

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

PROJECT OVERVIEW

HandsMen Threads is a custom Salesforce CRM solution developed to streamline business operations within the men's fashion industry. The system centralizes customer management, product cataloging, order processing, inventory tracking, and marketing campaigns. By implementing a strong data model and UI-driven validations, the CRM ensures accurate data capture and consistency across all business processes.

Automated business processes—including record-triggered flows, scheduled flows, email alerts, and Apex logic—improve operational efficiency. Key automation includes order confirmation notifications, loyalty status updates, and proactive stock alerts. A batch Apex class also monitors and updates low inventory levels. The integrated security model ensures role-based access for the Sales, Inventory, and Marketing teams.

Overall, the CRM enhances customer engagement through personalized communication, improves internal workflow efficiency, and establishes a scalable, long-term solution on the Salesforce platform.

Key Features:

- Automated order processing with real-time inventory deduction
- Dynamic customer loyalty program with tier-based classification
- Proactive low-stock alerting system for inventory managers
- Email-driven customer communication for order confirmations

- Role-based security architecture ensuring departmental data segregation
- Comprehensive reporting dashboards for business intelligence

OBJECTIVES

The primary objective of this CRM project is to design an end-to-end Salesforce solution that strengthens data management and elevates customer service. The system aims to:

- Automate key business processes such as order calculations, loyalty status updates, and low-stock alerts.
- Maintain accurate, consistent, and clean data through validation rules.
- Provide real-time tracking of inventory and customer transactions.
- Improve collaboration via role-based data visibility.
- Enhance customer experience through personalized email communication.

PHASE 1: REQUIREMENT ANALYSIS & PLANNING

Understanding Business Requirements

HandsMen Threads requires:

- A centralized platform for customer, order, product, and inventory management.
- Automation to reduce manual errors and streamline processes.
- Email-driven communication for order confirmations and loyalty updates.
- Real-time inventory visibility supported by low-stock alerts.
- Data validation (e.g., email formatting) to ensure data integrity.

Defining Project Scope and Objectives

Scope includes:

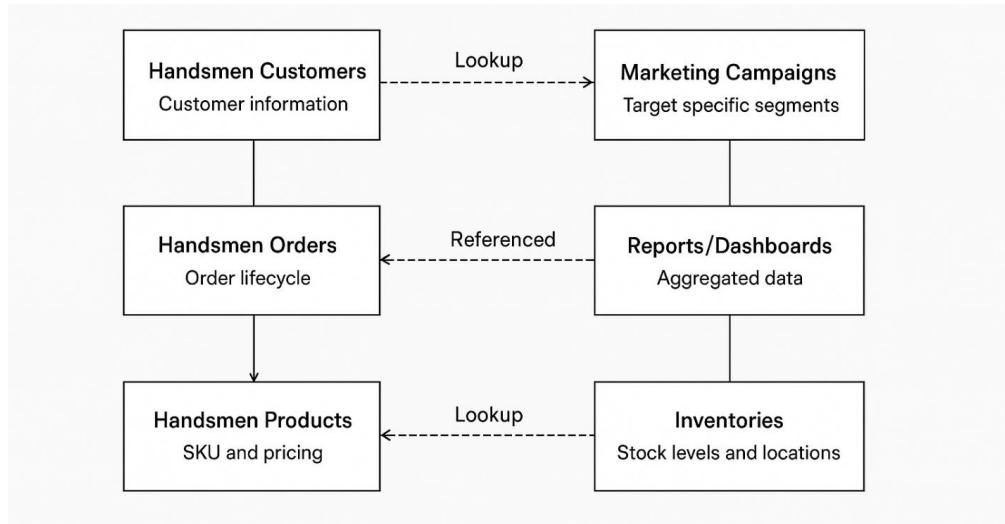
- Custom CRM application with objects for Customers, Orders, Products, Inventory, and Campaigns.
- Automation via Flows, Email Alerts, Scheduled Jobs, and Apex Triggers.
- Validation rules for accurate input.
- Role-based security model for different departments.
- Reports and dashboards to monitor sales, inventory, and loyalty trends.

Objectives:

- Automate critical operations such as order computation, loyalty adjustments, and inventory deduction.
- Ensure data accuracy and consistency across all custom objects.
- Enhance customer communication through automated email workflows.
- Enable real-time monitoring of inventory to prevent overselling.
- Consolidate all business functions within one centralized Salesforce system.

