

Deliverable-2

1. a. User Stories:

#	Stakeholder Category	Role	User Story	Acceptance Criteria (Given–When–Then)	Corresponding U Case(s)
US-1	Internal Operational	Customer Service Officer (CSO)	<i>As a customer service officer, I want to create and manage customer profiles so that customer data remains accurate and up to date.</i>	Given I am logged in as a CSO and viewing a profile; When I add, edit, or deactivate a customer; Then the system validates the data, prevents duplicates, and confirms the update.	UC-1 Create & Manage Customer Profile
US-2	Internal Operational	Teller	<i>As a teller, I want to perform deposits and withdrawals efficiently so that I can serve customers quickly and reduce queue times.</i>	Given I'm authenticated and viewing a customer's account; When I enter a deposit or withdrawal amount; Then the system validates it, updates the balance, and records the transaction instantly.	UC-2 Process Cash Transaction (Deposit/Withdrawal)
US-3	External Operational	Customer	<i>As a customer, I want to transfer funds between my accounts so</i>	Given I am logged in with valid accounts and	UC-3 Transfer Funds Between Accounts

#	Stakeholder Category	Role	User Story	Acceptance Criteria (Given–When–Then)	Corresponding U Case(s)
			<i>that I can manage my money conveniently online.</i>	sufficient funds; When I enter a transfer amount and confirm; Then the system moves funds atomically and provides a confirmation message.	
US-4	External Operational	Customer / Loan Applicant	<i>As a customer, I want to apply for a loan online so that I don't have to visit the bank in person.</i>	Given I am authenticated and eligible; When I fill and submit a loan request form; Then the system records it as Pending and notifies me of submission.	UC-4 Apply for L
US-5	Internal Executive	Credit Officer / Admin	<i>As a credit officer, I want to review and decide on loan applications so that I can approve or reject requests based on customer creditworthiness.</i>	Given I have access to pending loan applications; When I open and review an application; Then I can approve or reject it, and the system updates the loan status with a decision date.	UC-5 Review & Decide Loan Application (Approve/Reject)
US-6	External Operational	Customer / Admin	<i>As a user, I want to view my</i>	Given I am logged in and	UC-6 View Transaction Histo

#	Stakeholder Category	Role	User Story	Acceptance Criteria (Given–When–Then)	Corresponding U Case(s)
			<i>transaction history and download account statements so that I can track my financial activity easily.</i>	select an account and date range; When I request a statement; Then the system displays all relevant transactions and allows export as PDF/CSV.	& Generate Statement
US-7	Internal Executive / System Automation	System Scheduler (on behalf of Admin)	<i>As the banking system, I want to automatically calculate and post monthly interest so that account balances remain accurate without manual work.</i>	Given it is the scheduled monthly trigger time; When the scheduler runs; Then the system calculates interest for all eligible accounts, posts entries, and logs the outcome.	UC-7 Accrue & Post Monthly Interest
US-8	External Operational / System	System & Customer	<i>As the system, I want to detect when an account balance becomes negative so that I can alert the customer immediately to avoid overdraft issues.</i>	Given an account's balance changes; When the balance drops below zero; Then the system flags the event, creates an overdraft alert, and	UC-8 Overdraft Detection & Alert

#	Stakeholder Category	Role	User Story	Acceptance Criteria (Given–When–Then)	Corresponding U Case(s)
				notifies the customer.	

1. b. Use Cases:

Use Case: UC-1 — Create & Manage Customer Profile

Type: External event

Primary Actor(s): Customer Service Officer (CSO) / Admin

External Event: A new customer application or an edit request for an existing profile requires system response.

Trigger: CSO/Admin submits form to create or modify a customer record.

Preconditions: User is authorized; customer exists (for edit); data-entry screen accessible.

Postconditions: Customer profile created or updated; audit log entry written.

Event-Decomposition Checklist:

1. **External Event:** Actor initiates creation or edit of customer data.
2. **Use Case Name:** Create & Manage Customer Profile.
3. **Preconditions:** Authorization, customer existence (if edit).
4. **Trigger:** Submission of create/edit request.

Use Case: UC-2 — Process Cash Transaction (Deposit/Withdrawal)

Type: External event

Primary Actor(s): Teller / Customer

External Event: Teller receives a cash deposit or withdrawal request.

