

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

Project Overview:

HandsMen Threads is a Salesforce-based Customer Relationship Management (CRM) solution designed to support a premium men's bespoke tailoring business. The system aims to digitize and streamline key business operations such as client profiling, appointment bookings, tailoring order management, and personalized customer communication.

The CRM addresses the limitations of manual record-keeping by centralizing customer data, tailoring preferences, measurements, and order statuses within a unified Salesforce platform. Through automation and structured workflows, HandsMen Threads enhances customer experience, operational efficiency, and service consistency while supporting the brand's commitment to sophistication and personalization.

Objectives:

The primary objective of this project is to develop a robust and scalable **Salesforce CRM** that enhances customer relationship management and optimizes bespoke tailoring operations. Specifically, the system aims to:

- Improve customer profiling by maintaining accurate and centralized customer records
- Streamline appointment booking and order tracking processes
- Automate notifications and approval workflows to reduce manual intervention
- Provide management with actionable insights through reports and dashboards

By achieving these objectives, the CRM delivers significant business value, including:

- Improved customer satisfaction
- Reduced manual errors
- More efficient and structured workflow management

Phase 1: Requirement Analysis & Planning

➤ Understanding Business Requirements

HandsMen Threads operates within the luxury men's fashion industry, where customer experience, accurate order handling, inventory reliability, and loyalty recognition are essential to business success. Prior to the implementation of Salesforce, key business data such as customer records, purchase history, inventory levels, and loyalty status were managed through fragmented and manual processes. This resulted in delayed order confirmations, inconsistent loyalty updates, reactive stock management, and limited visibility into overall business performance.

The organization required a centralized CRM solution capable of managing real-time transactions while ensuring data accuracy and process consistency. Critical business needs identified during this phase included immediate customer communication upon order confirmation, automated loyalty tier updates based on purchase behavior, proactive inventory monitoring to prevent stockouts, and reliable daily processing of bulk financial and inventory adjustments.

To address these requirements, the Salesforce CRM was designed to serve as a single source of truth, enabling structured data storage, automated business logic, and real-time operational visibility across sales, warehouse, and management teams. This approach ensures improved customer satisfaction, reduced operational risks, and a scalable foundation to support future growth and system enhancements.

➤ **Defining Project Scope and Objectives**

Based on the identified business requirements of HandsMen Threads, the project scope was clearly defined to focus on automating the most critical operations within the luxury men's fashion business. The primary objective at this stage was to ensure that Salesforce would effectively support real-time customer engagement, accurate inventory management, and reliable data processing.

The scope of the project includes:

- Development of custom and standard Salesforce objects to represent Customers, Orders, Products, Inventories, Loyalty Status, and Marketing Campaigns.
- Implementation of automation to support the four core business processes: order confirmation, loyalty tier updates, proactive stock alerts, and scheduled bulk order processing.
- Configuration of role-based security controls to protect sensitive customer, inventory, and financial data.
- Creation of reports and dashboards to provide actionable operational and management insights.

The project scope intentionally excludes external system integrations such as online payment gateways and third-party marketing platforms, which were identified as future enhancements beyond the current capstone implementation.

➤ Design of Data Model and Security Model

The Salesforce data model for HandsMen Threads was designed using custom objects to reflect the company's sales, inventory, and marketing processes. Core objects include **HandsMen Customer**, **HandsMen Order**, **HandsMen Product**, **Inventory**, and **Marketing Campaigns**, connected through clearly defined lookup and master-detail relationships. A one-to-many relationship allows each customer to place multiple orders, while products are linked to inventory records through a master-detail relationship to maintain accurate stock control. Marketing campaigns are associated with customers to support promotional tracking and reporting.

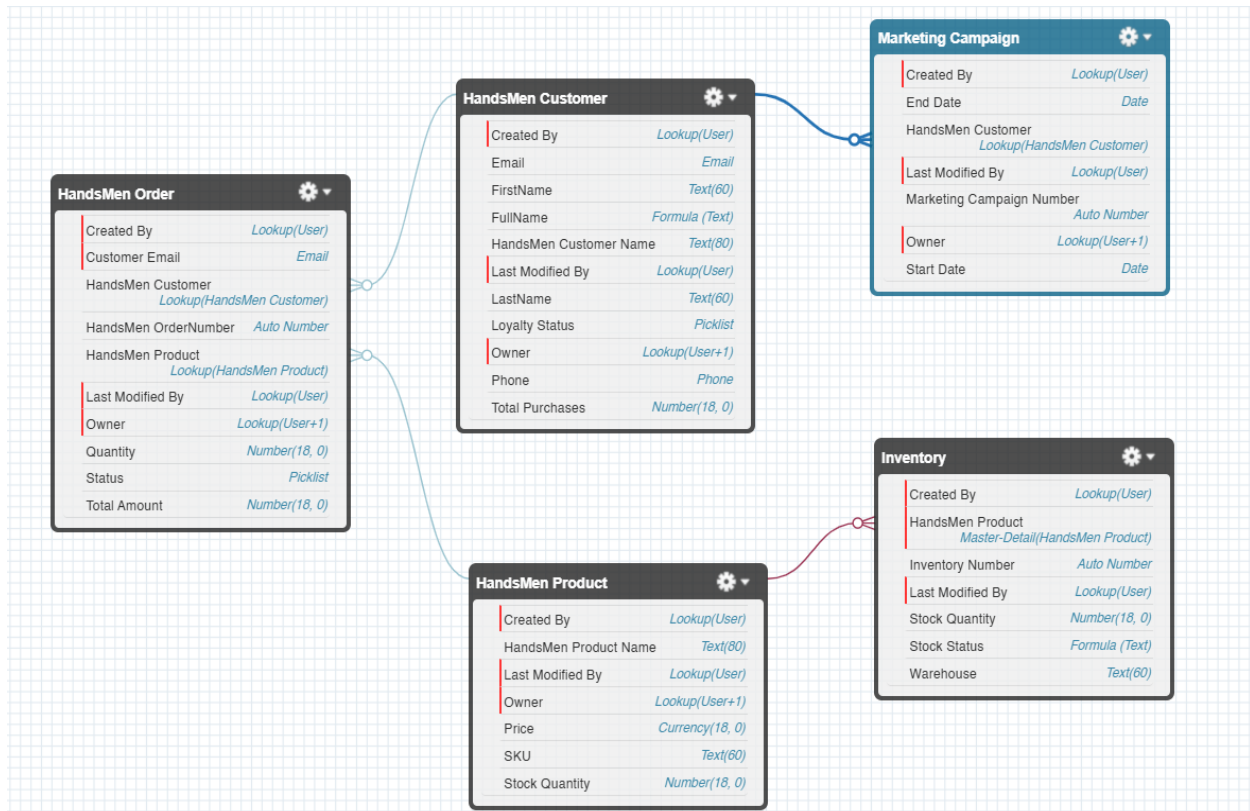


Figure 1. Object Relationship Diagram (ERD) – Salesforce Schema Builder

To protect business and customer information, a role-based security model was implemented using Salesforce profiles, role hierarchies, and permission sets. This design aligns data access with organizational roles and job responsibilities.

- **Profiles and Permission Sets** define user permissions, controlling which objects and fields users can view, create, edit, or delete.
- **Role Hierarchy** mirrors the organizational structure (CEO, Managers, Staff) and governs record visibility, allowing managers to access records owned by their subordinates.

This structured security model ensures data confidentiality and integrity, supports system scalability and automation, and prevents unauthorized access to sensitive information.

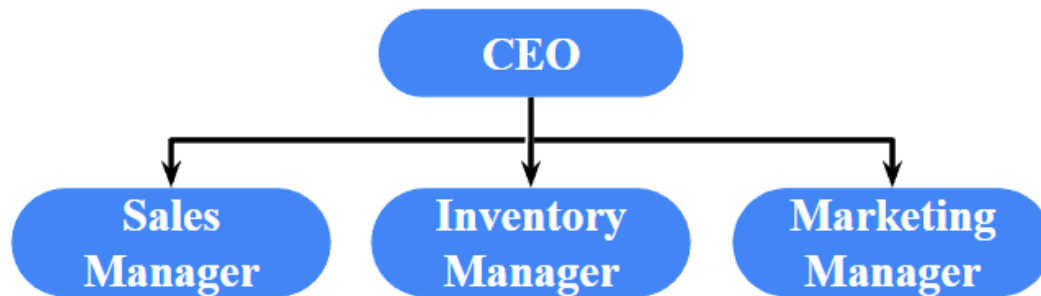


Figure 2. Role Hierarchy Diagram – Salesforce Role Setup

➤ Stakeholder Mapping

Key stakeholders were identified to ensure the CRM meets HandsMen Threads’ business needs, with roles and access defined for secure and efficient operations.

- **Developer** – Designs, develops, and documents the CRM.
- **Instructor / Project Advisor** – Provides guidance, sets requirements, and evaluates deliverables.
- **End Users (Staff: Sales, Inventory, Marketing Managers)** – Manage customer records, sales, inventory, and marketing; access is role-based.
- **Customers (Indirect Users)** – Receive automated notifications like order confirmations and loyalty updates.
- **Salesforce Administrator** – Maintains the system, manages security, and implements future enhancements.

➤ Execution Roadmap

A structured execution roadmap was followed to guide the development of the HandsMen Threads Salesforce solution from planning to deployment. Each phase was implemented systematically to align with project objectives.

The roadmap included:

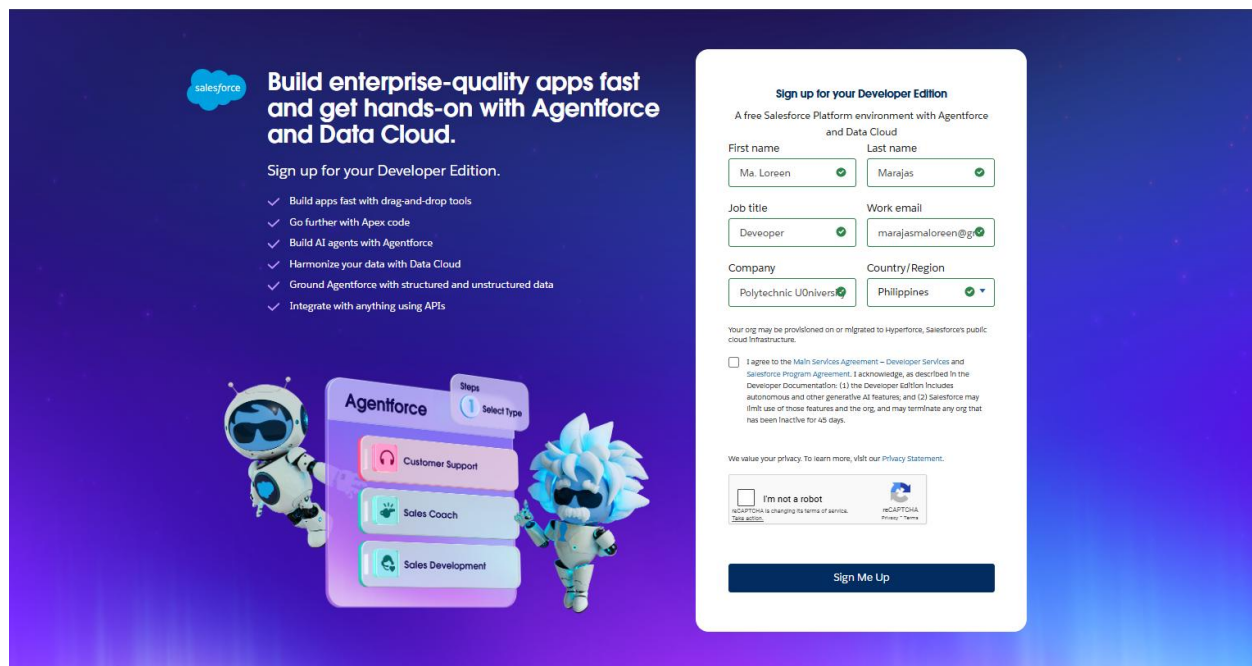
1. **Requirement Analysis and System Design** – Defining use cases, user scenarios, and user stories to map business processes.
2. **Salesforce Backend Configuration** – Setting up credentials, objects, fields, tabs, apps, and user access (profiles, roles, and permission sets).
3. **Automation and Flows** – Creating flows, Apex automation, and batch jobs to streamline business operations.