Design Data Model and Security Model

The data model defines how key entities relate and interact within the HandsMen system, connecting customers, orders, products, inventory, campaigns, and reports to ensure smooth and integrated business operations.



Key entities:

- **HandsMen Customers** – Master object with detail orders and campaign associations.
- **HandsMen Orders** – Tracks full order lifecycle and product linkage.
- **HandsMen Products** – Catalog with SKU, price, and inventory linkage.
- **Inventory** – Real-time stock tracking across warehouses.
- **Marketing Campaigns** – Customer targeting for promotions.

Stakeholders Mapping

1. Sales Team

- **Role:** Front-line customer interaction, order processing
- **Needs:** Fast order entry, customer history access, inventory visibility
- **Pain Points:** Slow manual processes, no mobile access
- **Success Metrics:** Order processing time, customer satisfaction scores

2. Inventory Managers

- **Role:** Stock level monitoring, warehouse coordination, reorder management
- **Needs:** Real-time stock alerts, movement tracking, reporting
- **Pain Points:** Stockouts, manual counting, lack of visibility
- **Success Metrics:** Stockout frequency, inventory turnover rate

3. Marketing Team

- **Role:** Campaign planning, customer segmentation, promotion execution
- **Needs:** Customer data access, loyalty insights, campaign tracking
- **Pain Points:** Scattered customer data, no segmentation tools
- **Success Metrics:** Campaign ROI, customer engagement rates

4. System Administrators

- **Role:** CRM maintenance, user support, customization
- **Needs:** Full system access, monitoring tools, documentation
- **Responsibilities:** System uptime, data backup, user training

5. Senior Management

- **Role:** Strategic decision-making, performance monitoring
- **Needs:** Executive dashboards, KPI visibility, trend analysis
- **Success Metrics:** Revenue growth, customer retention, operational efficiency

Secondary Stakeholders:

- IT Department
- Finance Team
- Customer Service

Execution Roadmap

Project Timeline: 8 Weeks

Week 1-2: Gather requirements, design data model, set up Developer Org, and plan security architecture.

Week 3-4: Build custom objects, configure fields, implement validation rules, establish relationships, and load test data.

Week 5: Develop flows and Apex triggers for automation, configure email alerts, and test processes.

Week 6: Create Lightning App, customize layouts, implement dynamic forms, and configure user security.

Week 7: Create unit tests, conduct end-to-end and UAT testing, optimize performance, and fix bugs.

Week 8: Deploy to production, migrate historical data, train users, finalize documentation, and provide go-live support.

