

HandsMen Threads: Elevating the Art of Sophistication in Men's Fashion

ABSTRACT

This capstone project presents the design and implementation of a custom Salesforce CRM solution for HandsMen Threads, elevating the art of sophistication in men's fashion. The primary objective was to streamline customer management, order processing, inventory optimization, and marketing operations to support the company's rapid growth. Using Salesforce's robust cloud-based capabilities, the system automates key business processes, enforces data integrity, and delivers real-time operational insights.

The solution integrates custom objects, intelligent automation flows, rigorous validation rules, targeted email alerts, and tailored Apex code. Together, these components enhance customer engagement, drive sales performance, reduce inventory challenges, and provide comprehensive visibility across all aspects of the business.

OBJECTIVE

Core mission was to design and implement a custom Salesforce CRM for HandsMen Threads that would simplify daily operations and elevate customer satisfaction.

To achieve this, here are the following key objectives:

- **Automate routine tasks** such as sending order confirmations, updating customer loyalty statuses, and flagging low inventory levels.
- **Ensure data accuracy and consistency** through the implementation of robust validation rules.
- **Provide real-time visibility** into inventory levels, customer interactions, and sales performance.
- **Enhance cross-department collaboration** by improving communication and workflow between the sales, inventory, and marketing teams.
- **Deliver personalized customer experiences** through automated messaging and tailored loyalty programs.

TECHNOLOGY DESCRIPTION

Salesforce

Salesforce is a cloud-based Customer Relationship Management (CRM) platform that helps businesses manage customer data, automate processes, and improve service, marketing, and sales operations. It offers both point-and-click tools and programmatic capabilities (such as Apex and Flows) to build customized business solutions.

Custom Objects

Custom Objects in Salesforce act like personalized digital filing cabinets, specifically designed to store *HandsMen Threads*' unique business information.

- **Customer__c** – Stores detailed customer information, including personal data, contact details, and loyalty status.
- **Product__c** – Manages all product details such as name, description, price, and available stock.
- **Order__c** – Records every customer order, linking it to the related customer and products, and capturing order date, quantity, and total amount.
- **Marketing_Campaign__c** – Tracks marketing campaigns and promotional activities to help evaluate performance and impact.

Tabs

Tabs serve as quick-access navigation tools within Salesforce. I created custom tabs for each object (e.g., *Products*, *Orders*, *Customers*) so that team members can easily view, create, and manage records directly within the *HandsMen Threads* app.

Custom App

I developed a custom Lightning App named “**HandsMen Threads**”, serving as the central hub for all operations. The app consolidates essential tabs such as *Customer*, *Order*, *Product*, *Inventory*, *Campaign*, and *Reports* providing users with a unified workspace for seamless workflow management.

Profiles & Roles

These are all about controlling who sees what and who can do what:

Profiles and Roles ensure proper access control and data security by defining what users can see and do within the system.

- **Profiles** – Specify user permissions, including accessible objects, fields, and interface layouts. For example, a *HandsMen Sales Profile* was designed for sales personnel with access tailored to their responsibilities.
- **Roles** – Determine data visibility based on organizational hierarchy. For example, a *Sales Manager* can view all sales records, while a *Sales Representative* can only access their own, maintaining clear reporting lines and data security.

Permission Sets

Permission Sets act like bonus permission packs that grant users additional access beyond what their standard profile allows. They let administrators fine-tune permissions without modifying a user's main profile, providing greater flexibility and control over system access.

Validation Rules

Validation Rules serve as safeguards to maintain data accuracy and consistency. They verify that information entered into Salesforce meets specific business standards before it can be saved.

Examples:

- Ensuring that email addresses follow a valid format (e.g., must contain “@gmail.com”).
- Preventing users from saving an order if it would reduce product stock below zero.

Email Templates & Alerts

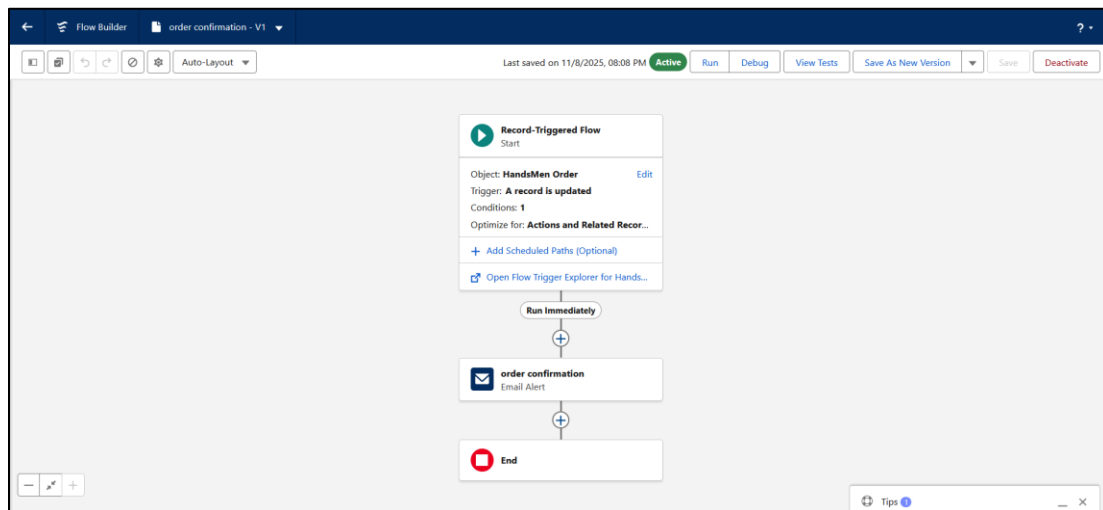
These tools help streamline and standardize communication across the organization.

- **Email Templates:** Pre-designed layouts used for messages such as order confirmations, ensuring consistency and professionalism in all communications.
- **Email Alerts:** Automated notifications triggered by specific events for example, when a new order is placed or when a customer's loyalty status changes.

