

Team Name: 1_FinStack

Project Title

Expense, Reconciliation, and Compliance Management System

Domain

FinTech

Functional Requirements

Authentication

- **FR-1:** The system shall authenticate users using organization ID, expense submitter ID, and password.
- **FR-2:** The system shall restrict access based on assigned roles.

Expense Management

- **FR-3:** The system shall allow expense submitters to submit expenses with mandatory fields and receipts.
- **FR-4:** The system shall validate expense submissions for completeness and policy applicability before acceptance.

Approval Workflow

- **FR-5:** The system shall route submitted expenses to the appropriate manager.
- **FR-6:** The system shall record approval or rejection decisions with timestamps.

Payment and Reconciliation

- **FR-7:** The system shall allow finance officers to initiate payments for approved expenses.

- **FR-8:** The system shall receive payment status information from the bank or authorized payment channel.
- **FR-9:** The system shall perform reconciliation between approved expenses and received payment records.
- **FR-10:** The system shall flag reconciliation issues for finance review.

Compliance and Audit

- **FR-11:** The system shall enforce expense policies automatically.
 - **FR-12:** The system shall maintain immutable audit logs of all expense-related actions.
 - **FR-13:** The system shall generate audit reports for compliance review.
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Non-Functional Requirements

Performance

- The system shall support concurrent access by multiple users.
- The system shall provide expense submission responses within defined acceptable time limits.

Security

- The system shall require authentication for all users before granting access.
- The system shall enforce role-based access control.
- The system shall prevent modification of audit logs.

Reliability and Availability

- The system shall prevent duplicate payments.
- The system shall handle payment failures without causing data inconsistency.

Usability

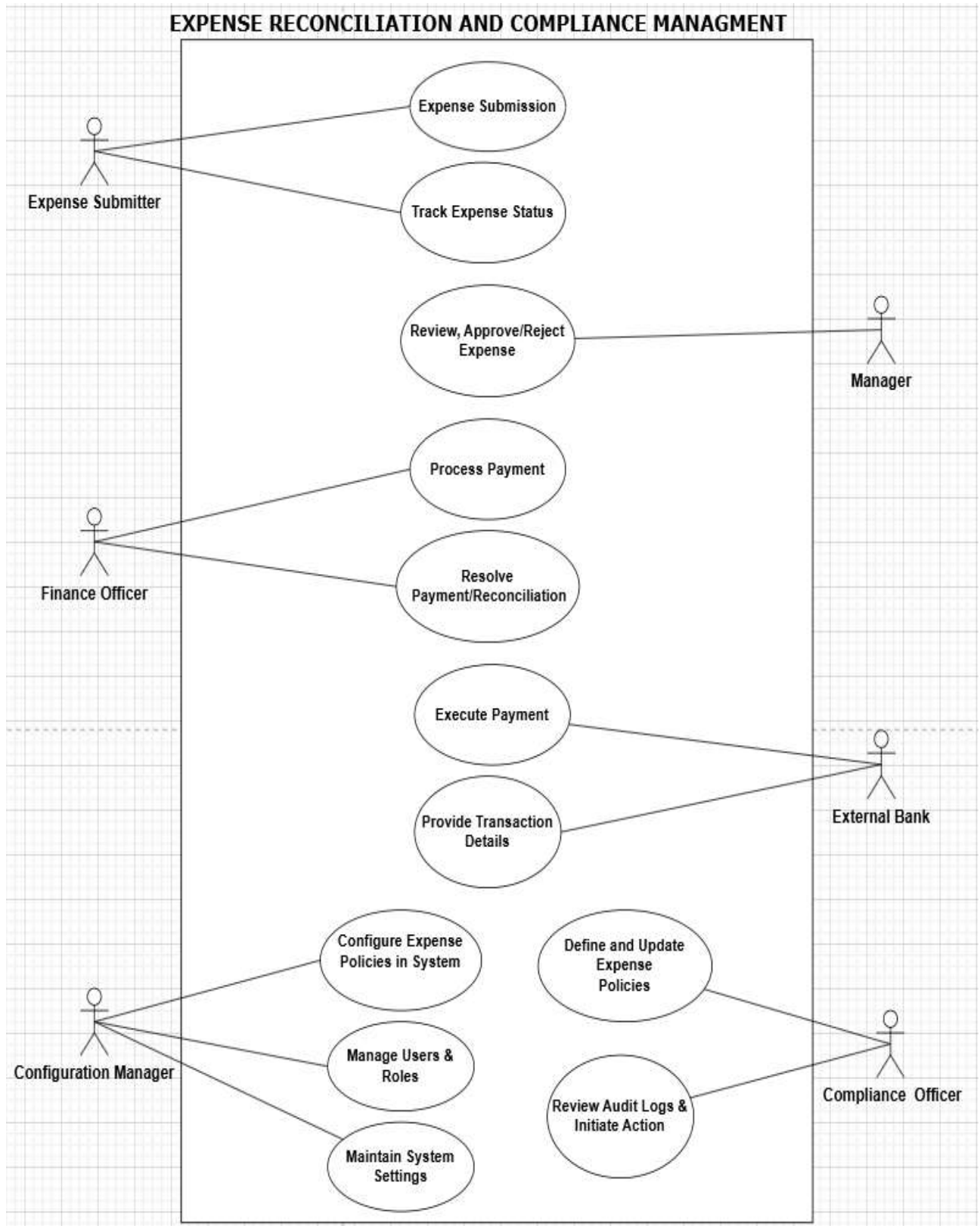
- The system shall provide clear feedback for user actions.
 - The system shall present error messages that are understandable to non-technical users.
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System Models

