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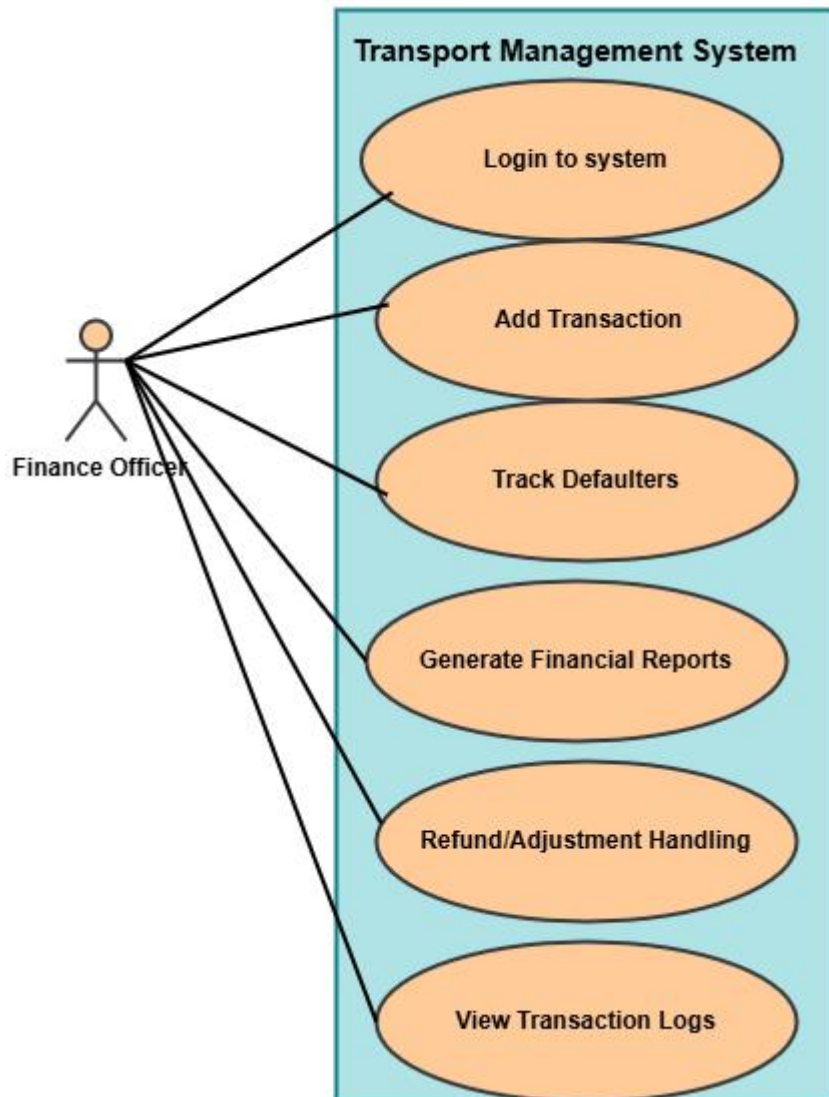
Class: BSE-5B

Assignment No 02

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DAO stands for:	Error! Bookmark not defined.

CHAPTER 01: USECASE DIAGRAM



CHAPTER 02: FULLY DRESSED USECASE

Use Case: Track Defaulters

Element	Description
Use Case ID	UC-FIN-05
Use Case Name	Track Defaulters
Actor	Finance Officer
Trigger	Officer clicks “Track Defaulters”
Preconditions	Officer must be logged in
Postconditions	A list of defaulters is displayed
Normal Flow	1. Officer selects defaulter tracking 2. System queries dummy data 3. Shows the list
Alternative Flow	3a. If no defaulters: show “No defaulters found”
Exceptions	Database not reachable or error
Business Rules	Only finance officer can perform
Assumptions	Dummy defaulters are used for demo

Use Case: Generate Financial Reports

Element	Description
Use Case ID	UC-FIN-06
Use Case Name	Generate Financial Reports

Element	Description
Actor	Finance Officer
Trigger	Officer requests a report
Preconditions	Officer is logged in and authorized
Postconditions	Report is displayed in the window
Normal Flow	1. Officer selects report option 2. System generates a summary 3. Display result
Alternative Flow	3a. No transactions found: Show "No data to report"
Exceptions	Report fails to generate
Business Rules	Only authorized officers
Assumptions	Reports are generated based on dummy data

Use Case: Refund / Adjustment Handling

Element	Description
Use Case ID	UC-FIN-07
Use Case Name	Refund/Adjustment Handling
Actor	Finance Officer
Trigger	Officer initiates refund
Preconditions	Transaction ID is available

