

PROJECT TITLE

📌 Micro-Finance Loan Management CRM

A Salesforce Admin + Developer Implementation

Project Type: Salesforce CRM Implementation – Financial Services / Micro-Finance / B2C

Target Users: Borrowers, Loan Officers, Branch Managers, Finance/Admin Teams.

📌📌 Phase 1 – Problem Understanding & Industry Analysis

- **Requirement Gathering:** Interview loan officers, branch managers, finance team to capture needs like instant loan approvals, repayment reminders, and delinquency tracking.
- **Stakeholder Analysis:**
 - Primary: Borrowers, Loan Officers, Finance Managers.
 - Secondary: Credit Analysts, Field Agents, Regulatory Auditors.
- **Business Process Mapping:** From Application → Approval → Disbursement → Repayment → Closure visualized in Lucidchart.
- **Industry-specific Use Case Analysis:** Study micro-finance lending cycles, RBI/NBFC compliance, common challenges (group loans, small-ticket EMIs).
- **AppExchange Exploration:** Evaluate packages like “Financial Services Cloud” or “Loan Management” accelerators for inspiration.

📌 Phase 2 – Org Setup & Configuration

- **Salesforce Edition:** Developer Edition (Free).
- **Company Profile Setup:** Set micro-finance org name, currency, time zone.
- **Business Hours & Holidays:** Configure loan-repayment working days.
- **Fiscal Year Settings:** Align to quarterly lending cycles.
- **User Setup & Licenses:** Create users for Loan Officers, Finance, Admins.
- **Profiles & Roles:**
 - **Profiles:** Loan Officer (standard user), Finance Manager (custom).
 - **Roles:** Branch Officer → Branch Manager → Head Office.
- **Permission Sets:** Extra rights for credit analysts (bulk data import, reporting).
- **OWD & Sharing Rules:** Private for Loans & Payments; branch-based sharing.
- **Login Access Policies:** Two-factor login for Finance roles.
- **Dev Org Setup:** Enable Lightning, add sample data.
- **Sandbox Usage:** Create a sandbox for testing automation.
- **Deployment Basics:** Prepare for Change Sets or SFDX.

🔍 Phase 3 – Data Modeling & Relationships

- **Standard & Custom Objects:**
 - Standard: Contact (re-used as Customer).
 - Custom: Loan Application, Loan Account, Repayment Schedule, Payment, Collateral.
- **Fields:** Amount, Tenure, Interest Rate, Status, ID Proof, Credit Score.
- **Record Types:** Differentiate Personal Loan vs Group Loan.
- **Page & Compact Layouts:** Quick view of balance, EMI schedule.
- **Schema Builder:** Visualize relationships.
- **Relationships:**
 - Customer ↔ Loan Applications (Master–Detail).
 - Loan Application ↔ Loan Account (1–1).
 - Loan Account ↔ Repayment Schedule (1–M).
 - Repayment Schedule ↔ Payment (1–M).
 - Collateral (Lookup to Loan Application).
- **Junction Objects:** For group loans linking many customers to one loan.
- **External Objects:** Optional credit-bureau data.

🔍 Phase 4 – Process Automation (Admin)

- **Validation Rules:**
 - Interest Rate > 0.
 - Disbursed ≤ Approved.
- **Workflow Rules:** Notify officer if application pending >48 hrs.
- **Process Builder:** Auto-update Loan Account status when fully paid.
- **Approval Process:** Loans > ₹5 lakh require Finance Manager approval.
- **Flow Builder:**
 - **Record-Triggered:** On approval, auto-create Loan Account & repayment schedules.
 - **Scheduled:** Send reminders 3 days before EMI due.
 - **Screen Flow:** Guided Loan Application intake.
- **Email Alerts / Field Updates / Tasks / Custom Notifications:** SMS + email to customers for payment reminders and approval notices.