4. **Email Templates** – Developing automated communication for customer notifications.
5. **Reporting and Dashboards** – Designing insights for sales, inventory, and marketing operations.
6. **Data Testing, Validation, and Security Verification** – Ensuring data integrity, correct permissions, and role-based access.
7. **System Deployment and Technical Documentation** – Final rollout of the CRM along with complete project documentation.

Phase 2: Salesforce Development – Backend & Configurations

➤ Setup Environment & DevOps Workflow

The development of the HandsMen Threads Salesforce CRM was conducted entirely within a **Salesforce Developer Org**, providing a secure environment for configuration, development, and testing. Development followed a structured workflow using **task-based Kanban boards** to plan, execute, and track progress. All changes were implemented and tested in the Developer Org before being marked complete, ensuring systematic development, proper sequencing of tasks, and clear documentation of progress.



The image shows the Salesforce Developer Edition sign-up page. On the left, there's a promotional banner for Agentforce with the text "Build enterprise-quality apps fast and get hands-on with Agentforce and Data Cloud." Below this, it says "Sign up for your Developer Edition." and lists five benefits: "Build apps fast with drag-and-drop tools", "Go further with Apex code", "Build AI agents with Agentforce", "Harmonize your data with Data Cloud", and "Ground Agentforce with structured and unstructured data". There's also a "Steps" section with "1 Select Type" and three options: "Customer Support", "Sales Coach", and "Sales Development". On the right, there's a form titled "Sign up for your Developer Edition" with fields for "First name" (Ma. Loreen), "Last name" (Marajes), "Job title" (Developer), "Work email" (marajasmaloreen@g), "Company" (Polytechnic UOnivers), and "Country/Region" (Philippines). Below the form, there's a checkbox for "I agree to the Main Services Agreement - Developer Services and Salesforce Program Agreement" and a "Sign Me Up" button.

Figure 3.1. Salesforce Developer Org – Sign-Up Page

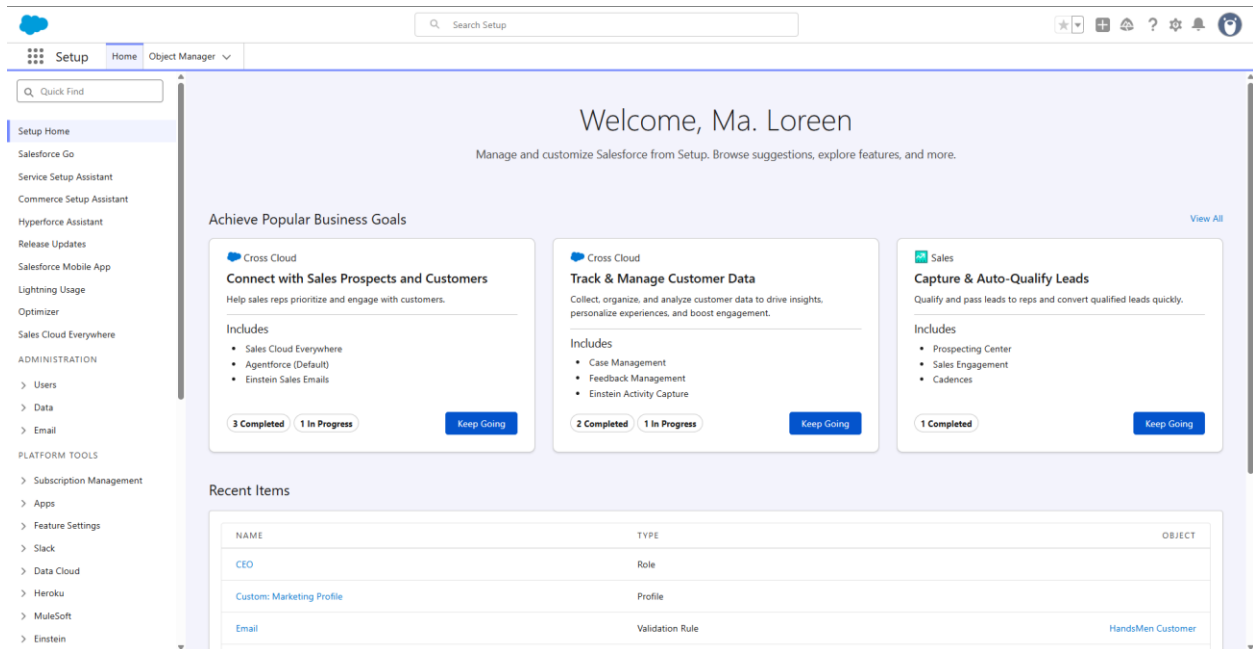


Figure 3.2. Salesforce Developer Org – Logged-In Home Page

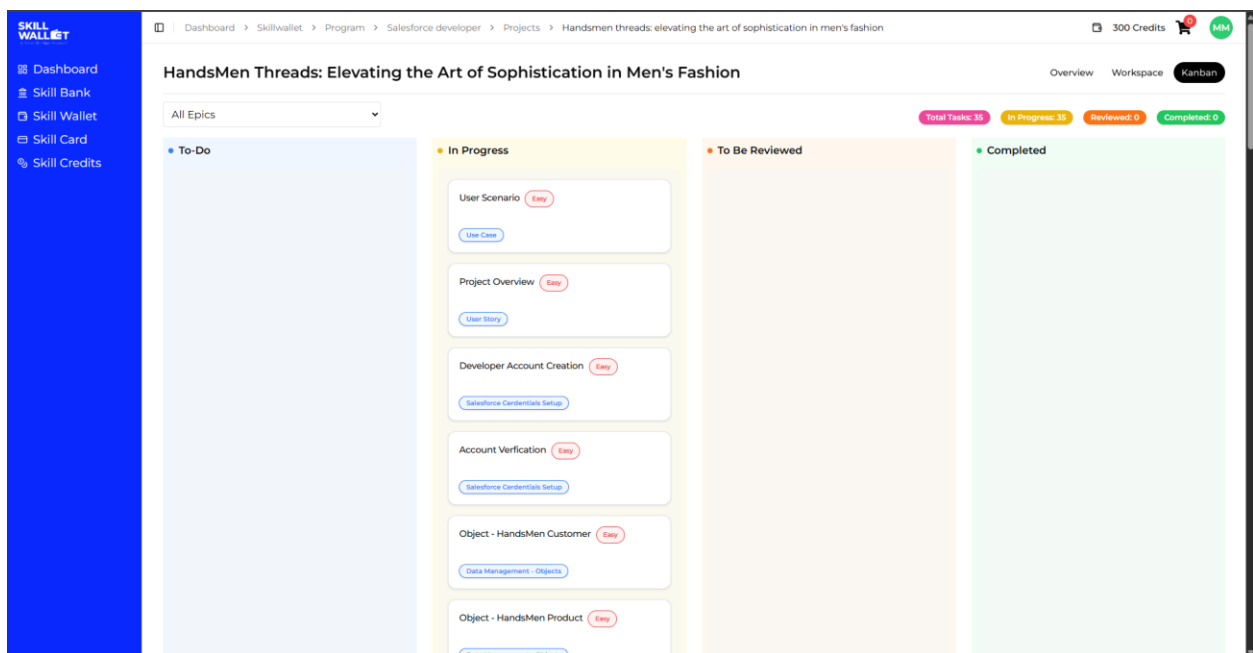


Figure 3.3. Kanban Board – Task Progress for HandsMen Threads Development

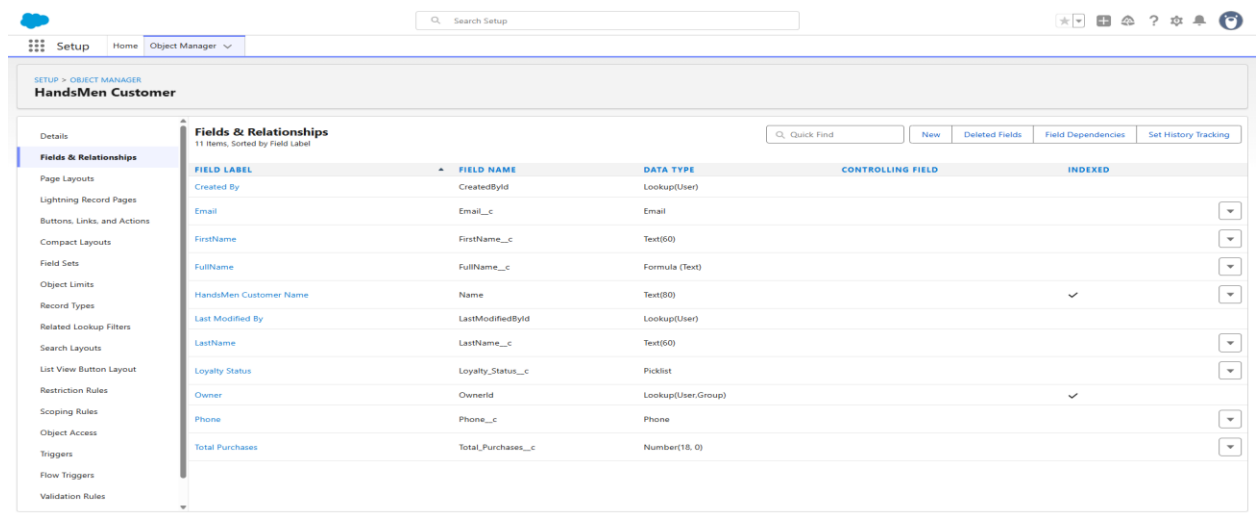
➤ **Customization of Objects, Fields, Validation Rules, Automation (Workflow Rules, Process Builder, Flows, Approval Process).**

- **Custom Objects and Fields**

The CRM was designed with custom objects to capture and organize HandsMen Threads' core business data, enabling accurate tracking, reporting, and automation. Relationships and key fields were defined to ensure data consistency across the system.

The five custom objects include:

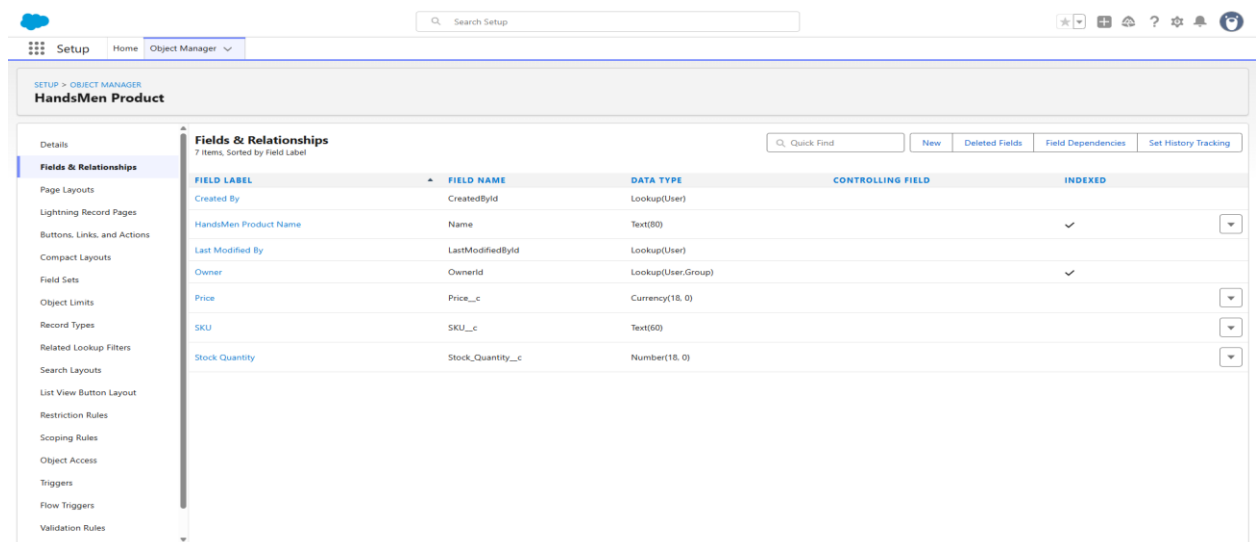
- **HandsMen Customer** – Stores customer details such as email, full name, loyalty status, and total purchases.