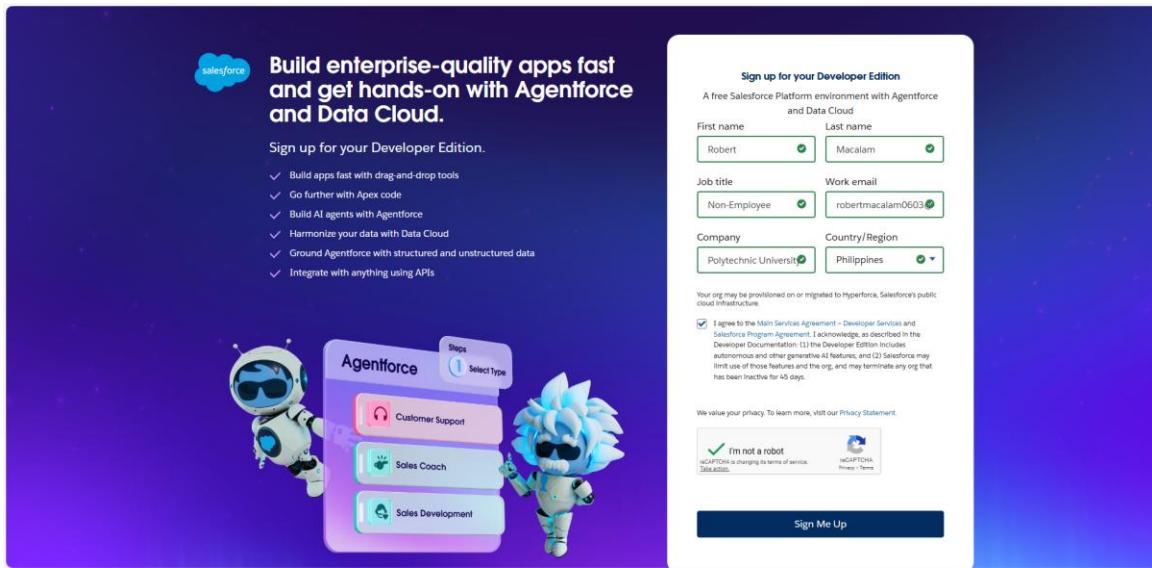
PHASE 2: SALESFORCE DEVELOPMENT - BACKEND & CONFIGURATIONS

Environment Setup & DevOps Workflow

- A Salesforce Developer Org was created and configured for development.

<https://developer.salesforce.com/signup>

- The account was verified, a password was created, and Setup access was successfully granted.



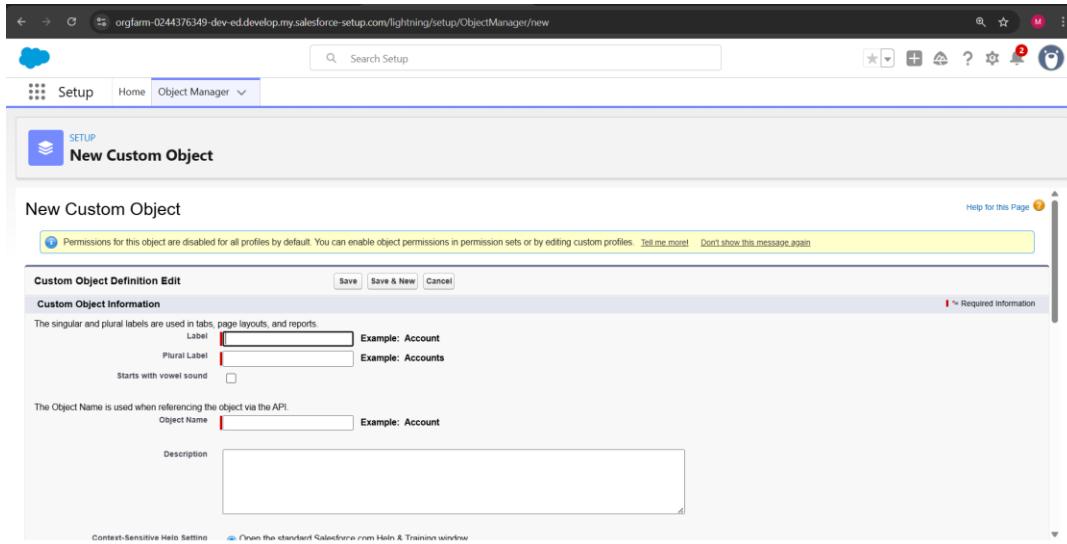
2.2 Customization of Objects, Fields, Validation Rules, Automation

Five major objects:

- HandsMen Customer (HandsMen_Customer__c)** - Stores key customer details including email address, contact number, and loyalty status.
- HandsMen Product (HandsMen_Product__c)** - Contains detailed product records, including SKU codes, pricing, and stock availability.
- HandsMen Order (HandsMen_Order__c)** - Contains customer order information, including product quantities and the associated order status.
- Inventory (Inventory__c)** - Monitors inventory quantities and corresponding warehouse locations.
- Marketing Campaign (Marketing_Campaign__c)** - Holds campaign data such as promotion details and timing.

Steps:

- Navigate to Setup > Object Manager > Click “Create” Button > Custom Object
- Provided the object label, name, and enabled reporting/search options
- Saved the custom object and created tabs for each object



Validation Rules

To maintain data accuracy and uphold business rules, the following validation rules were applied:

- Order Object: Prevents saving the record if Total_Amount__c <= 0.
- Error Message: "Please enter a correct amount"

Information

HandsMen OrderNumber

Owner: Robert Macalam

HandsMen Product: Jersey

HandsMen Customer: Robert

Status: --None--

Quantity:

Total Amount: 0

Please Enter Correct Amount

*Customer Email: robertmacalam0603@gmail.com

We hit a snag.

Review the following fields

* Total Amount

(Cancel) (Save & New) (Save)

- Customer Object: Validates that the email address contains "@gmail.com"
- Error Message: "Please enter a Correct Gmail."