📌 Phase 5 – Apex Programming (Developer)

- **Classes & Objects:** LoanCalculator.cls, RepaymentScheduler.cls.
- **Apex Triggers:**
 - After insert on Loan Application → create repayment schedule.
 - Before delete on Customer → block if active loans exist.
- **Trigger Design Pattern:** Handler class for scalability.
- **SOQL & SOSL:** Fetch overdue EMIs, search customer loans.
- **Collections (List, Set, Map):** Manage installment batches.
- **Control Statements:** Loop through schedules to update penalties.
- **Batch Apex:** Nightly overdue/penalty updates.
- **Queueable Apex:** Bulk SMS/email reminders.
- **Scheduled Apex:** Monthly summary to management.
- **Future Methods:** Async credit score fetch.
- **Exception Handling:** Log failed API or payment updates.
- **Test Classes:** ≥75 % coverage for deployment.
- **Asynchronous Processing:** Handle high-volume repayments.

🔗 Phase 6 – User Interface Development

- **Lightning App Builder:** Build LoanSphere app with tabs: Customers, Loan Applications, Loan Accounts, Repayments, Payments.
- **Record Pages:**
 - Customer 360 view with credit info and active loans.
 - Loan Account timeline with repayment history.
- **Tabs & Home Page Layouts:** Quick metrics: total disbursed, overdue loans.
- **Utility Bar:** One-click “New Loan Application” or “Collect Payment.”
- **LWC (Lightning Web Components):**
 - EMI Calculator slider component.
 - Repayment Calendar heat map.
- **Apex with LWC:** Imperative calls for dynamic EMI calculations.
- **Events in LWC / Wire Adapters / Navigation Service:** Live updates & smooth navigation.

📌 Phase 7 – Integration & External Access

- **Named Credentials:** Secure integration with Payment Gateway.
- **External Services:** Credit Bureau score service.
- **Web Services (REST/SOAP):** Payment posting, credit verification.
- **Callouts:** Trigger payment confirmation API.
- **Platform Events:** Notify branch officers of large disbursements.
- **Change Data Capture:** Sync data to an external analytics warehouse.
- **Salesforce Connect:** Optional read-only access to bank systems.
- **API Limits:** Monitor for heavy repayment traffic.
- **OAuth & Authentication:** Secure borrower self-service portal.
- **Remote Site Settings:** Allow outbound API calls.

📌 Phase 8 – Data Management & Deployment

- **Data Import Wizard / Data Loader:** Migrate customers, applications, payments.
- **Duplicate Rules:** Prevent duplicate customer IDs or mobile numbers.
- **Data Export & Backup:** Weekly automated export.
- **Change Sets:** Move customizations to production.
- **Unmanaged vs Managed Packages:** Package reusable components.
- **ANT Migration Tool & VS Code/SFDX:** Version control & CI/CD.

📌 Phase 9 – Reporting, Dashboards & Security Review

- **Reports:**
 - Loan Disbursement by Branch & Month.
 - Collection vs. Schedule.
 - Overdue Loans Aging.
 - Officer Productivity.
- **Report Types:** Custom for Loan-Repayment hierarchy.
- **Dashboards:**
 - Portfolio Outstanding Gauge.
 - Interest Revenue Trend.
 - Delinquency Heat Map.
- **Dynamic Dashboards:** Branch Manager sees only their branch data.
- **Sharing Settings:** Fine-grained access to sensitive financial info.
- **Field Level Security:** Protect ID proof & income data.
- **Session Settings & Login IP Ranges:** Extra security.
- **Audit Trail:** Track changes to key records.

📌 Phase 10 – Final Presentation & Demo Day

- **Pitch Presentation:** “From Paper Chaos to Digital Micro-Finance Engine.”
- **Demo Walkthrough:**
 1. Borrower submits loan application online.
 2. Officer approves, repayment schedule auto-creates.
 3. Payment posted, dashboards update live.
- **Handoff Documentation:** ERD, user manual, test plan.
- **LinkedIn/Portfolio Showcase:** Screenshots, demo video, GitHub metadata.