The screenshot shows the Salesforce Setup interface for the 'HandsMen Customer' object. The 'Fields & Relationships' tab is selected, displaying a table of 11 fields. The table has columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed. The fields listed are: Created By, Email, FirstName, FullName, HandsMen Customer Name, Last Modified By, LastName, Loyalty Status, Owner, Phone, and Total Purchases.

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(80)		✓
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)		

- **HandsMen Product** – Contains product information including SKU, price, and stock levels.



The screenshot shows the Salesforce Setup interface for the 'HandsMen Product' object. The 'Fields & Relationships' tab is selected, displaying a table of 7 fields. The table has columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed. The fields listed are: Created By, HandsMen Product Name, Last Modified By, Owner, Price, SKU, and Stock Quantity.

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(50)		
Stock Quantity	Stock_Quantity__c	Number(18, 0)		

- **HandsMen Order** – Records customer orders with details on quantity, status and total amount.

The screenshot shows the Salesforce Setup interface for the 'HandsMen Order' 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, and Validation Rules. The main content area is titled 'HandsMen Order' and 'Fields & Relationships' (10 Items, Sorted by Field Label). It includes a search bar and tabs for New, Deleted Fields, Field Dependencies, and Set History Tracking. The table below lists the fields for this object.

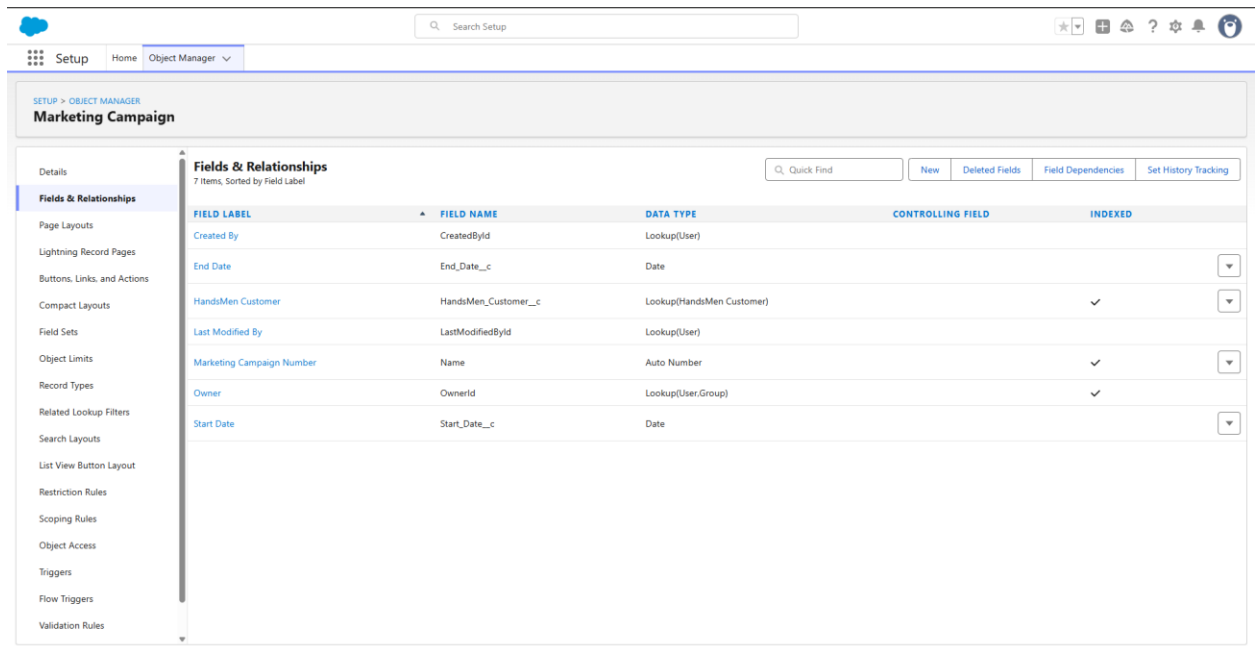
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Customer Email	Customer_Email__c	Email		
HandsMen Customer	HandsMen_Customer__c	Lookup(HandsMen Customer)		✓
HandsMen OrderNumber	Name	Auto Number		✓
HandsMen Product	HandsMen_Product__c	Lookup(HandsMen Product)		✓
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)		

- **Inventory** – Tracks stock quantities, stock status, and warehouse locations.

The screenshot shows the Salesforce Setup interface for the 'Inventory' 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, and Validation Rules. The main content area is titled 'Inventory' and 'Fields & Relationships' (7 Items, Sorted by Field Label). It includes a search bar and tabs for New, Deleted Fields, Field Dependencies, and Set History Tracking. The table below lists the fields for this object.

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)		

- **Marketing Campaign** – Manages promotion details and campaign schedules.



The screenshot shows the Salesforce Setup interface for the Marketing Campaign 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, and Validation Rules. The main content area is titled 'Marketing Campaign' and 'Fields & Relationships', showing 7 items sorted by Field Label. A table lists the fields with their labels, names, data types, controlling fields, and indexed status.

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		

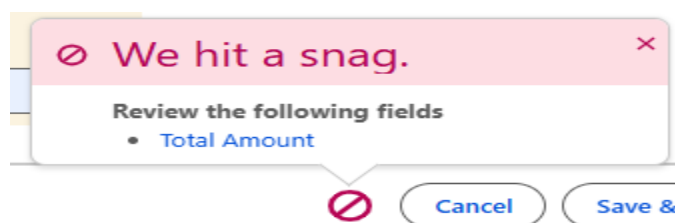
- Validation Rules

Validation rules were implemented in the CRM to ensure data accuracy and enforce business logic.

- **HandsMen Customer** – Ensures that email addresses entered are valid Gmail accounts. If an email does not contain “@gmail.com,” the system displays the error: *“Please fill Correct Gmail.”*



- **HandsMen Order** – Prevents orders from being saved with zero or negative amounts. If Total_Amount__c is less than or equal to zero, the error message *“Please Enter Correct Amount”* appears.



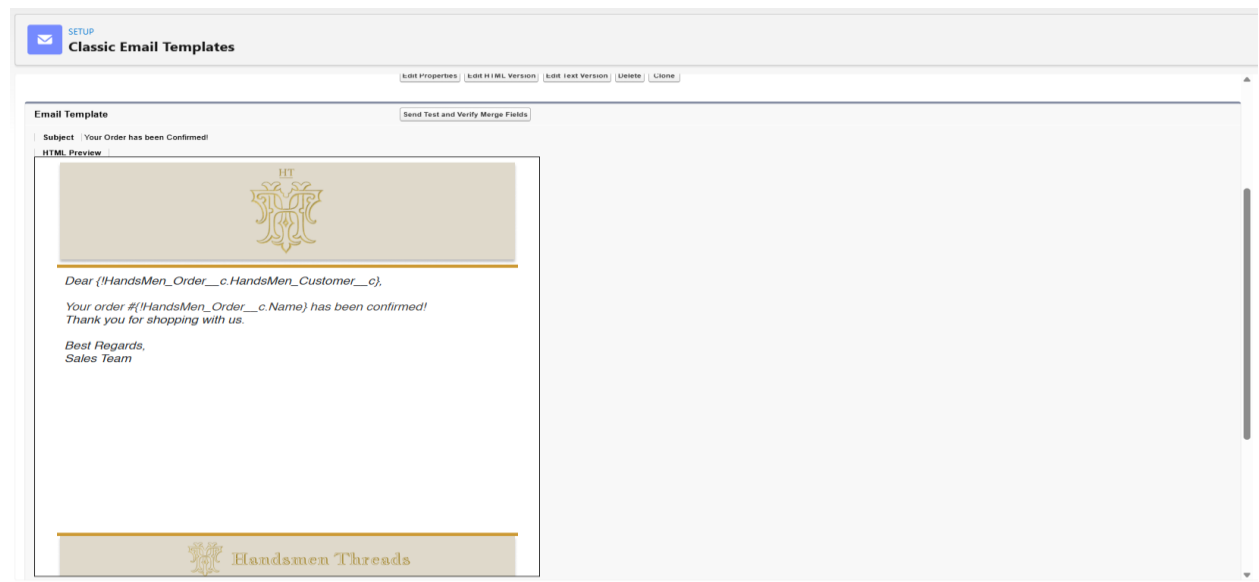
- **Inventory** – Ensures that stock levels cannot be zero or negative. If Stock_Quantity__c is less than or equal to zero, the system displays “The inventory count is never less than zero.”



- Email Templates

Email templates are predefined message formats that allow automated, consistent communication by dynamically including relevant data. Three email templates were created to automate and standardize communication with customers and staff:

- **Order Confirmation** – Sent automatically when an order is confirmed.



- **Low Stock Alert** – Triggered when inventory drops below 5 units.

SETUP

Classic Email Templates

Text Email Template

Low Stock Alert

Help for this Page

Preview your email template below.

Email Template Detail

Email Templates from Salesforce

Unified Public Classic Email Templates

Edit

Delete

Clone

Email Template Name	Low Stock Alert	Available For Use	✓
Template Unique Name	Low_Stock_Alert	Last Used Date	
Encoding	Unicode (UTF-8)	Times Used	
Author	Ma. Loreen Marajias (Change)		
Description			
Created By	Ma. Loreen Marajias, 11/25/2025, 5:05 PM	Modified By	Ma. Loreen Marajias, 11/25/2025, 5:05 PM

Edit

Delete

Clone

Email Template

Send Text and Verify Merge Fields

Subject

Low Stock Alert Email

Plain Text Preview

Dear Inventory Manager,

This is to inform you that the stock for the following product is running low:
Product Name: {Inventory__c.HandsMen_Product__c}
Current Stock Quantity: {Inventory__c.Stock_Quantity__c}
Please take the necessary steps to restock this item immediately.

Best Regards,
Inventory Monitoring System

Attachments

Attach File

No records to display

- **Loyalty Program Email** – Sent when a customer’s loyalty status is updated.

SETUP

Classic Email Templates

Subject

Loyalty Program Email

HTML Preview

Congratulations! You are now a {HandsMen_Customer__c.Loyalty_Status__c} member and you are eligible for our Loyalty Rewards Program.

Enjoy exclusive discounts, early access to offers, and special member benefits.

Thank you for your continued Support.

Plain Text Preview

Congratulations! You are now a {HandsMen_Customer__c.Loyalty_Status__c} member and you are eligible for our Loyalty Rewards Program.

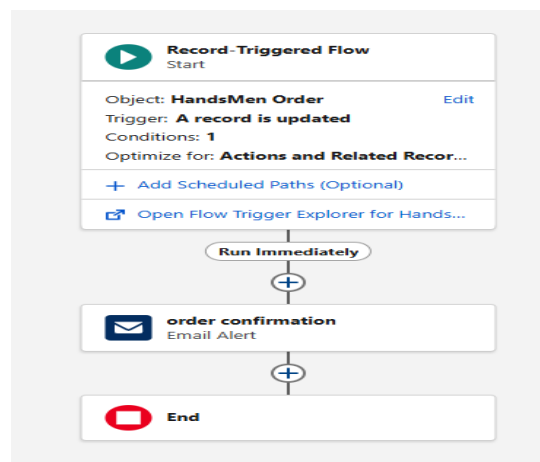
Enjoy exclusive discounts, early access to offers, and special member benefits.