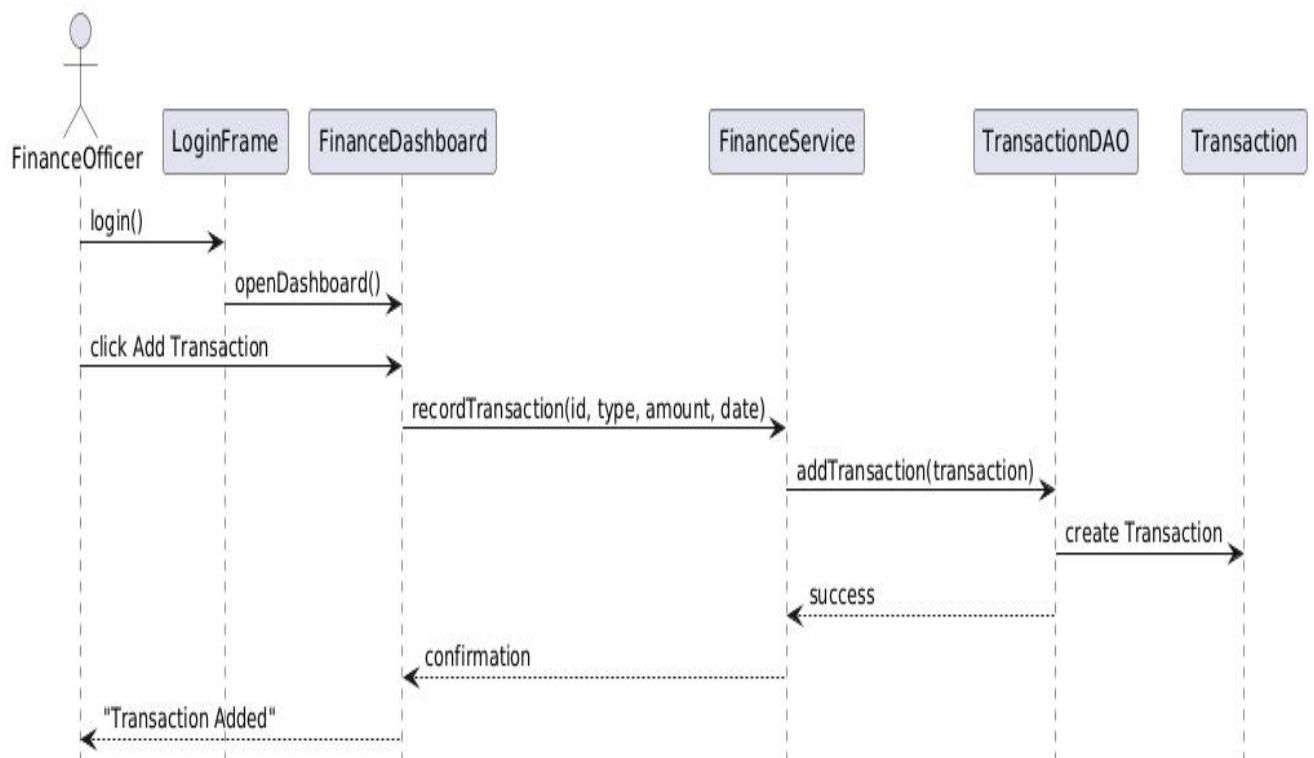
Element	Description
Postconditions	Refund is processed and confirmation shown
Normal Flow	1. Officer enters transaction ID 2. System accepts input 3. Confirmation is shown
Alternative Flow	2a. If invalid ID: show error message
Exceptions	Field left blank or input format wrong
Business Rules	Only valid IDs can be processed
Assumptions	Refunds are dummy-handled only

