

# Salesforce CRM Project Documentation

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## HandsMen Threads

### Project Overview

HandsMen Threads is a Salesforce CRM solution built to manage an online clothing store's customer engagement, inventory, and loyalty rewards. The application helps track customer purchases, manage low-stock alerts, automate loyalty point allocation, and streamline task management for order processing. It supports multiple business workflows with backend automation and frontend flexibility.

### Objectives

- Automate loyalty point management for repeat customers.
- Alert inventory managers when product stock is low.
- Automate daily tasks like syncing inventory and creating follow-ups.
- Simplify order tracking and enhance customer service.
- Provide dashboards for real-time insights and trend analysis.

### Phase 1: Requirement Analysis & Planning

#### Understanding Business Requirements:

- Customers should earn loyalty points for every purchase.
- If stock falls below a threshold, alert notifications must be sent.
- Admins need a dashboard to track stock levels and customer purchases.
- Task reminders should be created automatically after orders.
- Managers require an approval process for large-value orders.

#### Defining Project Scope and Objectives:

- CRM tracks inventory, customer orders, and loyalty points.
- Admins and Managers get reports/dashboards for analytics.
- Approval process created for high-value transactions.
- Scheduled flows for stock sync and reminders.
- Role hierarchy ensures data security and access control.

### **Data & Security Model:**

- Custom Objects: Inventory, Loyalty Program.
- Relationships: Customer → Order (Master-Detail).
- Security: Roles → Admin > Manager > Executive. Permission sets added for special access.

## **Phase 2: Salesforce Development – Backend & Configurations**

### **Setup & DevOps:**

- Sandboxes used for development and testing.
- Deployment done using Change Sets.

### **Customizations:**

- Objects: Inventory, Loyalty Program, Orders.
- Fields: LoyaltyPoints, StockLevel, AlertSent.
- Validation Rules: Prevent orders if stock is unavailable.
- Automation:
  - Flow: Stock Alert Flow, Loyalty Points Flow.
  - Scheduled Flow: Daily Inventory Sync at 12 AM.
  - Approval Process: Triggered if order value > ₹10,000.

### **Apex Implementation:**

- Apex Class: InventoryBatchJob – Scheduled to run daily.
- Trigger: Reduces stock on order creation.
- Asynchronous Apex: Scheduled Apex job for syncing inventory.
- Test Class: InventoryBatchJobTest, OrderTriggerTest.

## **Phase 3: UI/UX Development & Customization**

### **Lightning App:**

- App Name: HandsMen CRM
- Custom Tabs: Inventory, Orders, Customers, Loyalty

### **Page Customizations:**

- Dynamic Forms on Customer & Inventory records.
- Conditional fields visible based on order value.

### **User Management:**

- Profiles: System Admin, Inventory Manager, Sales Executive.
- Permission Sets for approval access and debugging.

### **Dashboards & Reports:**

- Dashboard 1: Low Stock Overview.
- Dashboard 2: Top Customers by Loyalty Points.
- Report: Orders Approved vs. Rejected.

### **LWC Component:**

- Custom component to display customer loyalty points in real-time.

## **Phase 4: Data Migration, Testing & Security**

### **Data Loading:**

- Used Data Loader for bulk upload of customers and stock.
- Data Import Wizard for single object records.

### **Security Features:**

- Profiles and Roles assigned as per department.
- Field-level access restricted via profiles.
- Sharing Rules applied based on region.

### **Field Tracking & Duplicates:**

- History Tracking enabled for StockLevel and OrderStatus.
- Matching Rules configured to detect duplicate emails.

### **Testing Strategy:**

- Manual test cases created with screenshots.
- Scenarios tested:
  - Loyalty point allocation upon order.
  - Stock alert generation if stock < 5.
  - Scheduled flow running at 12 AM.
  - Task creation after order submission.
  - Validation: Can't place order with 0 stock.

### **Test Class Coverage:**

- Average > 85%

## **Phase 5: Deployment, Documentation & Maintenance**

### **Deployment Strategy:**

- Deployed using Change Sets.
- Post-deployment test runs and data verification completed.

### **Maintenance Plan:**

- Scheduled job logs monitored daily.
- Flow error notifications sent to Admin via Email Alert.
- Bugs tracked using Case object.

### **Troubleshooting:**

- Added error handlers in flows with Fault Paths.
- Debug Logs analyzed via Developer Console.
- System issues documented with resolution steps.

### **Conclusion**

HandsMen Threads CRM successfully automates customer loyalty tracking, stock monitoring, and order task management. It integrates flows, Apex, reports, and LWC to deliver a robust retail CRM. The system is scalable for future enhancements, including chatbot integration, WhatsApp notifications, or predictive inventory alerts using AI.