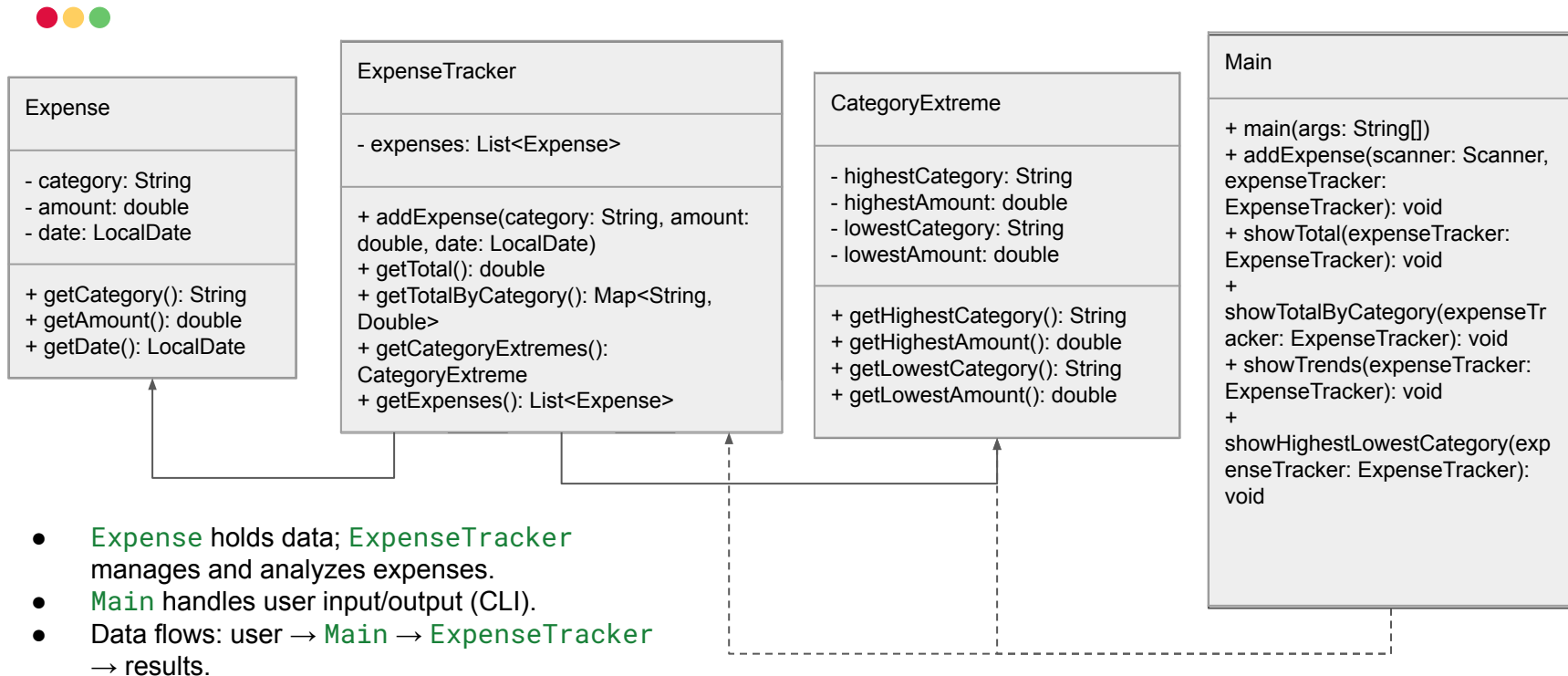


Presented By

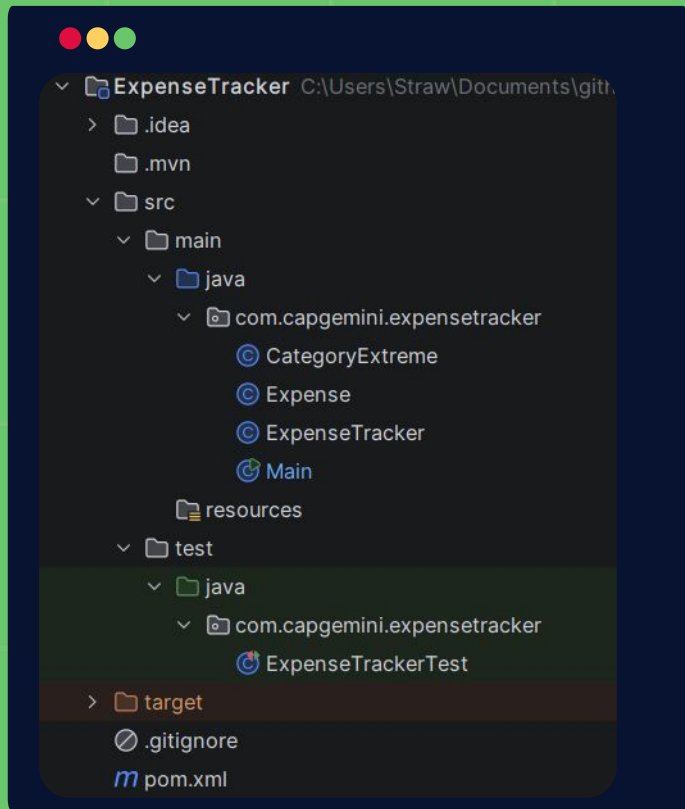
Rovia Simmons

12/14/2025

Approach and Design



Key Files and Folders



Project structure showing main source code and test files



This project uses Maven structure

Main Files:

- **Main.java**: The application's entry point.
- **ExpenseTracker.java**: Contains the core logic for expense handling.
- **Expense.java**: The data model for an individual expense.

Test Files: **ExpenseTrackerTest.java**: Contains the unit tests to verify the functionality

Process to Run, Test, and Verify



Run the application

Locate the folder with the POM file in the command line

```
mvn clean compile
```

```
mvn exec:java -Dexec.mainClass="com.capgemini.expensetracker.Main"
```



Run the tests and verify ExpenseTracker works

```
Mvn test
```



Add sample/seed data

Enter expenses via CLI prompts

Or pre-populate in Main.java:



Add sample/seed data

```
public class Main {  
    @Rovia Simmons *  
    public static void main(String[] args) {  
        @Rovia Simmons *  
        System.out.println("Welcome to the Expense Tracker App!");  
  
        Scanner scanner = new Scanner(System.in);  
        ExpenseTracker expenseTracker = new ExpenseTracker();  
  
        // pre-populate here!  