The following models are used to describe system behavior:

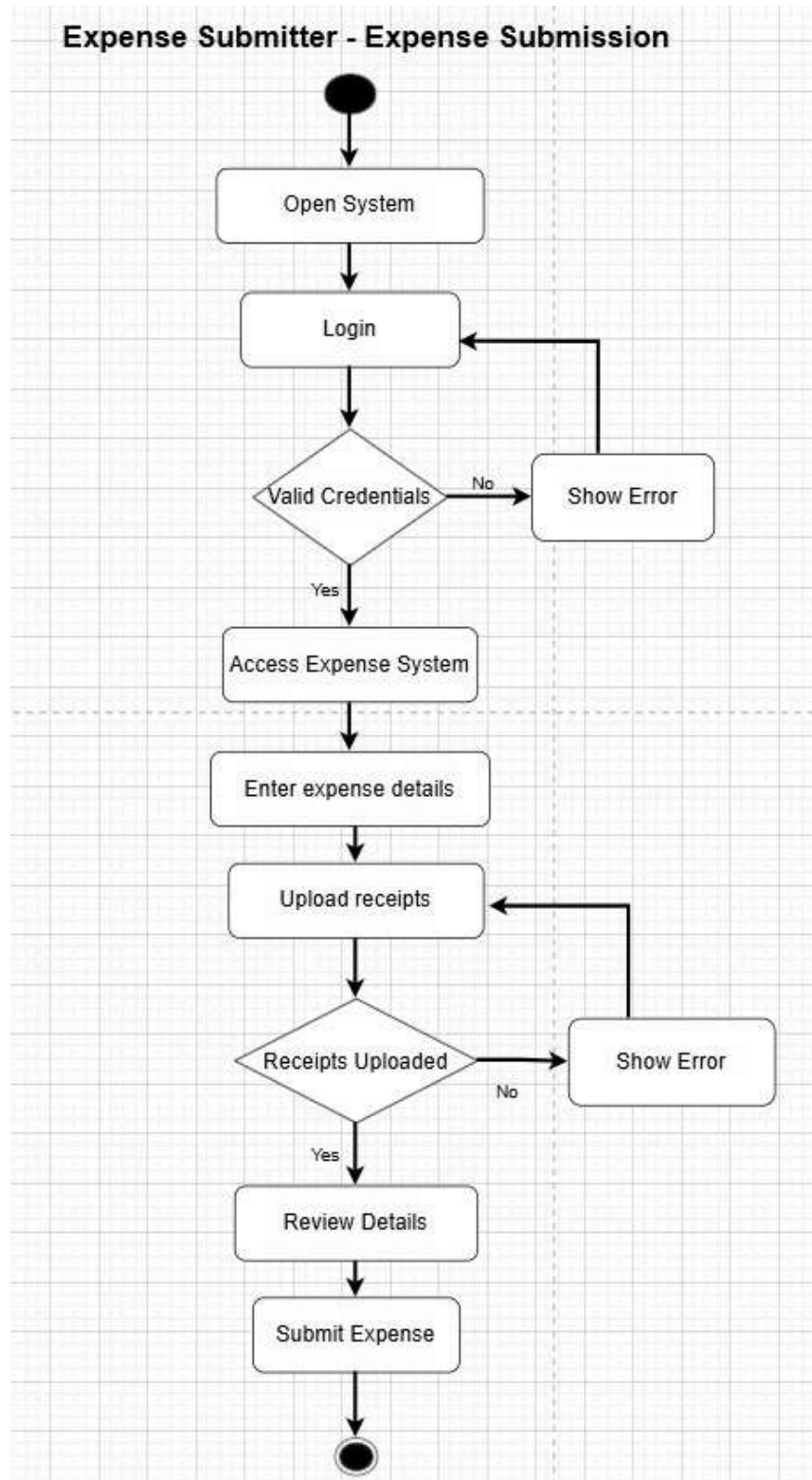
- Use Case Diagram
- Activity Diagrams
- Sequence Diagram

