

HandsMen Threads: Elevating the Art of Sophistication in Men's Fashion - Salesforce Capstone Project Documentation

PROJECT OVERVIEW

This project presents the implementation of a customized Salesforce CRM for **[HandsMen Threads: Elevating the Art of Sophistication in Men's Fashion]**, an organization in the **[Business]** sector. CRM centralizes customer, product, transactions, and operational data to streamline workflows, automate business processes, and enhance customer satisfaction.

OBJECTIVES

Improve data accuracy and consistency through validation and automation. -Streamline business processes such as **[e.g., bookings, orders, services]**. Enhance customer experience through automated notifications. - Provide management with real-time insights through dashboards and reports.

PHASE 1: REQUIREMENT ANALYSIS & PLANNING

1. Understanding Business Requirements

- Keep customer records up to date, including accurate contact information and loyalty status.
- Oversee product catalogs and ensure real-time visibility of inventory levels.
- Automate order confirmations and send customer notifications such as email alerts.
- Alert the warehouse team when stock levels drop to critical thresholds.
- Run bulk order processing every midnight to refresh financial data and inventory counts.

- Ensure Sales users have secure, properly managed access through appropriate permission settings.

2. Project Scope and Objectives

In Scope:

- Building five custom objects to support data storage needs.
- Using Flows and Apex to automate key business processes.
- Applying validation rules to maintain data integrity.
- Creating reports and dashboards to provide management visibility.
- Setting up security controls through profiles, permission sets, and role hierarchies.
- Running nightly batch operations.

Out of Scope:

- Integrations with external platforms or services.
- Development of custom storefronts or e-commerce features.

3. Data Model & Security Model Design

- Entity Relationship Diagram (ERD)

4. Stakeholder Mapping

Stakeholder	Role	Responsibilities
Project Sponsor	Executive	Approves overall CRM vision
Sales Team	End Users	Manage customers, orders
Warehouse Manager	Ops	Receives low stock alerts
Salesforce Admin	Builder	Designs, builds, and configures the CRM

5. Execution Roadmap

Phase 1: Architecture & Planning

- Configure objects, fields, relationships, and formula fields.

- Set up validation rules, build flows, and develop Apex triggers and batch processes.
- Create email templates for system notifications and customer-facing messages.

Phase 2: Development

- Create custom objects and fields as needed.
- Build automations using flows, process builders, and Apex triggers.
- Configure data security settings and sharing access.
- Set up email templates and notification workflows.

Phase 3: Testing and Q&A

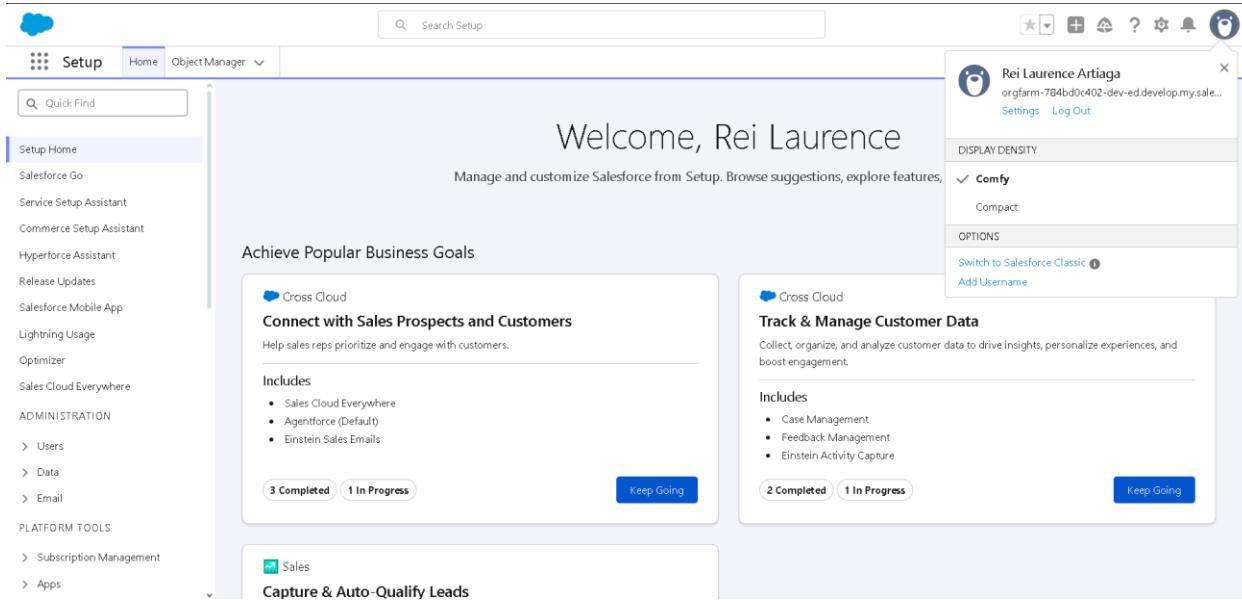
- Conduct unit tests for objects and automated processes.
- Perform end-to-end testing using sample datasets.
- Run performance evaluations and carry out security assessments.