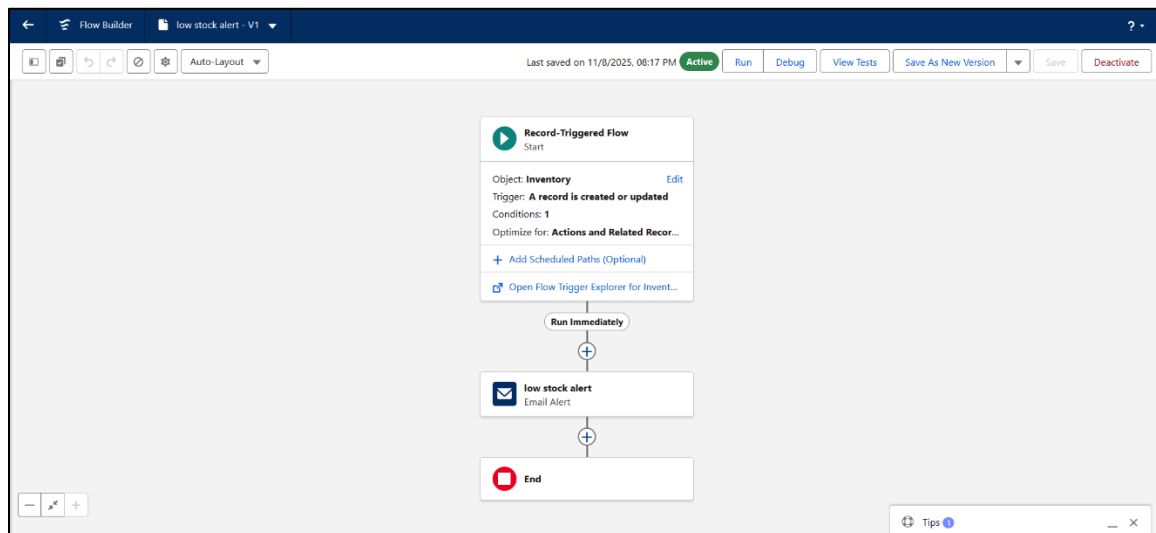
Flows

Flows are Salesforce's visual automation tools that allow us to design complex business logic without writing code. Here are some key flows I built:

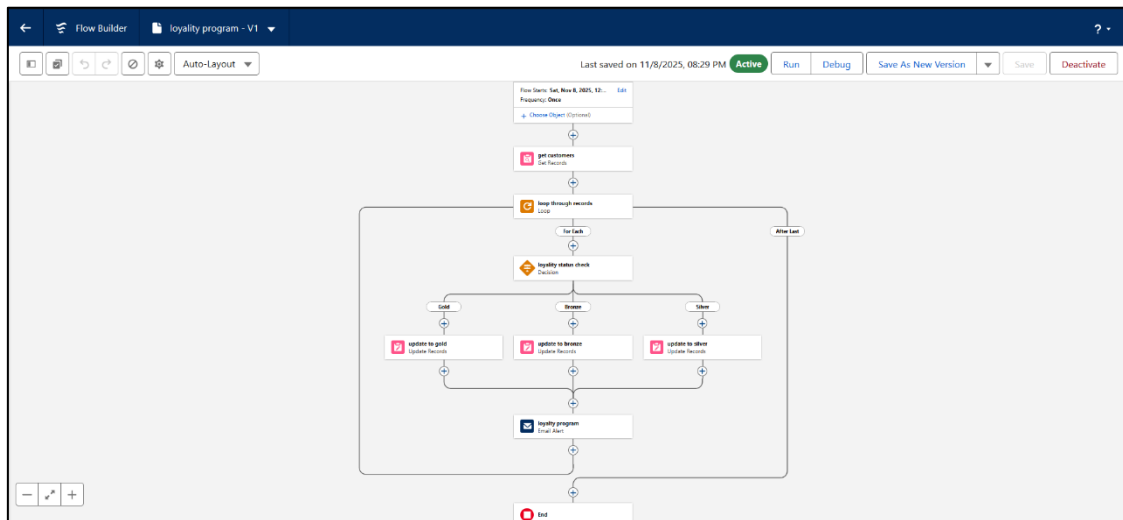
1. **Email Notification Flow:** This flow automatically sends an order confirmation email to the customer the moment a new order is placed.



2. **Stock Update Flow:** This flow automatically updates the product's available stock.



3. **Scheduled Loyalty Update Flow:** This flowcheck and update customer loyalty statuses based on their total purchase amounts.

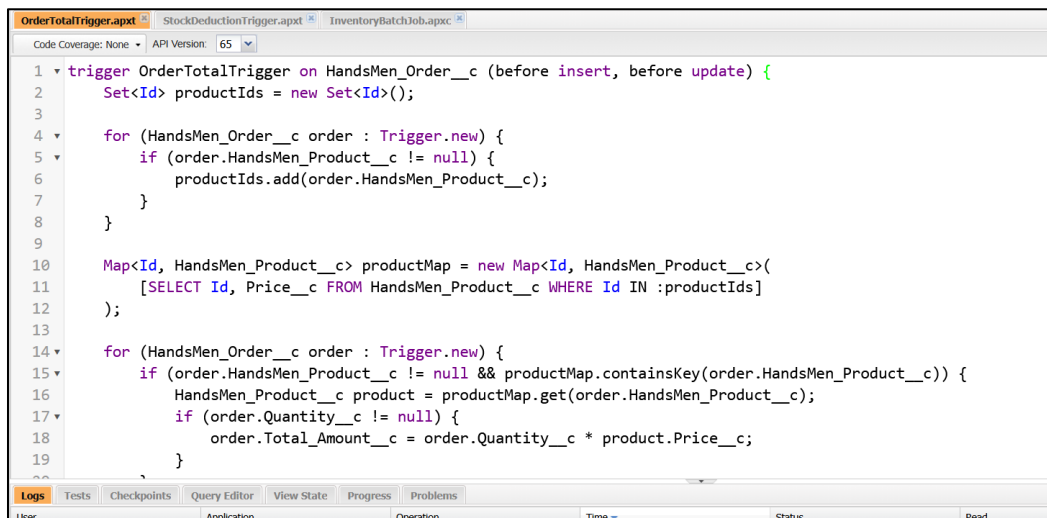


Apex

Apex is Salesforce's built-in programming language, used to implement custom or complex business logic that goes beyond what standard automation tools can achieve. It enables developers to create powerful backend processes that ensure data accuracy and efficiency.