Information

HandsMen Customer Name: Ronny

Owner: Robert Macalam

Email: ronny@example.com

Phone:

Loyalty Status: --None--

FirstName: ronny

LastName: r

Total Purchases: 500

We hit a snag.

Review the errors on this page.

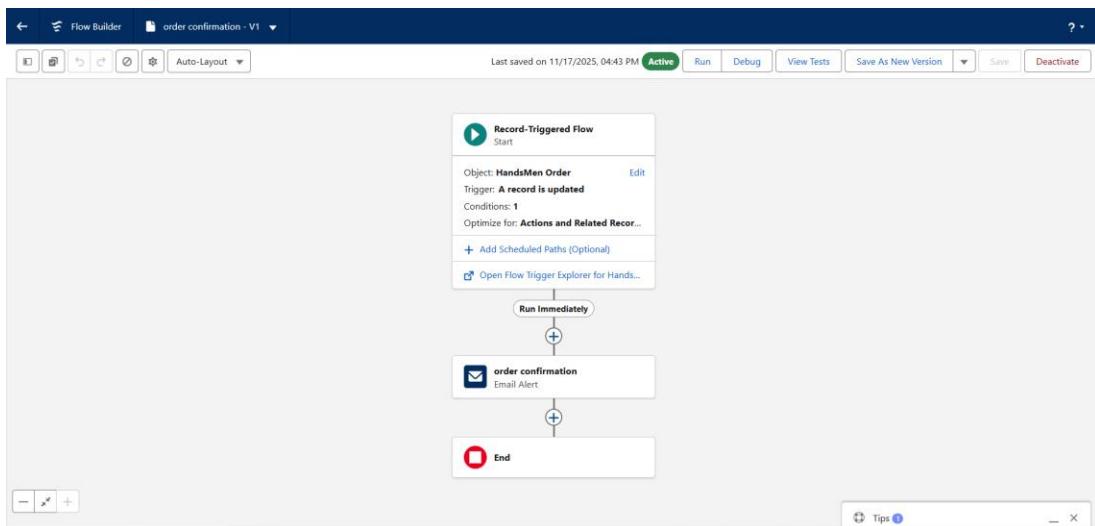
* Please fill Correct Gmail

(Cancel) (Save & New) (Save)

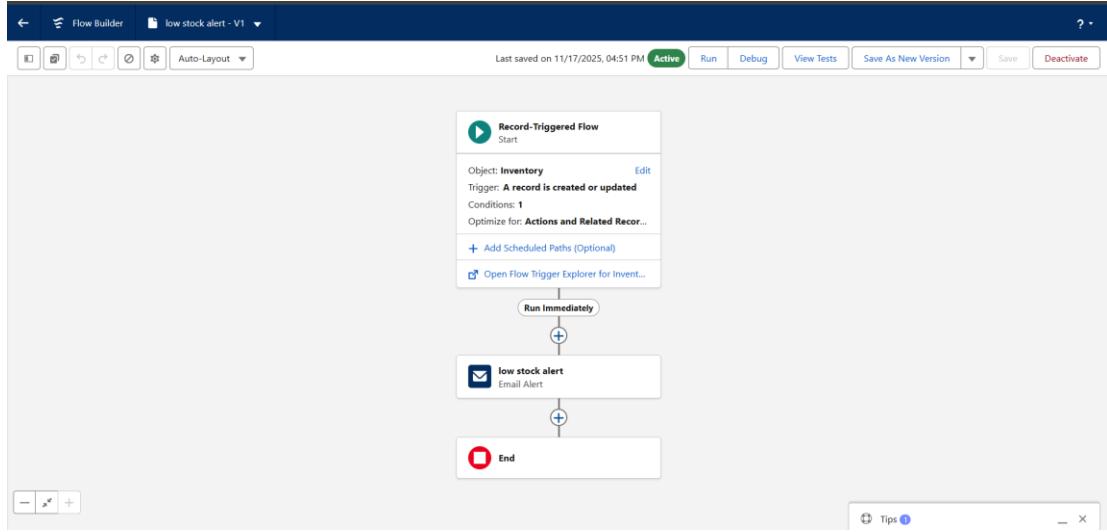
Automation (Flows)

- **Record-triggered flows:**

- **Order Confirmation Email Flow** - The flow activates when an order's status is changed to *Confirmed*, automatically sending an Order Confirmation email to the customer through the configured email alert.

