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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, Handsman 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		

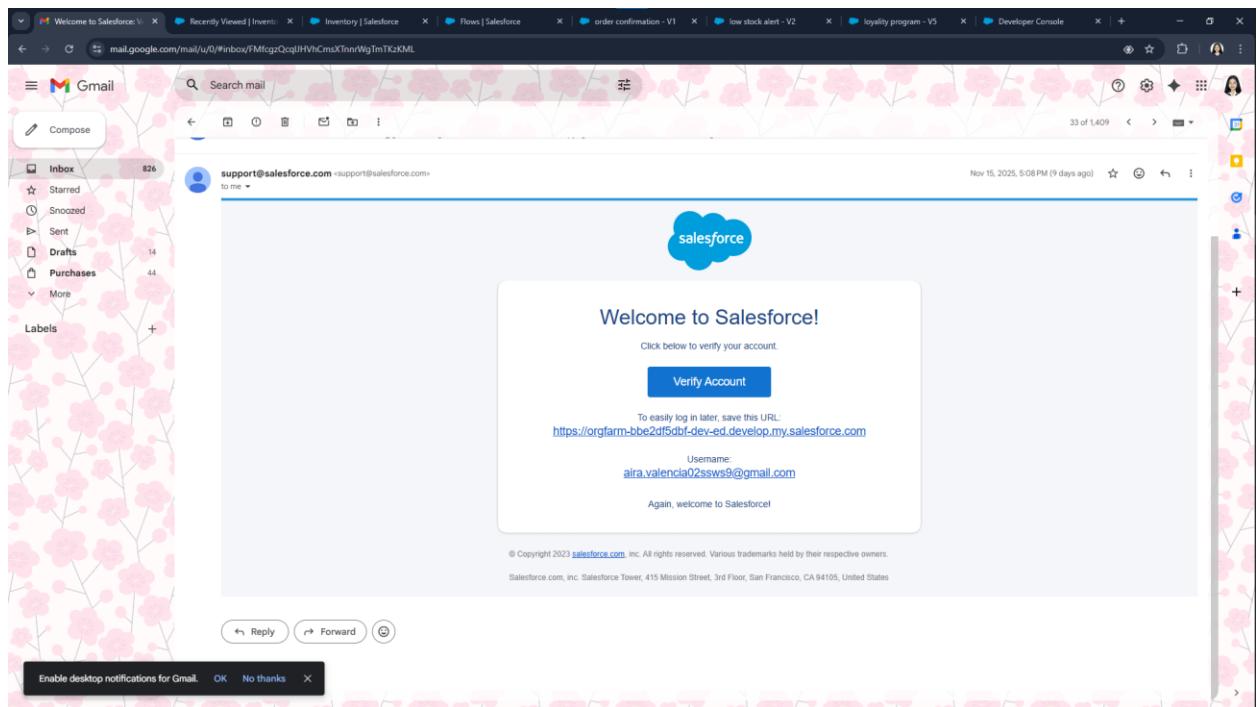
- **Stakeholders Mapping:** Inventory Manager, Sales Team, Admin, IT Support.
- **Execution Roadmap:** Timeline covering Planning → Development → Testing → Deployment.