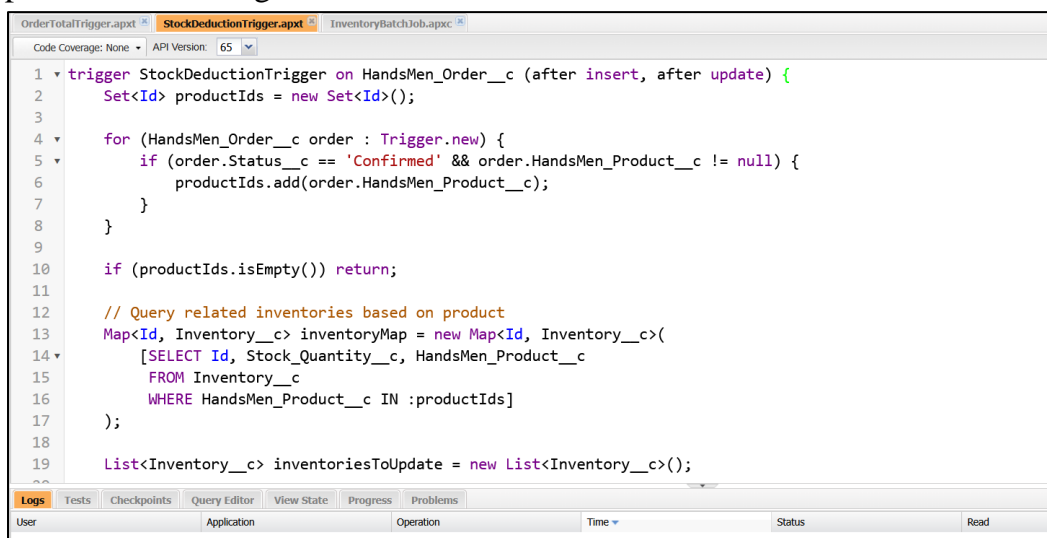
Key Apex Triggers Implemented:

- **Order Total Trigger:** Automatically calculates and updates the *Total_Amount__c* field on an order based on the quantity and unit price — ensuring accurate order totals every time.



```
1 trigger OrderTotalTrigger on HandsMen_Order__c (before insert, before update) {
2     Set<Id> productIds = new Set<Id>();
3
4     for (HandsMen_Order__c order : Trigger.new) {
5         if (order.HandsMen_Product__c != null) {
6             productIds.add(order.HandsMen_Product__c);
7         }
8     }
9
10    Map<Id, HandsMen_Product__c> productMap = new Map<Id, HandsMen_Product__c>(
11        [SELECT Id, Price__c FROM HandsMen_Product__c WHERE Id IN :productIds]
12    );
13
14    for (HandsMen_Order__c order : Trigger.new) {
15        if (order.HandsMen_Product__c != null && productMap.containsKey(order.HandsMen_Product__c)) {
16            HandsMen_Product__c product = productMap.get(order.HandsMen_Product__c);
17            if (order.Quantity__c != null) {
18                order.Total_Amount__c = order.Quantity__c * product.Price__c;
19            }
20        }
21    }
22 }
```

- **Stock Deduction Trigger:** Automatically deducts product quantities from inventory once an order is confirmed, working seamlessly with validation rules to prevent overselling.



```
1 trigger StockDeductionTrigger on HandsMen_Order__c (after insert, after update) {
2     Set<Id> productIds = new Set<Id>();
3
4     for (HandsMen_Order__c order : Trigger.new) {
5         if (order.Status__c == 'Confirmed' && order.HandsMen_Product__c != null) {
6             productIds.add(order.HandsMen_Product__c);
7         }
8     }
9
10    if (productIds.isEmpty()) return;
11
12    // Query related inventories based on product
13    Map<Id, Inventory__c> inventoryMap = new Map<Id, Inventory__c>(
14        [SELECT Id, Stock_Quantity__c, HandsMen_Product__c
15         FROM Inventory__c
16         WHERE HandsMen_Product__c IN :productIds]
17    );
18
19    List<Inventory__c> inventoriesToUpdate = new List<Inventory__c>();
20 }
```

- **Loyalty Status Trigger:** Dynamically updates a customer's *Loyalty_Status__c* field in real time based on their cumulative purchase history.

DETAILED PROJECT EXECUTION

1. Salesforce Developer Org Setup

I set up a new Salesforce Developer Org at <https://developer.salesforce.com/signup>, our main environment for all development work.

Build enterprise-quality apps fast and get hands-on with Agentforce and Data Cloud.

Sign up for your Developer Edition.

- ✓ Build apps fast with drag-and-drop tools
- ✓ Go further with Apex code
- ✓ Build AI agents with Agentforce
- ✓ Harmonize your data with Data Cloud
- ✓ Ground Agentforce with structured and unstructured data
- ✓ Integrate with anything using APIs

Steps

Select Type

- Customer Support
- Sales Coach
- Sales Development

Sign up for your Developer Edition

A free Salesforce Platform environment with Agentforce and Data Cloud

First name: Qvell ✓ Last name: Crisostomo ✓


Job title: Developer ✓ Work email: qvell.crisostomo1@gmail.com ✓

Company: Bulacan State University ✓ Country/Region: Philippines ✓

Your org may be provisioned on or migrated to Hyperforce, Salesforce's public cloud infrastructure.

☒ I agree to the Main Services Agreement – Developer Services and Salesforce Program Agreement. I acknowledge, as described in the Developer Documentation: (1) the Developer Edition includes autonomous and other generative AI features, and (2) Salesforce may limit use of those features and the org, and may terminate any org that has been inactive for 45 days.

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Sign Me Up

2. Custom Object Creation

The core data structure was developed by creating custom objects and fields to capture all essential business information within Salesforce.

- **HandsMen Customer (Customer__c):** Stores customer information such as name, email, phone number, address, and loyalty status (*Loyalty_Status__c*).
- **HandsMen Product (Product__c):** Contains product details including name, description, unit price (*Unit_Price__c*), and available stock (*Stock__c*).
- **HandsMen Order (Order__c):** Records order-related data such as order date, quantity (*Quantity__c*), and total amount (*Total_Amount__c*), with relationships linking to both customer and product records.
- **Marketing Campaign (Marketing_Campaign__c):** Tracks marketing and promotional activities for performance evaluation and campaign management.