Phase 4: Deployment & Training

- Move the solution to the production environment.
 - Provide user training on the newly implemented features.
 - Offer post-launch support and ongoing system monitoring
-

PHASE 2: SALESFORCE DEVELOPMENT – BACKEND & CONFIGURATIONS

1. Environment Setup & DevOps Workflow

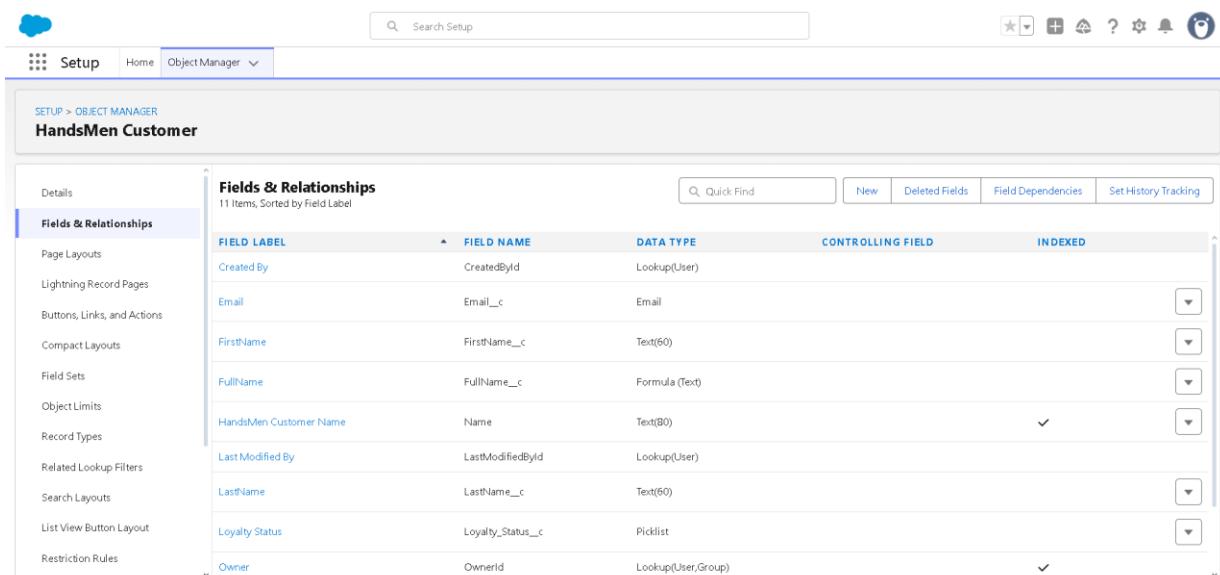


The screenshot shows the Salesforce Setup Home page. On the left, there's a sidebar with links like Setup Home, Salesforce Go, Service Setup Assistant, etc. The main area features a "Welcome, Rei Laurence" message and a "Manage and customize Salesforce from Setup. Browse suggestions, explore features." banner. Below this, there are three cards under "Achieve Popular Business Goals": 1) "Cross Cloud Connect with Sales Prospects and Customers" which includes "Sales Cloud Everywhere", "Agentforce (Default)", and "Einstein Sales Emails". It shows 3 Completed and 1 In Progress tasks. 2) "Cross Cloud Track & Manage Customer Data" which includes "Case Management", "Feedback Management", and "Einstein Activity Capture". It shows 2 Completed and 1 In Progress tasks. 3) "Sales Capture & Auto-Qualify Leads". A user profile for "Rei Laurence Artiga" is visible on the right, along with options for "DISPLAY DENSITY" (set to "Comfy"), "OPTIONS", and links to "Settings" and "Log Out".