## 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 lists various setup options like Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, etc. The main content area is titled 'Fields & Relationships' and displays 11 items, sorted by Field Label. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. Key fields shown include Created By (CreatedById, Lookup(User)), Email (Email\_\_c, Email), FirstName (FirstName\_\_c, Text(60)), FullName (FullName\_\_c, Formula(Text)), Name (Name, Text(60)), Last Modified By (LastModifiedById, Lookup(User)), LastName (LastName\_\_c, Text(60)), Loyalty Status (Loyalty\_Status\_\_c, Picklist), Owner (OwnerId, Lookup(User,Group)), Phone (Phone\_\_c, Phone), and Total Purchases (Total\_Purchases\_\_c, 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(60)		
FullName	FullName__c	Formula (Text)		
HandsMen Customer Name	Name	Text(60)		
Last Modified By	LastModifiedById	Lookup(User)		
LastName	LastName__c	Text(60)		
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 top navigation bar includes tabs for 'Welcome to Salesforce: Verify', 'Recently Viewed | Inventories |', 'HandsMen Product | Salesforce', and 'New Tab'. Below the navigation is a search bar labeled 'Search Setup'. The main area has tabs for 'Setup' and 'Object Manager', with 'Object Manager' selected. Under 'SETUP > OBJECT MANAGER', the 'HandsMen Product' object is listed. On the left, a sidebar lists various setup categories: 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 right side displays the 'Fields & Relationships' section, which lists seven fields: 'Created By' (Field Label: 'Created By', Field Name: 'CreatedBy', Data Type: 'Lookup(User)'), 'Name' (Field Label: 'HandsMen Product Name', Field Name: 'Name', Data Type: 'Text(80)'), 'Last Modified By' (Field Label: 'Last Modified By', Field Name: 'LastModifiedBy', Data Type: 'Lookup(User)'), 'Owner' (Field Label: 'Owner', Field Name: 'OwnerId', Data Type: 'Lookup(User,Group)'), 'Price' (Field Label: 'Price', Field Name: 'Price\_\_c', Data Type: 'Currency(18, 0)'), 'SKU' (Field Label: 'SKU', Field Name: 'SKU\_\_c', Data Type: 'Text(50)'), and 'Stock Quantity' (Field Label: 'Stock Quantity', Field Name: 'Stock\_Quantity\_\_c', Data Type: 'Number(18, 0)'). A header for the table includes columns for 'FIELD LABEL', 'FIELD NAME', 'DATA TYPE', 'CONTROLLING FIELD', and 'INDEXED'. Buttons at the bottom of the table include 'Quick Find', 'New', 'Deleted Fields', 'Field Dependencies', and 'Set History Tracking'.

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*

The screenshot shows the Salesforce Object Manager interface for the 'HandsMen Order' object. The left sidebar lists various setup categories like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, etc. The main content area is titled 'Fields & Relationships' and displays a table of fields. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. Key fields shown include '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), and 'Total Amount' (Total\_Amount\_\_c, Number(18, 0)).

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)		

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 shows the Salesforce Object Manager interface for the 'Inventory' object. The left sidebar lists various setup categories like Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, etc. The main content area is titled 'Fields & Relationships' and displays a table of fields. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are:

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(60)		

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 interface for the Marketing Campaign object. The top navigation bar includes tabs for 'Welcome to Salesforce: Verify', 'Recently Viewed | Inventories', 'Marketing Campaign | Salesforce', and 'New Tab'. Below the navigation is a search bar labeled 'Search Setup' and a header with icons for 'Setup', 'Home', and 'Object Manager'. The main content area is titled 'Marketing Campaign' under 'SETUP > OBJECT MANAGER'. A sidebar on the left lists various setup categories such as 'Details', 'Fields & Relationships', 'Page Layouts', etc. The 'Fields & Relationships' section is currently selected and displays a table with seven items, sorted by Field Label. The table columns are 'FIELD LABEL', 'FIELD NAME', 'DATA TYPE', 'CONTROLLING FIELD', and 'INDEXED'. The data in the table is as follows:

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*

The screenshot shows the Salesforce Object Manager interface for the 'HandsMen Customer' object. On the left, a sidebar lists various setup options like Details, Fields & Relationships, Page Layouts, and Validation Rules. The 'Validation Rules' option is selected and highlighted in blue. The main content area displays the 'HandsMen Customer Validation Rule' detail page. The rule is named 'Email' and has the formula 'NOT CONTAINS(Email\_\_c, '@gmail.com')'. The error message is 'Please fill correct Gmail'. The rule is active and located at the top of the page. It was created by 'Aira Joy Valencia' on 11/15/2025, 12:54 AM.

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*

The screenshot shows the Salesforce Object Manager interface for the 'HandsMen Order' object. On the left, a sidebar lists various configuration options like Details, Fields & Relationships, Page Layouts, and Validation Rules. The 'Validation Rules' option is selected and highlighted with a blue border. The main content area displays the 'Validation Rule Detail' for the 'HandsMen Order Validation Rule'. The rule is named 'Total\_Amount' and has the formula 'Total\_Amount <= 0'. The error message is 'Please Enter Correct Amount'. The validation rule is active and was created by 'Aira Joy Valencia' on 11/15/2025, 12:50 AM.

