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## **HANDSMEN THREADS:**

### **ELEVATING THE ART OF SOPHISTICATION IN MEN'S FASHION**

Submitted by:

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## **Project Overview**

HandsMen Threads, a dynamic organization in the fashion industry, has initiated a Salesforce project aimed at transforming its data management processes and enhancing customer relationship management. The project involves the creation of a comprehensive CRM system with a data model designed to store all relevant business information, ensuring a seamless flow of data across the organization. Key features of the system include automated order confirmations to improve customer communication, a dynamic loyalty program that updates customer rewards based on purchase history, proactive stock alerts to prevent inventory shortages, and scheduled bulk order updates to maintain accurate financial and inventory records. By integrating these processes, the CRM addresses critical business needs such as operational efficiency, accurate decision-making, and improved customer engagement.

## **Objectives**

The objectives of this Salesforce CRM project are centered on improving the overall efficiency and effectiveness of HandsMen Threads' business operations. By leveraging Salesforce's robust tools and automation capabilities, the system aims to streamline workflows, enhance customer engagement, and ensure the accuracy and reliability of critical business data.

The objectives of the project are as follows:

1. Maintain accurate and consistent business data through validation rules and user interface controls.
2. Streamline operations with automated order confirmations, proactive stock alerts, and scheduled bulk order updates.

3. Implement a dynamic loyalty program that updates customer rewards based on purchase history.
4. Reduce manual tasks and ensure timely monitoring of inventory and order statuses.
5. Provide reliable and organized data to facilitate strategic business decisions.

## Project Phases

### Phase 1: Requirement Analysis & Planning

- **Understanding Business Requirements:** The CRM addresses manual tracking of inventory, delayed order notifications, and low customer engagement.
- **Defining Project Scope and Objectives:** The system includes custom objects for Customers, Products, Inventory, and Orders; automation for order confirmations, stock alerts, and loyalty updates.
- **Data Model Description:**

Object	Key Fields	Relationships
Handsmen Customer	Customer Name, Email, Phone, Loyalty Status, Total Purchases	Linked to Orders
Handsmen Product	Product Name, SKU, Price, Stock Quantity	Linked to Inventory and Orders
Handsmen Order	OrderNumber, Handsment Product, Handsmen Customer, Status, Quantity,	Linked to Customer, Product, and Inventory

	Total Amount, Customer Email	
Inventory	Handsmen Product, Stock Quantity, Warehouse	Linked to Product and Orders
Marketing Campaigns		

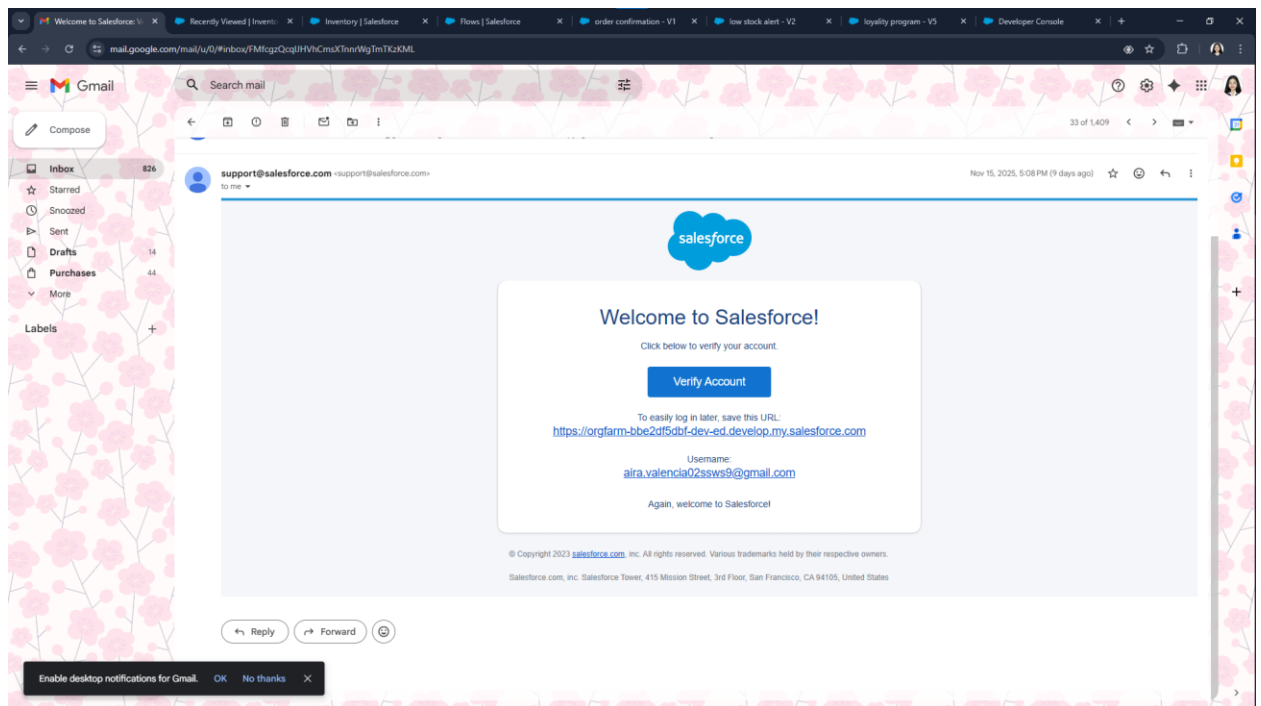
- **Stakeholders Mapping:** Inventory Manager, Sales Team, Admin, IT Support.
- **Execution Roadmap:** Timeline covering Planning → Development → Testing → Deployment.

## Phase 2: Salesforce Development - Backend & Configurations

During this phase, the Salesforce CRM system was developed to meet the business requirements of HandsMen Threads. The development focused on customizing objects, fields, validation rules, automation, and backend logic to ensure smooth operations, accurate data, and improved customer engagement.

### 1. Environment Setup & DevOps Workflow

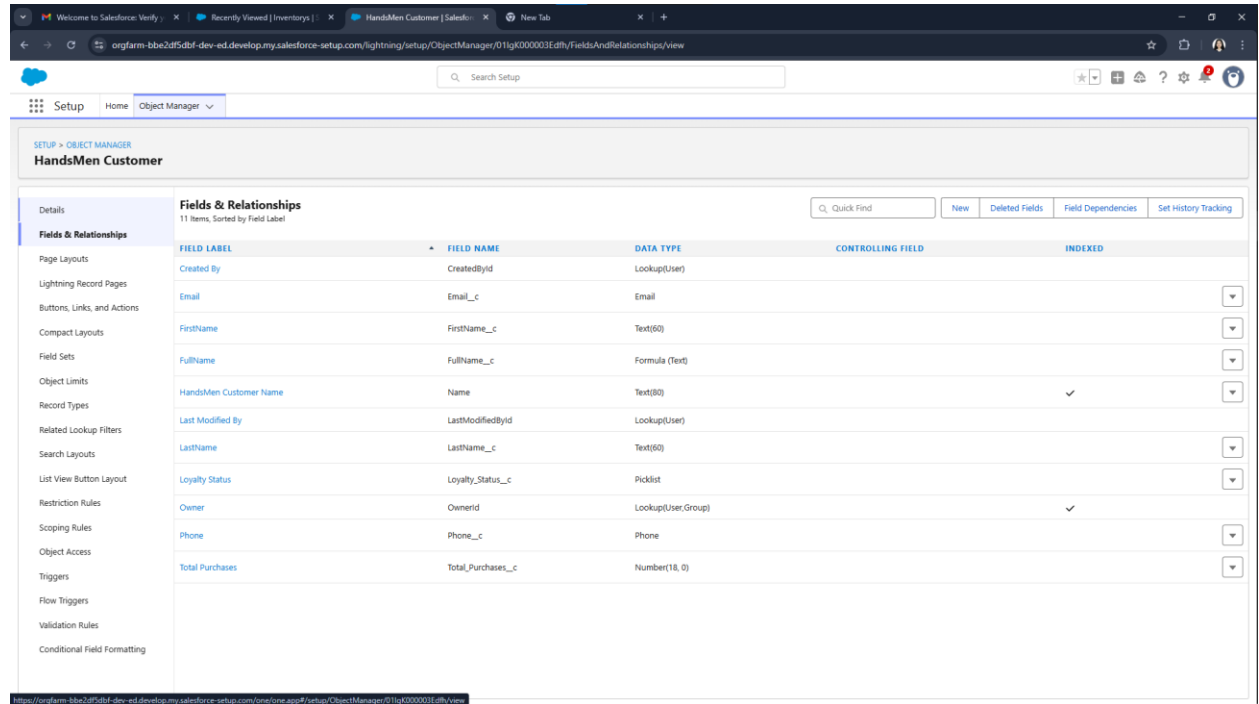
Salesforce Developer Org was used for development and testing. Sandbox environment prepared for configuration and testing before production deployment. Change sets and deployment plan established to move customizations safely to production.