3. Custom Lightning App

I created the "HandsMen Threads" Lightning App. This app pulls together all relevant tabs (Customer, Order, Product, Inventory, Campaign, Reports) to create a single, easy-to-use workspace for our teams.

4. Validation Rules

I implemented rules to ensure data quality:

- **Product Stock:** Prevents *Stock__c* from being less than zero.
- **Customer Email:** Requires the Email field to contain "@gmail.com".

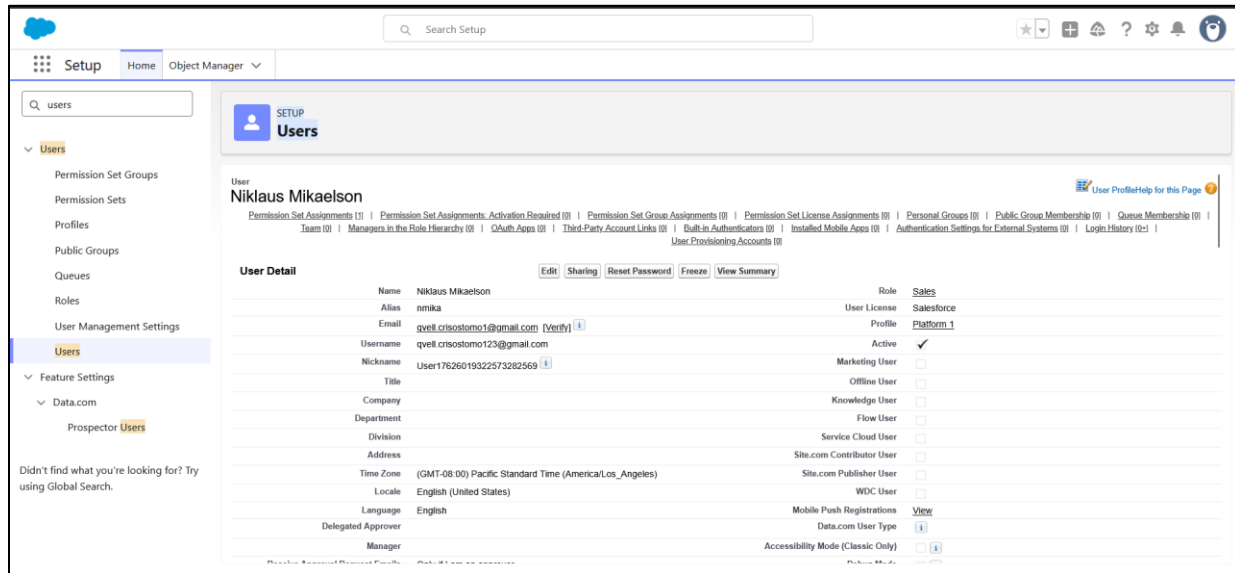
5. User Profiles & Roles

Specific profiles and roles were configured to manage user permissions and control data visibility within the Salesforce system.

- **Profiles:** The *Standard User* profile was cloned and customized to create role-specific profiles, such as the *HandsMen Sales Profile*, ensuring each user had access tailored to their responsibilities.
- **Roles:** A clear role hierarchy was established, including positions like *Sales Manager* and *Inventory Manager*, to define data visibility and maintain proper access levels based on organizational responsibilities.

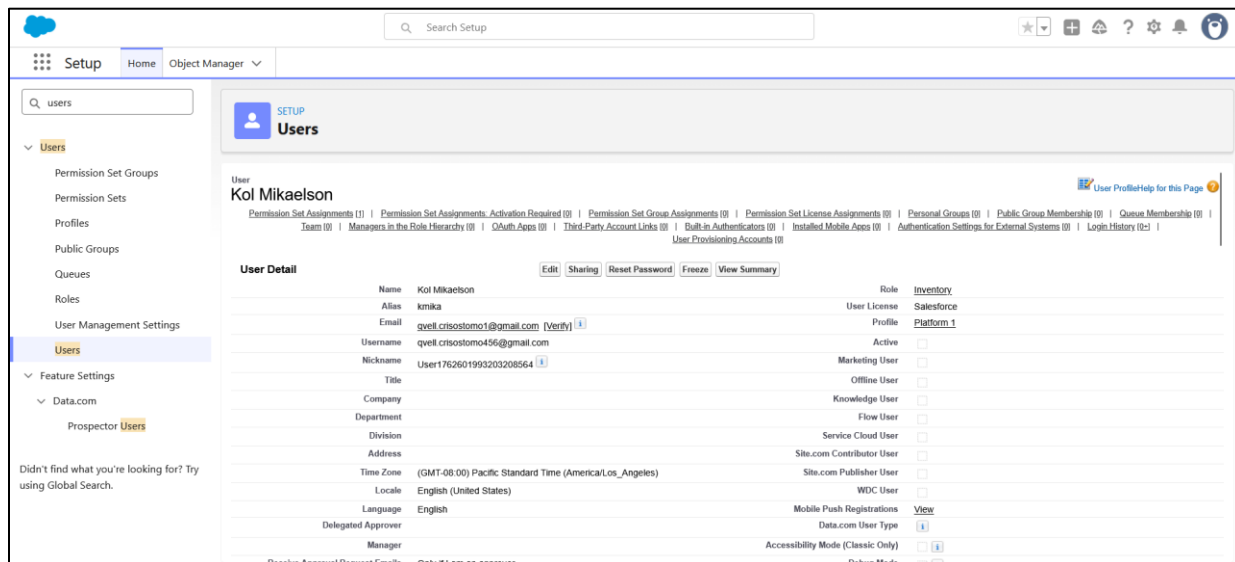
6. User Creation

I created new users and assigned them to their respective roles and profiles (e.g., Niklaus Mikaelson for Sales, Kol Mikaelson for Inventory) to demonstrate the system's multi-user capabilities.