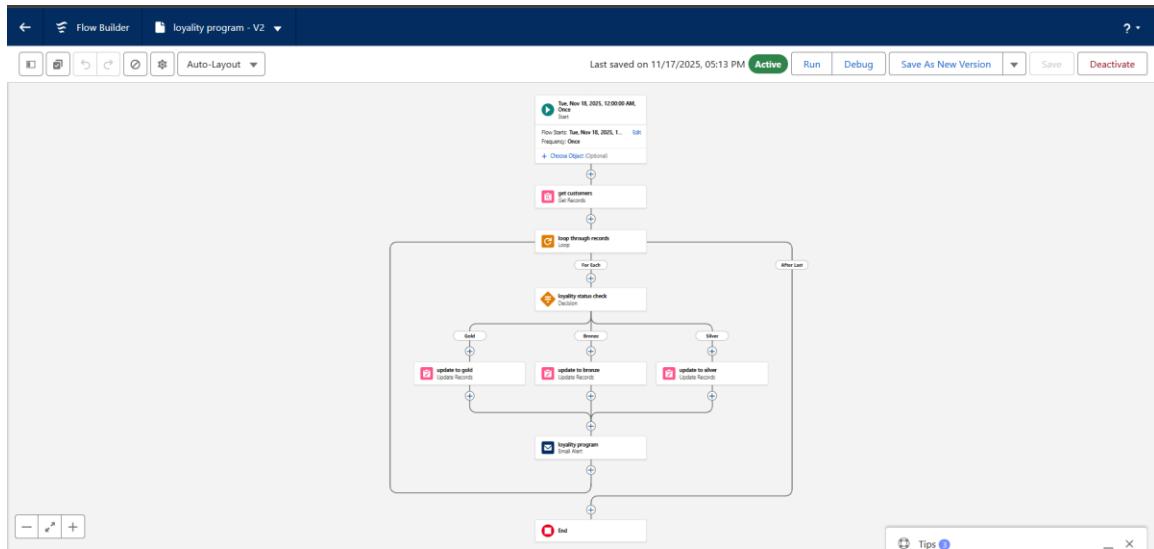


- **Low Stock Alert Flow** - The flow activates when an inventory item's quantity drops below five units, automatically sending a Low Stock Alert email to the Inventory Manager through the configured email alert.



- **Scheduled-Triggered Flow:**

- **Loyalty Program Flow** – Runs every night at midnight, reviewing all customer records and automatically updating their Loyalty Status according to each customer's total purchase amount.



Apex Triggers

- **Order Total Trigger** – Determines the Total Amount automatically by multiplying the order quantity with the unit 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 }

```

The screenshot shows the Salesforce Apex code editor with the file 'OrderTotalTrigger.apxt' open. The code defines a trigger named 'OrderTotalTrigger' on the 'HandsMen_Order__c' object. It handles both 'insert' and 'update' events. Inside the trigger, it first creates a set of product IDs. Then, it loops through each order. For each order, it checks if the product ID is not null. If it's not null, it adds the product ID to the set. Finally, it queries a map of products based on the product IDs in the set. For each order, it checks if the product ID is in the map and if the quantity is not null. If both conditions are met, it calculates the total amount by multiplying the quantity by the product price.

- **Stock Deduction Trigger** – Automatically reduces the inventory quantity each time an order is submitted and confirmed.

```

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                }
28            }
29        }
30    }
31
32    update inventoriesToUpdate;
33 }

```

The screenshot shows the Salesforce Apex code editor with the file 'StockDeductionTrigger.apxt' open. The code defines a trigger named 'StockDeductionTrigger' on the 'HandsMen_Order__c' object. It handles 'insert' and 'update' events. Inside the trigger, it first creates a set of product IDs. Then, it loops through each order. For each order, it checks if the status is 'Confirmed' and if the product ID is not null. If both conditions are met, it adds the product ID to the set. After the loop, it checks if the set is empty. If it's not empty, it queries a map of inventories based on the product IDs in the set. For each order, it loops through the inventories in the map. If the inventory's product ID matches the order's product ID, it decreases the stock quantity by the order's quantity and adds the updated inventory to a list of inventories to be updated. Finally, it updates the inventories in the list.

- **Inventory Batch Job** - Runs on schedule to monitor inventory levels, update stock data, and ensure proactive replenishment and accurate tracking