## 2. Custom Objects and Fields

**Figure 1**

*Object Manager: Handsmen Customer*



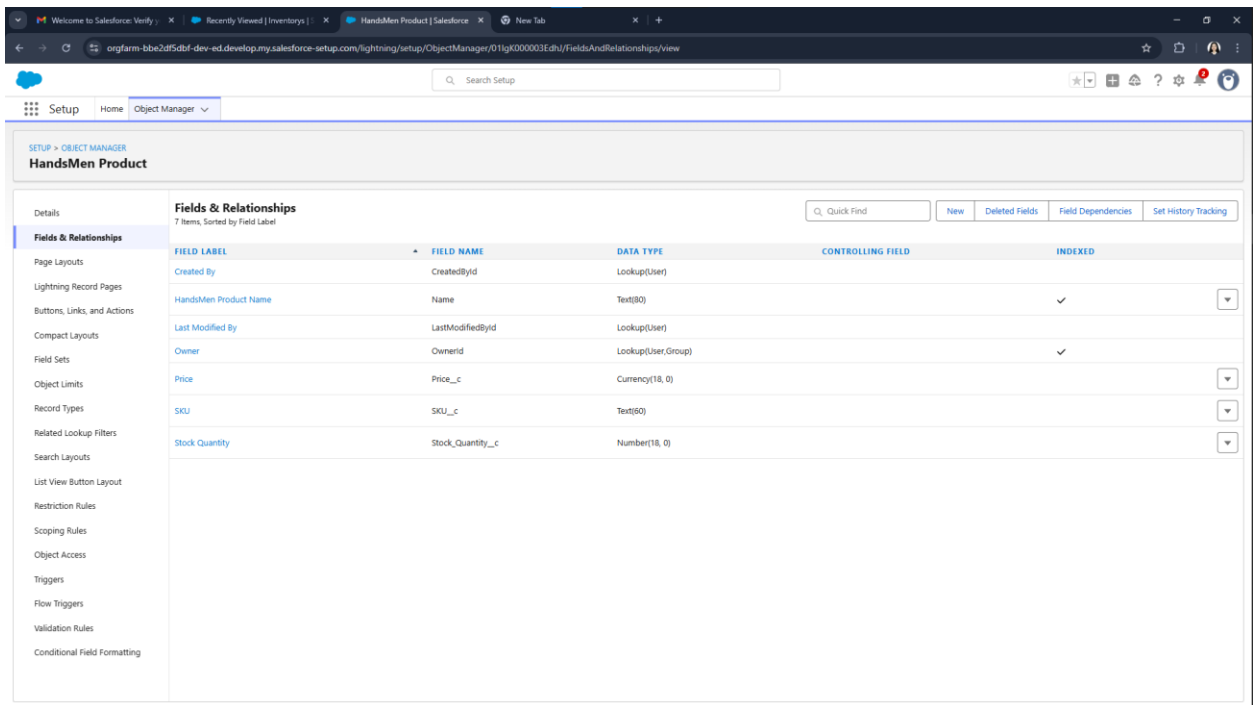
The screenshot shows the Salesforce Object Manager interface for the 'HandsMen Customer' object. The left sidebar contains a navigation menu with options like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, Restriction Rules, Scoping Rules, Object Access, Triggers, Flow Triggers, Validation Rules, and Conditional Field Formatting. The main area displays the 'Fields & Relationships' section, which lists 11 fields. The fields are: Created By (Lookup(User)), Email (Email), FirstName (Text(50)), FullName (Formula (Text)), HandsMen Customer Name (Text(50), Indexed), Last Modified By (Lookup(User)), LastName (Text(50)), Loyalty Status (Picklist), Owner (Lookup(User/Group), Indexed), Phone (Phone), and Total Purchases (Number(18, 0)).

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Email	Email_c	Email		
FirstName	FirstName_c	Text(50)		
FullName	FullName_c	Formula (Text)		
HandsMen Customer Name	Name	Text(50)		✓
Last Modified By	LastModifiedById	Lookup(User)		
LastName	LastName_c	Text(50)		
Loyalty Status	Loyalty_Status_c	Picklist		
Owner	OwnerId	Lookup(User/Group)		✓
Phone	Phone_c	Phone		
Total Purchases	Total_Purchases_c	Number(18, 0)		

The HandsMen Customer object stores all relevant customer information, including personal details, contact information, total purchase, and loyalty status. This object is linked to Orders to track transactions and supports the dynamic loyalty program by updating rewards based on total purchases. Key Fields: Name, Email, Total Purchases, Loyalty Status

**Figure 2**

*Object Manager: Handsmen Product*



The screenshot shows the Salesforce Object Manager interface for the 'HandsMen Product' object. The left sidebar contains a navigation menu with options like Details, Fields & Relationships, Page Layouts, and others. The main area displays the 'Fields & Relationships' section, which lists 7 items sorted by Field Label. The table below shows the details of these fields.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
HandsMen Product Name	Name	Text(80)		✓
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User, Group)		✓
Price	Price_c	Currency(18, 0)		
SKU	SKU__c	Text(80)		
Stock Quantity	Stock_Quantity__c	Number(18, 0)		

The HandsMen Product object contains details of all products available in the store. It tracks product names, prices, SKU, and stock quantity. Each product is linked to Inventory for stock management and Orders to monitor sales. Key Fields: Product Name, Price, SKU, Stock Quantity.

**Figure 3**

*Object Manager: Handsmen Order*

SETUP > OBJECT MANAGER

**HandsMen Order**

Details

**Fields & Relationships**

10 Items, Sorted by Field Label

Quick Find New Deleted Fields Field Dependencies Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Customer Email	Customer_Email_c	Email		
HandsMen Customer	HandsMen_Customer_c	Lookup(HandsMen Customer)		✓
HandsMen OrderNumber	Name	Auto Number		✓
HandsMen Product	HandsMen_Product_c	Lookup(HandsMen Product)		✓
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User Group)		✓
Quantity	Quantity_c	Number(18, 0)		
Status	Status_c	Picklist		
Total Amount	Total_Amount_c	Number(18, 0)		

<https://orgfarm-bbe2df5dbf-dev-ed.develop.my.salesforce-setup.com/one/one-app#/setup/ObjectManager/01gK000003Edwv/FieldsAndRelationships/view>

The HandsMen Order object records all customer orders, including order number, customer name, ordered products, quantity, total amount, and order status. This object integrates with Flows and Apex triggers to automatically calculate total amounts and trigger order confirmation emails. Key Fields: Order Number, Customer, Product, Quantity, Total Amount, Status.