Use Case: View Transaction Logs

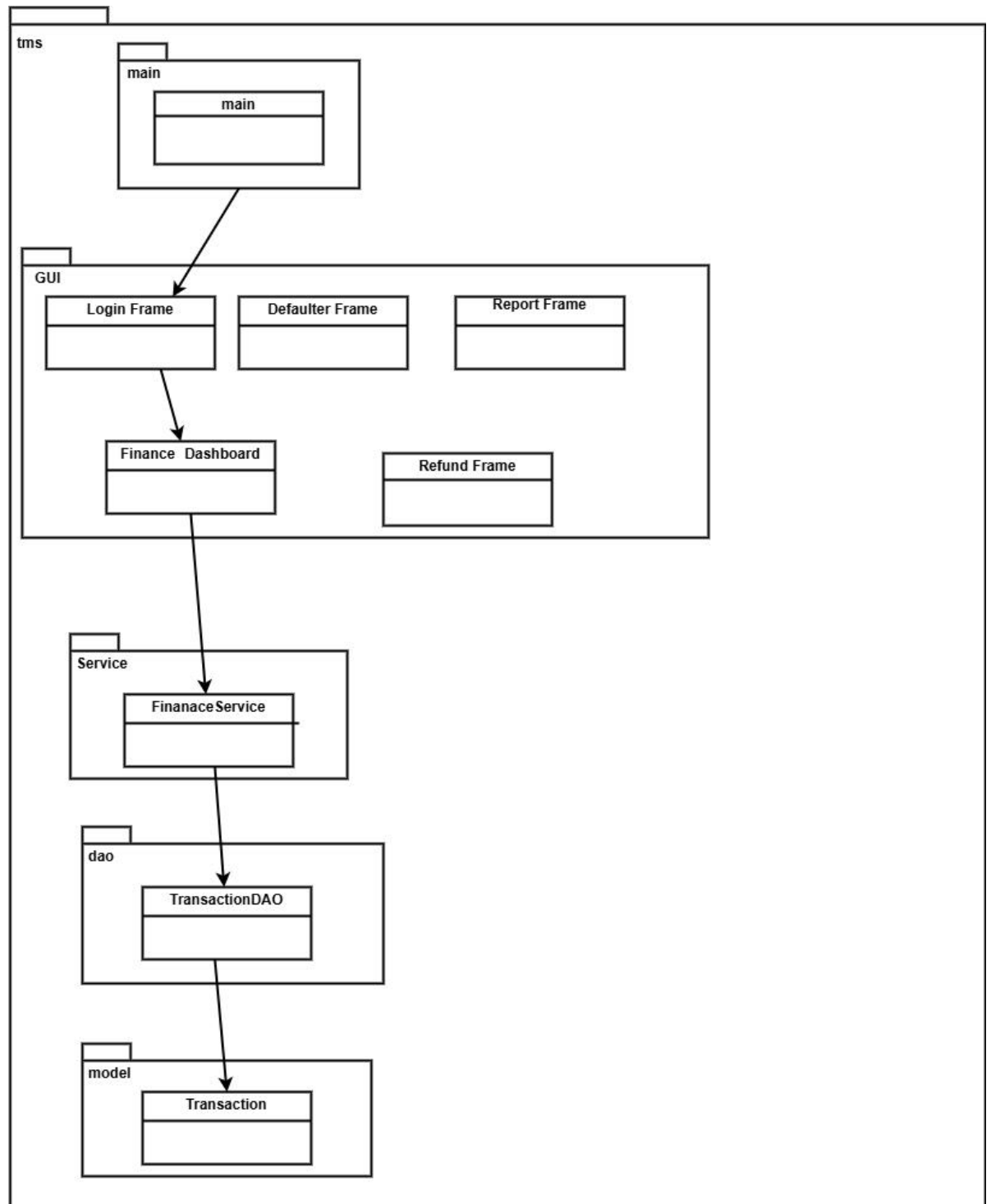
Element	Description
Use Case ID	UC-FIN-08
Use Case Name	View Transaction Logs
Actor	Finance Officer
Trigger	Officer selects "View All Transactions"
Preconditions	Transactions have been recorded
Postconditions	A list of transactions is displayed
Normal Flow	1. Officer clicks view 2. System retrieves list 3. Display in dialog

Element	Description
Alternative Flow	2a. No records: show “No transactions found”
Exceptions	Data access failure
Business Rules	Only finance officer can view
Assumptions	Transaction list is maintained in memory