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*

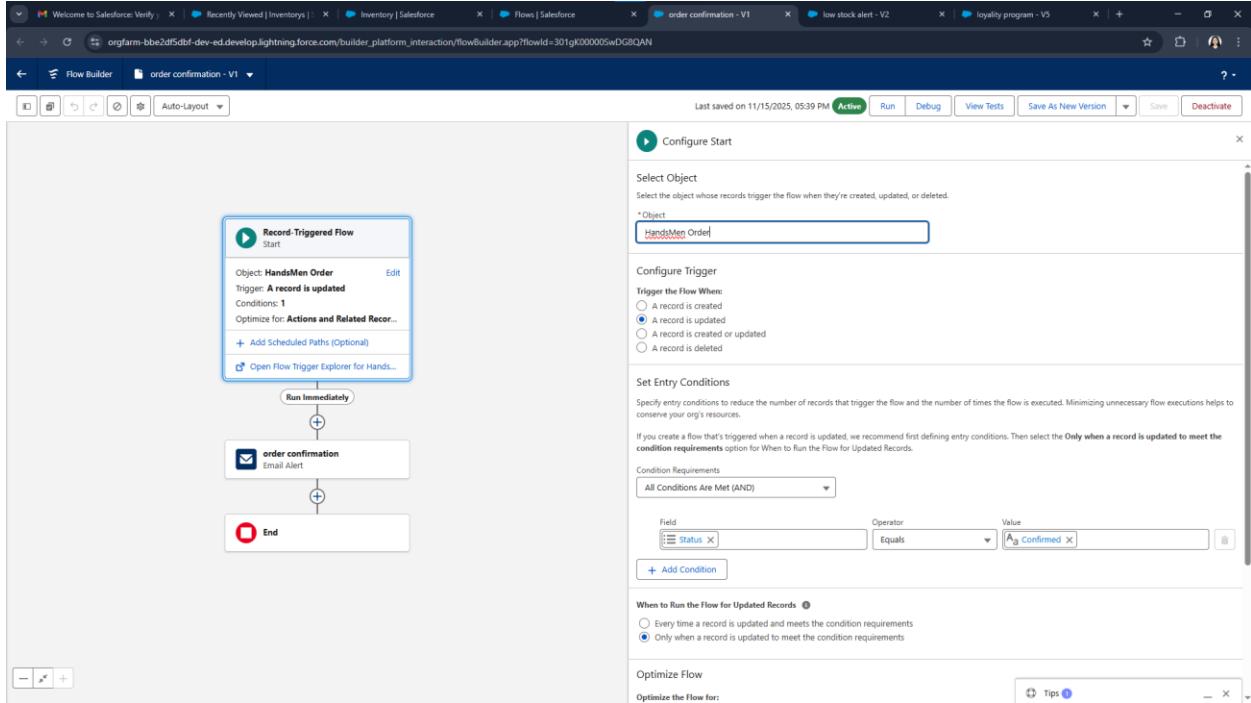
The screenshot shows the Salesforce Object Manager interface for the 'Inventory' object. The left sidebar lists various configuration options like Details, Fields & Relationships, Page Layouts, and Validation Rules. The 'Validation Rules' option is selected, highlighted with a blue border. The main content area displays the details of a specific validation rule named 'Stock\_Quantity'. The rule's formula is 'Stock\_Quantity\_\_c <= 0', and its error message is 'The inventory count is never less than zero.' The rule is marked as 'Active'. The 'Created By' field shows 'Aira Joy Valencia' with a creation date of '11/15/2025, 12:52 AM'. The 'Modified By' field also shows 'Aira Joy Valencia' with the same date and time.