**Figure 4**

*Object Manager: Inventory*

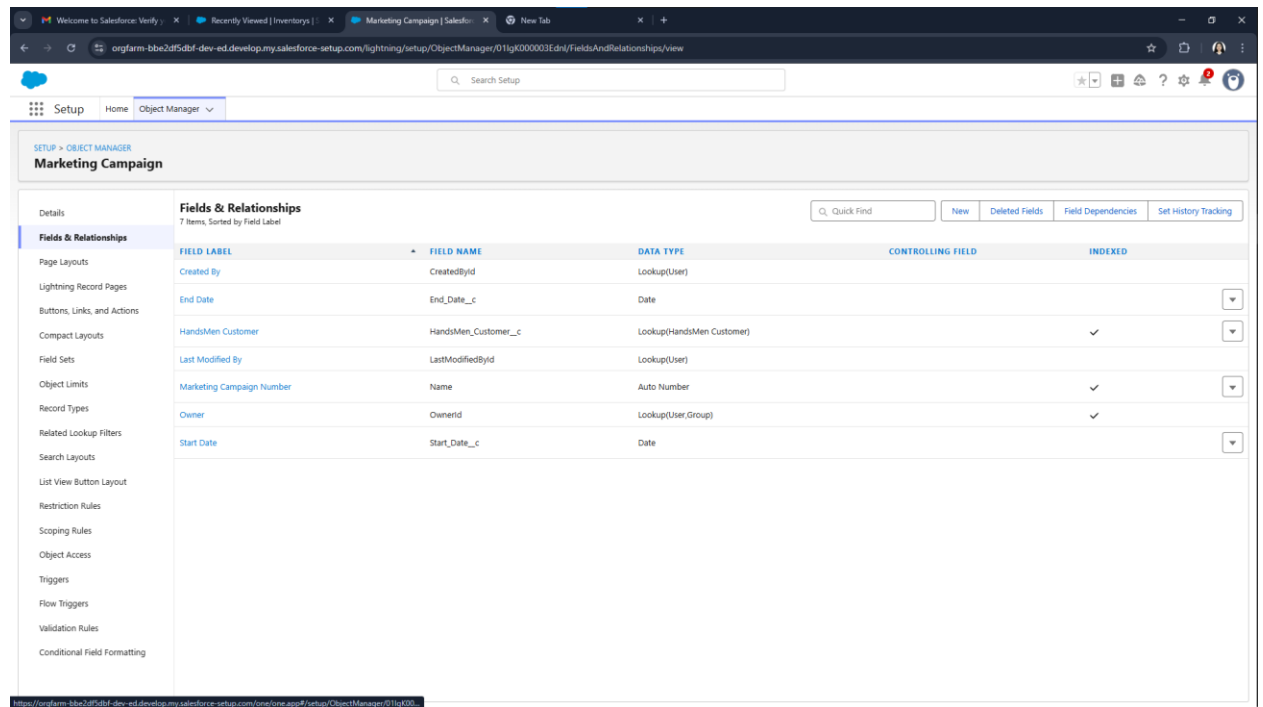
The screenshot displays the Salesforce Object Manager interface for the 'Inventory' object. The left sidebar contains a navigation menu with options like Details, Fields & Relationships, Page Layouts, and others. The main area is titled 'Fields & Relationships' and shows a table of 7 items. The table has columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed. The items listed are Created By, HandsMen Product, Inventory Number, Last Modified By, Stock Quantity, Stock Status, and Warehouse.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
HandsMen Product	HandsMen_Product__c	Master-Detail(HandsMen Product)		✓
Inventory Number	Name	Auto Number		✓
Last Modified By	LastModifiedById	Lookup(User)		
Stock Quantity	Stock_Quantity__c	Number(18, 0)		
Stock Status	Stock_Status__c	Formula (Text)		
Warehouse	Warehouse__c	Text(50)		

The Inventory object manages the stock levels of all products. It monitors stock quantities, generates low-stock alerts via automation, and ensures the availability of products for fulfilling orders. Each inventory record is linked to a HandsMen Product. Key Fields: Inventory number, Product, Stock Quantity, Stock Status.

**Figure 5**

## *Object Manager: Marketing Campaigns*



The screenshot shows the Salesforce Object Manager for the Marketing Campaign object. The left sidebar contains a navigation menu with options: Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, Restriction Rules, Scoping Rules, Object Access, Triggers, Flow Triggers, Validation Rules, and Conditional Field Formatting. The main content area is titled 'Marketing Campaign' and shows 'Fields & Relationships' with 7 items, sorted by Field Label. A table lists the fields with columns: FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
End Date	End_Date__c	Date		
HandsMen Customer	HandsMen_Customer__c	Lookup(HandsMen Customer)		✓
Last Modified By	LastModifiedById	Lookup(User)		
Marketing Campaign Number	Name	Auto Number		✓
Owner	OwnerId	Lookup(User,Group)		✓
Start Date	Start_Date__c	Date		

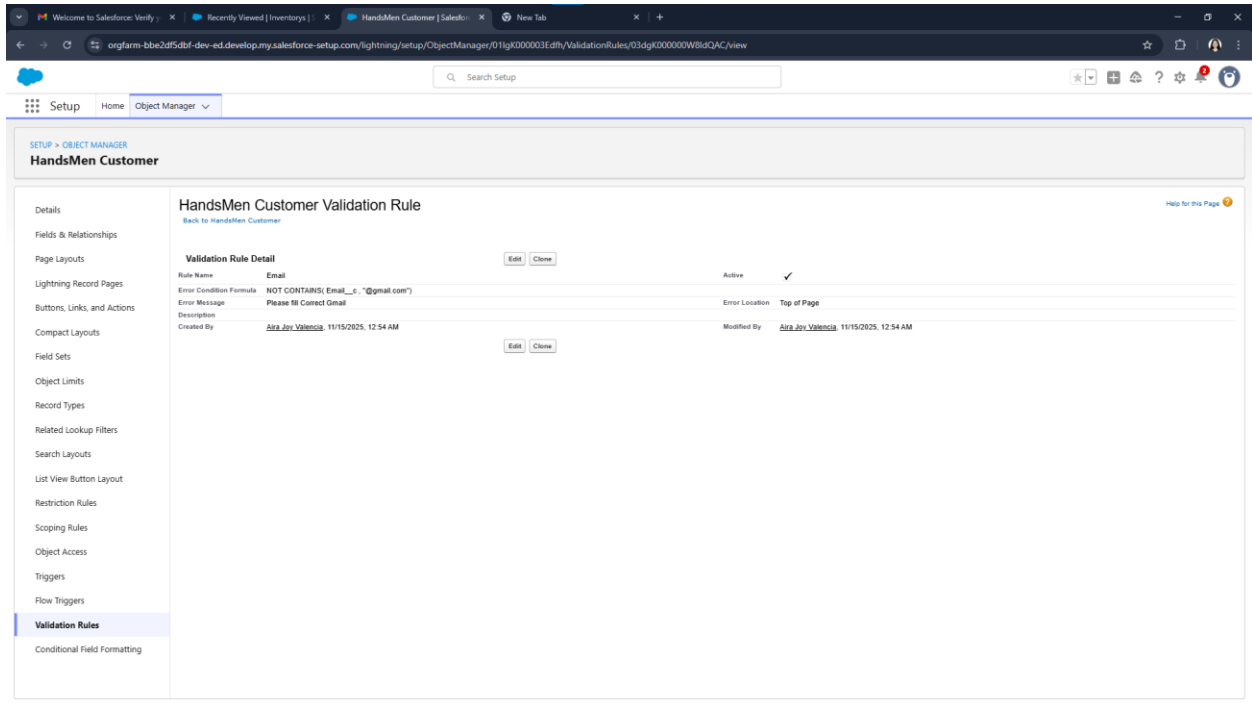
The Marketing Campaigns object tracks promotional activities and campaigns targeted at customers. It stores customer name, marketing campaign number, and start date.

Key Fields: Customer Name, Start Date, End Date.