2. Customization (Objects, Fields, Validation Rules, Automation)

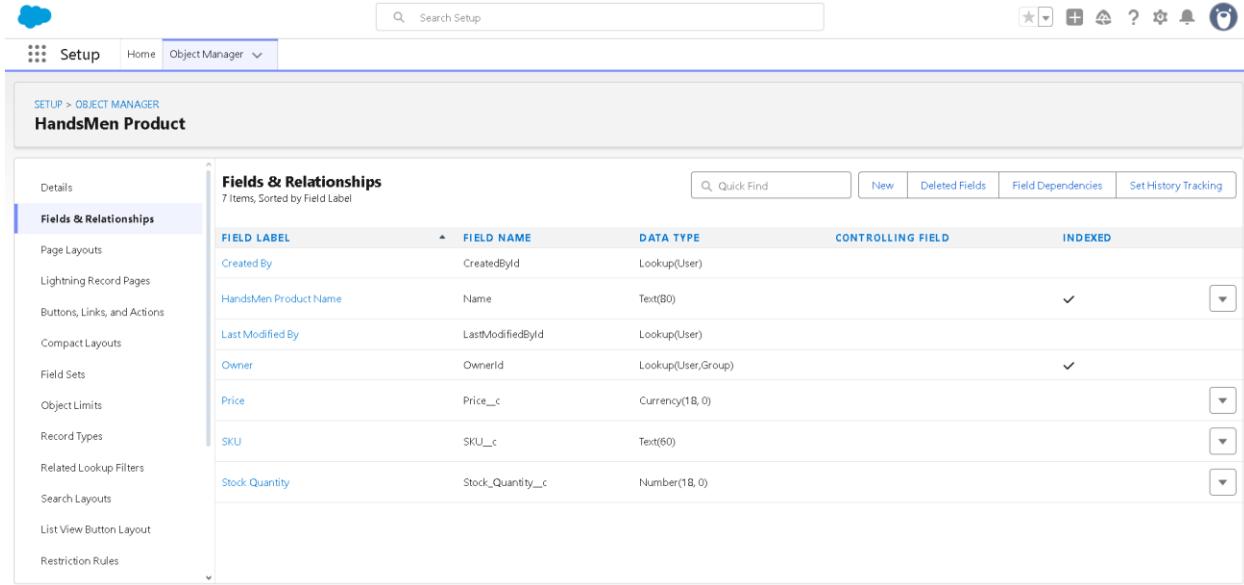
Objects & Fields Setup

- **HandsMen Customer** – Stores customer details and profiles to support interaction and order tracking.



The screenshot shows the Salesforce Object Manager page for the "HandsMen Customer" object. The left sidebar lists various customization options: Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, and Restriction Rules. The main content area displays the "Fields & Relationships" section with 11 items, sorted by Field Label. The table columns include FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are: Created By (CreatedById, Lookup(User)), Email (Email__c, Email), FirstName (FirstName__c, Text(60)), FullName (FullName__c, Formula (Text)), HandsMen Customer Name (Name, Text(80)), Last Modified By (LastModifiedById, Lookup(User)), LastName (LastName__c, Text(60)), Loyalty Status (Loyalty_Status__c, Picklist), and Owner (OwnerId, Lookup(User,Group)).