- Automation

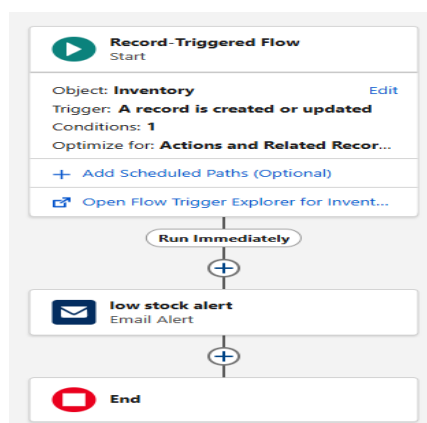
Automation was implemented to streamline routine business processes, reduce manual effort, and ensure consistent execution of critical operations. Salesforce Flows were primarily used to automate tasks such as sending emails, updating loyalty statuses, and monitoring inventory.

Key automated processes include:

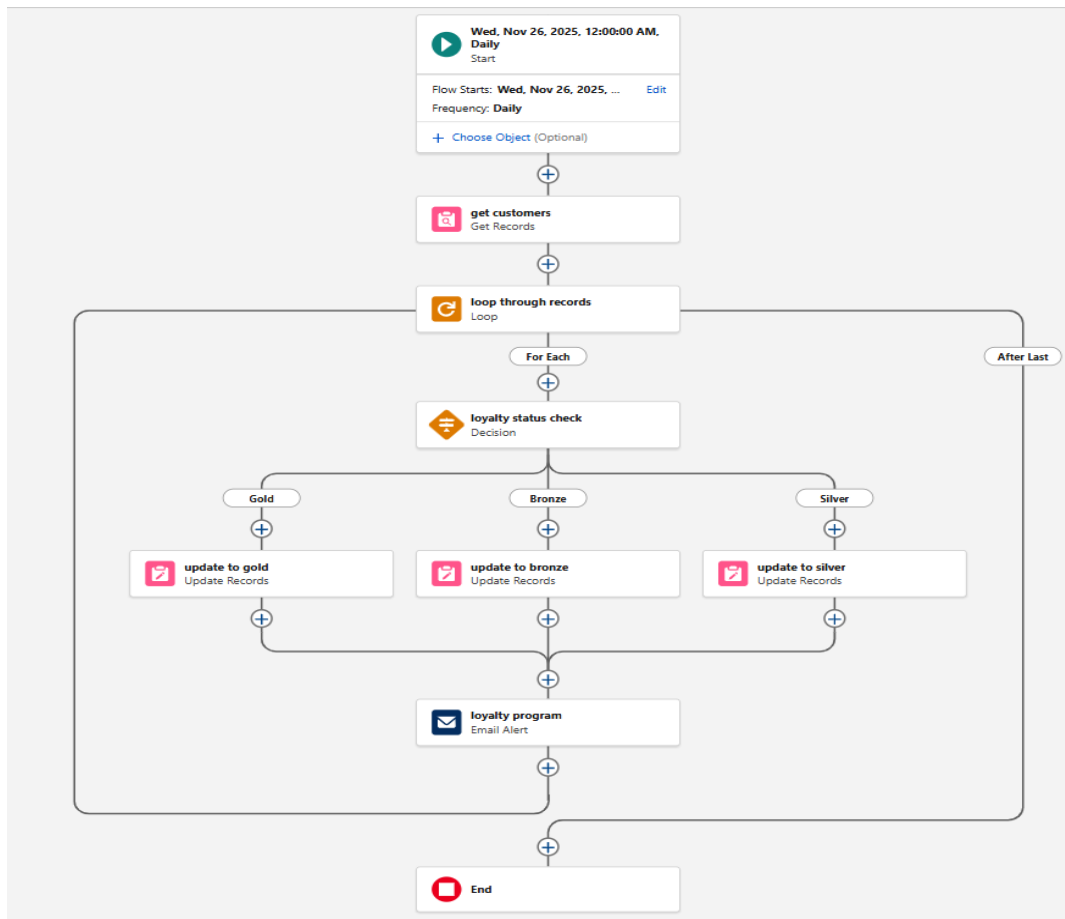
- **Order Confirmation Flow** – A record-triggered Flow on the Order object that automatically sends a personalized confirmation email to the customer when the order status is updated to *Confirmed*.



- **Low Stock Alert Flow** – A record-triggered Flow on the Product or Inventory object that sends an immediate email notification to inventory managers when stock drops to 5 units or below, preventing stockouts.



- **Loyalty Status Flow** – A record-triggered or scheduled Flow that evaluates a customer’s total purchase history and updates their loyalty tier accordingly, sending an email notification to inform them of the status change.



➤ Apex Classes, Triggers, and Asynchronous Apex

Apex was used to implement complex business logic that could not be fully handled by declarative tools. This ensured **consistent enforcement of business rules, data integrity**, and automation of high-volume processes.

Key Apex Components Implemented:

- **Order Validation & Total Calculation**
 - **Trigger:** OrderTrigger – validates order quantity before insert/update
 - **Handler Class:** OrderTriggerHandler – enforces rules for status based on quantity
 - **Trigger:** OrderTotalTrigger – calculates Total_Amount__c as Quantity × Product Price

```

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 }

```

- **Inventory Management**

- **Trigger:** StockDeductionTrigger – reduces inventory stock after order confirmation
- **Handler Class:** StockDeductionHandler – queries inventory and deducts ordered quantities

```

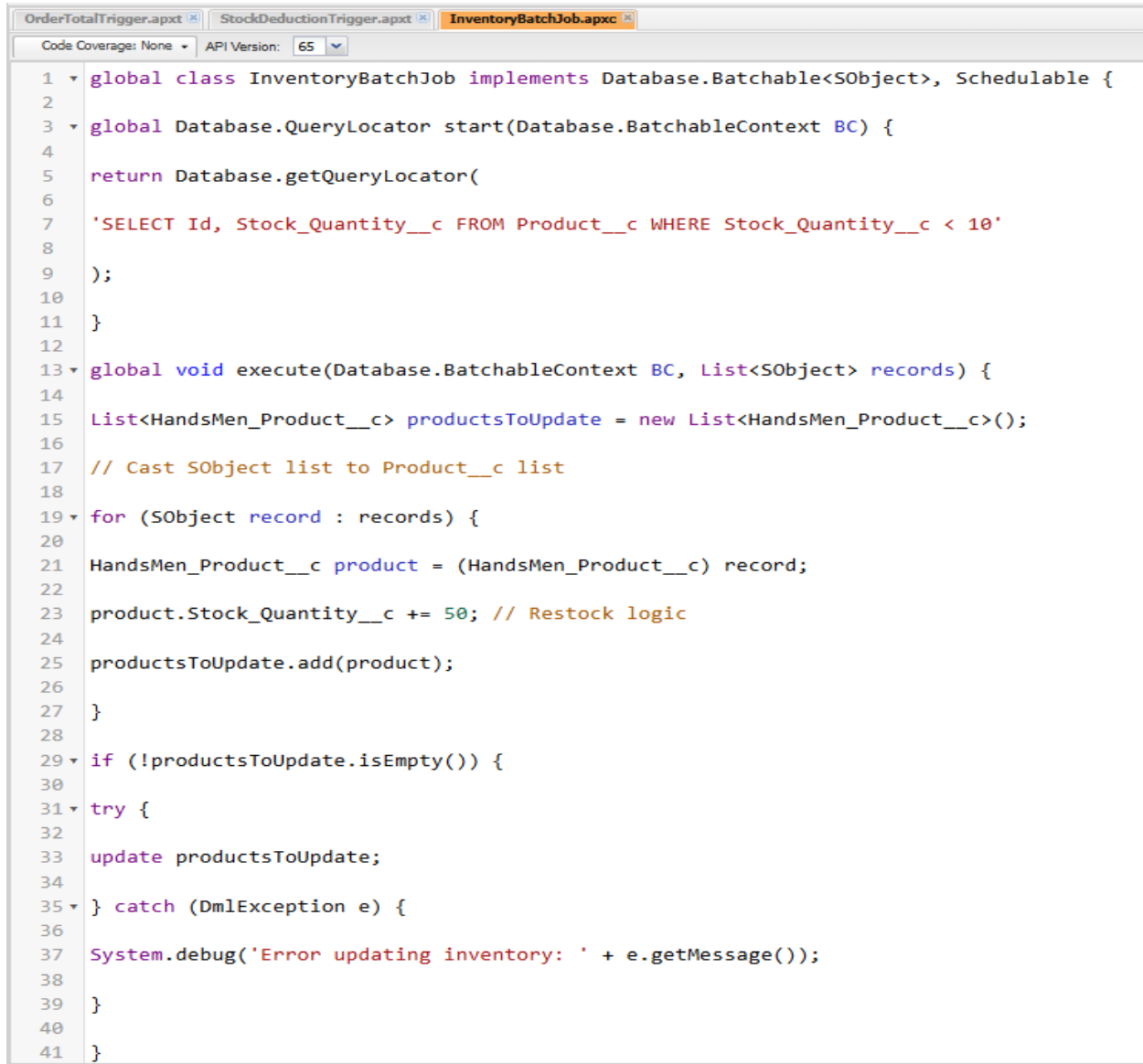
1  trigger StockDeductionTrigger on HandsMen_Order__c (after insert, after update) {
2      Set<Id> productIds = new Set<Id>();
3
4      for (HandsMen_Order__c order : Trigger.new) {
5          if (order.Status__c == 'Confirmed' && order.HandsMen_Product__c != null) {
6              productIds.add(order.HandsMen_Product__c);
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 }

```

- **Customer Loyalty Automation**

- **Trigger:** LoyaltyStatusUpdateTrigger – updates loyalty status after customer purchase changes
- **Handler Class:** LoyaltyStatusHandler – applies tier rules (Gold/Silver/Bronze) based on total purchases

- **Asynchronous Apex (Batch / Scheduler)**
 - Scheduled batch jobs were developed to handle **bulk order processing** and **automatic inventory restocking** during off-peak hours, ensuring system performance and accurate daily records.



```
OrderTotalTrigger.apxt | StockDeductionTrigger.apxt | InventoryBatchJob.apxc
Code Coverage: None | API Version: 65
1  global class InventoryBatchJob implements Database.Batchable<SObject>, Schedulable {
2
3  global Database.QueryLocator start(Database.BatchableContext BC) {
4
5      return Database.getQueryLocator(
6
7          'SELECT Id, Stock_Quantity__c FROM Product__c WHERE Stock_Quantity__c < 10'
8
9      );
10
11  }
12
13  global void execute(Database.BatchableContext BC, List<SObject> records) {
14
15      List<HandsMen_Product__c> productsToUpdate = new List<HandsMen_Product__c>();
16
17      // Cast SObject list to Product__c list
18
19  for (SObject record : records) {
20
21      HandsMen_Product__c product = (HandsMen_Product__c) record;
22
23      product.Stock_Quantity__c += 50; // Restock logic
24
25      productsToUpdate.add(product);
26
27  }
28
29  if (!productsToUpdate.isEmpty()) {
30
31  try {
32
33      update productsToUpdate;
34
35  } catch (DmlException e) {
36
37      System.debug('Error updating inventory: ' + e.getMessage());
38
39  }
40
41  }
```

Phase 3: UI/UX Development & Customization

➤ Lightning App Setup

A custom Salesforce Lightning App named “**HandsMen Threads**” was created using the **App Manager**. The app consolidates all essential tabs which includes Customers, Orders, Products, Inventory, Loyalty Status, and Marketing Campaigns, into a single workspace. This setup allows users to access all relevant CRM functions efficiently without switching between multiple applications.