### 3. Validation Rules

Figure 6

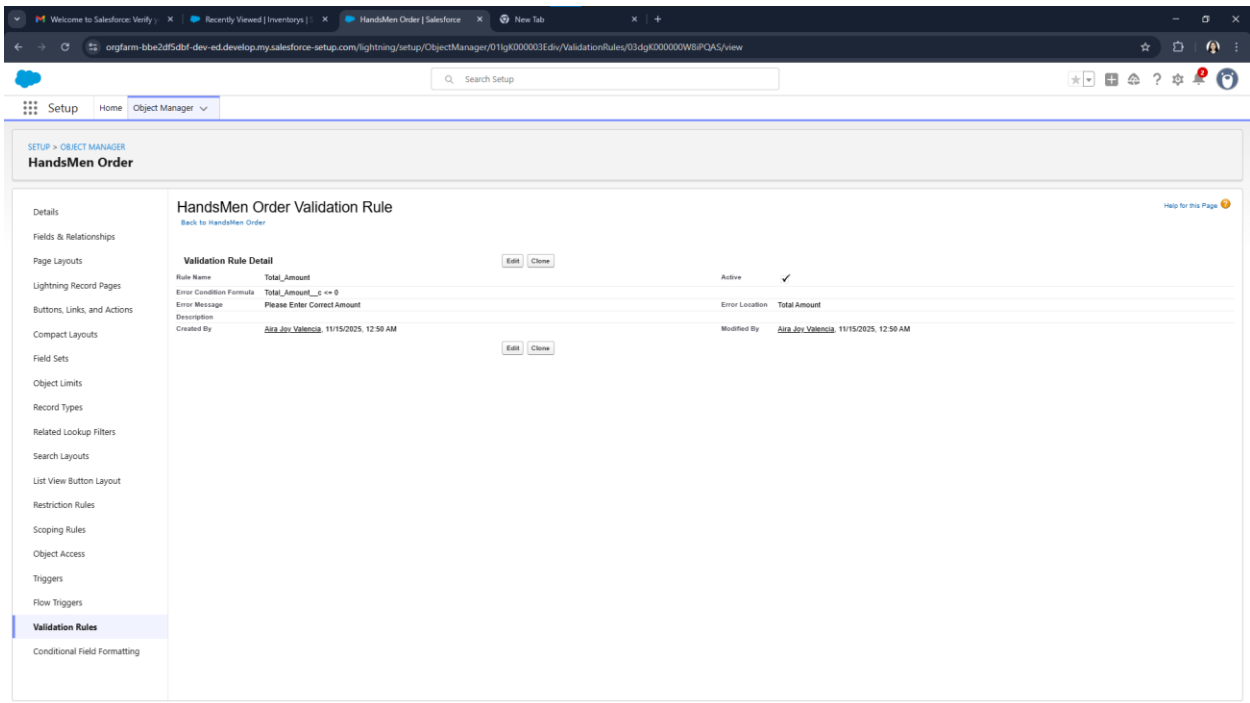
#### *Customer Email Validation Rule*



Ensures that the email address entered for a customer follows a valid email format. This prevents incorrect or incomplete email entries, enabling reliable communication with customers.

**Figure 7**

### *Handsmen Order Validation Rule*

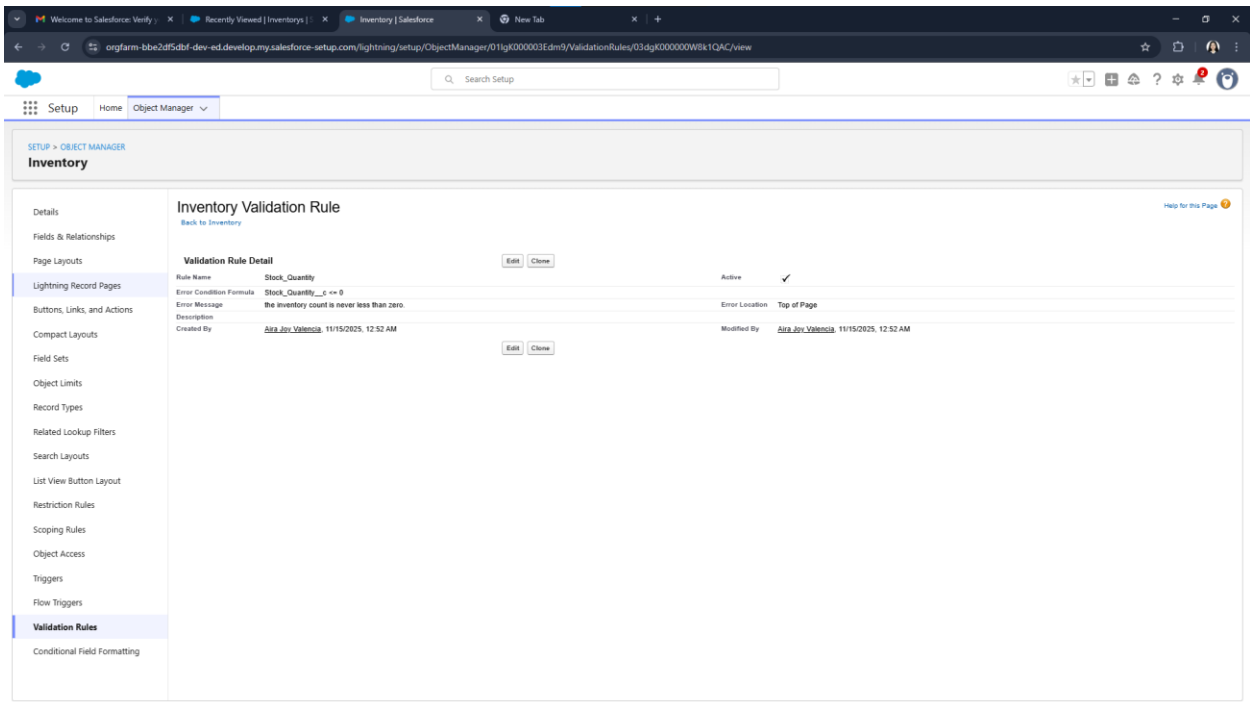


Ensures that the Total Amount field in an order is correctly calculated and not left blank.

This guarantees accurate financial data for orders and prevents manual entry errors.

**Figure 8**

### *Inventory Validation Rule*

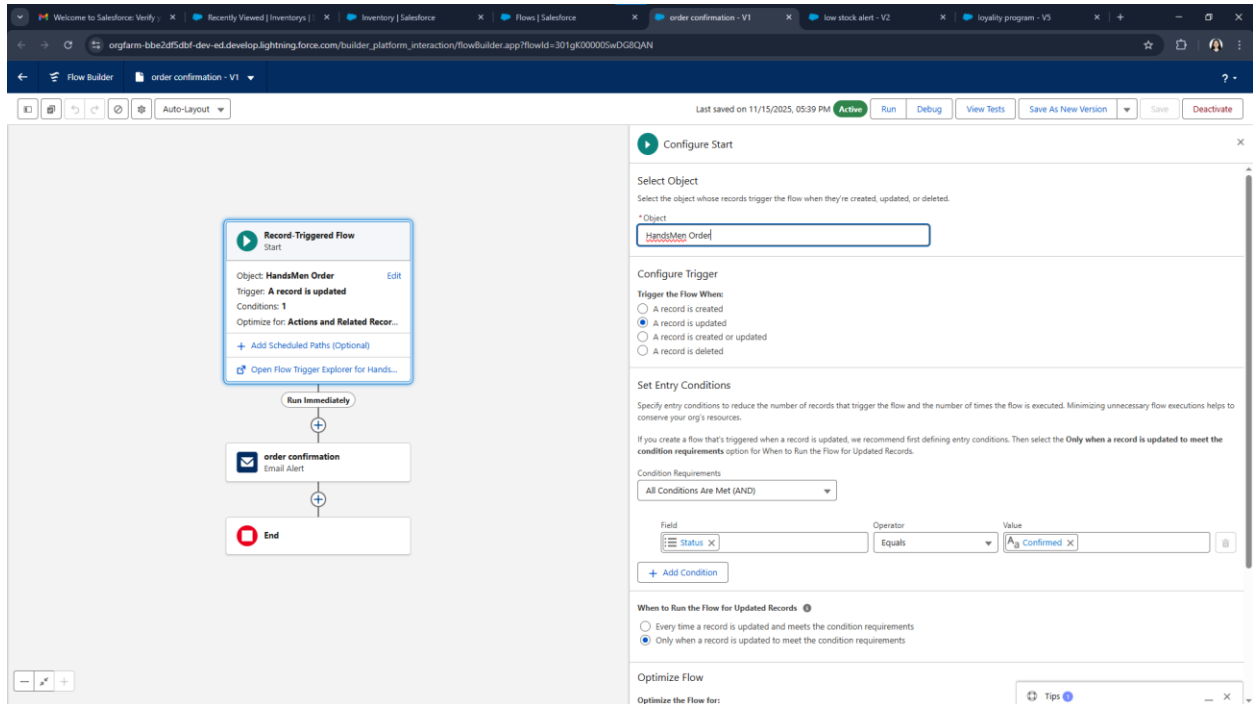


Prevents the Stock Quantity from being set to a negative value. This ensures accurate inventory tracking and avoids discrepancies in stock management.