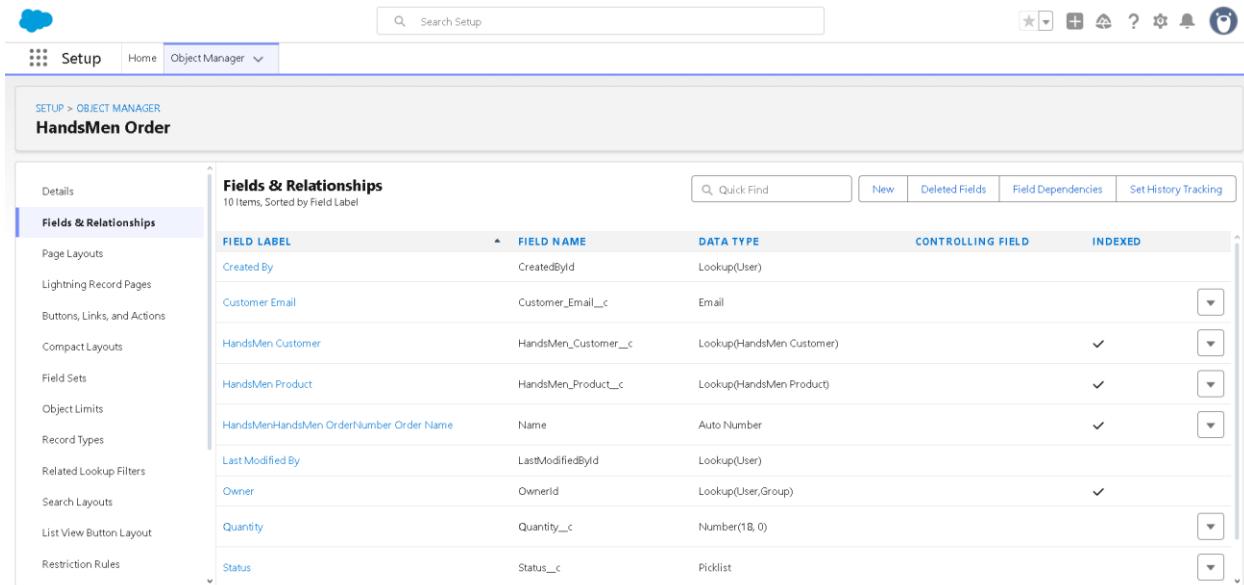
- **HandsMen Product** – Holds information about all products offered by HandsMen Threads.



The screenshot shows the Salesforce Object Manager interface for the 'HandsMen Product' object. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main title is 'HandsMen Product'. On the left, a sidebar lists various configuration options under 'Fields & Relationships'. The right pane displays a table titled 'Fields & Relationships' with 7 items. The columns are: FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are: Created By (CreatedBy), HandsMen Product Name (Name), Last Modified By (LastModifiedBy), Owner (OwnerId), Price (Price__c), SKU (SKU__c), and Stock Quantity (Stock_Quantity__c).

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedBy	Lookup(User)		
HandsMen Product Name	Name	Text(80)		✓
Last Modified By	LastModifiedBy	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Price	Price__c	Currency(18, 0)		
SKU	SKU__c	Text(60)		
Stock Quantity	Stock_Quantity__c	Number(18, 0)		