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**

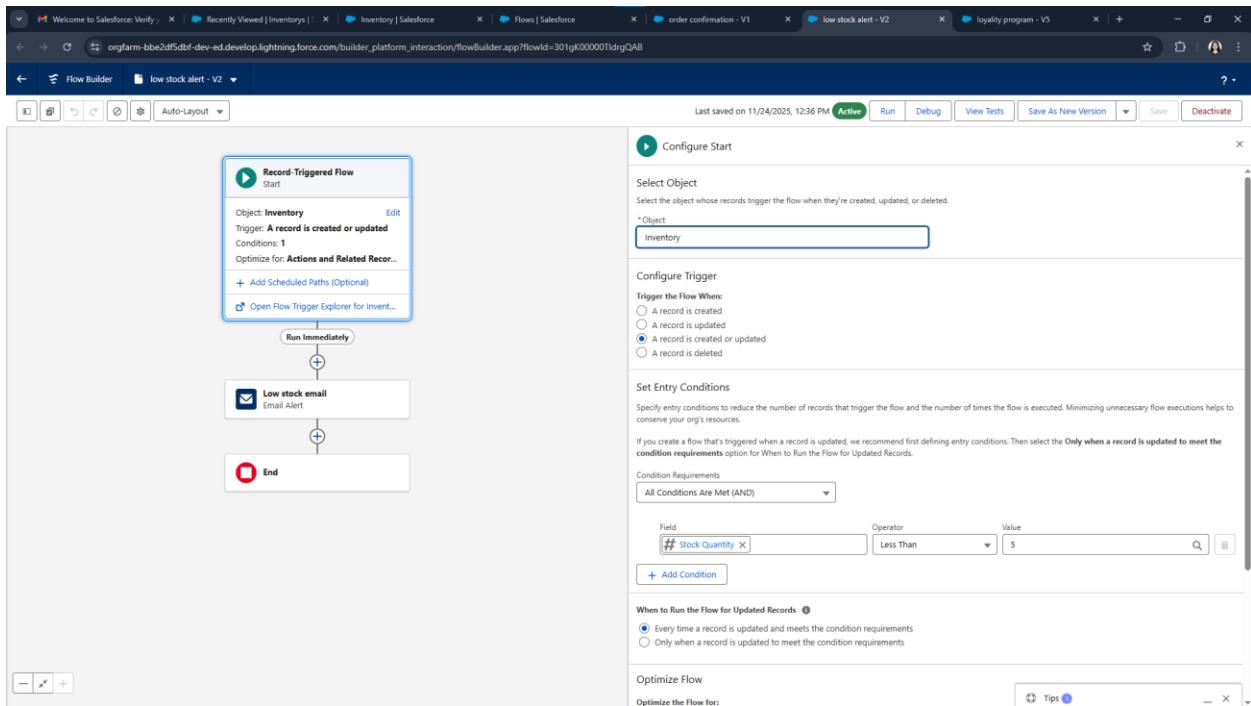
*Order Confirmation Email Flow*



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**

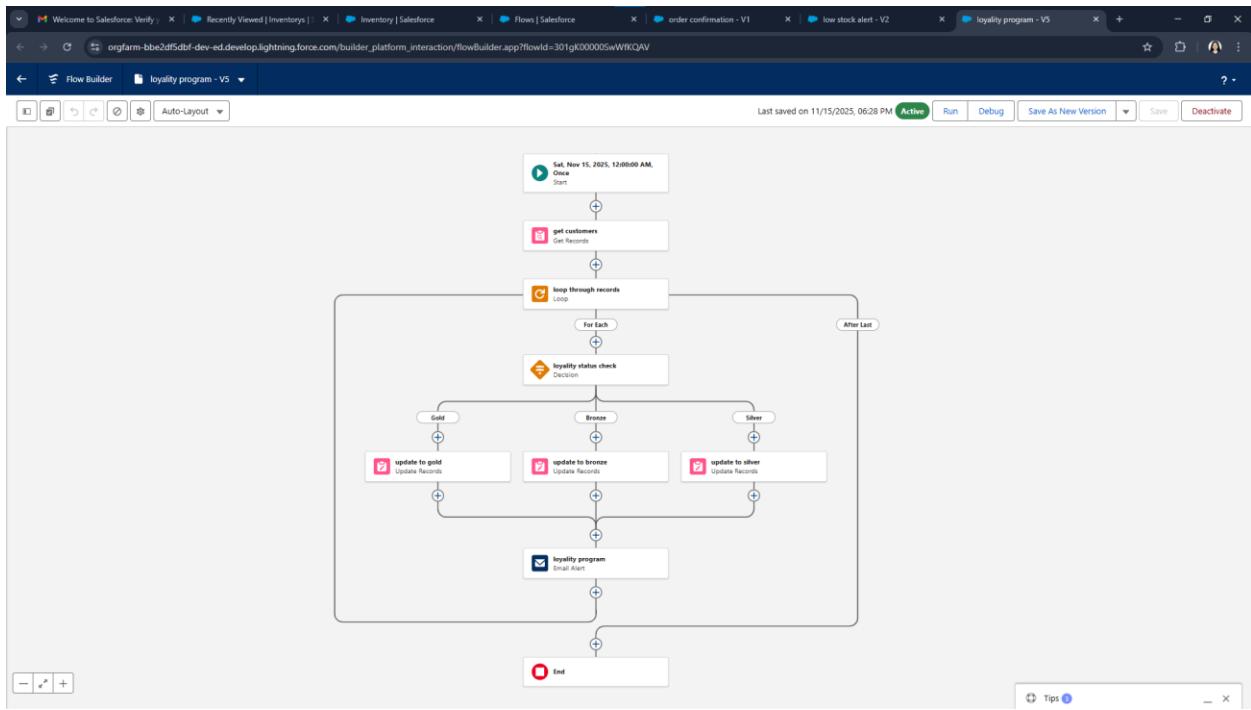
*Low Stock Alert Email – Record Triggered Flow*