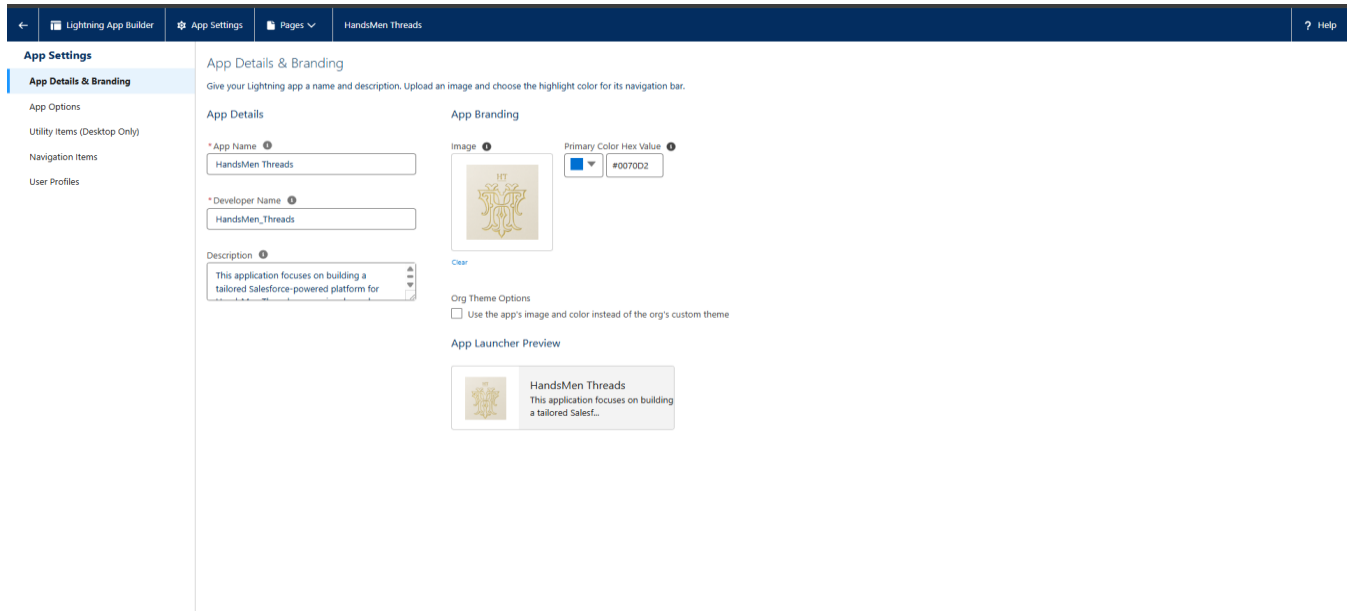


Figure 4.1. HandsMen Threads Lightning App Configuration in Salesforce App Manager

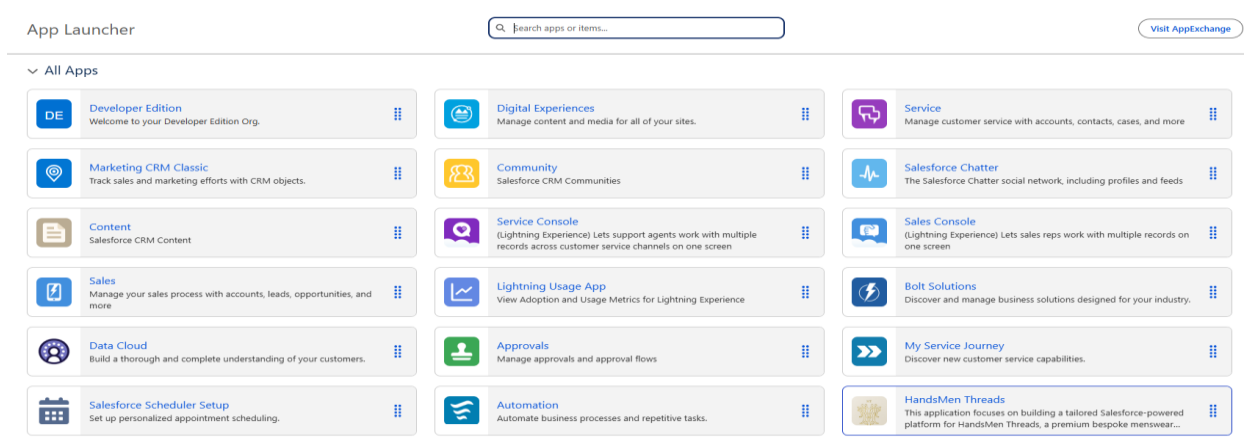


Figure 4.2. HandsMen Threads Application in Salesforce App Launcher

➤ Page Layouts and Dynamic Forms

Page layouts were customized using Dynamic Forms and standard layout configurations to improve data visibility and user guidance. Fields were logically grouped and arranged in a simple two-column layout across key objects, ensuring that users can quickly locate and update important information while minimizing data entry errors.

Page layouts and Dynamic Forms were customized for the following Salesforce objects:

a. HandsMen Customers

The screenshot shows the Salesforce Setup page for the 'HandsMen Customer' object. The left sidebar contains navigation links: Details, Fields & Relationships, Page Layouts (selected), 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 'HandsMen Customer Layout' and includes a 'Quick Find' bar. Below the navigation pane, there are sections for 'Fields' (listing Fields, Sections, and Blank Space), 'Highlights Panel', 'Quick Actions in the Salesforce Classic Publisher', 'Salesforce Mobile and Lightning Experience Actions', and 'HandsMen Customer Detail'. The 'HandsMen Customer Detail' section shows a sample record with fields like Customer Name, Email, Phone, Loyalty Status, First Name, Last Name, and Total Purchases.

b. HandsMen Orders

The screenshot shows the Salesforce Setup page for the 'HandsMen Order' object. The left sidebar contains navigation links: Details, Fields & Relationships, Page Layouts (selected), 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 'HandsMen Order Layout' and includes a 'Quick Find' bar. Below the navigation pane, there are sections for 'Fields' (listing Fields, Sections, and Blank Space), 'Highlights Panel', 'Quick Actions in the Salesforce Classic Publisher', 'Salesforce Mobile and Lightning Experience Actions', and 'HandsMen Order Detail'. The 'HandsMen Order Detail' section shows a sample record with fields like Order Number, HandsMen Product, HandsMen Customer, Status, Quantity, Total Amount, and Customer Email.

c. HandsMen Products

SETUP > OBJECT MANAGER

HandsMen Product

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

Conditional Field Formatting

HandsMen Product Layout

Save Quick Save Preview As... Cancel Undo Redo Layout Properties

Fields

Buttons

Quick Actions

Mobile & Lightning Actions

Expanded Lookups

Related Lists

Quick Find

Field Name

Section

Last Modified By

Owner

Stock Quantity

Blank Space

Created By

Price

HandsMen Product

SKU

HandsMen Product Sample

Highlights Panel

Customize the highlights panel for this page layout...

Quick Actions in the Salesforce Classic Publisher

Actions in this section are currently inherited from the global publisher layout. You can [override the global publisher layout](#) to set a customized list of actions for the publisher on pages that use this layout.

Salesforce Mobile and Lightning Experience Actions

Actions in this section are predefined by Salesforce. You can [override the predefined actions](#) to set a customized list of actions on Lightning Experience and mobile app pages that use this layout. If you customize the actions in the Quick Actions in the Salesforce Classic Publisher section, and have saved the layout, then this section inherits that set of actions by default when you click to override.

HandsMen Product Detail

Standard Buttons

Edit Delete Clone Change Owner Change Record Type Printable View Sharing Sharing Hierarchy Edit Labels

Custom Buttons

Information (header visible on edit only)

HandsMen Product

Name Sample Text

SKU Sample Text

Price \$123.45

Stock Quantity 81,312

Owner Sample Text

System Information (header visible on edit only)

Created By Sample Text

Last Modified By Sample Text

d. Inventory

SETUP > OBJECT MANAGER

Inventory

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

Conditional Field Formatting

Inventory Layout

Save Quick Save Preview As... Cancel Undo Redo Layout Properties

Fields

Buttons

Quick Actions

Mobile & Lightning Actions

Expanded Lookups

Related Lists

Quick Find

Field Name

Section

Inventory Number

Warehouse

Last Modified By

Owner

Stock Quantity

Blank Space

Created By

Stock Status

HandsMen Product

Stock Status

Inventory Sample

Highlights Panel

Customize the highlights panel for this page layout...

Quick Actions in the Salesforce Classic Publisher

Actions in this section are currently inherited from the global publisher layout. You can [override the global publisher layout](#) to set a customized list of actions for the publisher on pages that use this layout.

Salesforce Mobile and Lightning Experience Actions

Actions in this section are predefined by Salesforce. You can [override the predefined actions](#) to set a customized list of actions on Lightning Experience and mobile app pages that use this layout. If you customize the actions in the Quick Actions in the Salesforce Classic Publisher section, and have saved the layout, then this section inherits that set of actions by default when you click to override.

Inventory Detail

Standard Buttons

Edit Delete Clone Change Owner Change Record Type Printable View Edit Labels

Custom Buttons

Information (header visible on edit only)

Inventory Number

00N-2004-001234

HandsMen Product

Sample Text

Stock Quantity

12,112

Stock Status

Sample Text

Warehouse

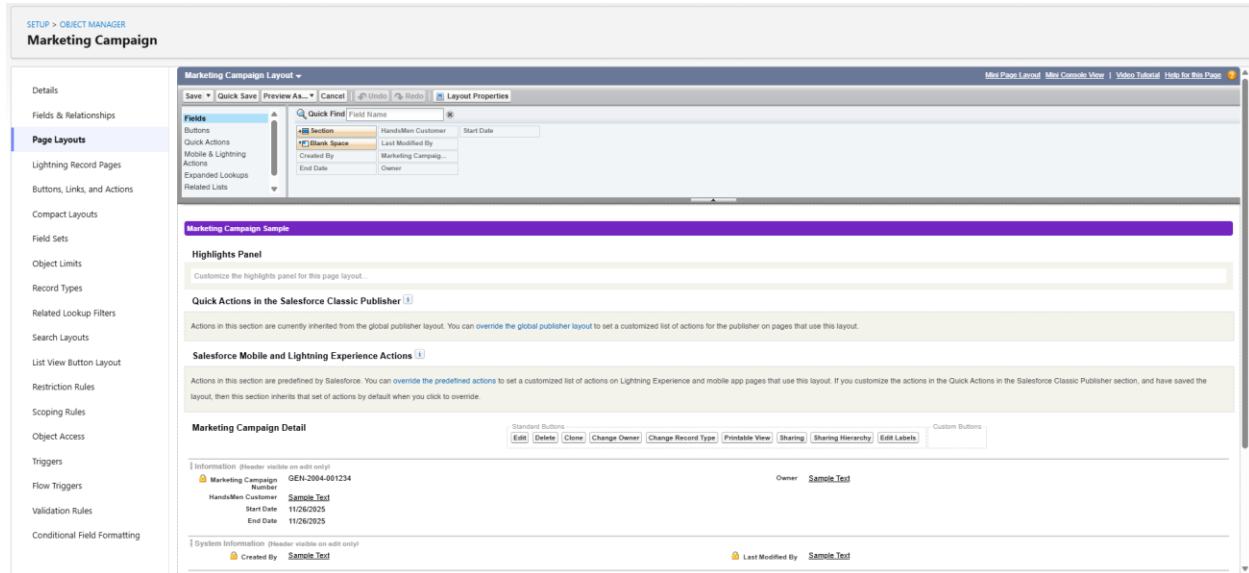
Sample Text

System Information (header visible on edit only)

Created By Sample Text

Last Modified By Sample Text

e. Marketing Campaigns



➤ User Management

User management was configured to align system access with defined business roles and responsibilities. Roles, profiles, and permission sets were used to control access to CRM data and features, ensuring data security and appropriate user privileges.

Role	Access Level
Sales Manager	Full Access to Customers, Orders
Inventory Manager	Read & Edit on Inventory, Products
Marketing Team	Read on Customers, Edit on Marketing Campaigns

Figure 5. User Role and Permission Setup – HandsMen Threads CRM

➤ Reports and Dashboards

Although no custom reports or dashboards were implemented during this phase, the system is fully capable of generating Salesforce reports and dashboards. These can be used to monitor key performance indicators such as order volume, current inventory levels, and customer loyalty distribution, supporting data-driven decision-making for management.