```
1 *global class InventoryBatchJob implements Database.Batchable<SObject>, Schedulable {
2
3     *global Database.QueryLocator start(Database.BatchableContext BC) {
4
5         return Database.getQueryLocator(
6             'SELECT Id, Stock_Quantity__c FROM Product__c WHERE Stock_Quantity__c < 10'
7         );
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 }
```

PHASE 3: UI/UX DEVELOPMENT & CUSTOMIZATION

Lightning App Setup

A custom lightning app “HandsMen Threads” created via App Manager.

The app includes the following tabs: HandsMen Customers, Orders, Products, Inventory, Marketing Campaign, Reports, Dashboards and other essential objects.

The app was assigned to the System Administrator profile.

The screenshot shows the 'HandsMen Threads' app interface. At the top, there's a navigation bar with tabs: 'HandsMen Customers' (which is active), 'HandsMen Orders', 'HandsMen Products', 'Inventory', 'Marketing Campaigns', 'Reports', 'Dashboards', 'Accounts', and 'Contacts'. Below the navigation bar, there's a section titled 'Recently Viewed' with a dropdown arrow. Underneath it, there's a list of 'HandsMen Customer Name' with two items: 'Robert' (selected) and 'john'. At the bottom of the list, there are several small icons for actions like New, Import, Change Owner, and Assign Label.

Page Layouts & Dynamic Forms

- **HandsMen Customers Record** - This record is used as an example, featuring the entry “Robert,” to illustrate how Page Layouts and Dynamic Forms are applied.

The screenshot shows the 'Details' tab of a HandsMen Customer record for 'Robert'. The page layout includes sections for 'Owner' (Robert Macalam), 'Email' (robertmacalam0603@gmail.com), 'Phone', 'Loyalty Status', 'FirstName' (Robert), 'LastName' (M), 'FullName' (Robert M), and 'Total Purchases' (500). The 'Created By' and 'Last Modified By' fields both show 'Robert Macalam' with the timestamp '11/23/2025, 11:53 PM'. The URL at the bottom is https://orgname-0244376349-dev-ed.lightning.force.com/lightning/c/inventory_c/h.

- **Logical Sections via Dynamic Forms:** Dynamic Forms help categorize record information into well-defined sections, enhancing user navigation.

Example sections include:

- Customer Details
- Order History
- Loyalty Program

- **Read-Only Fields:** Specific fields in the Loyalty Program section are designated as read-only to ensure data accuracy. These include:

- Loyalty Status
- Total Purchases

These values are automatically generated through Flows, and their read-only configuration is applied through the Page Layout.

Users will find these fields in the “Details” tab.

User Management - User profiles, roles, and permission sets provide controlled, secure access to data and features tailored by department and responsibility.

The screenshot shows the Salesforce Setup interface with the 'Users' tab selected. On the left, a sidebar lists various user management categories like Permission Set Groups, Profiles, and Roles. The main area displays the 'User Detail' page for a user named 'Daniel Mikaelson'. The user's details include Name (Daniel Mikaelson), Alias (dmika), Email (robertmacalam0603@gmail.com [Verified]), Username (robertmacalam0603@gmail.com), Nickname (User176336697679277739), Title (empty), Company (empty), Department (empty), Division (empty), Address (empty), Time Zone (GMT-08:00 Pacific Standard Time (America/Los_Angeles)), Locale (English (United States)), Language (English), Delegated Approver (empty), Manager (empty), and Receive Approval Request Emails (Only if I am an approver). The user is assigned to the 'Marketing' role, has the 'Platform_1' profile, and is active. Other tabs like Sharing, Reset Password, Freeze, and View Summary are also visible.