## 4. Automation - Flows and Process Builder

Figure 9

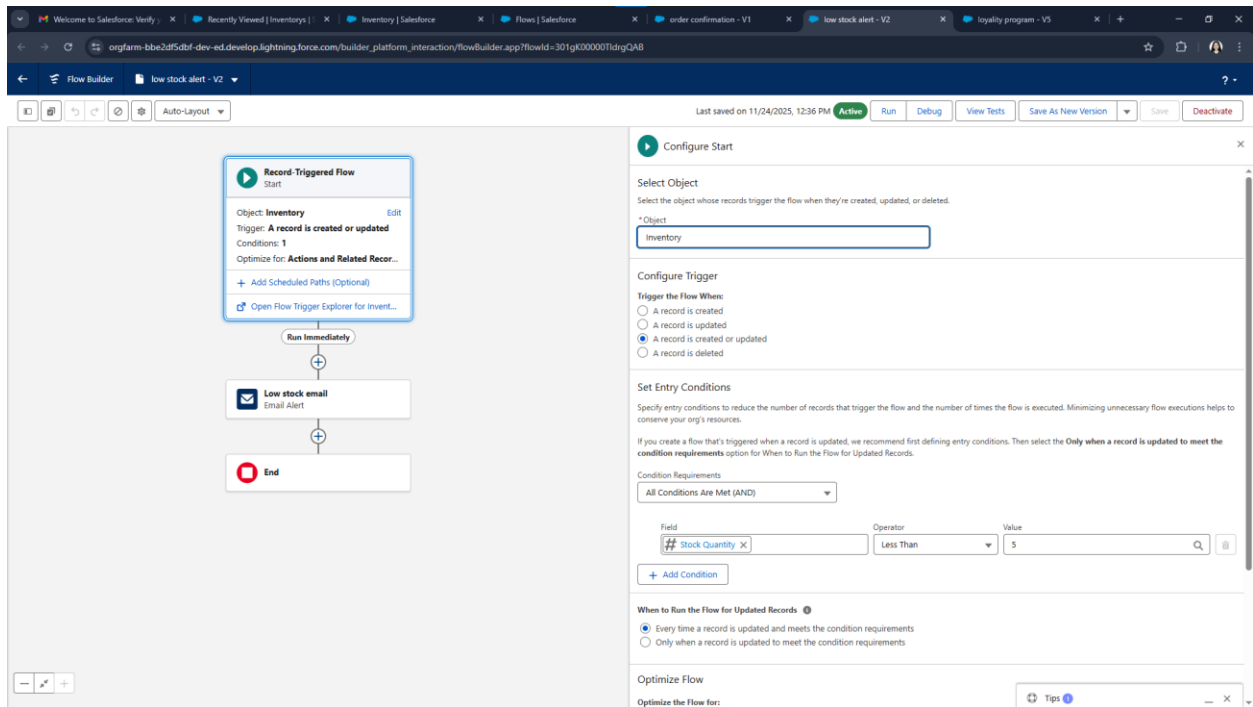
### *Order Confirmation Email Flow*



Automatically sends an email to the customer once a HandsMen Order is confirmed. This flow improves customer engagement by keeping them informed about their purchase status.

**Figure 10**

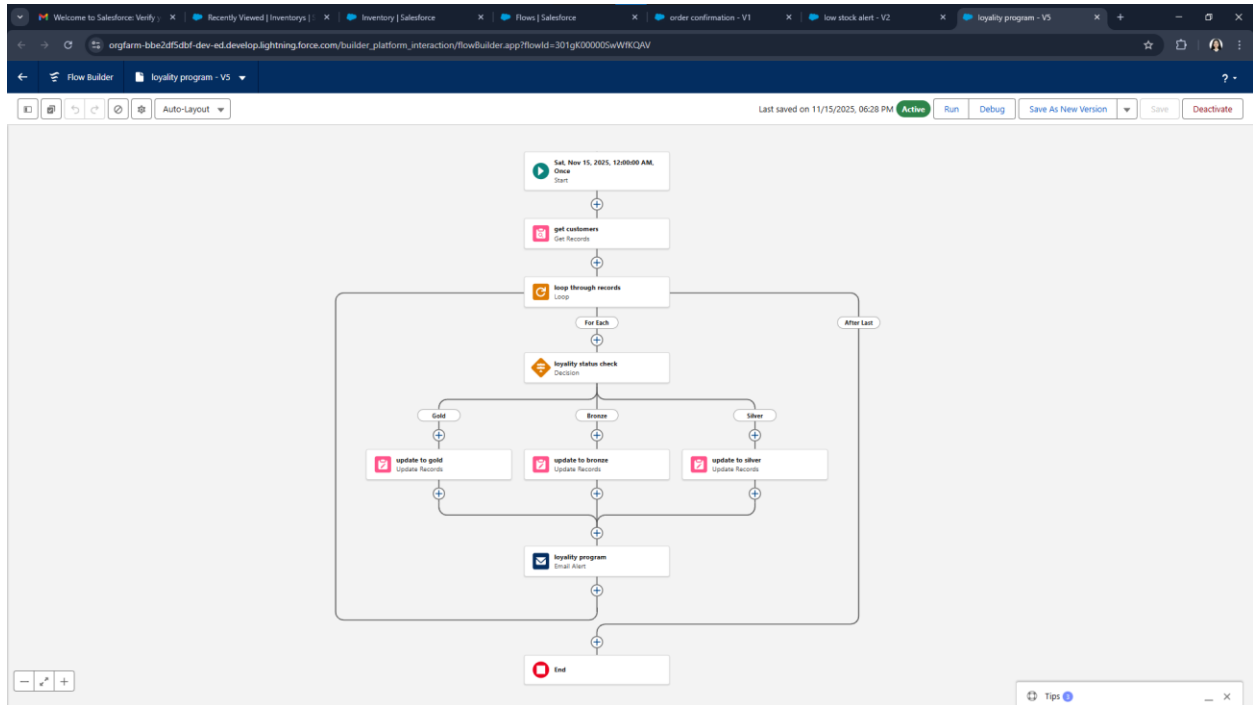
*Low Stock Alert Email – Record Triggered Flow*



Triggers an email notification to the inventory team when the stock quantity of a product falls below a set threshold (e.g., 5 units). This ensures timely restocking and prevents stockouts.

**Figure 11**

*Loyalty Program Email Flow*



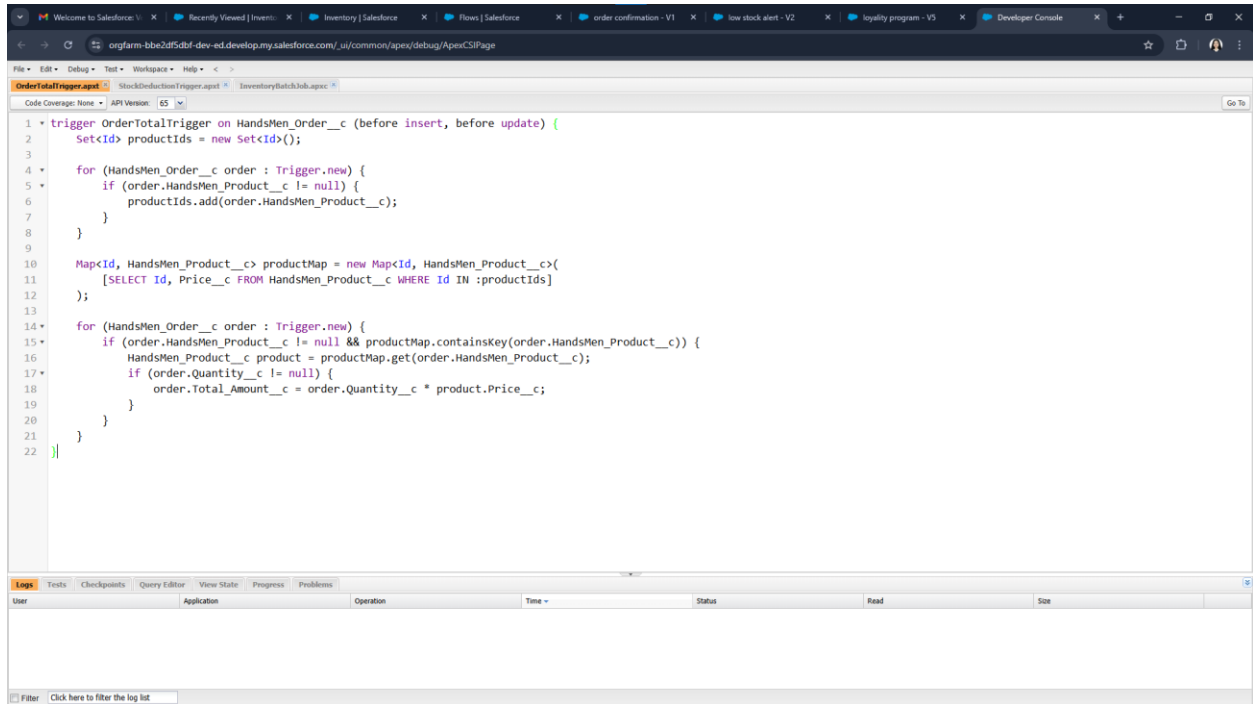
Automatically sends a notification to the customer when their loyalty status changes based on accumulated purchases. This flow promotes repeat business and rewards loyal customers.