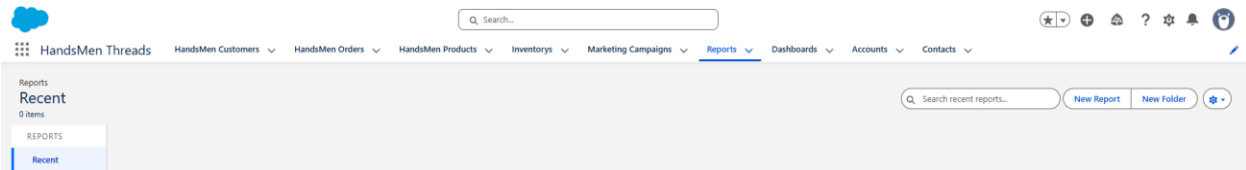


Figure 6.1. Reports Module in Salesforce Lightning App

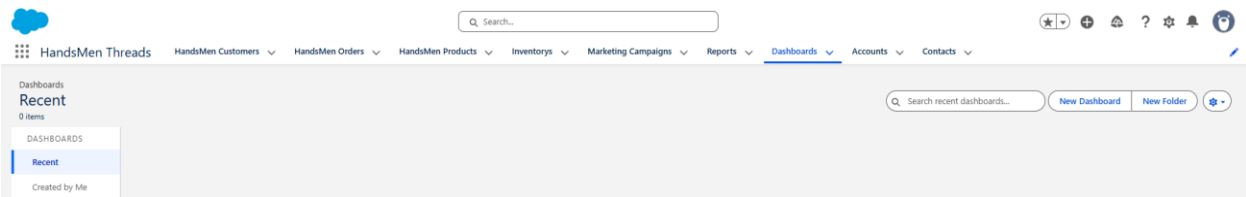


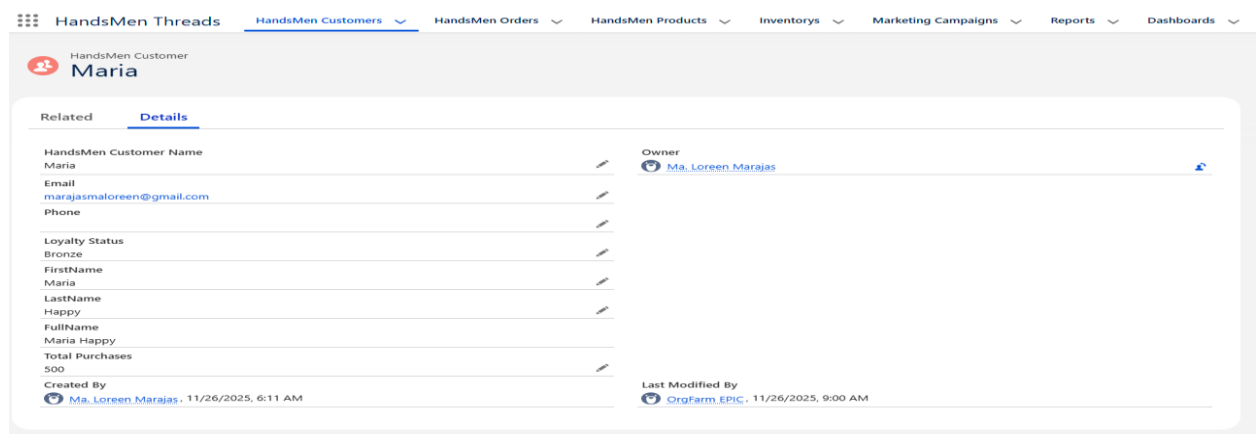
Figure 6.2. Dashboards Module in Salesforce Lightning App

➤ Lightning Pages

Custom **Lightning Record Pages** were developed using the Lightning App Builder for core objects, including Customers, Orders, Products, Inventory, and Marketing Campaigns. These pages were optimized for clarity and consistency, providing users with a structured view of record details and related information within the Salesforce interface.

Custom Lightning Record Pages were developed using the **Lightning App Builder** for the core Salesforce objects, including:

a. HandsMen Customers



b. HandsMen Orders

HandsMen Threads

HandsMen Customers

HandsMen Orders

HandsMen Products

Inventorys

Marketing Campaigns

Reports

Dashboards

HandsMen Order

O-0012

Related

Details

HandsMen OrderNumber

O-0012

HandsMen Product

[Polo Shirt](#)

HandsMen Customer

[Maria](#)

Status

Confirmed

Quantity

400

Total Amount

80,000

Customer Email

[marajasmaloreen@gmail.com](#)

Created By

[Ma. Loreen Marajas](#) · 11/26/2025, 10:25 PM

Owner

[Ma. Loreen Marajas](#)

Last Modified By

[Ma. Loreen Marajas](#) · 11/26/2025, 11:56 PM

c. HandsMen Products

HandsMen Threads

HandsMen Customers

HandsMen Orders

HandsMen Products

Inventorys

Marketing Campaigns

Reports

Dashboards

HandsMen Product

Polo Shirt

Related

Details

HandsMen Product Name

Polo Shirt

SKU

Price

\$200

Stock Quantity

1,000

Created By

[Ma. Loreen Marajas](#) · 11/26/2025, 9:49 PM

Owner

[Ma. Loreen Marajas](#)

Last Modified By

[Ma. Loreen Marajas](#) · 11/26/2025, 9:49 PM

d. Inventory

HandsMen Threads

HandsMen Customers

HandsMen Orders

HandsMen Products

Inventorys

Marketing Campaigns

Reports

Dashboards

Inventory

I -0004

Related

Details

Inventory Number

I -0004

HandsMen Product

[Polo Shirt](#)

Stock Quantity

1,200

Stock Status

Available

Warehouse

Created By

[Ma. Loreen Marajas](#) · 11/26/2025, 9:49 PM

Last Modified By

[Ma. Loreen Marajas](#) · 11/26/2025, 11:56 PM

e. Marketing Campaigns

The screenshot shows the 'Marketing Campaigns' page in Salesforce. The navigation bar includes 'HandsMen Threads', 'HandsMen Customers', 'HandsMen Orders', 'HandsMen Products', 'Inventorys', 'Marketing Campaigns' (selected), 'Reports', and 'Dashboards'. The main content area displays the details for a specific campaign, 'MC -0001'. The details are organized into two columns. The left column lists fields: 'Marketing Campaign Number' (MC -0001), 'HandsMen Customer' (Maria), 'Start Date' (11/26/2025), 'End Date' (11/30/2025), and 'Created By' (Ma. Loreen Marajas, 11/26/2025, 11:59 PM). The right column lists 'Owner' (Ma. Loreen Marajas) and 'Last Modified By' (Ma. Loreen Marajas, 11/26/2025, 11:59 PM). Each field has an edit icon next to it.

Related	Details
Marketing Campaign Number	Owner
MC -0001	Ma. Loreen Marajas
HandsMen Customer	
Maria	
Start Date	
11/26/2025	
End Date	
11/30/2025	
Created By	Last Modified By
Ma. Loreen Marajas, 11/26/2025, 11:59 PM	Ma. Loreen Marajas, 11/26/2025, 11:59 PM

Phase 4: Data Migration, Testing & Security

➤ Data Loading Process

- **Initial Data Migration:** Master data for HandsMen Threads, including Customers, Products, and Inventory records, was migrated using the **Data Import Wizard** for its simplicity and suitability for small to medium datasets (<50,000 records).

The screenshot shows the 'Data Import Wizard' in Salesforce. The interface is divided into three main sections: 'Choose data', 'Edit mapping', and 'Start import'. The 'Choose data' section is active, showing a list of 'Standard objects' and 'Custom objects'. Under 'Standard objects', there are three items: 'Accounts and Contacts', 'Leads', and 'Solutions'. The 'What do you want to do?' section is empty. The 'Where is your data located?' section is empty. At the bottom, there are buttons for 'Cancel', 'Previous', and 'Next'.

Import your Data into Salesforce
You can import up to 50,000 records at a time.

What kind of data are you importing?

Standard objects	Custom objects
Accounts and Contacts	
Leads	
Solutions	

What do you want to do?

Where is your data located?

Cancel Previous Next

- **Bulk or Ongoing Loads:** For larger volumes or regular updates, the **Data Loader** was designated as the standard tool.

Import your Data into Salesforce
You can import up to 50,000 records at a time.

What kind of data are you importing?

Standard objects: HandsMen Customers, HandsMen Orders, HandsMen Products, Inventories, Marketing Campaigns

What do you want to do?

Add new records: Match by: [None], Which User field in your file designates record owners?: [None], Trigger workflow rules and processes?: [x] trigger workflow rules and processes for new and updated records

Update existing records: Add new and update existing records

Where is your data located?

Drag CSV file here to upload

File: [Choose File] customers.csv

Character Code: [ISO-8859-1 (General US & Western European, ISO-LATIN-1)]

Values Separated By: [Comma]

Cancel Previous Next

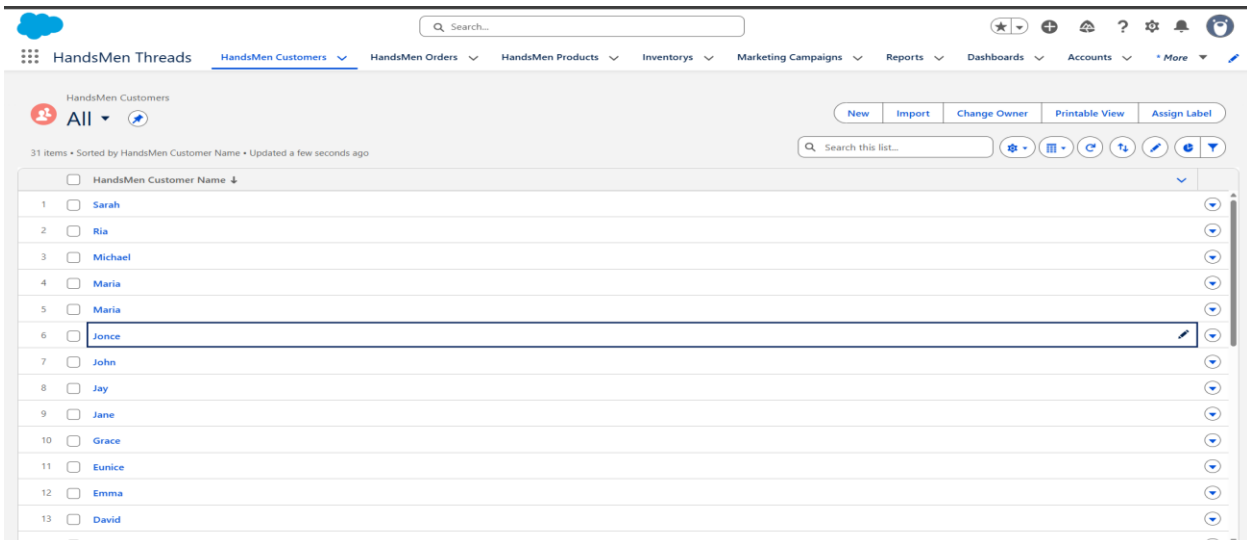
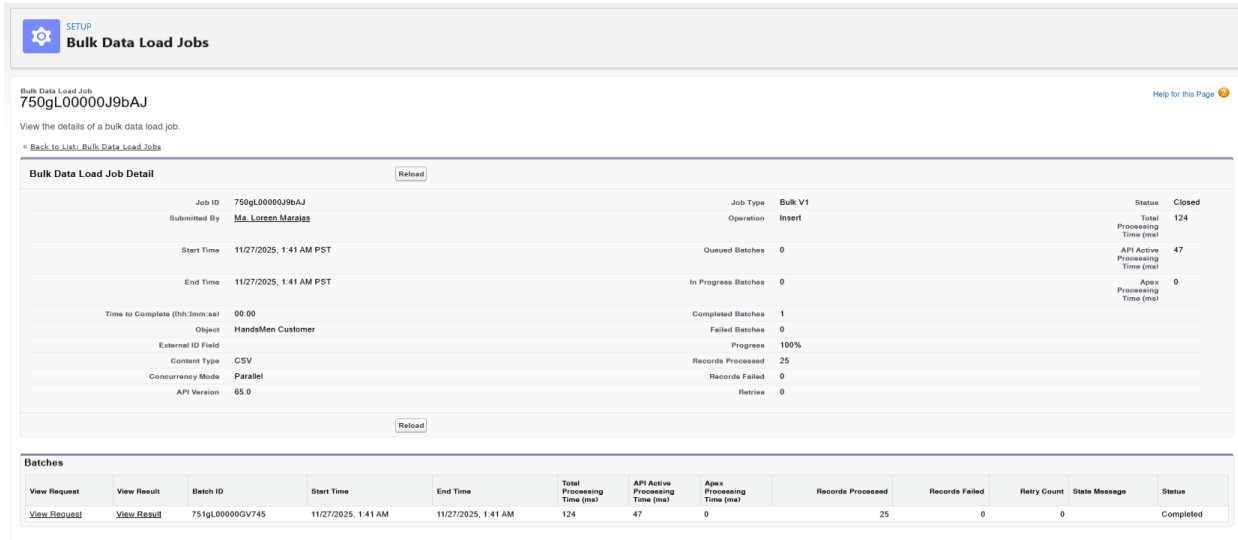
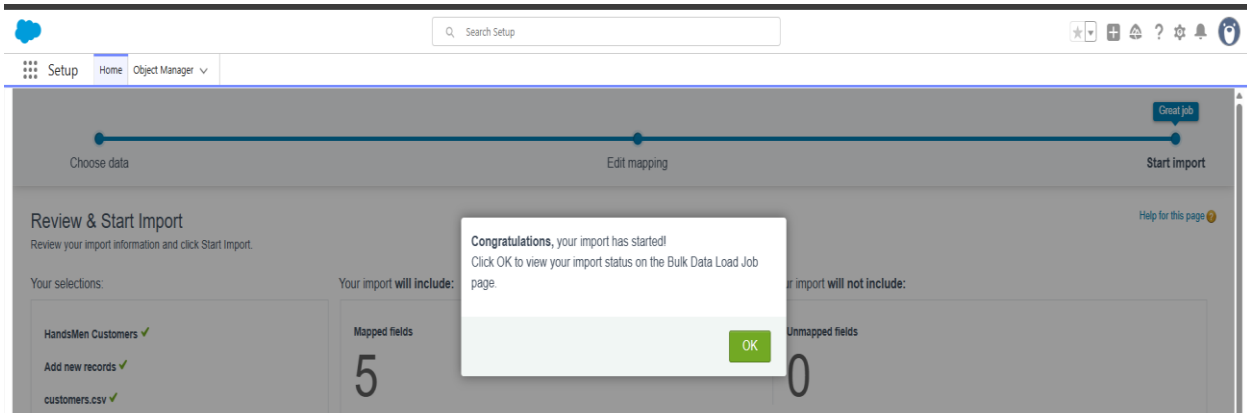
- **Field Mappings:** Carefully configured to ensure data integrity and consistency during migration.