The screenshot shows the Salesforce Setup interface for user management. The left sidebar contains navigation links: Setup, Home, Object Manager, Users, Permission Set Groups, Permission Sets, Profiles, Public Groups, Queues, Roles, User Management Settings, Feature Settings, Data.com, and Prospector. The main content area displays the 'Users' section for 'Niklaus Mikaelson'. The user's details are as follows:

User Detail	
Name	Niklaus Mikaelson
Alias	nmika
Email	qvell.crisostomo1@gmail.com
Username	qvell.crisostomo123@gmail.com
Nickname	User17626019322573282569
Title	
Company	
Department	
Division	
Address	
Time Zone	(GMT-08:00) Pacific Standard Time (America/Los_Angeles)
Locale	English (United States)
Language	English
Delegated Approver	
Manager	
Role	Sales
User License	Salesforce
Profile	Platform 1
Active	<input checked="" type="checkbox"/>
Marketing User	<input type="checkbox"/>
Offline User	<input type="checkbox"/>
Knowledge User	<input type="checkbox"/>
Flow User	<input type="checkbox"/>
Service Cloud User	<input type="checkbox"/>
Site.com Contributor User	<input type="checkbox"/>
Site.com Publisher User	<input type="checkbox"/>
WDC User	<input type="checkbox"/>
Mobile Push Registrations	<input type="checkbox"/>
Data.com User Type	<input type="checkbox"/>
Accessibility Mode (Classic Only)	<input type="checkbox"/>



The screenshot shows the Salesforce Setup interface for user management. The left sidebar contains navigation links: Setup, Home, Object Manager, Users, Permission Set Groups, Permission Sets, Profiles, Public Groups, Queues, Roles, User Management Settings, Feature Settings, Data.com, and Prospector. The main content area displays the 'Users' section for 'Kol Mikaelson'. The user's details are as follows:

User Detail	
Name	Kol Mikaelson
Alias	kmika
Email	qvell.crisostomo1@gmail.com
Username	qvell.crisostomo456@gmail.com
Nickname	User1762601993203208564
Title	
Company	
Department	
Division	
Address	
Time Zone	(GMT-08:00) Pacific Standard Time (America/Los_Angeles)
Locale	English (United States)
Language	English
Delegated Approver	
Manager	
Role	Inventory
User License	Salesforce
Profile	Platform 1
Active	<input type="checkbox"/>
Marketing User	<input type="checkbox"/>
Offline User	<input type="checkbox"/>
Knowledge User	<input type="checkbox"/>
Flow User	<input type="checkbox"/>
Service Cloud User	<input type="checkbox"/>
Site.com Contributor User	<input type="checkbox"/>
Site.com Publisher User	<input type="checkbox"/>
WDC User	<input type="checkbox"/>
Mobile Push Registrations	<input type="checkbox"/>
Data.com User Type	<input type="checkbox"/>
Accessibility Mode (Classic Only)	<input type="checkbox"/>

7. Email Templates

Custom email templates were designed for automated and consistent communication, such as "Order Confirmation" and "Loyalty Status Update."

8. Flow Implementations

a. Email Notification Flow (Record-Triggered) - Automatically sends an order confirmation email to the customer whenever a new order is created.

b. Stock Update Flow (Record-Triggered) - Updates product stock levels in real time whenever an order is created or modified.

c. Scheduled Loyalty Update Flow (Scheduled-Triggered) - Runs daily to refresh each customer's loyalty status based on their cumulative purchase amount.

9. Apex Triggers

a. Order Total Trigger (OrderTrigger) - Automatically calculates and updates the total amount of an order based on quantity and unit price.

b. Stock Deduction Trigger (ProductStockUpdateTrigger) - Ensures product stock is correctly reduced after an order.

c. Loyalty Status Trigger (CustomerLoyaltyUpdateTrigger) - Updates a customer's loyalty status in real-time based on their cumulative purchase history.

PROJECT DEMONSTRATION: A Real-World Example

To demonstrate how our Salesforce CRM works in practice, here's a simple walkthrough of a typical customer interaction within the *HandsMen Threads* system.

1. Customer Registration:

- A new customer, **Qvell Crisostomo**, is added to the system through the **HandsMen Customers** tab.
- The sales representative enters details such as the customer's name, email, and loyalty status.
- Validation rules ensure accuracy — for example, email entries must follow the correct format (e.g., must contain “@gmail.com”).
- Once the information is verified, the record is saved, and the customer is successfully registered.

2. **Product Setup:**

Under the **HandsMen Products** tab, the inventory manager lists available products.

- An item such as “**T-shirt cloth**” is entered with its details, including price and current stock level.
- This ensures all items are properly tracked and ready for order processing.

3. **Order Placement:**

- When the customer places an order (e.g., for the “T-shirt cloth”), the sales rep creates a new record under the **HandsMen Orders** tab, linking it to both the customer and the product.
- An **Apex Trigger** automatically calculates the total order amount based on quantity and unit price.
- At the same time, the **Email Notification Flow** sends a confirmation email to the customer, summarizing the purchase details.

4. **Inventory Update:**

- The **Stock Update Flow** automatically adjusts the product’s stock level once the order is saved.
- For example, if one T-shirt cloth was sold from a stock of 10, the inventory updates to 9 instantly.
- Validation rules prevent over-ordering by blocking any order that exceeds available stock.

5. **Loyalty Status Update:**

- The **Loyalty Status Trigger** updates the customer's loyalty tier (e.g., Bronze, Silver, Gold) based on total purchases.
- Additionally, a **Scheduled Flow** runs daily to ensure that all customer loyalty statuses remain accurate and up to date.

This demonstration highlights how *HandsMen Threads*' Salesforce CRM automates every step from customer registration and product management to order processing and loyalty tracking creating a seamless, efficient experience for both staff and customers.