        expenseTracker.addExpense(category: "Food", amount: 12.50, LocalDate.of(year: 2025, month: 12, dayOfMonth: 13));  
        expenseTracker.addExpense(category: "Transport", amount: 3.75, LocalDate.of(year: 2025, month: 12, dayOfMonth: 14));  
        expenseTracker.addExpense(category: "Entertainment", amount: 25.00, LocalDate.of(year: 2025, month: 12, dayOfMonth: 15));  
    }  
}
```

Test Data and Seed Data

Manual data:

```
1 Food 11.60 2025-12-12
1 Transport 1.79 2025-12-12
1 Transport 3.79 2025-12-14
1 Entertainment 25.00 2025-12-13
```

OR pre-populate Main.java:

```
public class Main {  & Rovia Simmons *
    public static void main(String[] args) {  & Rovia Simmons *
        System.out.println("Welcome to the Expense Tracker App!");

        Scanner scanner = new Scanner(System.in);
        ExpenseTracker expenseTracker = new ExpenseTracker();

        // pre-populate here!
        expenseTracker.addExpense( category: "Food", amount: 12.50, LocalDate.of( year: 2025, month: 12, dayOfMonth: 13));
        expenseTracker.addExpense( category: "Transport", amount: 3.75, LocalDate.of( year: 2025, month: 12, dayOfMonth: 14));
        expenseTracker.addExpense( category: "Entertainment", amount: 25.00, LocalDate.of( year: 2025, month: 12, dayOfMonth: 15));
```