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*

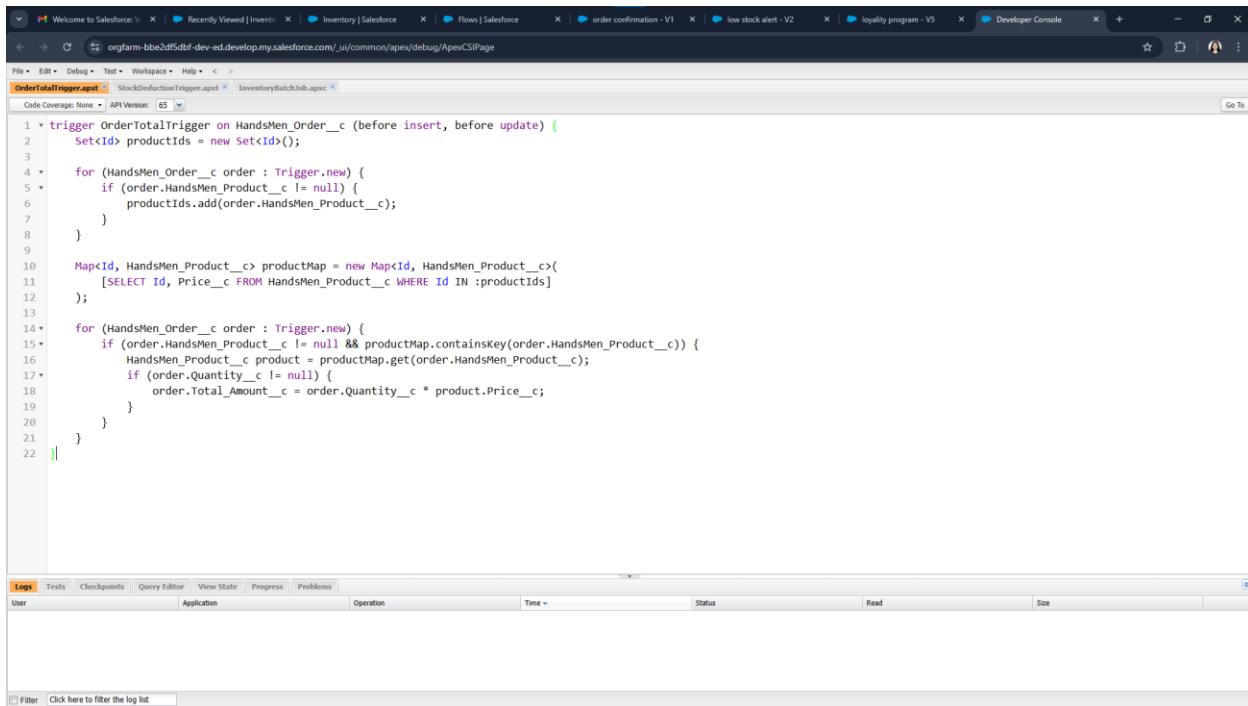


Automatically sends a notification to the customer when their loyalty status changes based on accumulated purchases. This flow promotes repeat business and rewards loyal customers.

## 5. Apex Classes and Triggers

Figure 12

*Order Total Trigger*



The screenshot shows the Salesforce Developer Console interface. The top navigation bar includes 'File', 'Edit', 'Debug', 'Test', 'Workspace', 'Help', and tabs for 'Inventory | Salesforce', 'Flows | Salesforce', 'order confirmation - V1', 'low stock alert - V2', and 'loyalty program - V5'. Below the tabs, the title bar displays 'orgfarm-bbe2d5fbf-dev-ed.develop.my.salesforce.com/ui/common/apex/debug/ApexCSPage' and the file name 'OrderTotalTrigger.apr'. The main content area contains the Apex trigger code:

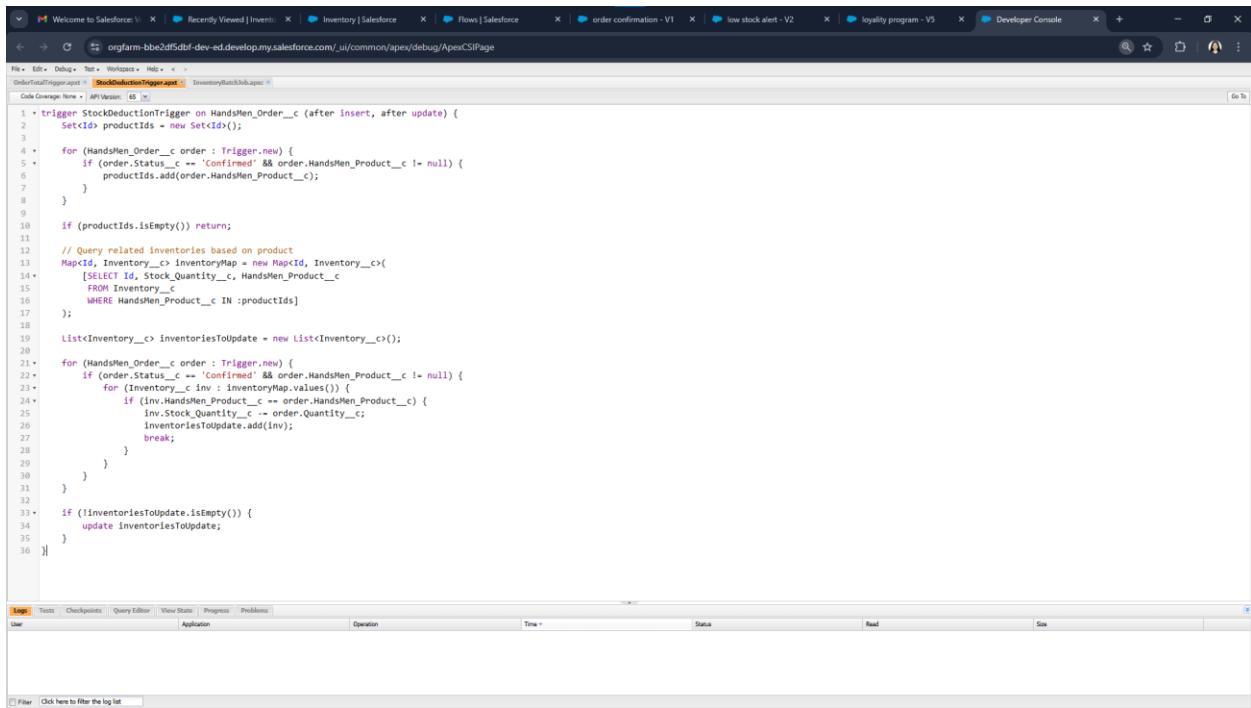
```
1 * trigger OrderTotalTrigger on HandsMen_Order__c (before insert, before update) {
2     Set<Id> productIds = new Set<Id>();
3
4     for (HandsMen_Order__c order : Trigger.new) {
5         if (order.HandsMen_Product__c != null) {
6             productIds.add(order.HandsMen_Product__c);
7         }
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 }]
```

Below the code editor, there is a 'Logs' tab and a table for monitoring application activity. The table has columns for 'User', 'Operation', 'Time', 'Status', 'Read', and 'Size'. A 'Filter' input field is also present at the bottom of the logs section.

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*



The screenshot shows the Salesforce Developer Console with the code editor open. The file is named `StockDeductionTrigger.apex`. The code implements a trigger on the `HandsMen_Order__c` object. It first creates a set of product IDs for orders that have been inserted or updated. Then, it queries related inventories based on these products. For each confirmed order, it iterates through its products and checks if the inventory quantity is less than or equal to the order quantity. If so, it updates the inventory quantity to reflect the difference. Finally, it updates the `inventoriesToUpdate` list and performs a bulk update of the inventories.