Use Case Diagram

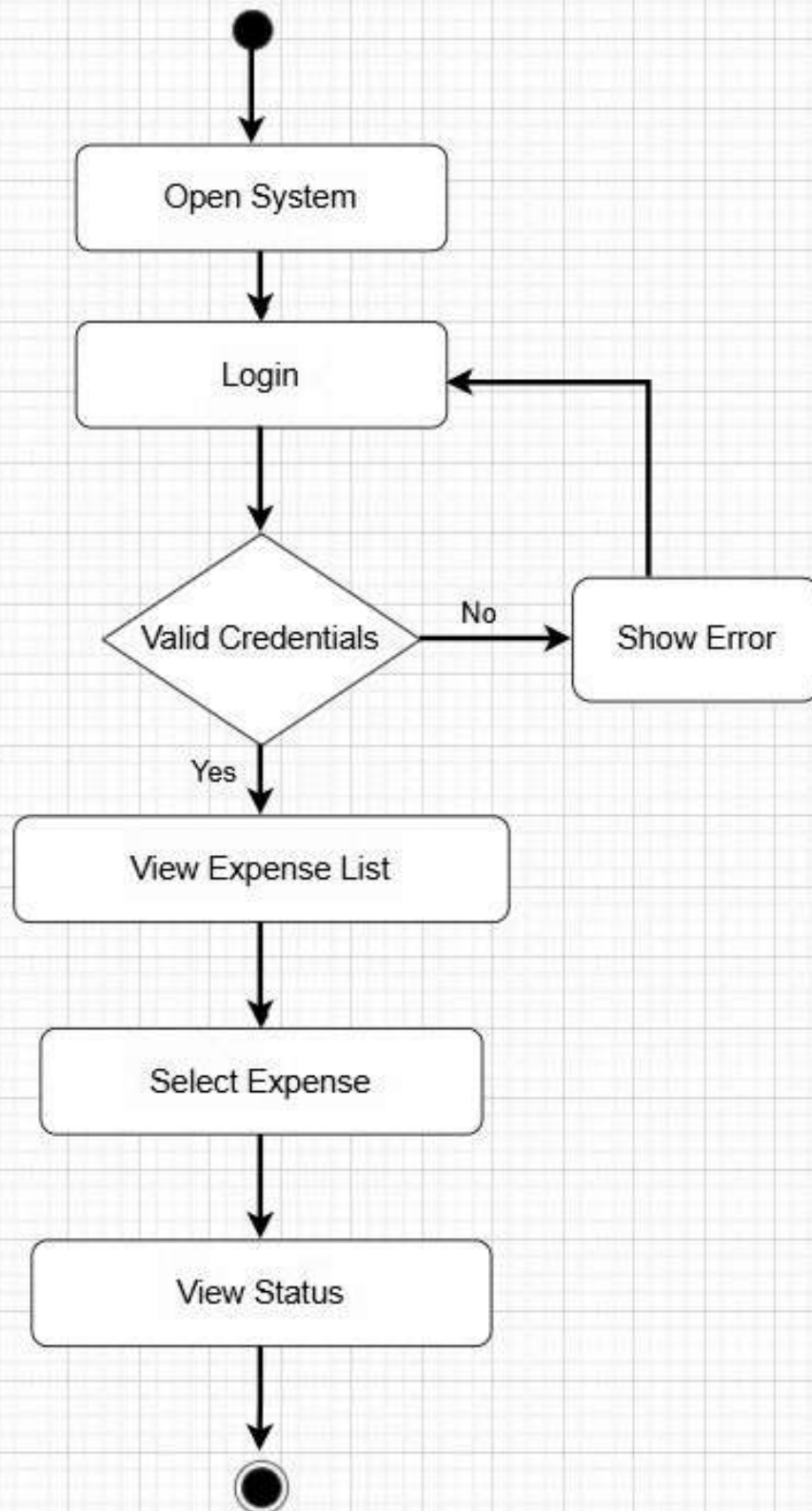


Activity Diagrams

1.Expense Submitter:

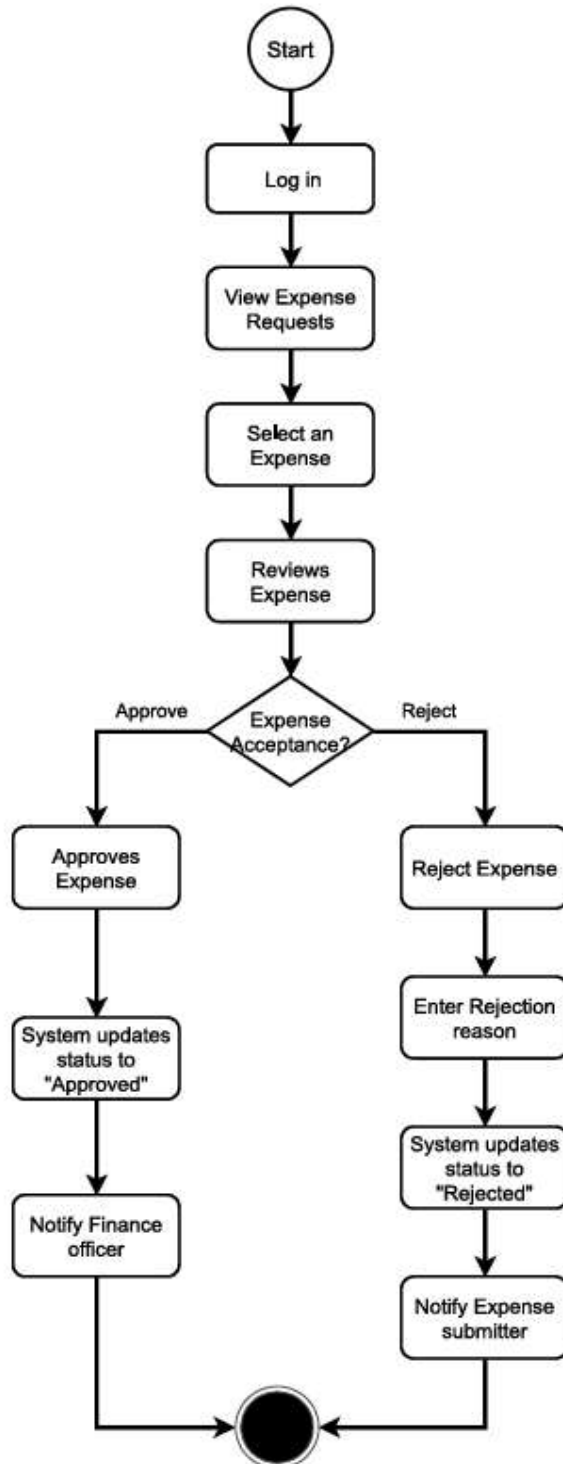


Expense Submitter - Track Expense Status

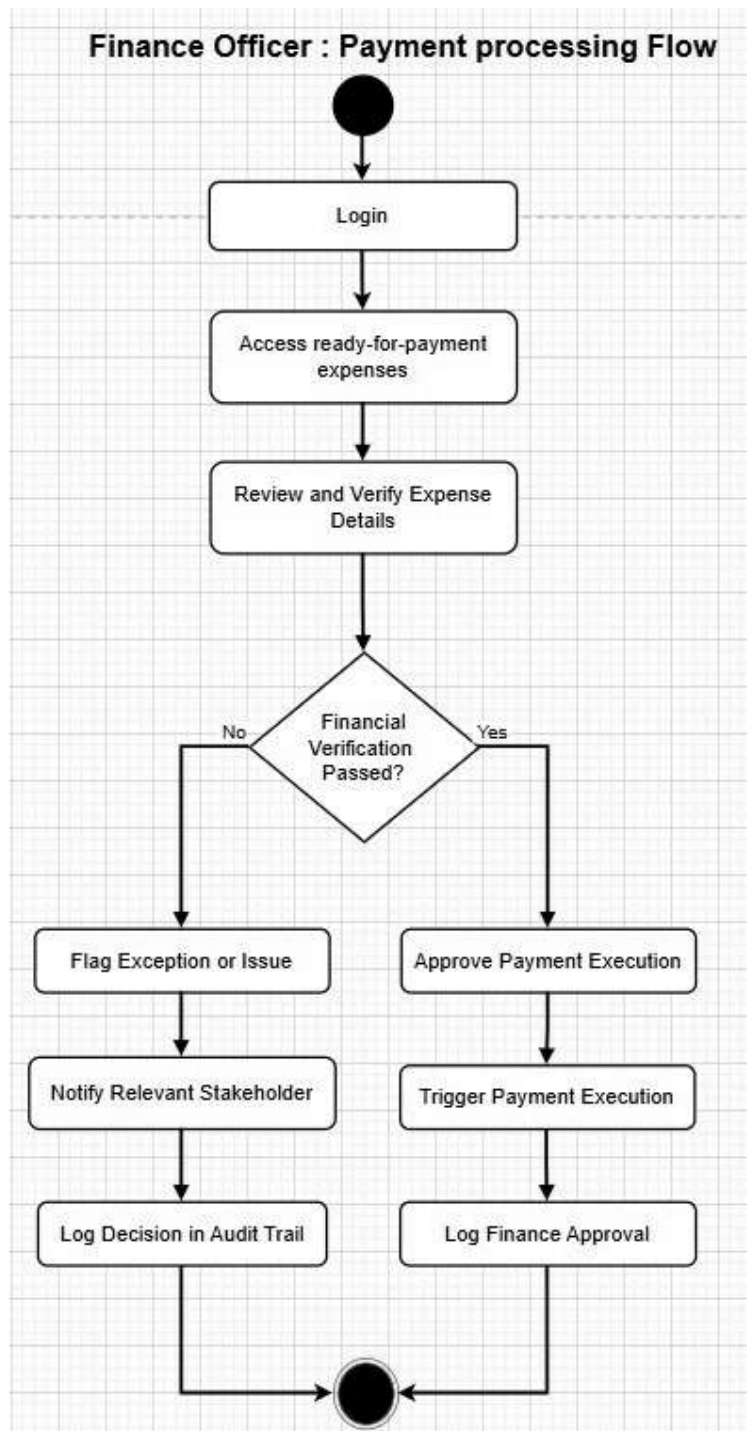


2.Manager:

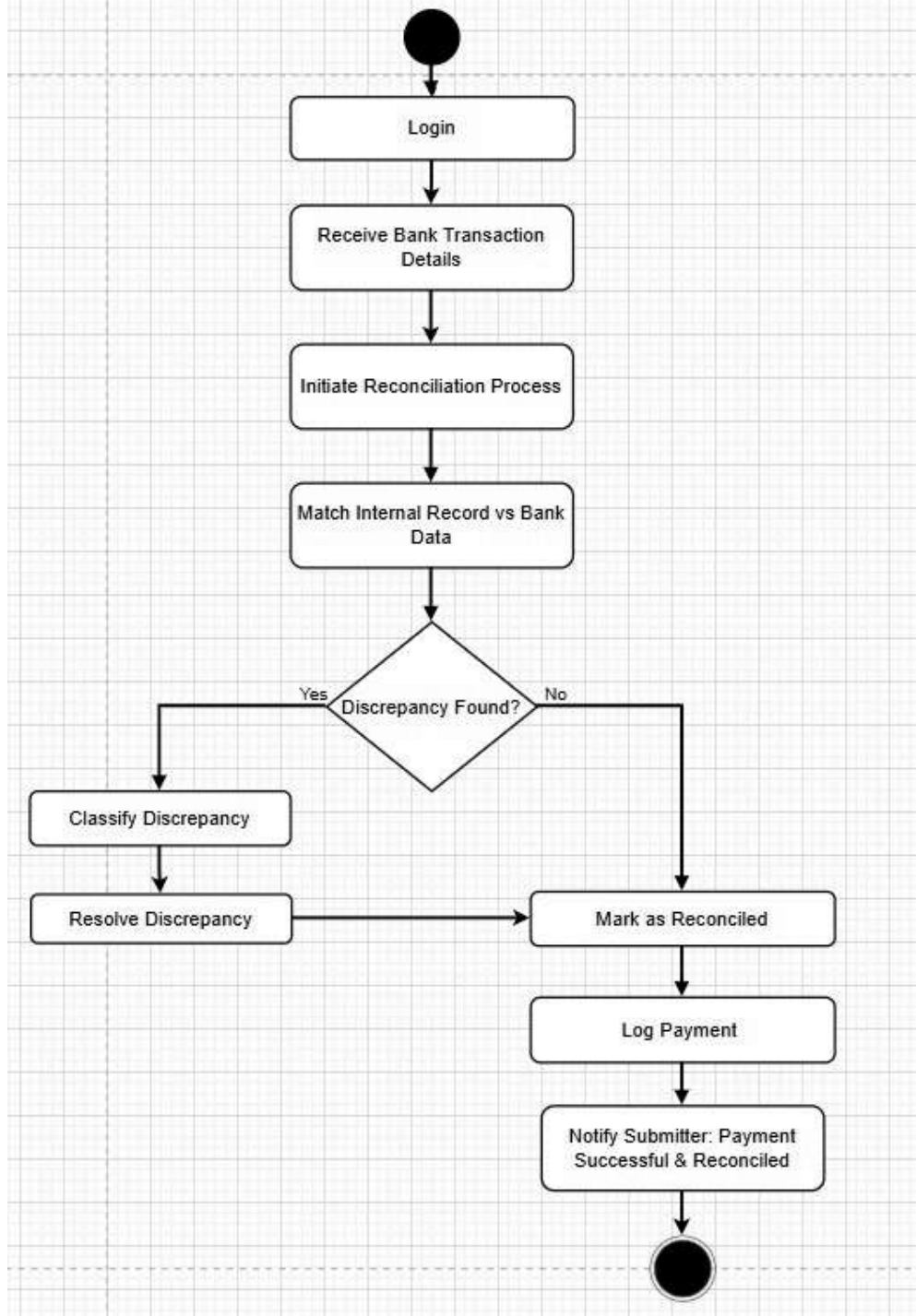
Manager Review and Approval Activity



3.Finance Officer:

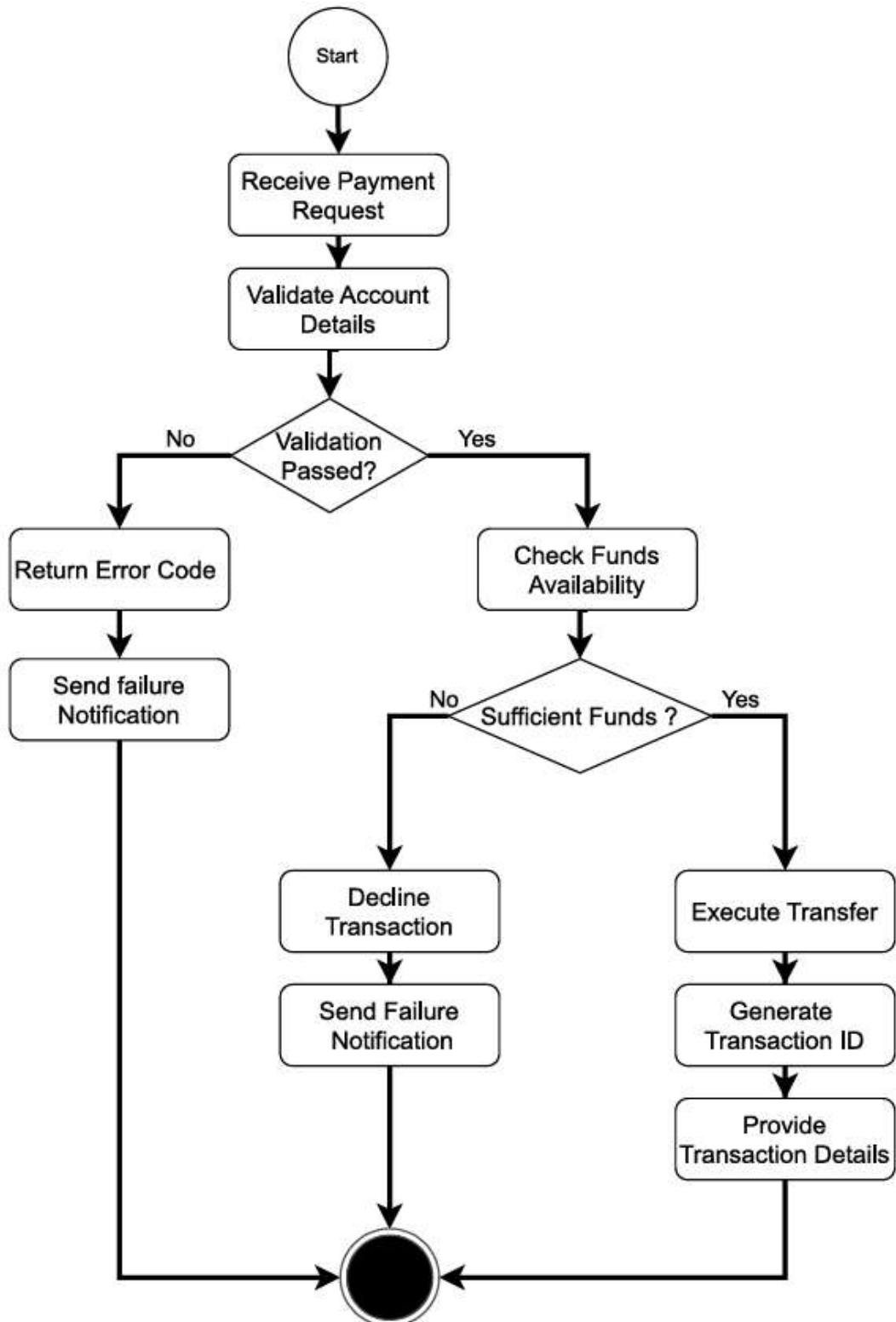


Finance Officer : Reconciliation Flow



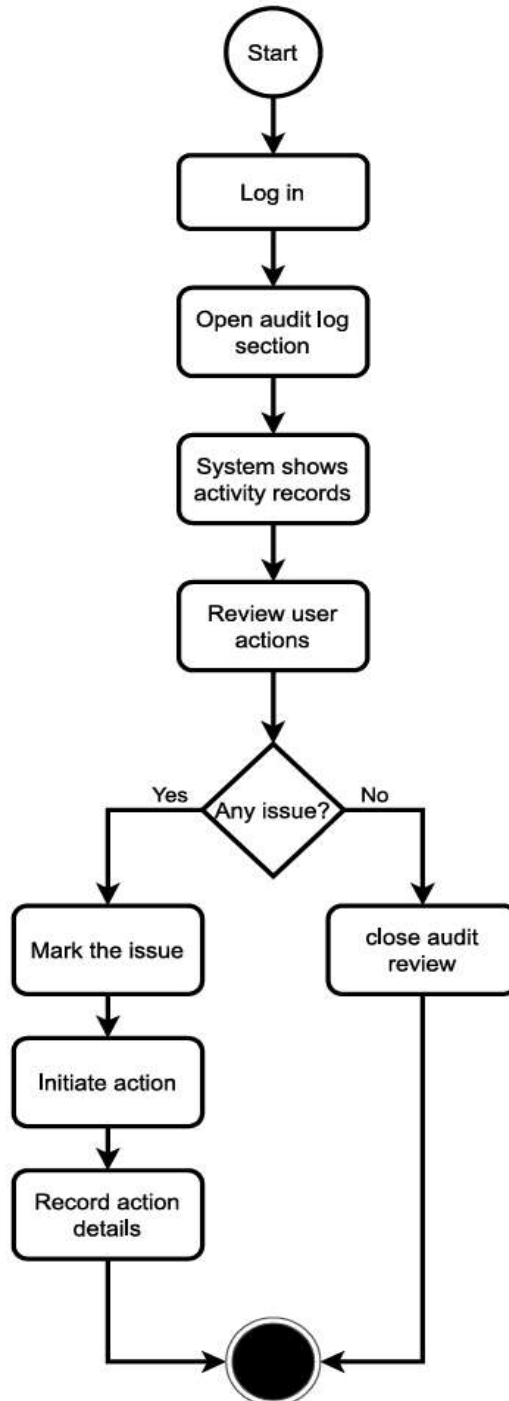
4.External Bank

External Bank (Execute & Report)