The screenshot shows the 'All Users' page in the Salesforce Setup interface. The left sidebar is identical to the previous screenshot. The main area shows a list of all users in the organization. The table includes columns for Action, Full Name, Alias, Username, Role, Active status, and Profile. The users listed are Chatter_Executor, EPIC_OrgFarm, Macalam_Robert, Mikaelson_Daniel, Mikaelson_Kofi, Mikaelson_Niklaus, User_Integration, and User_Security. The 'Active' column shows checkboxes for each user, and the 'Profile' column shows their respective profiles (Chatter Free User, System Administrator, Platform_1, etc.). Navigation links at the bottom allow users to filter by letter (A-Z) or view all users.

Reports and Dashboards

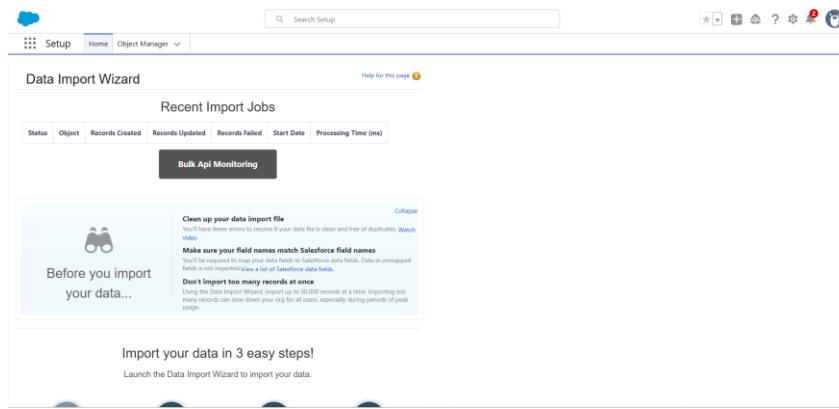
Design and deploy customized reports and dashboards to provide real-time insights into sales, inventory, orders, and customer engagement for stakeholders.

Lightning Pages

Use Lightning App Builder to assemble components, layouts, and content for a seamless and intuitive user interface across business processes.

PHASE 4: DATA MIGRATION, TESTING & SECURITY

Data Loading - Data Loader used for customers, products, and inventory imports.



Field History Tracking, Duplicate Rules & Matching Rule

Activate field history tracking on critical objects for audit trails and issue resolution, while implementing duplicate and matching rules to ensure data quality and prevent redundant records

Setup Home Object Manager

Search Setup

Field

Feature Settings

- Field History Tracking
- Marketing
- LinkedIn Lead Gen
- Lead Gen Fields
- Service
- Field Service
 - Field Service Mobile
 - Field Service Mobile App Builder
 - Field Service Settings
- Objects and Fields
 - Object Manager
 - Picklist Value Sets
 - Schema Builder
- Process Automation
- Workflow Actions
- Field Updates

Total Objects with Trackable Fields: 131
Total Trackable Fields: 1616
Trackable High Risk Fields: 0
Field Per Object Tracking Limit: 60

Object	Enable Field History Tracking	Number of Tracked Fields
Account	<input type="checkbox"/>	
Address	<input checked="" type="checkbox"/>	
Appointment Category	<input checked="" type="checkbox"/>	
Appointment Invitation	<input checked="" type="checkbox"/>	
Appointment Topic Time Slot	<input checked="" type="checkbox"/>	
Asset	<input checked="" type="checkbox"/>	

<https://orgfarm-0244376349-dev-ed.develop.my.salesforce.com/lightning/setup/FieldUpdates>

Setup Home Object Manager

Search Setup

matching rule

d SETUP Matching Rules

All Matching Rules

What Are Matching Rules?

View: All Matching Rules [Create New View] [Expand]

Action	Rule Name	Object	Status	Description	Last Modified Date	Last Modified By
Deactivate	Standard Account Matching Rule	Account	Active	Matching rule for account records. More info	11/11/2025	OEPIC
Deactivate	Standard Contact Matching Rule	Contact	Active	Matching rule for contact records. More info	11/11/2025	OEPIC
Deactivate	Standard Lead Matching Rule	Lead	Active	Matching rule for lead records. More info	11/11/2025	OEPIC

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Other [All]

<https://orgfarm-0244376349-dev-ed.develop.my.salesforce.com/lightning/setup/MatchingRules/home>

Setup Home Object Manager

Search Setup

duplicate

d SETUP Duplicate Rules

All Duplicate Rules

What Are Duplicate Rules?

View: All Duplicate Rules [Create New View] [Expand]

Role Name	Description	Object	Matching Rule	Active	Last Modified By	Last Modified Date
Standard Account Duplicate Rule	Identify accounts that duplicate other accounts.	Account	Standard Account Matching Rule	<input checked="" type="checkbox"/>	OEPIC	11/11/2025
Standard Contact Duplicate Rule	Identify contacts that duplicate other contacts and leads.	Contact	Standard Lead Matching Rule Standard Contact Matching Rule	<input checked="" type="checkbox"/>	OEPIC	11/11/2025
Standard Lead Duplicate Rule	Identify leads that duplicate other leads and contacts.	Lead	Standard Lead Matching Rule Standard Contact Matching Rule	<input checked="" type="checkbox"/>	OEPIC	11/11/2025

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Other [All]

<https://orgfarm-0244376349-dev-ed.develop.my.salesforce.com/lightning/setup/DuplicateRules/home>

Profiles, roles, role hierarchy, permission sets, and sharing rules

