Capstone Project – Musical Instrument Rental Business

Phase 1: Problem Understanding & Industry Analysis

1. Requirement Gathering

Business Needs

- Manage **instrument rentals** (who rented, when, how long, return date).
- Track **payments** (due date, paid/unpaid, mode of payment).
- Automate **reminders** for due payments.
- Provide **online payment simulation** inside Salesforce (free, using Flows).
- Generate **reports & dashboards** for store manager (revenue, late payments, active rentals).

Functional Requirements

1. Customer Registration (Contact)
2. Rental Contract Creation (Custom Object)
3. Payment Record (Custom Object with Pay Now option)
4. Automated Email Notifications (reminders + receipts)
5. Dashboards for business insights

Non-Functional Requirements

- Should be **built free of cost** (Developer Org).
- Easy to demonstrate in **5 day's timelines**.
- Scalable → Later integration with real payment gateways (Stripe, PayPal).

2. Stakeholder Analysis

Stakeholder	Role	Needs
Store Manager	Oversees rentals & payments	Dashboards, reports, business growth insights
Staff/Agents	Create rental contracts, record payments	Easy-to-use forms, quick data access
Customers	Rent instruments, make payments	Flexible online/offline payment options, no late fee issues
System (Salesforce)	Automates reminders, receipts, and tracking	Smooth workflows, central data

3. Business Process Mapping

Current (As-Is) Process

1. Customer visits shop → rents instrument → pays cash offline.
2. Staff records details manually in books/Excel.
3. If customer is **out of station**, cannot pay on time → **late fee charged**.
4. No centralized tracking → Manager struggles to analyze business.

Proposed (To-Be) Process with Salesforce

1. Staff creates **Rental Contract** in Salesforce for each customer.
2. System auto-generates a **Payment record** with amount & due date.
3. Salesforce sends **payment reminder email** before due date.
4. Customer clicks **"Pay Now" button** (Screen Flow simulation):
   a. Updates status = Paid, mode = Online, date = today.
   b. Triggers **Thank You email with receipt**.
5. Store Manager views everything on **dashboard** (active rentals, paid/unpaid, revenue).

Benefits:

- Customers can pay even if **out of station**.
- No more **unnecessary late fees**.
- Staff workload reduced → automation handles reminders.
- Manager gets **real-time insights**.

4. Industry-Specific Use Case Analysis

- **Library Book Rentals** → Track book issue, return, late fees.
- **Car Rentals** → Manage contracts, mileage, payment per day/week.
- **Camera Rentals** → Handle short-term rentals with deposits.
- **Instrument Rentals (Our Case)** → Mostly monthly, often for students, requires flexible payments.

All these industries need: **rental tracking + payment automation**.

Salesforce is well-suited because it provides **custom objects, flows, automation, dashboards**.

5. AppExchange Exploration

Existing solutions for payments:

1. **Chargent Payment Processing** → Automates recurring billing, supports Stripe/PayPal. *(Paid)*
2. **FinDock** → Donation & payment management, supports multiple payment gateways. *(Paid)*
3. **Zuora Billing** → Subscription-based billing & invoicing. *(Paid)*
4. **FinancialForce Accounting** → Full finance & payment suite. *(Paid)*

Limitation

- All above are **paid apps**, not suitable for student projects with zero budget.

Our Free Approach (Capstone-Friendly)

- Use **Salesforce Screen Flow** to simulate online payment:
  - Customer clicks **"Pay Now" button**.
  - Flow updates Payment record (Status = Paid, Mode = Online).
  - Auto-email receipt is sent.
- This requires **no cost**, no external API, and is **achievable within 5 days**.

Phase 1 Deliverables

- Identified **real-world problems** in instrument rental.
- Gathered functional & non-functional requirements.
- Analyzed key stakeholders & their needs.
- Mapped "As-Is" vs "To-Be" business process.
- Studied industry use cases.
- Explored AppExchange apps & decided on **free flow-based solution** for online payment.