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

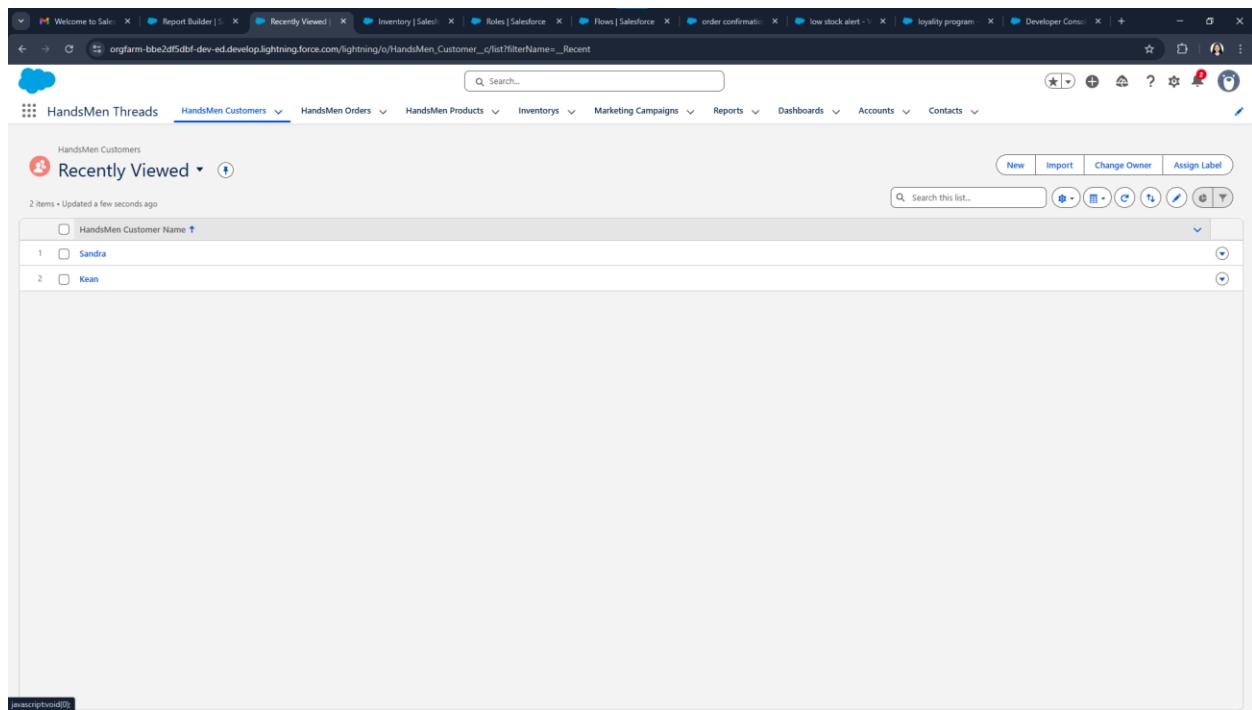
This trigger automatically deducts the quantity of products from the Inventory whenever an order is confirmed. It updates the related inventory records in real-time to reflect the current stock, preventing overselling and supporting accurate stock management.

## 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

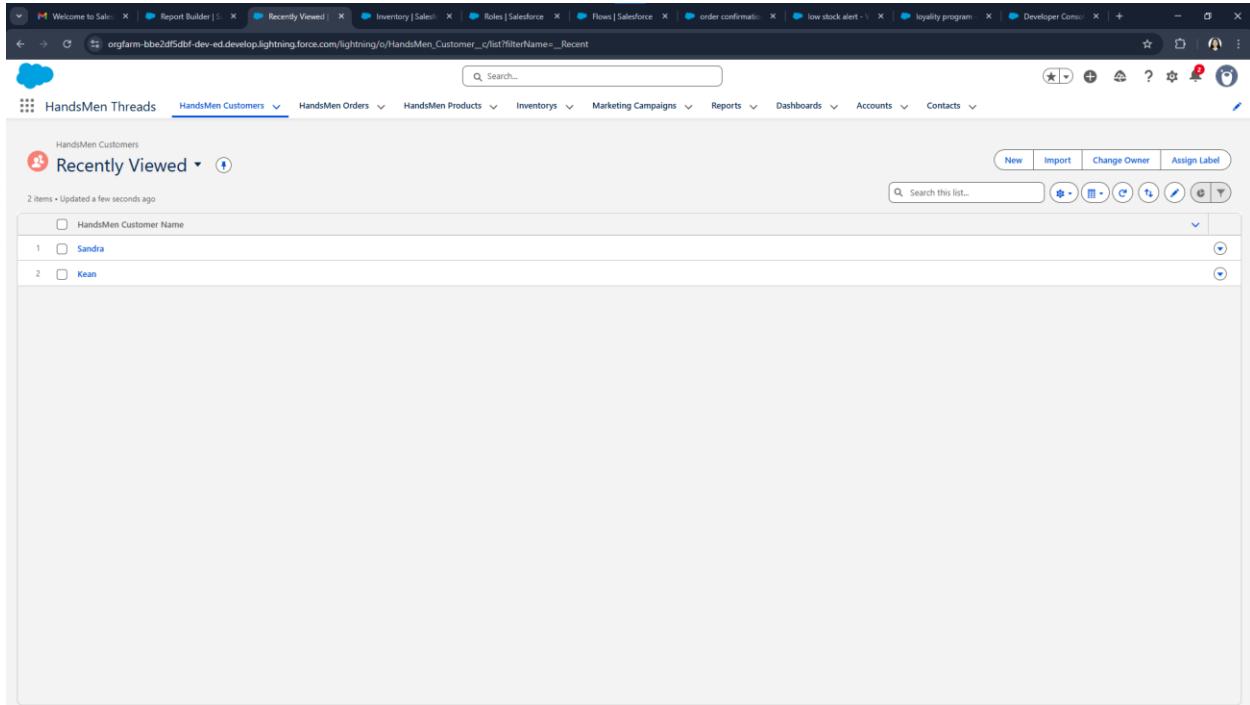
A custom HandsMen Threads App was created in Salesforce App Manager to centralize all objects, automation, and dashboards. The app provides quick access to Customers, Products, Orders, Inventory, and Marketing Campaigns in a single interface.