Edit Field Mapping: HandsMen Customers
Your file has been auto-mapped to existing Salesforce fields, but you can edit the mappings if you wish. Unmapped fields will not be imported.

Edit	Mapped Salesforce Object	CSV Header	Example	Example	Example
Change	FirstName	FirstName	John	Jane	Alex
Change	LastName	LastName	Doe	Smith	Johnson
Change	Email	Email	john1@gmail.com	jane1@gmail.com	alex1@gmail.com
Change	Total Purchases	Total_Purchases__c	100	500	1200
Change	Loyalty Status	Loyalty_Status__c	Bronze	Silver	Gold

Cancel Previous Next

Below are the screenshots of the successful bulk import of customer records for HandsMen Customers:



➤ Field History Tracking, Duplicate Rules, and Matching Rules

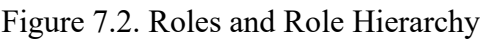
Field History Tracking, Duplicate Rules, and Matching Rules were not configured in this version of the system. While these features are useful for monitoring changes to critical fields, preventing duplicate records, and defining criteria for identifying matches, they were not implemented during this phase. These functionalities can be added in future system enhancements to further improve data integrity, auditability, and database quality.

➤ Profiles, Roles, Permission Sets, and Sharing Rules

Custom profiles and a simple role hierarchy were configured to provide appropriate access based on job functions. Sales users were able to manage Customers, Orders, and Products, while Warehouse users could manage Inventory and view Orders. Permission Sets were used to grant additional access to managers without modifying their base profiles. No sharing rules were implemented in this version of the system, meaning all record access was controlled solely through profiles, roles, and permission sets. This configuration ensured users had the necessary access for their responsibilities while maintaining data security.

Action	Profile Name	User License	Custom
Edit Clone	Analytics Cloud Integration User	Analytics Cloud Integration User	<input type="checkbox"/>
Edit Clone	Analytics Cloud Security User	Analytics Cloud Integration User	<input type="checkbox"/>
Edit Clone	Anypoint Integration	Identity	<input type="checkbox"/>
Edit Clone	Authenticated Website	Authenticated Website	<input type="checkbox"/>
Edit Clone	Authenticated Website	Authenticated Website	<input type="checkbox"/>
Edit Del ...	B2B Reordering Portal Buyer Profile	External Apps Login	<input checked="" type="checkbox"/>
Edit Clone	Chatter External User	Chatter External	<input type="checkbox"/>
Edit Clone	Chatter Free User	Chatter Free	<input type="checkbox"/>
Edit Clone	Chatter Moderator User	Chatter Free	<input type="checkbox"/>
Edit Clone	Contract Manager	Salesforce	<input type="checkbox"/>
Edit Clone	Cross Org Data Proxy User	XOrg Proxy User	<input type="checkbox"/>
Edit Del ...	Custom Marketing Profile	Salesforce	<input checked="" type="checkbox"/>
Edit Del ...	Custom Sales Profile	Salesforce	<input checked="" type="checkbox"/>
Edit Del ...	Custom Support Profile	Salesforce	<input checked="" type="checkbox"/>
Edit Clone	Customer Community Login User	Customer Community Login	<input type="checkbox"/>
Edit Clone	Customer Community Plus Login User	Customer Community Plus Login	<input type="checkbox"/>
Edit Clone	Customer Community Plus User	Customer Community Plus	<input type="checkbox"/>
Edit Clone	Customer Community User	Customer Community	<input type="checkbox"/>
Edit Clone	Customer Portal Manager Custom	Customer Portal Manager Custom	<input type="checkbox"/>
Edit Clone	Customer Portal Manager Standard	Customer Portal Manager Standard	<input type="checkbox"/>
Edit Clone	Einstein Agent User	Einstein Agent	<input type="checkbox"/>
Edit Clone	External Apps Login User	External Apps Login	<input type="checkbox"/>
Edit Clone	External Identity User	External Identity	<input type="checkbox"/>
Edit Clone	Force.com - App Subscription User	Force.com - App Subscription	<input type="checkbox"/>
Edit Clone	Force.com - Free User	Force.com - Free	<input type="checkbox"/>

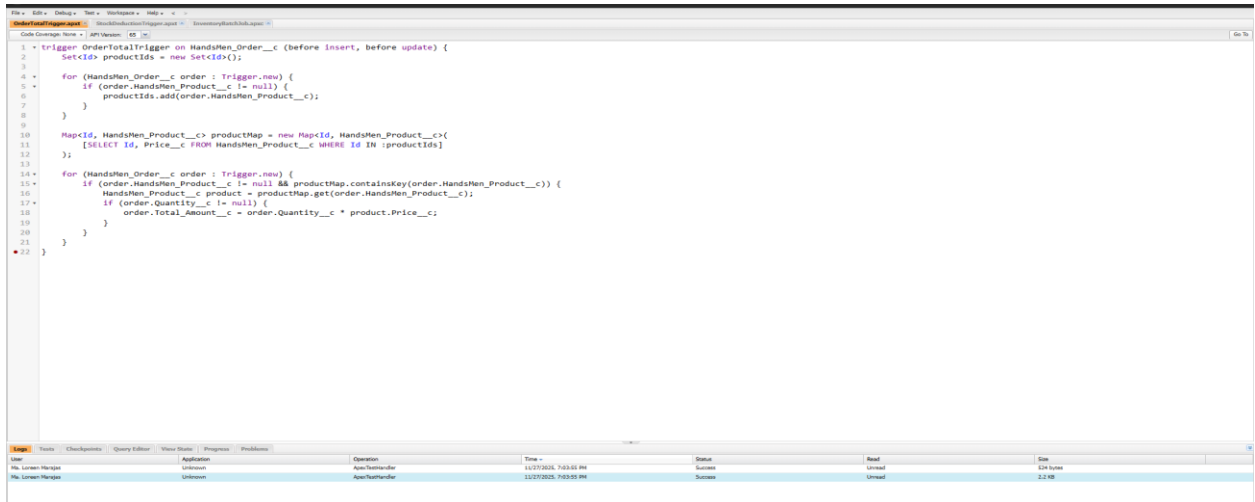
Figure 7.1. Profiles

Figure 7.3. Permission SetsFigure 7.4. Sharing Rules

Creation of Test Classes

Apex test classes were developed to validate the custom business logic, ensuring that triggers and automations operate correctly under normal and bulk conditions. These tests also maintain the required 75% code coverage for deployment.

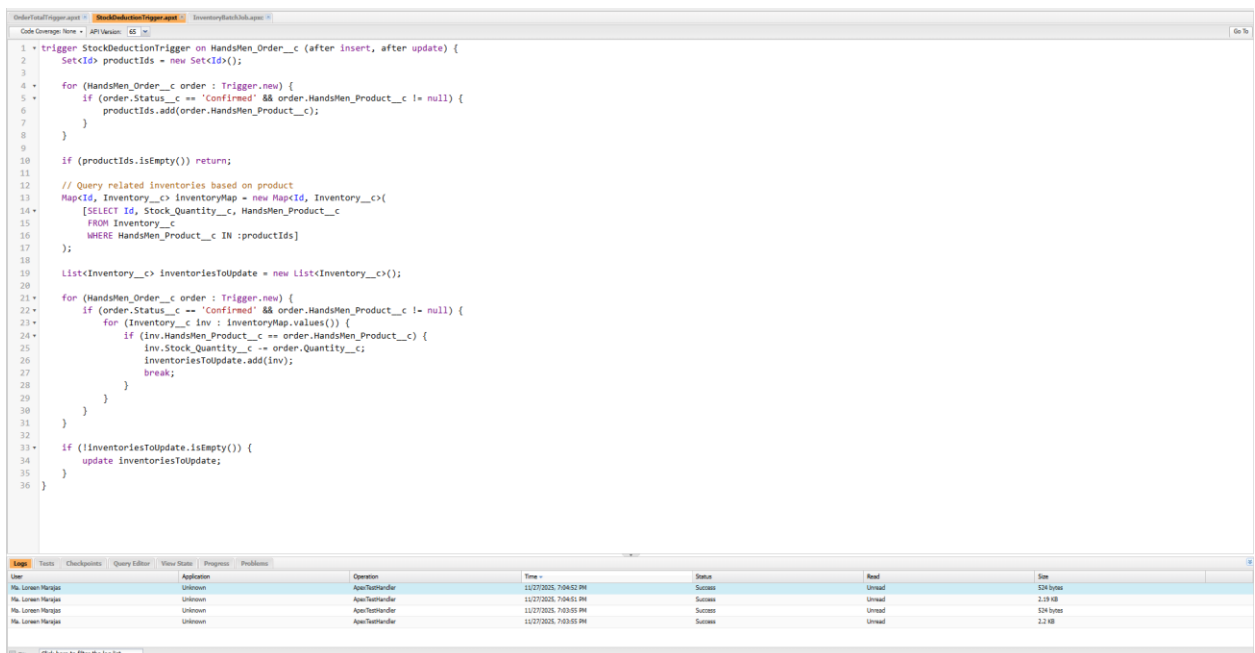
- **OrderTotalTriggerTest:** Inserts sample product and order records to verify that Total_Amount__c is calculated correctly as Quantity__c × Price__c. This test confirms the order total trigger works as expected across multiple records.



```
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 }
```