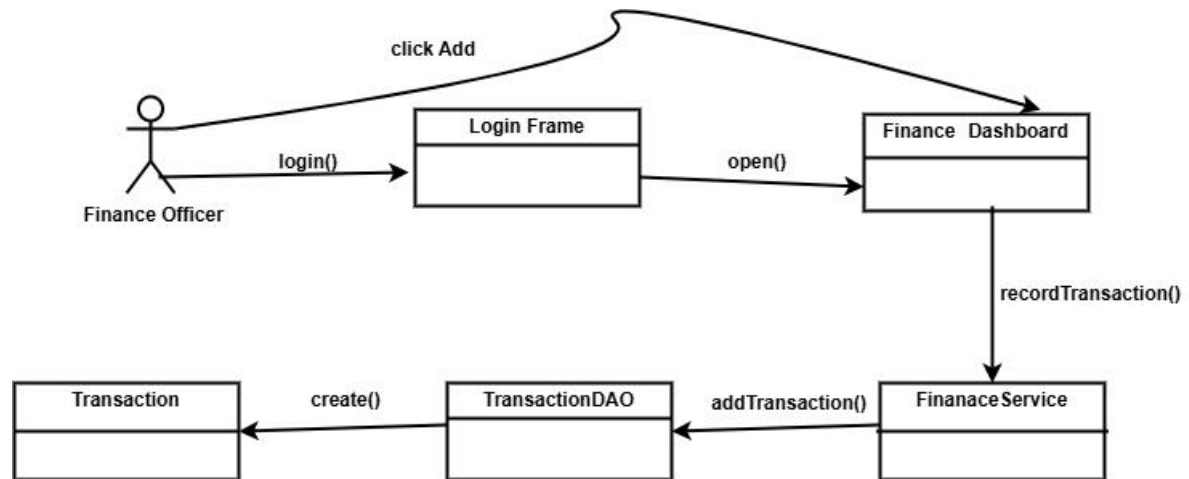
CHAPTER 03: SYSTEM SEQUENCE DIAGRAM



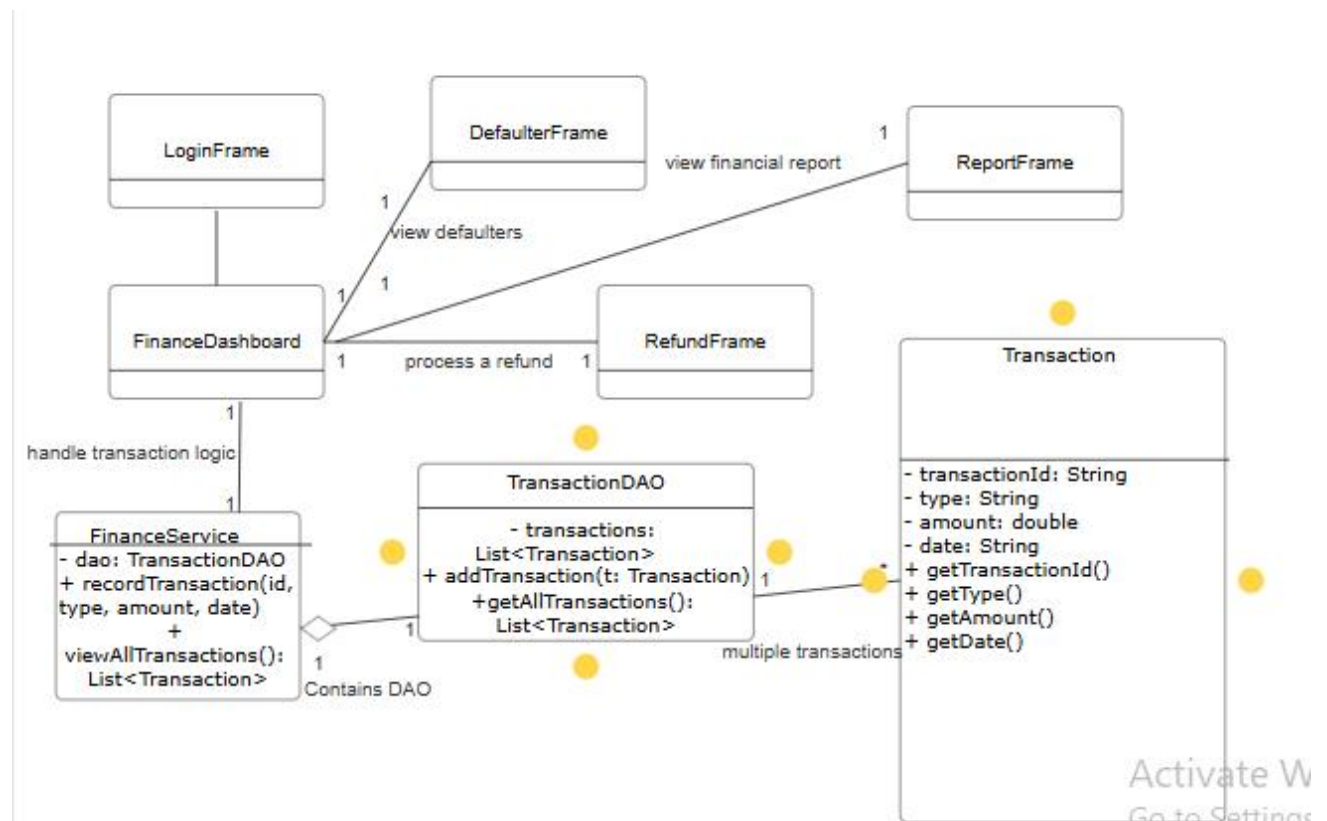
CHAPTER 04: PACKAGE DIAGRAM



CHAPTER 05: Communication Diagram



CHAPTER 06: CLASS DIAGRAM



Chapter 7: Implementation & Testing (Updated)

1. Implementation Approach

- **Technology Stack:**
 - **Programming Language:** Java
 - **Frameworks:** Swing (Java GUI)
 - **IDE:** NetBeans
 - **Architecture:** Layered (GUI → Service → DAO → Model)

- **Development Methodology:**

- Followed an **Iterative Development** model. Started with core functionality (transaction log), then added login and remaining use cases in phases.

- **Modules Developed:**

- Login System for Finance Officer
- Transaction Handling (Add + View)
- Defaulter Tracking
- Financial Report Generation
- Refund/Adjustment Processing