Trigger: Teller submits transaction.

Preconditions: Account active; amount > 0.

Postconditions: Account balance updated; transaction record with timestamp created.

Event-Decomposition Checklist:

1. **External Event:** Customer requests deposit or withdrawal.
2. **Use Case Name:** Process Cash Transaction.

3. **Preconditions:** Valid account, sufficient funds for withdrawal.
 4. **Trigger:** Teller executes transaction.
-

Use Case: UC-3 — Transfer Funds Between Accounts

Type: External event

Primary Actor(s): Customer

External Event: Customer initiates a fund transfer between accounts.

Trigger: Transfer form submitted.

Preconditions: Authenticated; valid source/destination; sufficient balance.

Postconditions: Debit/credit applied atomically; transaction logged; optional notification queued.

Event-Decomposition Checklist:

1. **External Event:** Customer request for inter-account transfer.
 2. **Use Case Name:** Transfer Funds Between Accounts.
 3. **Preconditions:** Authenticated session; valid account pair.
 4. **Trigger:** Submission of transfer form.
-

Use Case: UC-4 — Apply for Loan

Type: External event

Primary Actor(s): Customer / Loan Officer

External Event: Customer submits a loan application.

Trigger: Application form submitted.

Preconditions: Customer active; all required fields complete.

Postconditions: Loan created with status *Pending*; request date stored.

Event-Decomposition Checklist:

1. **External Event:** Loan request requiring system response.
 2. **Use Case Name:** Apply for Loan.
 3. **Preconditions:** Valid customer; form completeness check.
 4. **Trigger:** Submit application.
-

Use Case: UC-5 — Review & Decide Loan Application (Approve/Reject)

Type: External event

Primary Actor(s): Credit Officer / Admin

External Event: Officer reviews a pending loan and makes a decision.

Trigger: Approve/Reject action on pending loan record.

Preconditions: Loan application in *Pending* status; officer authorized.

Postconditions: Loan status set to *Approved* or *Rejected*; decision date stored; repayment schedule created if approved.

Event-Decomposition Checklist:

1. **External Event:** Officer decision event.
 2. **Use Case Name:** Review & Decide Loan Application.
 3. **Preconditions:** Pending loan exists; authorization validated.
 4. **Trigger:** Decision submitted.
-

Use Case: UC-6 — View Transaction History & Generate Statement

Type: External event

Primary Actor(s): Customer / Admin

External Event: Customer/Admin requests account history or statement.

Trigger: History or statement request submitted.

Preconditions: Account exists; requester authorized.

Postconditions: Transactions fetched and displayed; optional export generated.

Event-Decomposition Checklist:

1. **External Event:** Request for account statement.
 2. **Use Case Name:** View Transaction History & Generate Statement.
 3. **Preconditions:** Authorization; valid account.
 4. **Trigger:** Request initiated.
-

Use Case: UC-7 — Accrue & Post Monthly Interest

Type: Temporal event

Primary Actor(s): System (Scheduler)

Temporal Event: Occurs monthly at configured time (e.g., last day 23:59 Africa/Cairo).

Trigger: Scheduler job fires automatically.

Preconditions: Eligible accounts exist; interest rules configured.

Postconditions: Interest postings created; balances updated; logs and admin summary recorded.

Event-Decomposition Checklist:

1. **Temporal Event:** Time-based interest calculation requirement.
 2. **Use Case Name:** Accrue & Post Monthly Interest.
 3. **Preconditions:** Rules & accounts available.
 4. **Trigger/Time:** Monthly schedule (23:59 last day).
-

Use Case: UC-8 — Overdraft Detection & Alert

Type: State event

Primary Actor(s): System / Customer

State Event: Account balance changes from ≥ 0 to < 0 .

Trigger: Balance transition detected at transaction commit.

Preconditions: Account active; alert channels configured.

Postconditions: Overdraft alert created; notification sent; event logged.