SCREENSHOTS

Figure 1

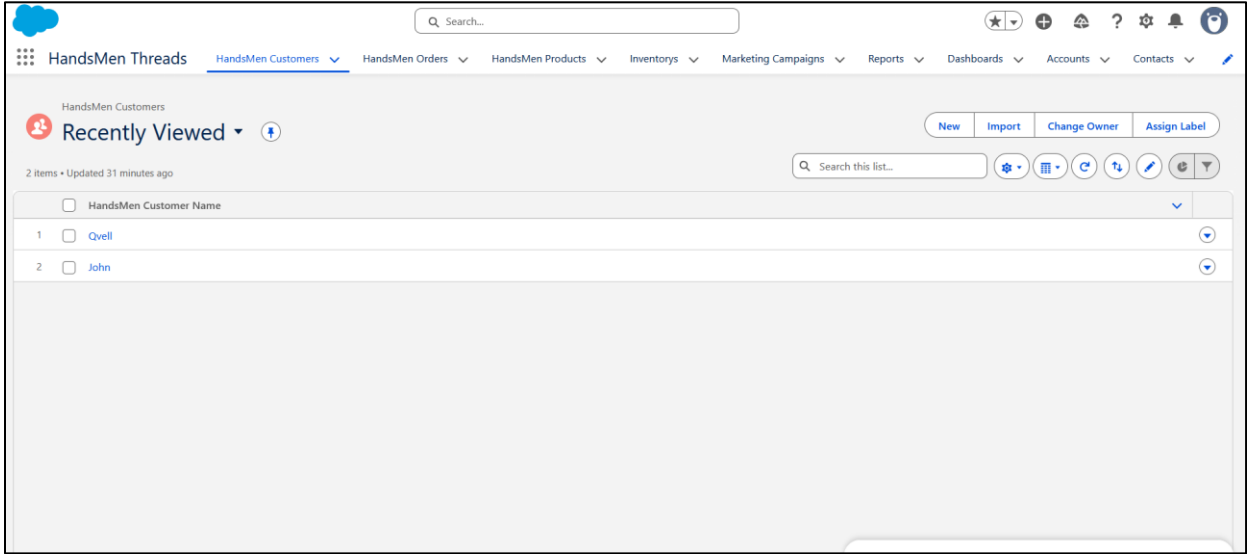


Figure 1: Custom App for HandsMen Threads

Figure 2

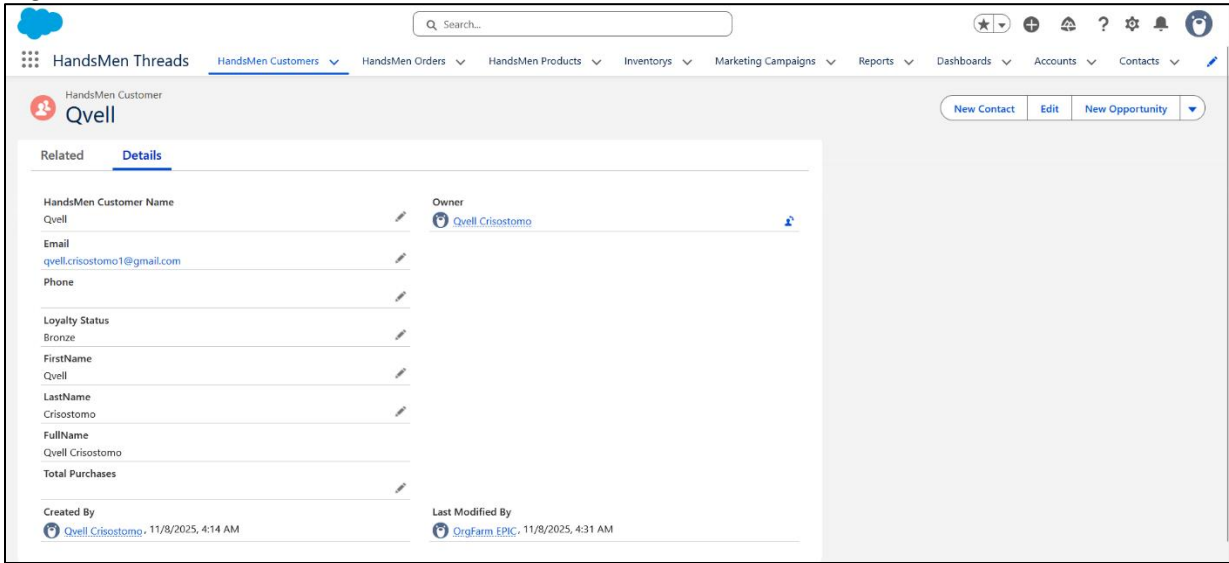


Figure 2: Customer Creation in HandsMen Threads

Figure 3

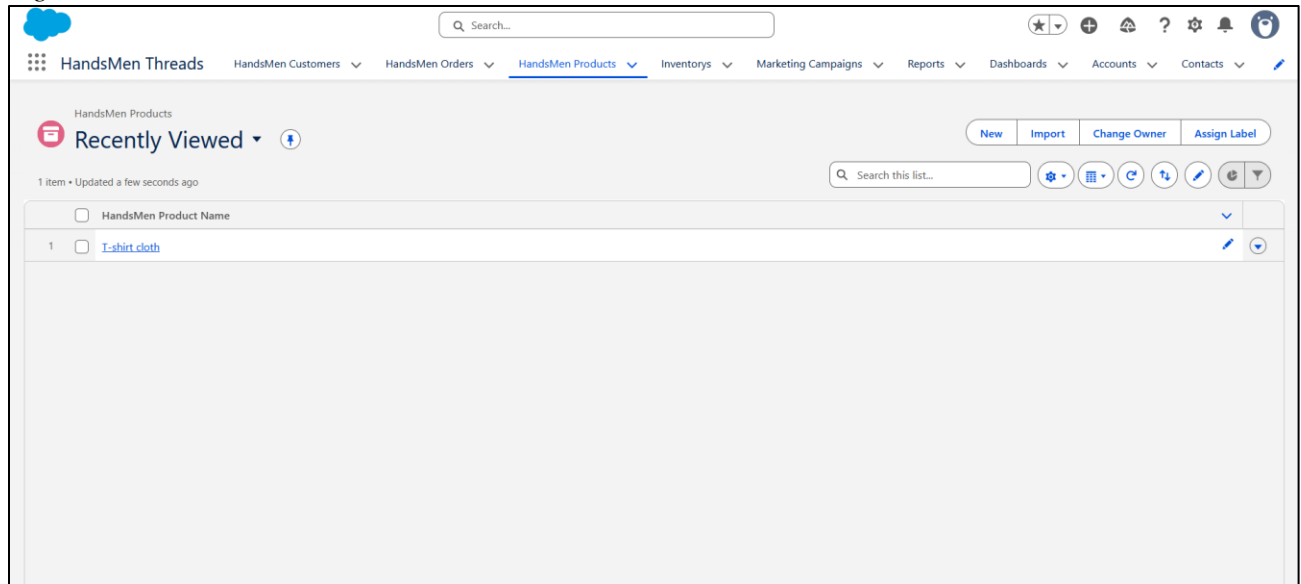


Figure 3: Product List View

Figure 4

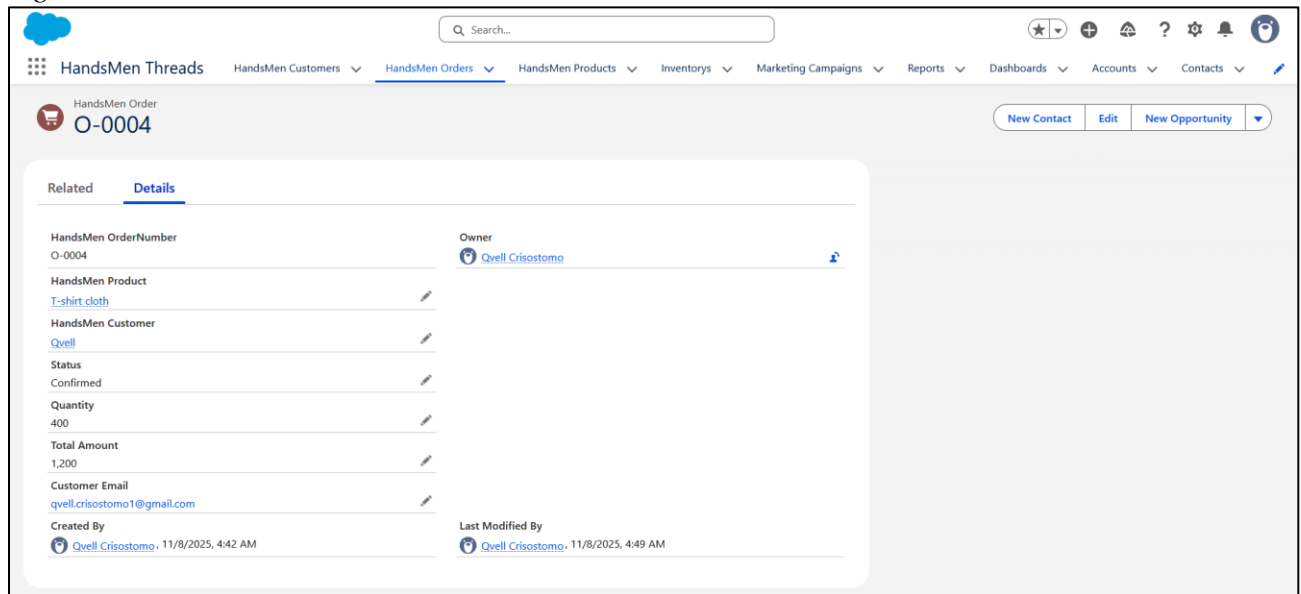


Figure 4: New Order Creation Page

Figure 5

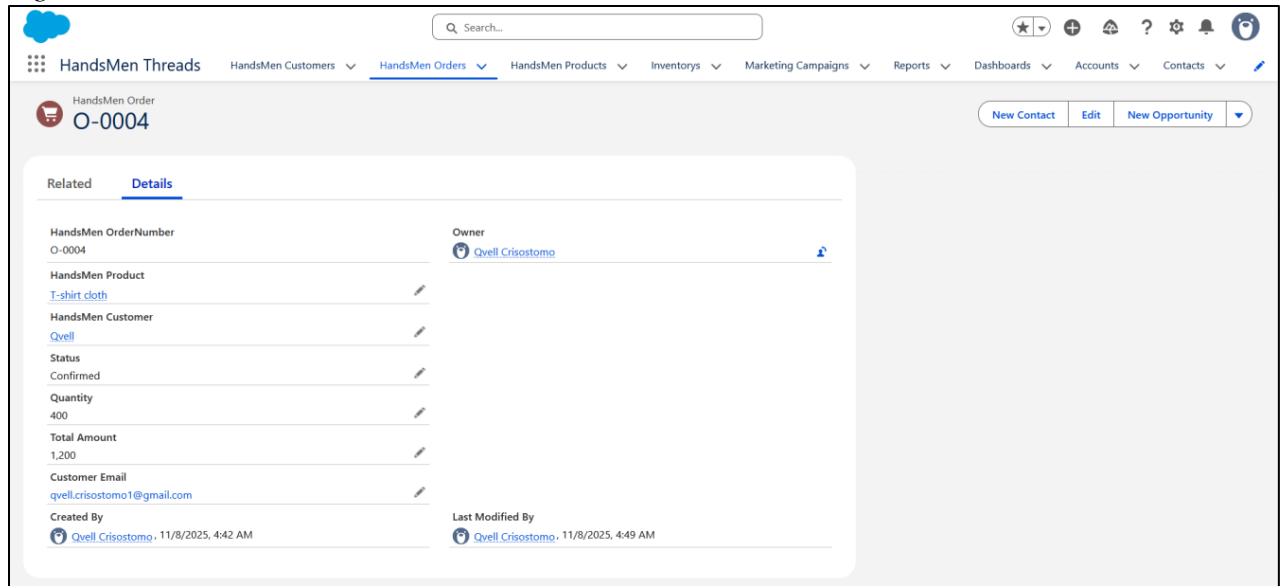


Figure 5: Order Confirmation

Figure 6

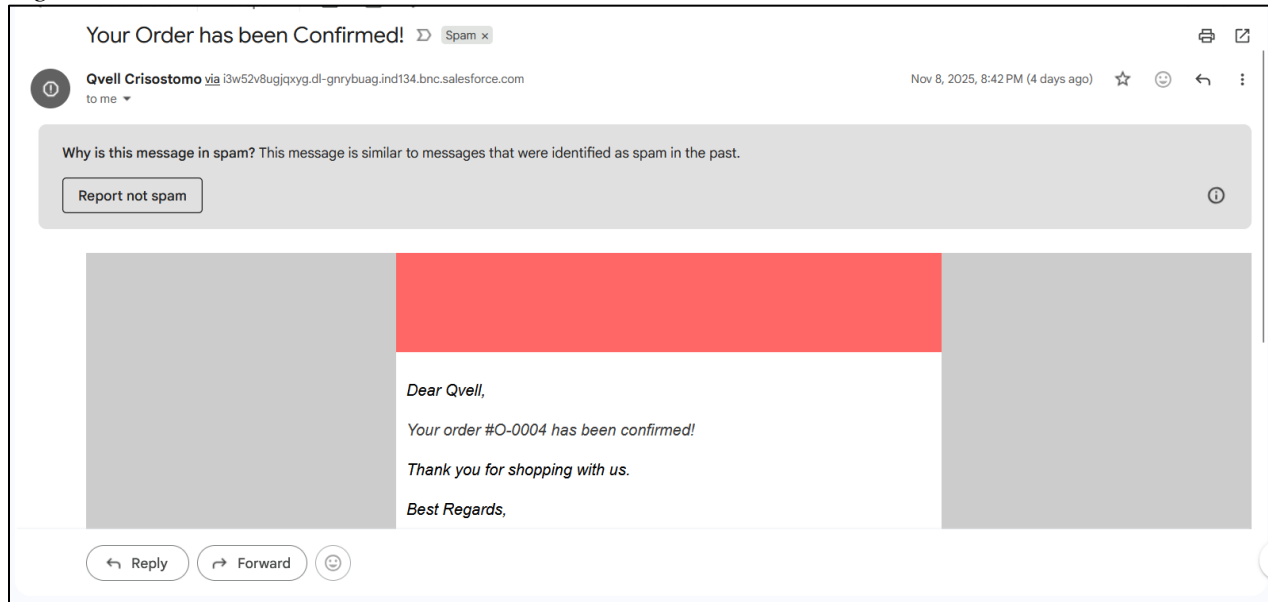


Figure 6: Order Confirmation Email Sent to Customer

Figure 7

The screenshot shows the 'HandsMen Threads' application interface. At the top, there is a navigation bar with a search bar and several menu items: HandsMen Customers, HandsMen Orders, HandsMen Products, **Inventories** (selected), Marketing Campaigns, Reports, Dashboards, Accounts, and Contacts. Below the navigation bar, the main content area displays the 'Inventory' details for 'I -0001'. On the right side of this area, there are buttons for 'New Contact', 'Edit', and 'New Opportunity'. The 'Details' tab is active, showing the following information:

- Inventory Number: I -0001
- HandsMen Product: [T-shirt cloth](#)
- Stock Quantity: 600 (with an edit icon)
- Stock Status: Available
- Warehouse: (with an edit icon)
- Created By: Qvell Crisostomo, 11/8/2025, 3:32 AM
- Last Modified By: Qvell Crisostomo, 11/8/2025, 4:49 AM

Figure 7: Inventory Creation

Figure 8

The screenshot shows an email interface for a 'Low Stock Alert Email'. The email is from 'Qvell Crisostomo' via 'xdd73v1dgck8.dl-gnrybuag.ind134.bnc.salesforce.com' to 'me'. The email is marked as 'Spam'. Below the header, there is a message box asking 'Why is this message in spam? This message is similar to messages that were identified as spam in the past.' with a 'Report not spam' button. The main body of the email contains the following text:

Dear Inventory Manager,
This is to inform you that the stock for the following product is running low:
Product Name: T-shirt cloth
Current Stock Quantity: 4
Please take the necessary steps to restock this item immediately.
Best Regards,
Inventory Monitoring System

At the bottom of the email, there are buttons for 'Reply', 'Forward', and a smiley face icon.

Figure 8: Low Stock Alert

Figure 9

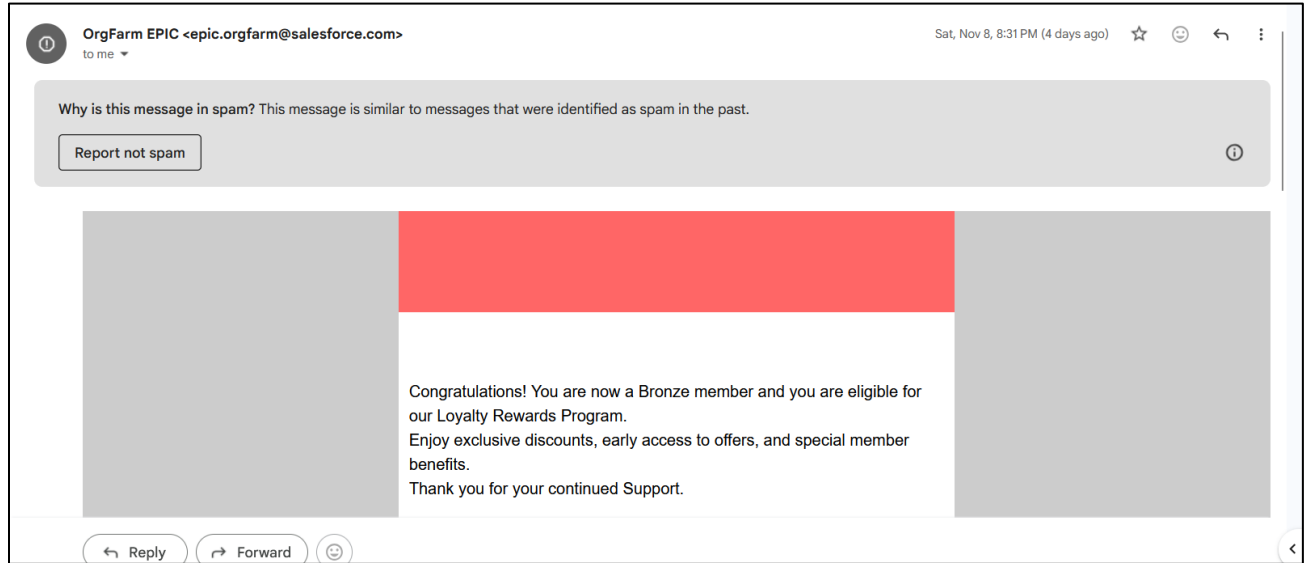


Figure 9: Customer Record Showing Updated Loyalty Status

CONCLUSION

Salesforce CRM solution for *HandsMen Threads* has transformed the way the business manages its daily operations. It streamlines core processes across sales, inventory, and marketing while strengthening customer relationships and ensuring data accuracy.

By using Salesforce's powerful capabilities such as custom objects, automation flows, validation rules, email alerts, and custom Apex logic, we built a fully integrated platform that delivers efficiency and insight. This system provides real time visibility into business performance, supports smarter decision making, and establishes a strong foundation for future growth.

Overall, the *HandsMen Threads* CRM not only simplifies work but also improves productivity, enhances customer satisfaction, and drives long term success.