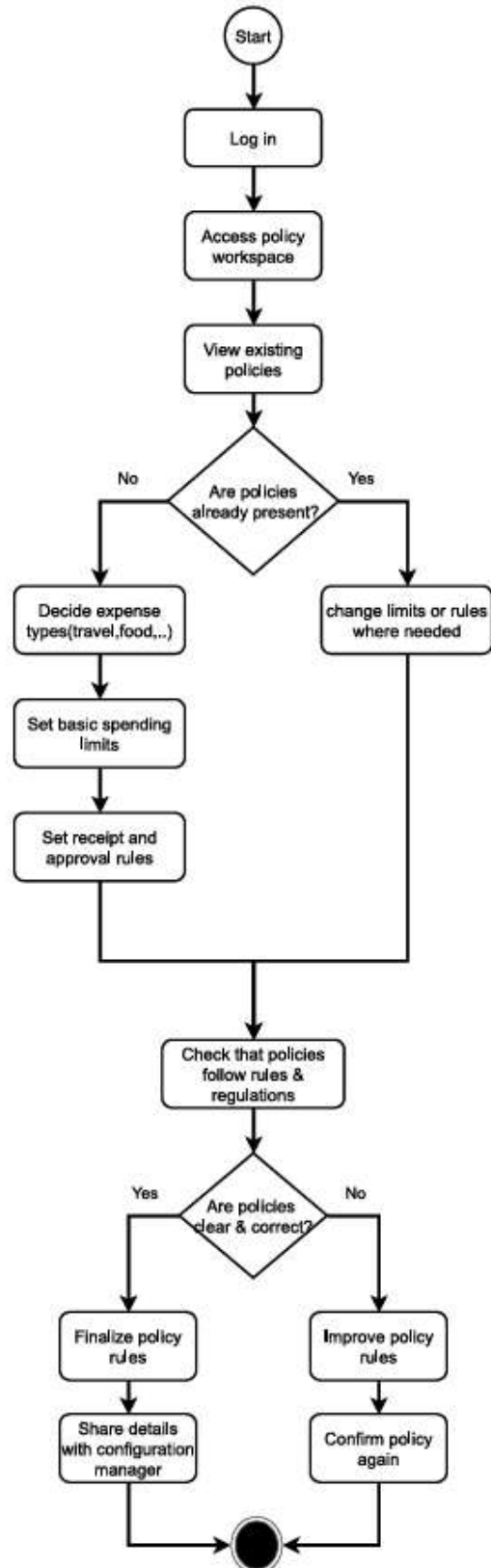


5.Compliance Officer

Review Audit Logs and Initiate Action - Compliance Officer

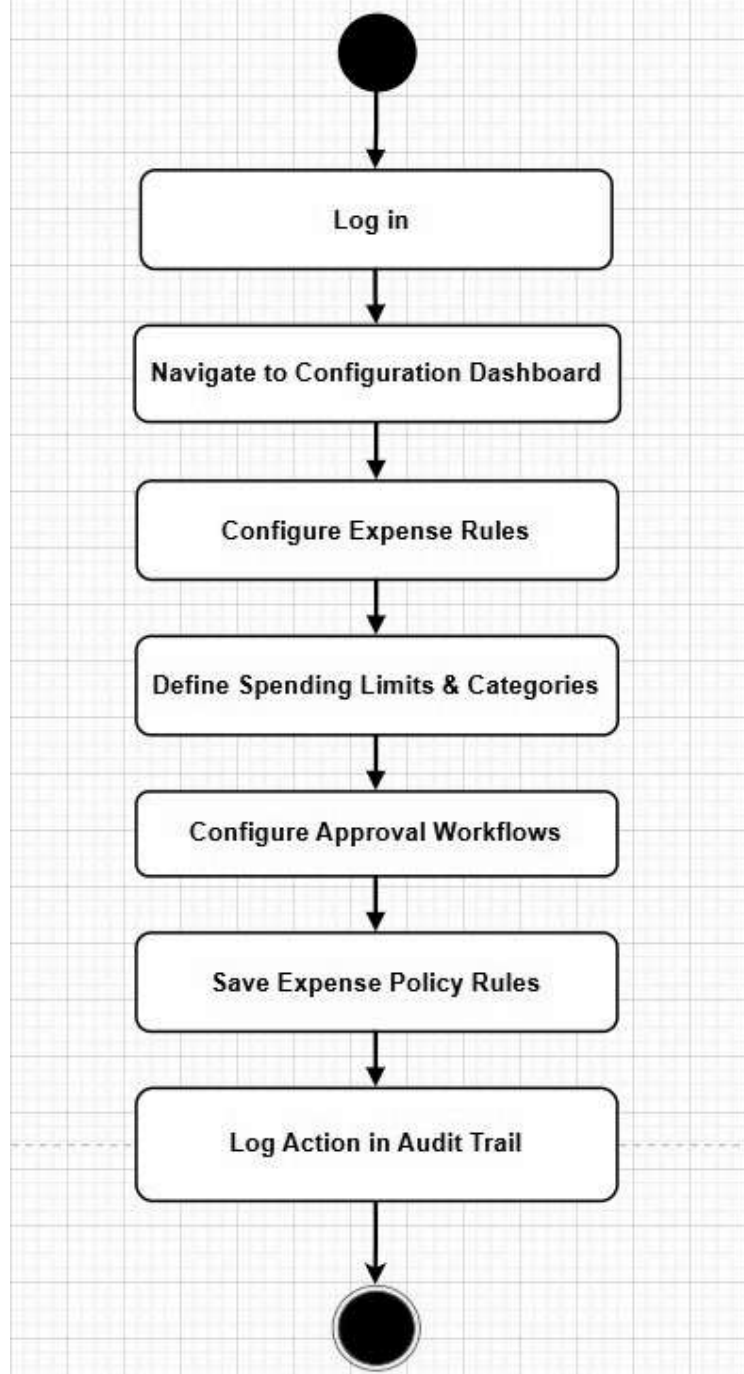


Define and Update Expense Policies - Compliance Officer

