Personal Budget tracker

ENSE 375 Project

Integration Testing

Integration testing generally focuses on testing modules interaction with each other. As per the requirements, we'll focus on testing a subset of modules interacting with each other with a sequence diagram to illustrate comprehensive testing.

Units used for Integration testing:

1. BudgetController
2. BudgetView
3. BudgetModel

Integration Points:

1. BudgetController & BudgetView
   a. Integration point: Controller calls view.setInputs(), getMessages() etc.
   b. Integration Type: UI & Controller
   c. View collects input and displays output controller handles flow
2. BudgetController & BudgetModel
   a. Integration point: Controller calls model.addFinancialEntry(), deleteEntry().
   b. Integration Type: Control & Business logic
   c. Controller assigns data operation to model
3. BudgetModel & Database
   a. Integration point: Model uses DB to execute SQL queries
   b. Integration type: Business logic & external system
   c. Model interacts with the data access layer.

Test Suites:

1. BudgetController & BudgetView Integration
   a. Verify user input
2. BudgetController & BudgetModel Integration
   a. Verify data operation assignment
3. BudgetModel & Database Integration
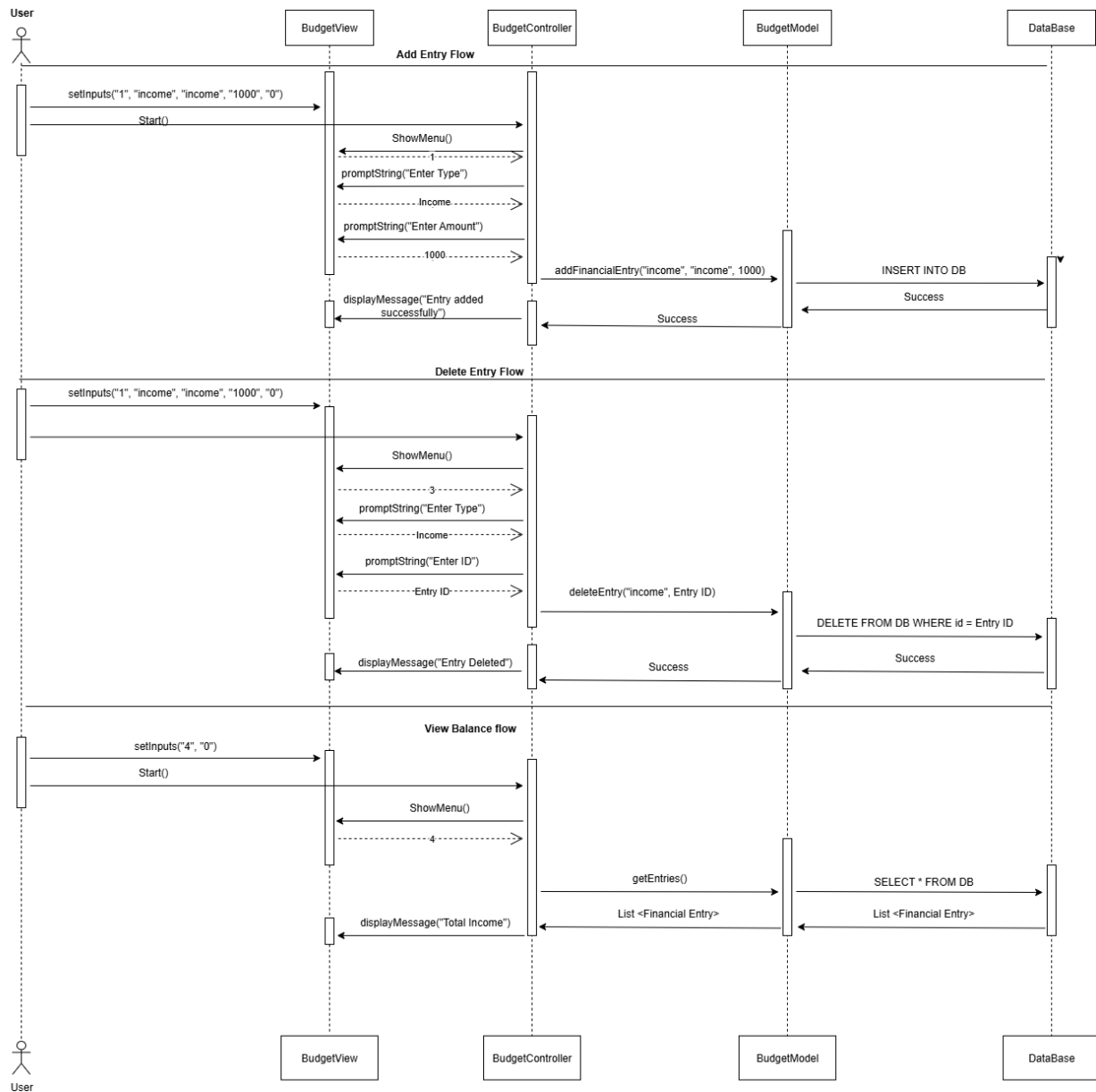   a. Verify that data has been stored properly

Diagram: Integration Testing

Test cases for use case testing:

1. public void controllerAndViewIntegration();
2. public void controllerAndModelIntegration();
3. public void modelAndDBIntegration();

For detailed implementation of tests visit IntegrationTest.java file.