Event-Decomposition Checklist:

1. **State Event:** System detects balance state change.
 2. **Use Case Name:** Overdraft Detection & Alert.
 3. **Preconditions:** Valid account; alert mechanism enabled.
 4. **State Change:** Balance $\geq 0 \rightarrow$ Balance < 0 .
-

2. Event–Use Case Mapping Table

Event Type	Event (Description)	User / Stakeholder (Event Source)	Corresponding Use Case(s)
External	New customer applies or CSO/Admin edits existing profile	Customer Service Officer (CSO) / Admin	UC-1: Create & Manage Customer Profile

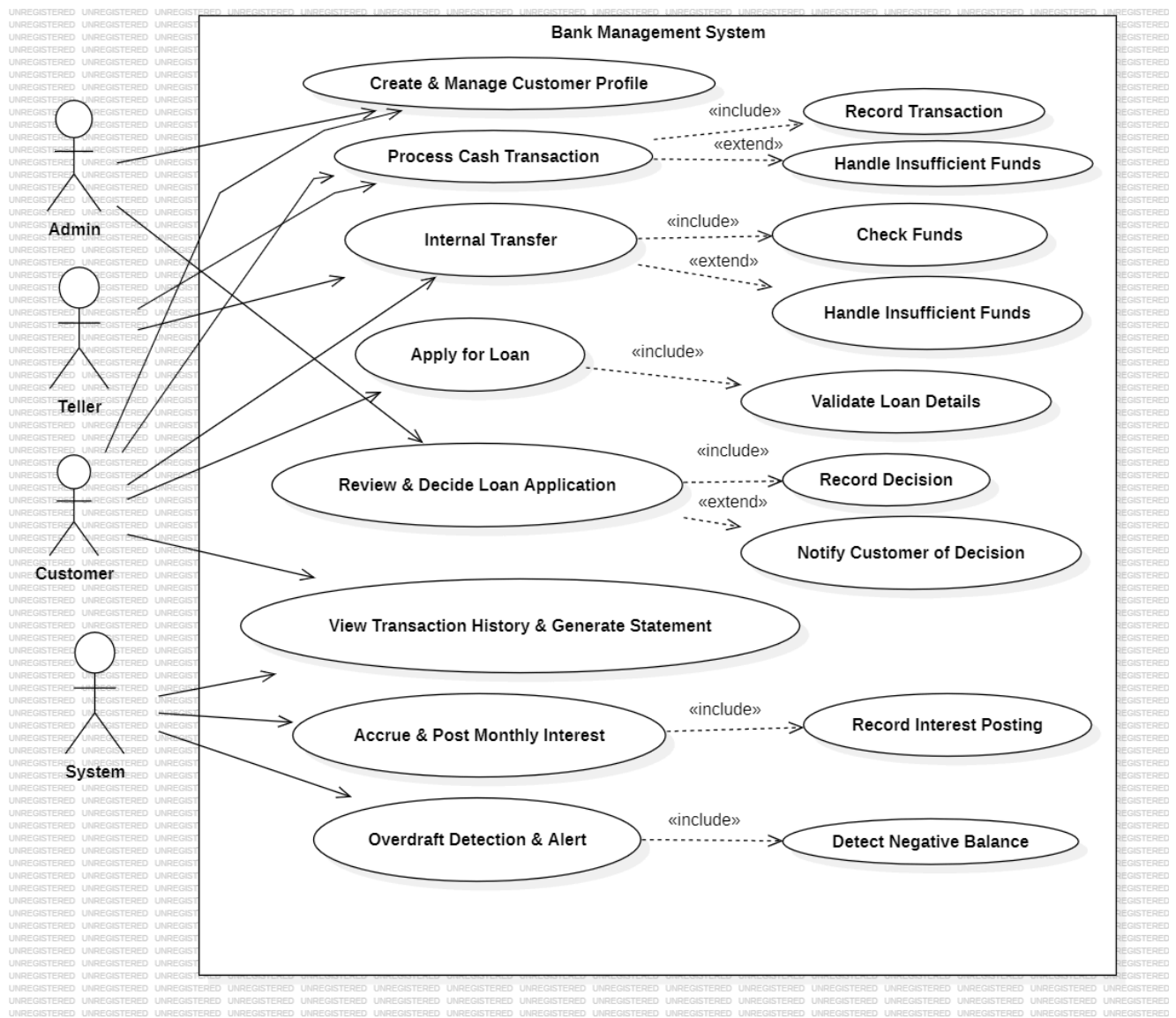
Event Type	Event (Description)	User / Stakeholder (Event Source)	Corresponding Use Case(s)
External	Teller receives request for cash deposit or withdrawal	Teller / Customer	UC-2: Process Cash Transaction (Deposit/Withdrawal)
External	Customer initiates transfer between accounts	Customer	UC-3: Transfer Funds Between Accounts
External	Customer submits loan application	Customer / Loan Officer	UC-4: Apply for Loan
External	Credit Officer/Admin decides to approve or reject pending loan	Credit Officer / Admin	UC-5: Review & Decide Loan Application (Approve/Reject)
External	Customer/Admin requests to view transaction history or generate statement	Customer / Admin	UC-6: View Transaction History & Generate Statement
Temporal	Monthly scheduled time reached for posting interest (e.g., last day, 23:59)	System Scheduler	UC-7: Accrue & Post Monthly Interest
State	Account balance changes from ≥ 0 to < 0 (overdraft detected)	System (automated detection) / Customer (recipient of alert)	UC-8: Overdraft Detection & Alert

