Loan Management System on Salesforce

Phase 1: Problem Understanding & Industry Analysis

Problem statement:

The Loan Management System is a Salesforce-based application designed to digitize and streamline the loan lifecycle for financial institutions. The system enables customers to submit loan applications online, while Loan Officers and Managers can review and approve requests through an automated approval process. EMI calculations are performed automatically using Apex triggers, and payment schedules are generated dynamically through Salesforce Flows and Invocable Apex. A Batch Apex job monitors overdue payments and updates their status accordingly.

The solution leverages Salesforce's Admin capabilities (custom objects, validation rules, approval process, reports & dashboards) and Developer capabilities (Apex triggers, Batch Apex, Lightning Web Components, and integrations) to deliver an efficient and user-friendly loan management platform. Management dashboards provide real-time visibility into loan portfolios, repayment status, and overdue accounts, ensuring better decision-making, reduced errors, and improved customer experience.

Requirement Gathering

- Business need: A digital system to handle loan applications from customers, streamline approvals, and track repayments.
- Stakeholders:
    - Customers (who apply for loans).
    - Loan Officers (review applications).
    - Managers/Finance Head (approve or reject).

🔹 Business Process Mapping

1. Customer submits loan application.

2. Loan Officer reviews and checks documents.
3. Approval workflow → Manager/Finance Head.
4. On approval → EMI calculation + repayment schedule auto-created.
5. System tracks payments (Paid/Pending/Overdue).

🔹 Industry Use Case

- Banks, NBFCs, and fintech companies use similar systems.
- Enhances compliance, reduces fraud, improves loan recovery.

Phase 2: Org Setup & Configuration

Salesforce Edition: Enterprise Edition (needed for Approval Process + Profiles).

Company Profile: Fiscal Year April–March, Loan Business Hours 9 AM – 6 PM.

User Setup:

- Roles: Customer, Loan Officer, Manager, Finance Head.
- Profiles:
    - Customer → limited community access.
    - Loan Officer → read/write loan apps.
    - Manager → approval permissions.
    - Finance → reporting access.

OWD & Sharing:

- Customers see only their loan applications.
- Loan Officers see all customers assigned to them.
- Managers see all applications.

Phase 3: Data Modeling & Relationships

1. **Customer__c**
    - Fields: Name, Email, Phone, Address, PAN_Number__c.
2. **Loan_Application__c**
    - Fields:
        - Application_No__c (Auto Number).
        - Loan_Type__c (Picklist: Home, Personal, Vehicle, Education).
        - Loan_Amount__c (Currency).
        - Interest_Rate__c (Percent).
        - Loan_Tenure__c (Number, Months).
        - EMI_Amount__c (Currency, Formula via Trigger).
        - Status__c (Picklist: Draft, Submitted, Approved, Rejected, Disbursed).
        - Customer__c (Lookup → Customer).
3. **Payment__c**
    - Fields: Payment_Date__c, Amount_Paid__c, Payment_Status__c (Paid, Pending, Overdue).
    - Lookup → Loan_Application__c.

🔹 Relationships

- **Customer → Loan** (One-to-Many).
- **Loan → Payment** (One-to-Many).

Phase 4: Process Automation (Admin)

Validation Rules:

- Loan_Amount__c > 0.
- Loan_Tenure__c >= 6.
- PAN_Number__c required if Loan_Amount__c > 50,000.

Flow Builder:

- Record-Triggered Flow → when Loan_Application__c.Status__c = Approved → auto-create Payment__c records for each EMI month.

Approval Process:

- Step 1: Loan Officer → Approve/Reject.
- Step 2: Manager/Finance Head final approval.
- Final Action: Update Status = Approved and trigger Flow.

Email Alerts: Notify customer on Approval/Reject.