## 5. Apex Classes and Triggers

Figure 12

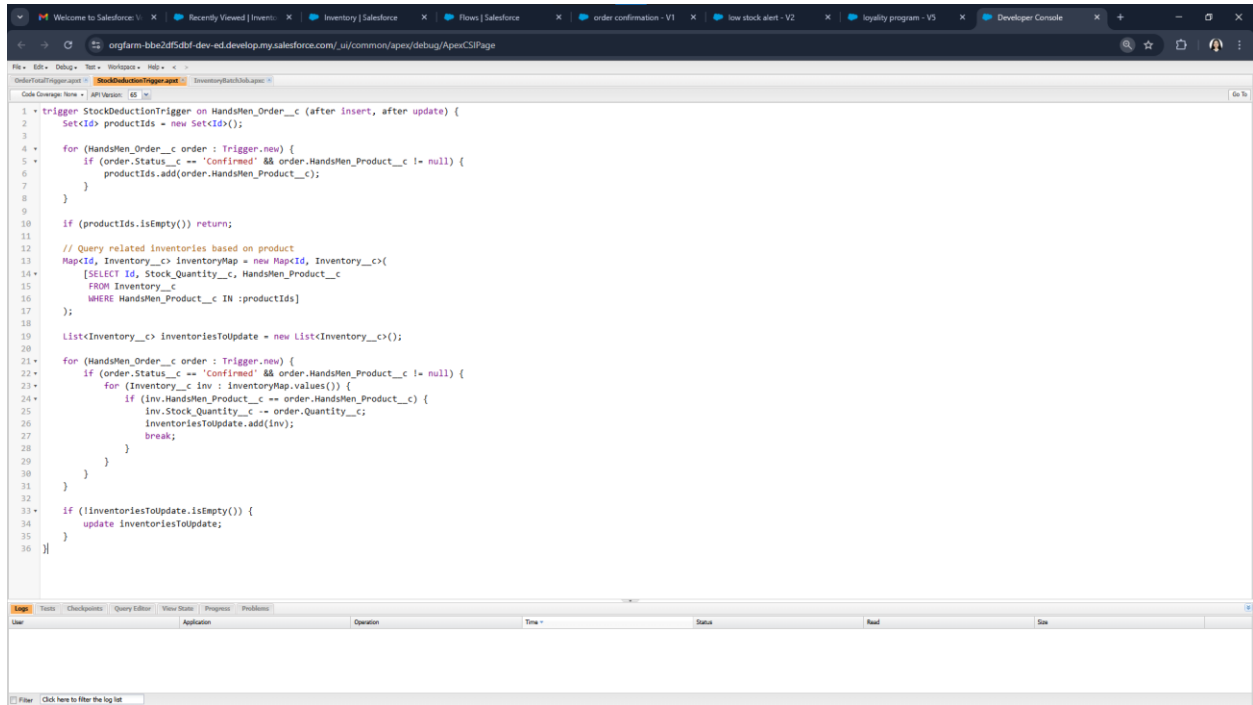
### *Order Total Trigger*



This trigger calculates the Total Amount of a HandsMen Order automatically whenever a new order is created or an existing order is updated. It multiplies the quantity of the ordered product by its price, ensuring accurate financial data without manual calculation.

**Figure 13**

## *Stock Deduction Trigger*



```
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    List<Inventory__c> inventoriesToUpdate = new List<Inventory__c>();
19
20    for (HandsMen_Order__c order : Trigger.new) {
21        if (order.Status__c == 'Confirmed' && order.HandsMen_Product__c != null) {
22            for (Inventory__c inv : inventoryMap.values()) {
23                if (inv.HandsMen_Product__c == order.HandsMen_Product__c) {
24                    inv.Stock_Quantity__c -= order.Quantity__c;
25                    inventoriesToUpdate.add(inv);
26                    break;
27                }
28            }
29        }
30    }
31
32    if (!inventoriesToUpdate.isEmpty()) {
33        update inventoriesToUpdate;
34    }
35 }
36 }
```

The screenshot shows the Salesforce Developer Console with the 'StockDeductionTrigger.apex' file open. The code is a trigger that runs after an order is inserted or updated. It identifies confirmed orders with a product ID, queries the inventory for those products, and then updates the stock quantity by subtracting the order quantity. The console interface includes tabs for 'Log', 'Tests', 'Checkpoints', 'Query Editor', 'View State', 'Progress', and 'Problems'. At the bottom, there is a 'Log' table with columns for User, Application, Operation, Time, Status, Read, and Size, and a 'Filter' button.

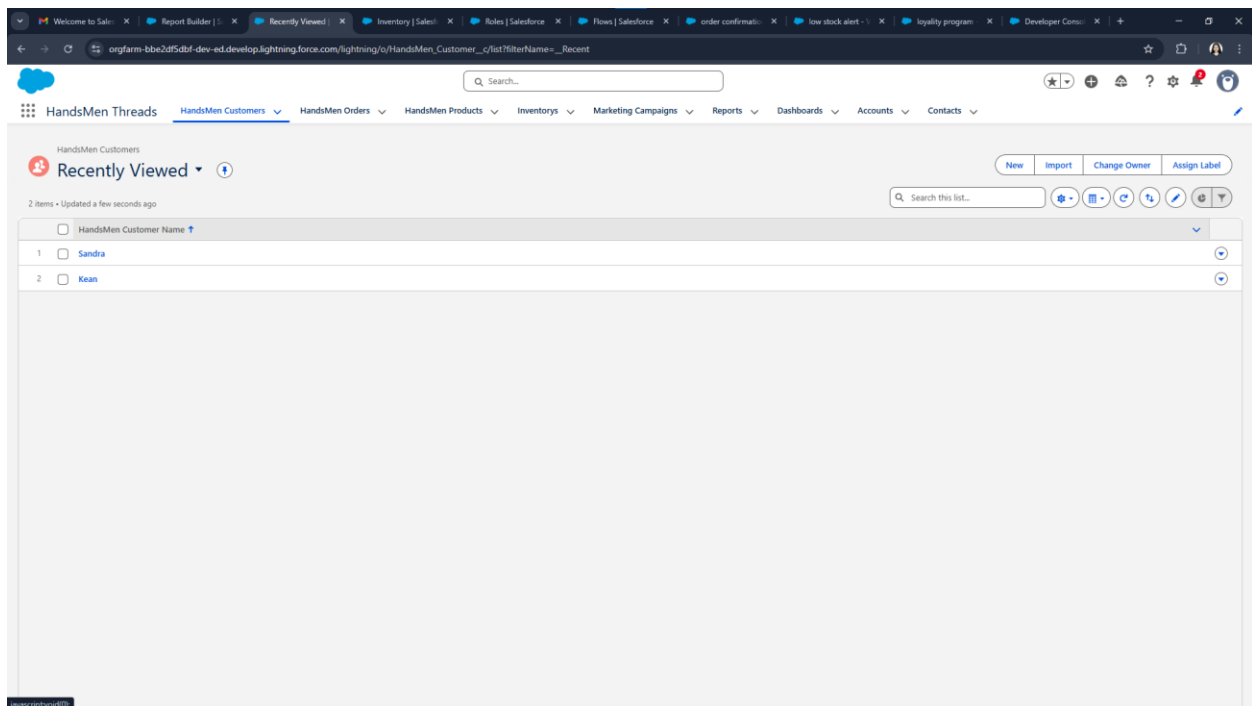
This trigger automatically deducts the quantity of products from the Inventory whenever an order is confirmed. It updates the related inventory records in real-time to reflect the current stock, preventing overselling and supporting accurate stock management.

## Phase 3: UI/UX Development & Customization

This phase focused on creating a user-friendly interface for HandsMen Threads' Salesforce CRM, ensuring that users can efficiently interact with records, access key information, and perform daily operations smoothly. The customization included Lightning App setup, page layouts, dynamic forms, reports, dashboards, and user management.