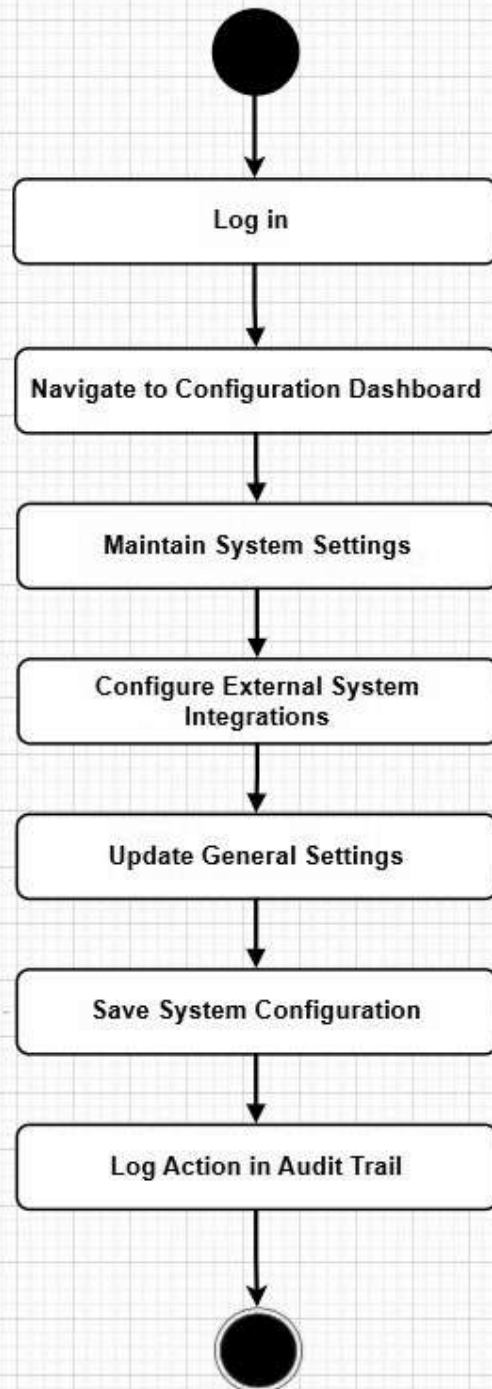


6.Configuration Manager:

Configuration Manager: Configure Rules



Configuration Manager: Maintain System Settings



Configuration Manager: Manage Users & Roles

