Banking Loan Application - Capstone Project

# Phase 1: Problem Understanding

Banks are facing issues because the loan process is manual. It takes time, sometimes duplicate work happens, and there is no clear tracking. Customers also don’t know the real status of their loan.   
Goal: Make a Salesforce app to keep all loan applications in one place, automate approvals and EMI generation, and give clear reports.

# Phase 2: Org Setup

Profiles we used:  
- System Admin: has full rights, sets up everything.  
- Loan Officer: makes loan applications for customers.  
- Underwriter: checks loan and credit details.  
- Branch Manager: gives approval or rejection.  
- Customer Service Officer: only view records to help customers.  
  
Role Hierarchy:  
Branch Manager > Underwriter > Loan Officer > Customer Service Officer

# Phase 3: Data Modeling

Custom Objects we created:  
1. Loan Application  
 - Fields: Loan Amount, Term, Interest, Loan Type, Status, Applicant (Account/Contact), Underwriter, Credit Score, EMI formula.  
  
2. Loan Payment  
 - Fields: EMI No, Date, Amount, Balance, Status (Paid/Missed).  
 - Connected to Loan Application.  
  
3. Collateral  
 - Fields: Type, Value, Serial Number, Location.  
 - Linked with the Loan Application.  
  
Standard Objects used: Account, Contact, User, Files.

# Phase 4: Automation

Flows:  
- When loan is submitted, assign to underwriter and send message.  
- When approved, system makes EMI schedule.  
- Daily check for missed payments and send reminders.  
  
Validation Rules:  
- Loan amount cannot be 0.  
- Approved amount should not be more than requested.  
- Loan cannot be disbursed before approval.  
  
Approval Process:  
- Loan goes from Officer → Underwriter → Branch Manager.

# Phase 5: Apex

We added small Apex code for:  
- Prevent duplicate applications of same person in short time.  
- Controller to show Loan + Payment details in LWC.  
- Batch job to send reminder mails one day before payment due.

# Phase 6: UI (Lightning + LWC)

We created a Lightning App called Banking Loan App.  
Tabs: Accounts, Contacts, Loan Applications, Loan Payments, Collateral, Reports.  
  
Record Page: shows related lists and also a custom Lightning Web Component.  
LWC: shows loan summary and EMI schedule in table.  
Dashboard: loans by status, overdue payments, etc.

# Phase 7: Integration (Optional)

- Can connect to Credit Bureau API to fetch credit score directly.  
- Can connect to payment gateway (like PhonePe) to pay EMI online.  
- Can send SMS/email notifications for approval or reminder.

# Phase 8: Data Management

- Added some test Accounts and Contacts using Import Wizard.  
- Entered few sample Loan Applications manually.  
- Auto generated EMI schedule using flow for demo purpose.

# Phase 9: Reports and Dashboards

Reports:  
- Loans by Status.  
- Loans by Type.  
- Overdue Payments.  
  
Dashboards:  
- Total loans approved vs rejected.  
- Total disbursed vs outstanding.  
- Missed payments trend.

# Phase 10: Demo Flow

1. The Loan Officer creates a Loan Application.  
2. It is sent to the Underwriter to check the details.  
3. Branch Manager approves the loan.  
4. EMI schedule records are created automatically.  
5. Loan Summary card (LWC) shows loan + EMI table.  
6. Reports and Dashboards update with live data.  
  
This demo flow shows how a loan is created, approved, and tracked easily in Salesforce.