### 1. Lightning App Setup

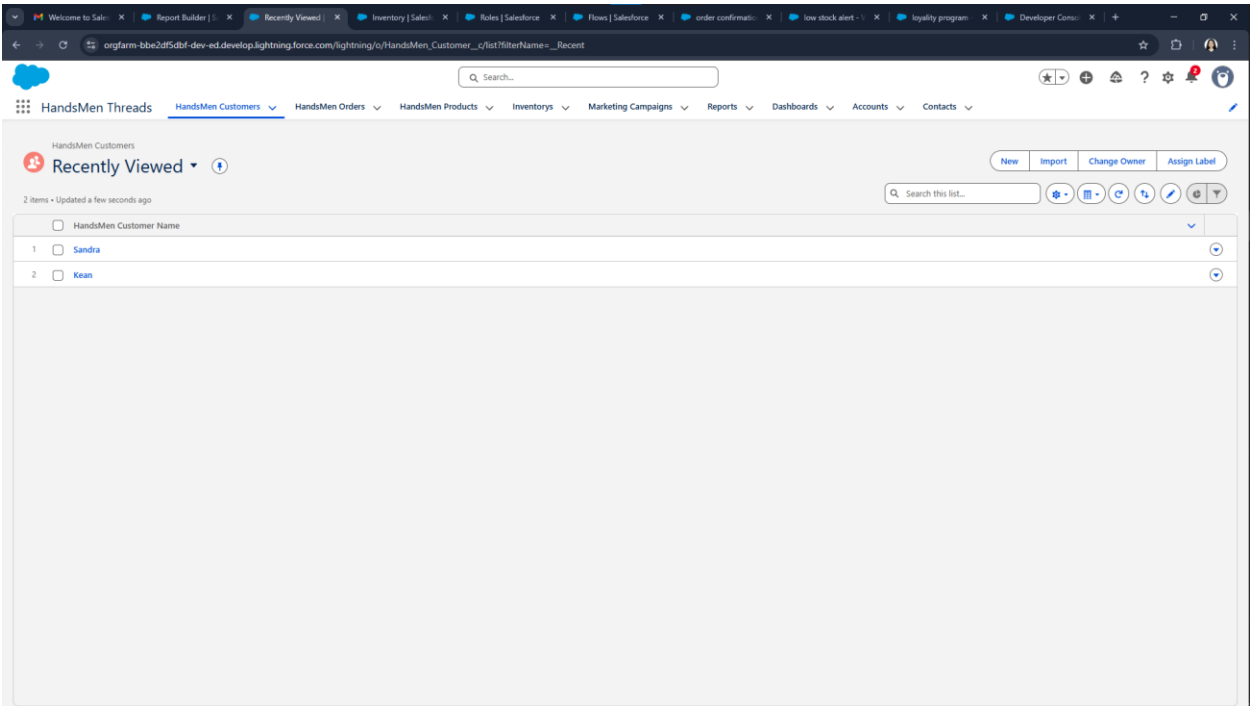
A custom HandsMen Threads App was created in Salesforce App Manager to centralize all objects, automation, and dashboards. The app provides quick access to Customers, Products, Orders, Inventory, and Marketing Campaigns in a single interface.



2. Page Layouts & Dynamic Forms

Figure 14

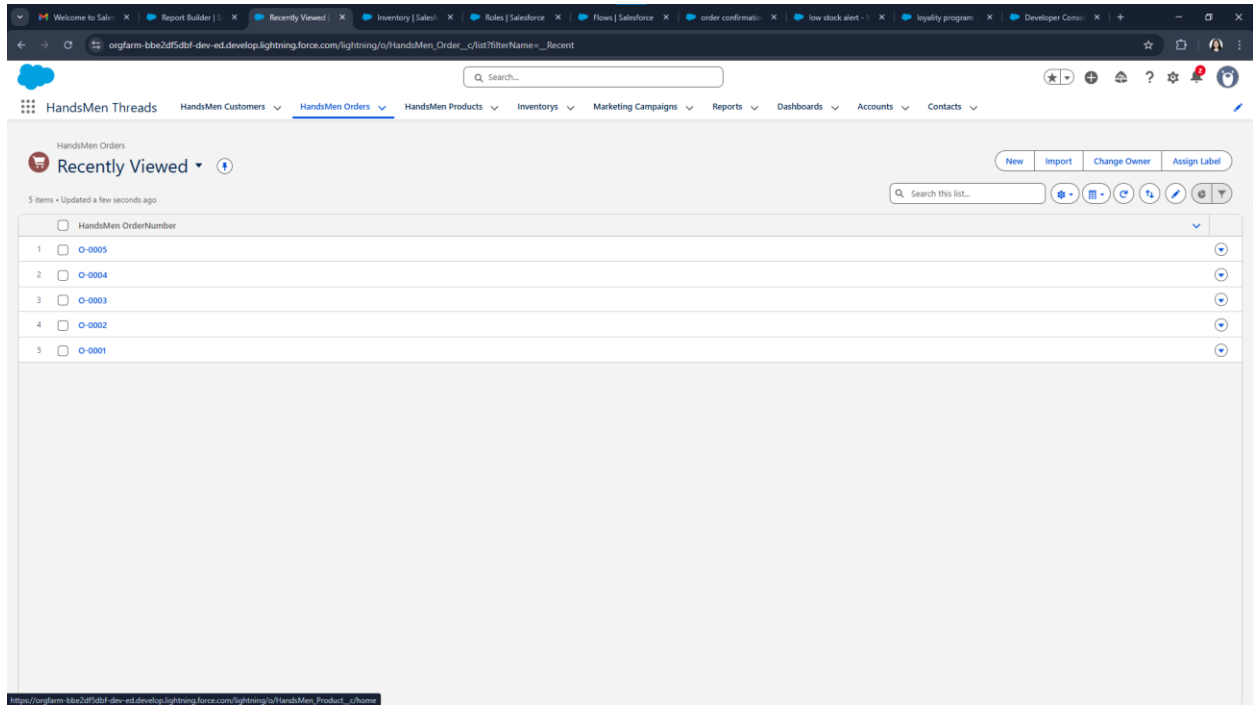
*Handsmen Customer Page*



Includes all relevant customer information, including contact details, total purchases, and loyalty status. The page layout is designed to provide quick access to customer records and related orders, supporting personalized engagement and loyalty program management.

**Figure 15**

*Handsmen Orders Page*



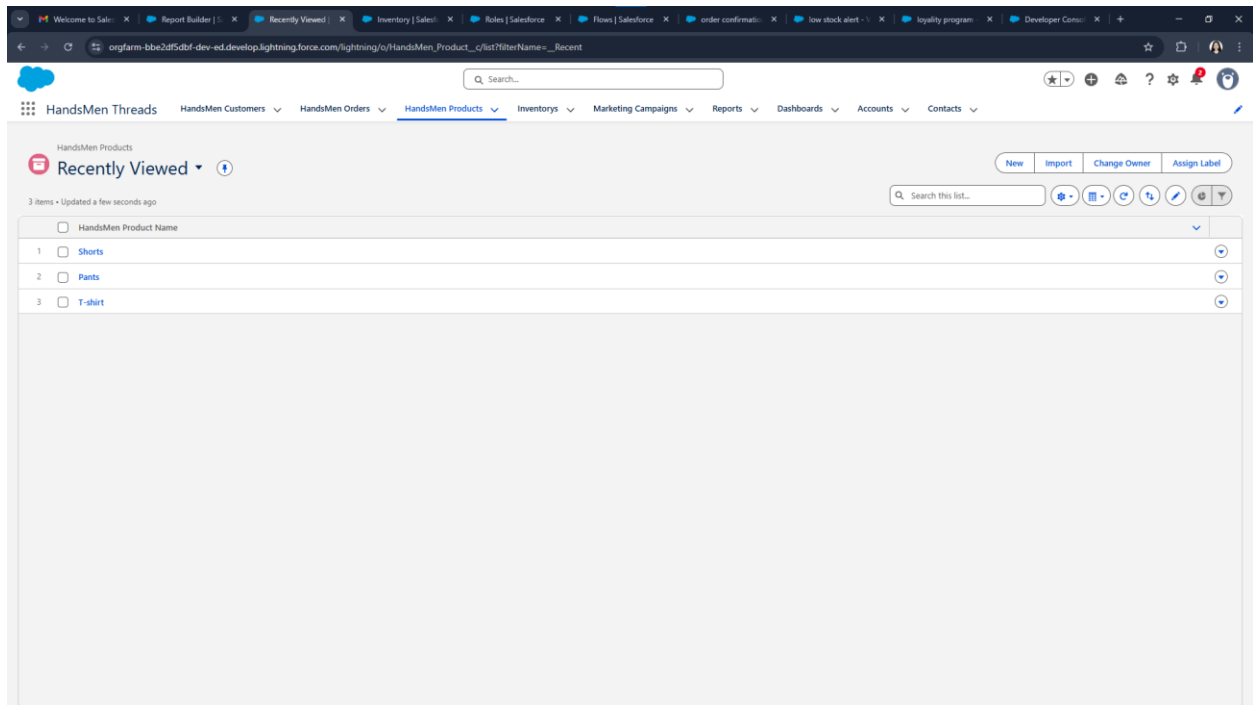
The screenshot displays the Salesforce interface for the 'Handsmen Orders' page. The page title is 'Handsmen Orders' with a 'Recently Viewed' dropdown. Below the title, it indicates '5 items • Updated a few seconds ago'. A search bar labeled 'Search this list...' is present. The table below lists 5 order records, each with a checkbox, a sequence number, and an order ID.