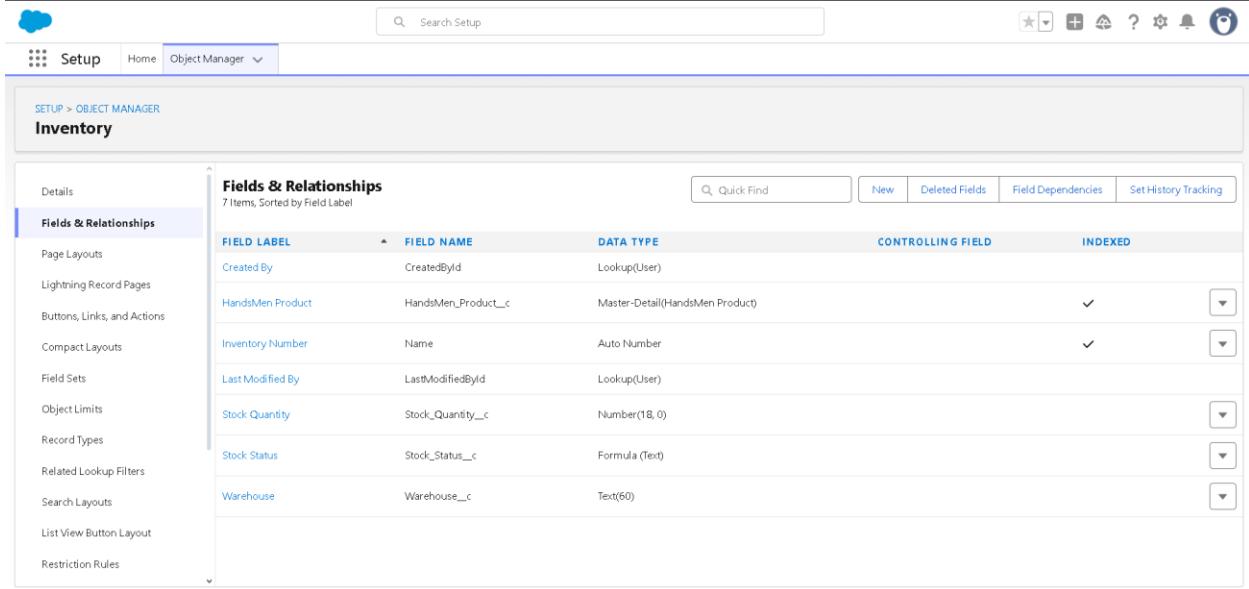
- **HandsMen Order** – Captures customer purchase records along with their order statuses.



The screenshot shows the Salesforce Object Manager interface for the 'HandsMen Order' object. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main title is 'HandsMen Order'. On the left, a sidebar lists various configuration options under 'Fields & Relationships'. The right pane displays a table titled 'Fields & Relationships' with 10 items. The columns are: FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are: Created By (CreatedBy), Customer Email (Customer_Email__c), HandsMen Customer (HandsMen_Customer__c), HandsMen Product (HandsMen_Product__c), HandsMenOrder Number Order Name (Name), Last Modified By (LastModifiedBy), Owner (OwnerId), Quantity (Quantity__c), and Status (Status__c).

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedBy	Lookup(User)		
Customer Email	Customer_Email__c	Email		
HandsMen Customer	HandsMen_Customer__c	Lookup(HandsMen Customer)		
HandsMen Product	HandsMen_Product__c	Lookup(HandsMen Product)		
HandsMenOrder Number Order Name	Name	Auto Number		
Last Modified By	LastModifiedBy	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓
Quantity	Quantity__c	Number(18, 0)		
Status	Status__c	Picklist		

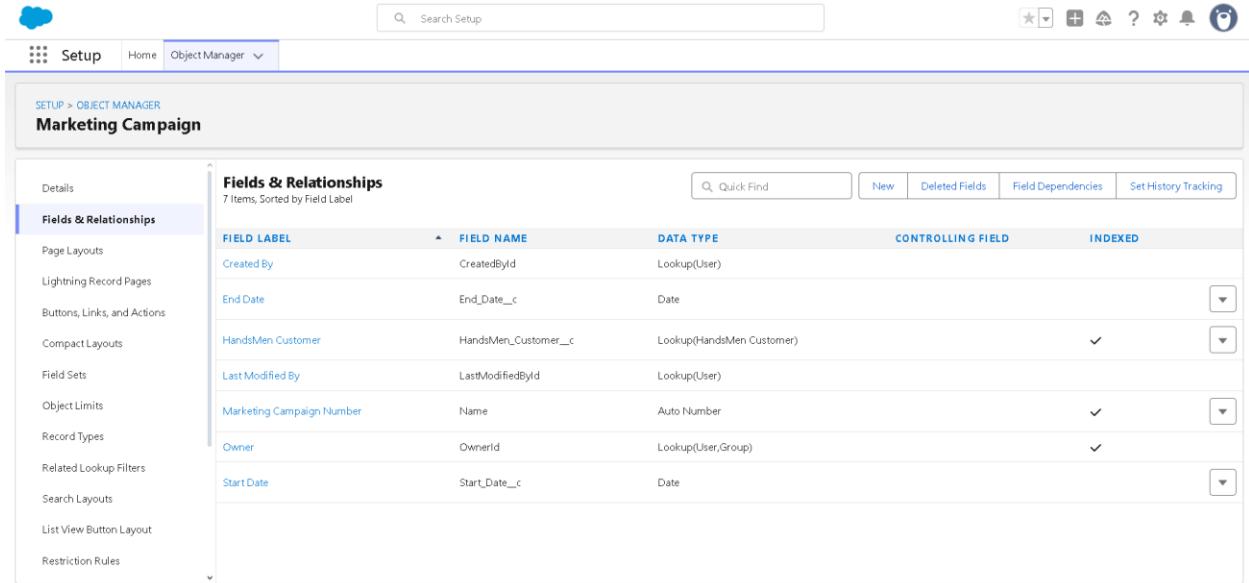
- **Inventory** – Tracks stock quantities and product availability.