## 2. Page Layouts & Dynamic Forms

**Figure 14**

*Handsmen Customer Page*



The screenshot shows a Salesforce Lightning interface for the 'HandsMen Customers' page. The top navigation bar includes links for 'HandsMen Threads', 'HandsMen Customers', 'HandsMen Orders', 'HandsMen Products', 'Inventorys', 'Marketing Campaigns', 'Reports', 'Dashboards', 'Accounts', and 'Contacts'. A search bar at the top right contains the placeholder 'Search...'. Below the navigation is a section titled 'Recently Viewed' with a dropdown arrow. It displays two items: 'Sandra' and 'Kean', each preceded by a small checkbox icon. To the right of this list is a toolbar with icons for 'New', 'Import', 'Change Owner', and 'Assign Label'. At the bottom of the page is a large, empty white area.

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 shows the HandsMen Orders page in a Salesforce Lightning environment. The page title is "HandsMen Orders". A header bar at the top includes links for "HandsMen Threads", "HandsMen Customers", "HandsMen Orders", "HandsMen Products", "Inventory", "Marketing Campaigns", "Reports", "Dashboards", "Accounts", and "Contacts". Below the header, a section titled "Recently Viewed" displays a list of 5 items, each with a checkbox and an order number: O-0005, O-0004, O-0003, O-0002, and O-0001. To the right of this list are buttons for "New", "Import", "Change Owner", and "Assign Label". Below the list is a search bar labeled "Search this list..." and a set of icons for filtering and sorting. The URL in the browser's address bar is [https://orgfarm-bbe2df5dbf-dev-ed.lightning.force.com/lightning/o/HandsMen\\_Order\\_c/list?filterName=\\_Recent](https://orgfarm-bbe2df5dbf-dev-ed.lightning.force.com/lightning/o/HandsMen_Order_c/list?filterName=_Recent).

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*

The screenshot shows a Salesforce Lightning interface for the 'HandsMen Products' page. The top navigation bar includes links for 'Welcome to Sales', 'Report Builder', 'Recently Viewed', 'Inventory | Sales', 'Roles | Salesforce', 'Flows | Salesforce', 'order confirmation', 'low stock alert -', 'loyalty program', and 'Developer Console'. Below the navigation is a header with a cloud icon and the title 'HandsMen Products'. The main content area displays a list titled 'Recently Viewed' with three items: 'Shorts', 'Pants', and 'T-shirt'. Each item has a checkbox next to it. To the right of the list are buttons for 'New', 'Import', 'Change Owner', and 'Assign Label'. A search bar labeled 'Search this list...' is also present.

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*

The screenshot shows the Salesforce Lightning Experience interface for the 'Inventory' page. The top navigation bar includes links for 'Welcome to Sales', 'Report Builder', 'Recently Viewed', 'Inventory | Sales', 'Notes | Salesforce', 'Flows | Salesforce', 'order confirmation', 'low stock alert -', 'loyalty program', and 'Developer Console'. Below the navigation is a secondary header with tabs for 'HandsMen Threads', 'HandsMen Customers', 'HandsMen Orders', 'HandsMen Products', 'Inventory' (which is currently selected), 'Marketing Campaigns', 'Reports', 'Dashboards', 'Accounts', and 'Contacts'. The main content area is titled 'Inventory' and shows a list titled 'Recently Viewed'. It displays two items: 'I-0002' and 'I-0001'. A search bar at the top right says 'Search...' and a toolbar below it includes 'New', 'Import', and 'Assign Label' buttons. A link at the bottom left of the page reads 'https://orgfarm-bbe2df5dbf-dev-ed.lightning.force.com/lightning/o/inventory\_c/home'.

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.