	Handsmen OrderNumber	
1	<a href="#">O-0005</a>	
2	<a href="#">O-0004</a>	
3	<a href="#">O-0003</a>	
4	<a href="#">O-0002</a>	
5	<a href="#">O-0001</a>	

Shows all order records with key fields such as order number, customer, product, quantity, total amount, and status. The layout list unique keys of all the orders of customers.

**Figure 16**

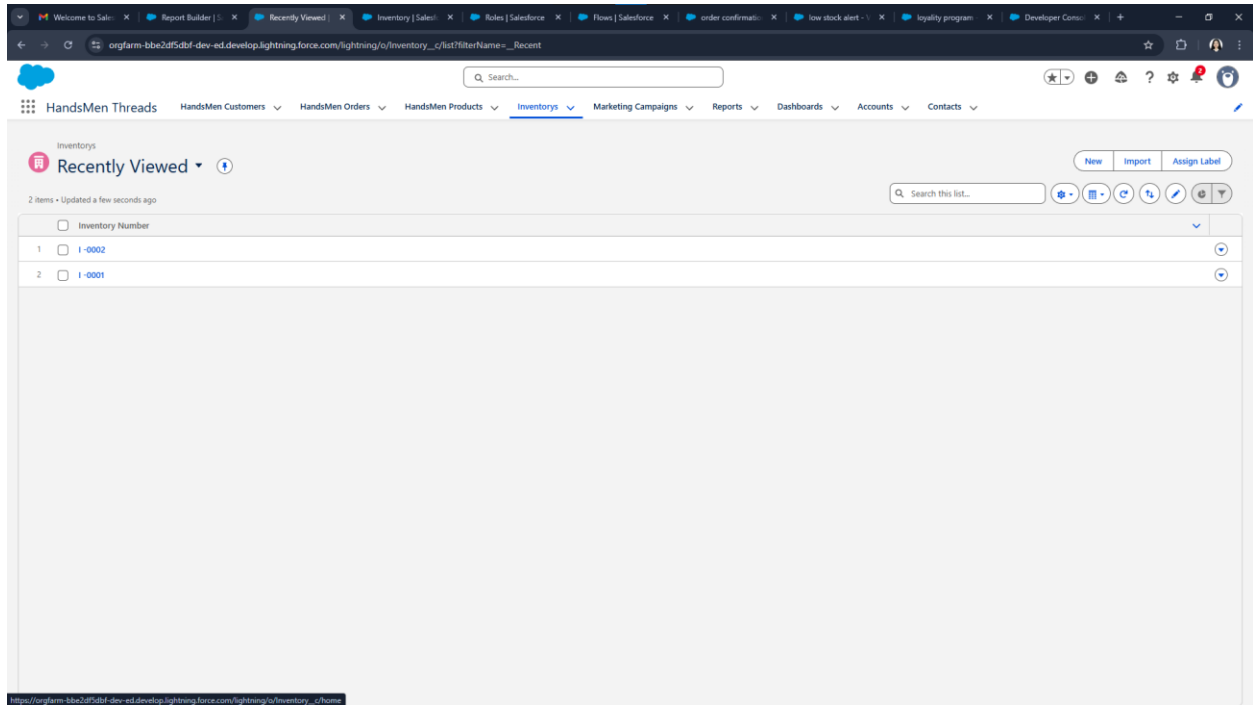
*Handsmen Products Page*



Displays product name including price and others. The page links to inventory records and orders, enabling quick updates to product details and supporting accurate stock management.

**Figure 17**

*Inventory Page*



Shows the stock levels of all products along with last updated information. This page is integrated with low-stock alerts and supports timely restocking to ensure product availability for orders.

## **Phase 4: Data Migrating Testing and Security**

**Unit Testing:** The functionality of Apex classes and triggers was verified.

For example: Order Total Trigger: Automatically calculates the total amount when creating or updating orders.

Stock Deduction Trigger: Automatically reduces inventory when an order is confirmed.

**Flow Testing:** All automated flows - Order Confirmation Email, Low-Stock Alert, and Loyalty Program Email - were tested through the system by creating sample records, as demonstrated in the video.

Record Validation: Validation rules for Customer Email, Inventory Stock, and Order Total were checked in real-time during the demo, showing that invalid entries are blocked.

*Note: Testing results are visible in the project demo video, which validates the correctness of triggers, flows, and validation rules.*

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

The final phase of the HandsMen Threads Salesforce CRM project focused on deploying the system, ensuring proper documentation, and establishing strategies for ongoing maintenance. The CRM was developed and tested in a Salesforce Developer Org, with deployment to production planned via Change Sets or other Salesforce deployment tools to ensure a smooth transition without disrupting business operations. All custom objects, fields, validation rules, automation flows, and Apex triggers have been documented, with accompanying screenshots to guide future administrators. Testing of flows, triggers, and validation rules is referenced in the project demo



video, providing visual proof of correct functionality. For system maintenance, administrators can monitor key processes such as orders, inventory levels, and loyalty program updates, review logs, and validate automation. The CRM is designed to be scalable, with potential future enhancements including the creation of reports and dashboards for analytics, integration of Lightning Web Components for interactive interfaces, automated data import scripts, and advanced security auditing. Overall, this phase ensures the CRM is ready for live operations, maintains data integrity, and supports improved customer engagement and operational efficiency.

## **Conclusion**

The HandsMen Threads Salesforce CRM project successfully delivers a customized and scalable solution designed to enhance the company's operational efficiency and customer engagement. Through the development of an automated business processes, and secure user management, the system now supports accurate order processing, real-time inventory updates, loyalty program automation, and improved communication through email notifications. The implementation of validation rules, Apex triggers, and record-triggered flows ensures data integrity at every stage of the workflow.

This CRM provides significant business value by streamlining key processes—such as order confirmation, stock monitoring, and customer tracking—reducing manual work and minimizing the possibility of errors. The platform is built with flexibility in mind, enabling administrators to maintain and expand the system as business requirements evolve. With a documented architecture, clear process flows, and comprehensive testing demonstrated through the project video, this system lays a solid foundation for future enhancements, including advanced

analytics through dashboards, integration of Lightning Web Components, and automated data migration.

Overall, the project demonstrates how Salesforce can be effectively utilized to support business growth, strengthen customer relationships, and modernize internal operations at HandsMen Threads.

### **Future Enhancements**

While the current Salesforce CRM implementation provides a solid foundation for managing customers, orders, inventory, and automated communication, several enhancements can further strengthen the system's capabilities and scalability. Future improvements may include the development of Reports and Dashboards to present real-time insights on sales performance, inventory status, and customer engagement metrics. Interactive user experiences can be introduced through Lightning Web Components (LWC), enabling features such as real-time stock monitoring, guided order creation, and interactive loyalty tracking.

To streamline bulk data handling, automated data import and synchronization processes may be added, reducing manual entry, and ensuring consistent information across systems. Advanced security features, including enhanced auditing, login monitoring, and automated compliance checks, can further strengthen data protection. Integration with AI-powered tools, such as Einstein Recommendations or chatbot support, may also help improve customer experience and personalize marketing interactions.

These enhancements will not only increase automation and efficiency but will also prepare the system for long-term growth as HandsMen Threads continues to expand its operations.

