

Project Title: Smart Customer Retention & Loyalty Management System

Phase 10: Final Presentation & Demo Day

1. Pitch Presentation

Problem Statement

Customer retention is one of the most pressing challenges faced by industries such as e-commerce, telecom, and SaaS. Businesses struggle with high churn rates due to delayed engagement, generic loyalty programs that fail to motivate customers, and manual retention processes that are both time-consuming and error-prone. In addition, organizations lack real-time visibility into customer health metrics, making it difficult for managers to identify at-risk customers and take proactive action. These issues result in revenue loss, reduced customer lifetime value, and weakened brand loyalty.

Proposed Solution

To address these challenges, the **Smart Customer Retention & Loyalty Management System** was developed on Salesforce. The solution leverages predictive analytics to identify at-risk customers, automated loyalty tiering to reward and retain customers effectively, and real-time dashboards to provide managers with a single view of customer health. Built using Salesforce automation tools, Apex programming, and Lightning components, the system ensures a proactive, customer-centric, and scalable approach to retention management.

Key Features

The system provides several important features. First, **churn detection** automatically calculates customer risk scores based on engagement activities and purchase history, while workflows and alerts notify Customer Success Managers to act quickly. Second, **loyalty tiering** enables customers to be enrolled into Bronze, Silver, Gold, or Platinum tiers automatically once they cross purchase thresholds. Third, **process automation** ensures loyalty points are updated instantly, churn alerts are triggered, and high-value redemptions follow an approval process. Finally, **dashboards and reports** offer real-time insights into churn trends, loyalty points distribution, and customer engagement metrics, empowering decision-makers with accurate, actionable data.

Business Value

The business impact of this solution is significant. Predictive churn scoring combined with proactive engagement can increase customer retention and improve overall ROI. Automated loyalty management enhances customer satisfaction and encourages repeat purchases, while operational efficiency improves by eliminating manual, error-prone processes. Managers and executives gain real-time visibility through dashboards, allowing them to make faster and more informed decisions. Moreover, because the solution is built on Salesforce, it is scalable and can be extended in the future with advanced features such as gamification, referral systems, and external CRM integrations.

2. Demo Walkthrough

<https://drive.google.com/file/d/1wmlIsDGBuS8wf8Ir5q1vaPUwdCVu4S8Y/view?usp=sharing>

3. Handoff Documentation

1. Project Overview

- **Project Title:** Smart Customer Retention & Loyalty Management System
- **Platform:** Salesforce (Lightning Experience)
- **Objective:** Improve customer retention and loyalty through predictive analytics, automation, and real-time dashboards.

2. System Architecture

- **Standard Objects:** Account, Contact
- **Custom Objects:**
 - Customer Retention Data
 - Loyalty Transaction
 - Engagement Activity
 - Customer Loyalty Enrollment (junction object)
- **Relationships:**
 - Customer Retention Data ↔ Loyalty Transaction (Lookup)
 - Customer Retention Data ↔ Engagement Activity (Master-Detail)
 - Customer Retention Data ↔ Account (Lookup)
 - Customer Loyalty Enrollment ↔ Loyalty Program (Many-to-Many)

3. Setup & Configuration

Step 1: Salesforce Org Setup

- Sign up for Salesforce Developer Edition
- Configure Lightning App: *Smart Retention App*
- Assign Permission Set: RetentionApp_Access

Step 2: Custom Objects & Fields

- **Customer Retention Data** → Risk Score, Loyalty Tier, Points Balance, Churn Flag
- **Loyalty Transaction** → Transaction Type, Points Changed, Transaction Date
- **Engagement Activity** → Activity Type, Activity Date, Notes

Step 3: Automation

- **Validation Rule:** Prevent negative points
- **Workflow Rule:** Alert on churn flag = TRUE
- **Flows:**
 - Churn Detection Flow
 - Loyalty Points Flow
 - Auto-Enrollment Flow
- **Approval Process:** High-value redemption approvals

4. Apex & LWC Components

- **Triggers:** EngagementActivityTrigger
- **Handler Class:** EngagementActivityTriggerHandler
- **Queueable & Batch Apex:** Risk score updates, scheduled cleanups
- **LWC Component:** customerRetentionCard (used in Lightning Record Page)
- **Controller Class:** RetentionController

5. Integrations

- **Named Credential:** Loyalty_NC → <https://jsonplaceholder.typicode.com>
- **REST Callouts:** Fetch loyalty-related data
- **Platform Events:** LoyaltyEvent → updates customer points via Flow

6. Data Management

- **Import:** Salesforce Data Import Wizard (CSV)
- **Export:** Data Export Service
- **Duplicate Rules:** Block duplicate email IDs

7. Reporting & Dashboards

- **Reports:**
 - All Customers (tabular)
 - Churn vs Retained Customers (summary)
 - Points by Loyalty Tier (summary)
- **Dashboard:** Retention & Loyalty Dashboard

8. Security & Sharing

- **Org-Wide Defaults:** Customer Retention Data = Private
- **Permission Set:** RetentionApp_Access for CSMs

- **Role Hierarchy:** Managers > CSMs > Agents

9. Deployment

- Use **VS Code + Salesforce CLI (SFDX)** for deployment.
- Run **tests** before deployment (CustomerRetentionTests).
- Maintain **backup exports** before major releases.

10. Maintenance & Next Steps

- Monitor scheduled jobs and batch Apex logs.
- Refresh dashboards weekly for management.
- Extend loyalty program features (e.g., gamification, referral system).
- Future integrations: Payment gateways, external CRMs.