User	Application	Operation	Time	Status	Read	Size
M. Loren Herges	Unknown	ApexTestHandler	11/27/2025, 7:03:02 PM	Success	Unread	524 bytes
M. Loren Herges	Unknown	ApexTestHandler	11/27/2025, 7:03:05 PM	Success	Unread	2.2 KB

- **StockUpdateTriggerTest:** Inserts inventory and order records, then updates an order status to 'Confirmed'. The test ensures the related Stock_Quantity__c is automatically decremented, validating the stock update trigger



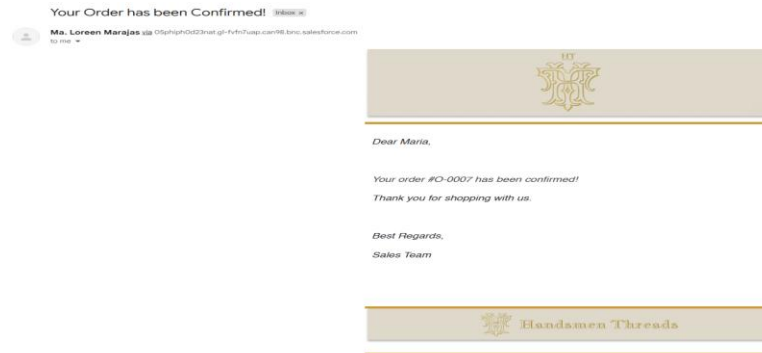
```
1 // Trigger StockUpdateTrigger on HandsMen_Order__c (after insert, after update) {
2   Set<Id> productIds = new Set<Id>();
3
4   for (HandsMen_Order__c order : Trigger.new) {
5     if (order.Status__c == 'Confirmed' && order.HandsMen_Product__c != null) {
6       productIds.add(order.HandsMen_Product__c);
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 }
```

User	Application	Operation	Time	Status	Read	Size
M. Loren Herges	Unknown	ApexTestHandler	11/27/2025, 7:04:02 PM	Success	Unread	524 bytes
M. Loren Herges	Unknown	ApexTestHandler	11/27/2025, 7:04:02 PM	Success	Unread	2.2 KB
M. Loren Herges	Unknown	ApexTestHandler	11/27/2025, 7:03:05 PM	Success	Unread	524 bytes
M. Loren Herges	Unknown	ApexTestHandler	11/27/2025, 7:03:05 PM	Success	Unread	2.2 KB

Functional Test Scenarios

1. Automated Order Confirmation

- **Scenario:** Confirm an order for a customer.
- **Steps:**
 1. Open HandsMen Orders tab.
 2. Create a new order with 'Draft' status.
 3. Save, then update status to 'Confirmed'.
- **Expected Outcome:** Confirmation email sent to customer automatically.
- **Observed Outcome:** Email sent successfully; verified in debug logs and customer inbox.



2. Loyalty Program Update

- **Scenario:** Update loyalty status based on purchase amount.
- **Steps:**
 1. Select a customer with Bronze status and \$0 total purchases.
 2. Create an order with Total Amount \$1,200.
- **Expected Outcome:** Customer status upgrades from Bronze to Gold.
- **Observed Outcome:** Status updated correctly; system automation verified.

BEFORE:

HandsMen Threads HandsMen Customers HandsMen Orders Hand

HandsMen Customer Jay

Related Details

HandsMen Customer Name Jay

Email marajasmaloreen@gmail.com

Phone

Loyalty Status Bronze

FirstName Jay

LastName Park

FullName Jay Park

Total Purchases

Created By Ma. Loreen Marajas · 11/26/2025, 9:48 PM

AFTER:

HandsMen Threads HandsMen Customers HandsMen Orders Hands

HandsMen Customer Jay

Related Details

HandsMen Customer Name Jay

Email marajasmaloreen@gmail.com

Phone

Loyalty Status Silver

FirstName Jay

LastName Park

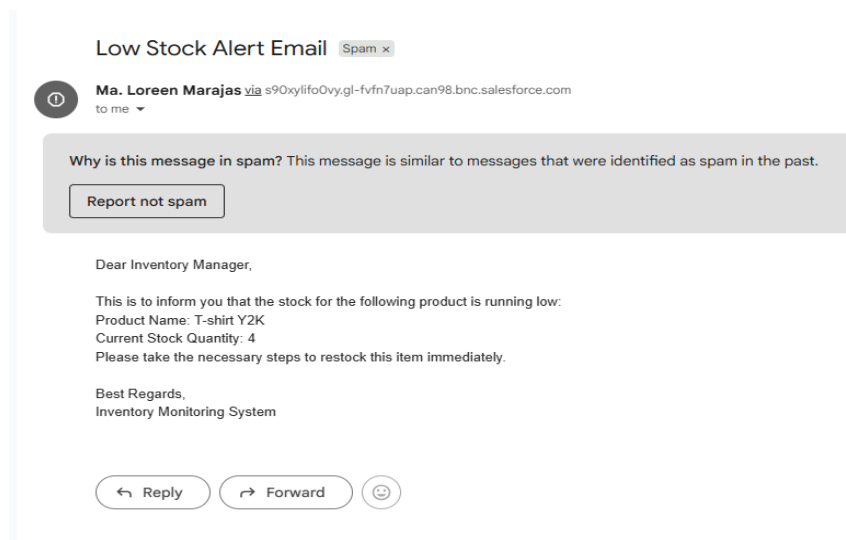
FullName Jay Park

Total Purchases

Created By Ma. Loreen Marajas · 11/26/2025, 9:48 PM

3. Low Stock Alert

- **Scenario:** Notify inventory manager when stock drops below threshold.
- **Steps:**
 1. Open Inventory record for a product.
 2. Reduce Stock_Quantity__c from 6 to 4.
 3. Save changes.
- **Expected Outcome:** Email alert sent to Inventory Manager.
- **Observed Outcome:** Alert received; team confirmed notification.



4. Order Total Calculation

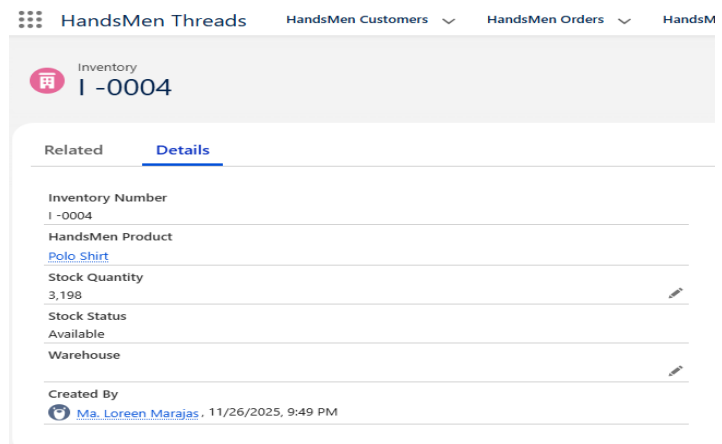
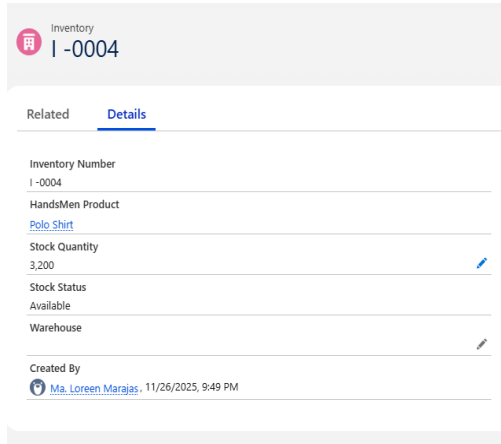
- **Scenario:** Verify automatic calculation of order total.
- **Steps:**
 1. Create a new order.
 2. Select a product (“Jacket” \$10) and quantity 50.
 3. Save the record.
- **Expected Outcome:** Total_Amount__c calculates to \$500.
- **Observed Outcome:** Field populated correctly upon saving.

The image shows two screenshots from a Salesforce interface. The left screenshot is the 'New HandsMen Order' form. It has a header 'New HandsMen Order' and a sub-header 'Information'. The form contains several fields: 'HandsMen OrderNumber' (empty), 'Owner' (Ma. Loreen Marajas), 'HandsMen Product' (Polo Shirt), 'HandsMen Customer' (Jay), 'Status' (Confirmed), 'Quantity' (2), 'Total Amount' (empty), and 'Customer Email' (marajasmaloreen@gmail.com). At the bottom are 'Cancel', 'Save & New', and 'Save' buttons. The right screenshot shows the 'HandsMen Order O-0017' details page. It has a header 'HandsMen Order O-0017' and a sub-header 'Details'. The details are listed in a table with columns for the field name and the value. The fields and values are: HandsMen OrderNumber (O-0017), HandsMen Product (Polo Shirt), HandsMen Customer (Jay), Status (Confirmed), Quantity (2), Total Amount (400), Customer Email (marajasmaloreen@gmail.com), and Created By (Ma. Loreen Marajas, 11/27/2025, 3:30 AM).

Field	Value
HandsMen OrderNumber	O-0017
HandsMen Product	Polo Shirt
HandsMen Customer	Jay
Status	Confirmed
Quantity	2
Total Amount	400
Customer Email	marajasmaloreen@gmail.com
Created By	Ma. Loreen Marajas, 11/27/2025, 3:30 AM

5. Stock Quantity Update

- **Scenario:** Inventory decrement after order confirmation.
- **Steps:**
 1. Check Inventory record (e.g., Stock 100).
 2. Create order with quantity 20 and status 'Confirmed'.
 3. Save record.
- **Expected Outcome:** Stock decreases to 80 automatically.
- **Observed Outcome:** Inventory updated correctly; automation verified.



Phase 5: Deployment, Documentation & Maintenance

➤ Deployment Strategy

The deployment of the HandsMen Threads CRM was planned to ensure a smooth transition from development to production. Change Sets were used to move customizations from the Developer Org to a UAT sandbox for testing. Once approved, the same Change Sets were deployed to the production environment, providing a controlled and traceable deployment process.\

➤ Maintenance and Monitoring

System maintenance focuses on ensuring continuous, reliable operation. Scheduled jobs, workflows, flows, and Apex triggers are regularly monitored using debug logs and system reports. Periodic data backups and user feedback reviews help identify and resolve potential issues proactively. Updates to business logic, objects, or automation are first tested in a sandbox before deployment to production.

➤ Troubleshooting

Troubleshooting follows a structured approach: errors are first analyzed using debug logs and Salesforce error messages, then validation rules, flows, and Apex triggers are reviewed for conflicts or logic issues. Any fixes are tested in a sandbox prior to production deployment, and each step is documented to create a knowledge base for future reference. This approach ensures that the CRM remains reliable, maintainable, and aligned with business needs.

Conclusion

The Salesforce CRM developed for HandsMen Threads successfully integrates and automates critical business processes, including managing customers, products, orders, inventory, and loyalty programs. By leveraging tools such as Custom Objects, Flows, Validation Rules, Email Alerts, and Apex triggers, the system ensures data accuracy, timely updates, and a seamless customer experience. Automation and role-based access controls reduce manual errors, accelerate operations, and provide management with actionable insights for decision-making.

Future Enhancements:

1. **Customer Self-Service Portal:** Allow customers to track orders, update information, and access support resources.
2. **Mobile Inventory & Sales Management:** Enable staff to manage inventory, process orders, and monitor loyalty on mobile devices.
3. **Advanced Analytics & Reporting:** Implement dashboards to visualize sales trends, inventory levels, and customer loyalty metrics.
4. **AI-Driven Insights:** Use predictive analytics to suggest cross-selling opportunities, forecast demand, and analyze customer behavior.
5. **Field History Tracking & Duplicate Rules:** Improve data accuracy and security by auditing changes and preventing duplicates.