3. Brief Use Case Description

Use Case Name	Primary Actor(s)	Trigger / Event Type	Brief Description (Goal)
Create & Manage Customer Profile	CSO / Admin	External – New or edit request	Create or update customer profiles to maintain accurate records.
Process Cash Transaction (Deposit/Withdrawal)	Teller / Customer	External – Deposit or withdrawal request	Handle deposits or withdrawals and update account balances.

Use Case Name	Primary Actor(s)	Trigger / Event Type	Brief Description (Goal)
Transfer Funds Between Accounts	Customer	External – Transfer request submitted	Transfer funds securely between valid accounts.
Apply for Loan	Customer / Loan Officer	External – Loan application submitted	Capture and validate customer loan requests for processing.
Review & Decide Loan Application (Approve/Reject)	Credit Officer / Admin	External – Decision on pending loan	Review pending loan applications and decide approval or rejection.
View Transaction History & Generate Statement	Customer / Admin	External – Statement or history request	Retrieve and display transaction history or generate account statements.
Accrue & Post Monthly Interest	System (Scheduler)	Temporal – Monthly scheduled job	Automatically calculate and post interest to eligible accounts.
Overdraft Detection & Alert	System / Customer	State – Balance becomes negative	Detect overdrafts and alert customers instantly.

4. UML Use Case Diagram



5. Jira Timeline

Google Gemini

Use case diagram

Files

Files

use case diagram

Use Case Diagram

Jira | Issue & Pr...

Board - PIB - Jira

405found.atlassian.net/jira/core/projects/PIB/board?filter=&groupBy=status

FrRedaMo SalahMoFShenoSHNFSherboSHNFpBooksYtWaIgFbGtGmailStarBeinYiYi

Jira

Search

Create

Premium trial

HM

Finish update

For you

Recent

Starred

Apps

Plans

Spaces

Recent

PIB

More spaces

Filters

Dashboards

Teams

Customize sidebar

Give feedback on the n...

Spaces

PIB

Summary

Board

List

Calendar

Timeline

Approvals

Forms

Pages

More

5

+

Search board

Filter

Group: Status

TO DO

internal operations stories and use cases

Nov 7, 2025

PIB-8

internal executive stories and use cases

Nov 7, 2025

PIB-10

external executive stories and use cases

Nov 7, 2025

PIB-11

external operations stories and use cases

Nov 7, 2025

PIB-9

Stakeholder Identification

IN PROGRESS

external executive stories and use cases

Nov 7, 2025

PIB-11

external operations stories and use cases

Nov 7, 2025

PIB-9

DONE

Oct 25, 2025

PIB-6

Workflow Documentation

Oct 25, 2025

PIB-7

Interview Agendas

Oct 25, 2025

PIB-5

Quickstart

Sort and prioritize with ease

List

Like a super-powered spreadsheet, the list helps you break down work efficiently, and sort by any field.

Guide me

Visualize timeframes

Gain a bird's eye view

Go to Settings to activate Windows.

Dismiss Quickstart

27°C

23°C

Search

ENG

6:02 PM

11/5/2025