An integrated security model with predefined profiles and roles will align with the organizational structure for Sales, Inventory, and Marketing teams, while permission sets and sharing rules provide granular access control to ensure appropriate data visibility and editing rights.

The screenshot shows the Salesforce Setup Roles page. On the left, there's a sidebar with navigation links like 'Setup', 'Home', 'Object Manager', and sections for 'Users', 'Roles', 'Feature Settings', 'Sales' (with 'Contact Roles on Contracts', 'Contact Roles on Opportunities', 'Case Team Roles', and 'Contact Roles on Cases'), 'Service', and 'Case Teams'. A search bar at the top says 'roles'. The main content area has a title 'SETUP Roles' and a sub-section 'Understanding Roles' with a note about setting up a role hierarchy. It shows a 'Sample Role Hierarchy' with a dropdown set to 'Territory-based Sample'. The hierarchy diagram includes 'Executive Staff' (CEO, President, CFO, VP, Sales), 'Western Sales Director' (Director of W. Sales, Western Sales Rep, CA Sales Rep, OR Sales Rep), 'Eastern Sales Director' (Director of E. Sales, Eastern Sales Rep, NY Sales Rep, MA Sales Rep), and 'International Sales Director' (Director of Int'l Sales, International Sales Rep, Asian Sales Rep, European Sales Rep). Arrows indicate the reporting relationships between these roles. To the right of the diagram, there are detailed descriptions of permissions for each level. At the bottom right of the page, there are buttons for 'Set Up Roles' and 'Don't show this page again'.

Test Classes

Build Apex test classes for all custom code, triggers, and batch jobs to ensure predictable functionality, enable regression testing, and meet Salesforce deployment requirements.

PHASE 5: DEPLOYMENT, DOCUMENTATION & MAINTENANCE

Deployment Strategy

The primary deployment approach will utilize Salesforce Change Sets to enable the transfer of configuration and customization elements from the sandbox development environment to the production environment. This approach allows for bundling related metadata components, validating dependencies prior to

deployment, and monitoring deployment progress to guarantee a smooth migration. Change Sets offer ease of use and are well-suited for organizations with moderate IT capabilities, helping to minimize errors and maintain controlled rollouts.

System Maintenance and Monitoring

After implementation, the CRM system will undergo continuous surveillance to detect performance problems, workflow malfunctions, and data quality concerns. Regular assessments of system functionality and review of audit trails will enable prompt detection and resolution of potential issues. Support mechanisms will be established to collect user input and address technical difficulties, maintaining high system availability and consistent operational effectiveness.

Troubleshooting Documentation

A comprehensive guide will be created to assist administrators and support personnel in identifying and fixing frequently encountered issues. This documentation will contain detailed instructions for addressing workflow breakdowns, automation malfunctions, data discrepancies, permission-related problems, system restoration processes, and protocols for escalating complex incidents to specialized teams, thereby maintaining system reliability and user contentment.

Conclusion

The HandsMen Threads Salesforce CRM initiative represents a comprehensive strategy designed to unify sales operations, inventory tracking, marketing campaigns, and customer support functions through customized data structures and intelligent automation capabilities. The system ensures data accuracy, enhances customer engagement, and streamlines business processes. By combining declarative automation mechanisms such as flows and process builders with programmatic Apex triggers, the platform automates critical workflows including

order validation, loyalty program updates, inventory replenishment notifications, and backend processing tasks. These functionalities are reinforced by granular, permission-based security controls and rigorous quality assurance protocols.

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