The screenshot shows the Salesforce Object Manager interface for the 'Inventory' object. The left sidebar includes links for Details, Fields & Relationships (which is selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, and Restriction Rules. The main content area displays the 'Fields & Relationships' section with 7 items, sorted by Field Label. The table columns are 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)		

- **Marketing Campaign** – Manages promotional initiatives and monitors customer engagement activities.



The screenshot shows the Salesforce Object Manager interface for the 'Marketing Campaign' object. The left sidebar includes links for Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, and Restriction Rules. The main content area displays the 'Fields & Relationships' section with 7 items, sorted by Field Label. The table columns are 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)		
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 Created

Examples:

- **Valid Email Format**

Object: HandsMen Customer__c

Field: Email

Validation Rule: NOT CONTAINS>Email, "@gmail.com")

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 Lightning Record Pages. The main content area is titled 'HandsMen Customer Validation Rule'. It displays the validation rule details: Rule Name is 'Email', Error Condition Formula is 'NOT CONTAINS>Email, "@gmail.com")', Error Message is 'Please fill Correct Gmail', and Description is empty. The rule is marked as Active and has a checkmark. The 'Created By' field shows 'Rei Laurence Artiga, 11/27/2025, 10:04 PM' and 'Modified By' shows 'Rei Laurence Artiga, 11/27/2025, 10:04 PM'. There are 'Edit' and 'Clone' buttons at the bottom of the detail section.

- **Stocks cannot be negative**

Object: Inventory__c

Field: Stock_Quantity__c

Validation Rule: Stock_Quantity__c <= 0

The screenshot shows the Salesforce Object Manager interface for the 'Inventory' object. The sidebar includes options like Details, Fields & Relationships, Page Layouts, and Lightning Record Pages. The main content area is titled 'Inventory Validation Rule'. It shows the validation rule details: Rule Name is 'Stock_Quantity', Error Condition Formula is 'Stock_Quantity__c <= 0', Error Message is 'the inventory count is never less than zero.', and Description is empty. The rule is marked as Active and has a checkmark. The 'Created By' field shows 'Rei Laurence Artiga, 11/27/2025, 9:59 PM' and 'Modified By' shows 'Rei Laurence Artiga, 11/27/2025, 9:59 PM'. There are 'Edit' and 'Clone' buttons at the bottom of the detail section.

- **Correct Order Amount**

Object: HandsMen Order__c

Field: Total_Amount__c

Validation Rule: Total_Amount__c <= 0

The screenshot shows the Salesforce Setup interface with the following details:

- Setup > OBJECT MANAGER**
- HandsMen Order**
- Validation Rule Detail** for the **HandsMen Order Validation Rule**.
- Validation Rule Detail Fields:**
 - Rule Name:** Total_Amount
 - Error Condition Formula:** Total_Amount__c <= 0
 - Error Message:** Please Enter Correct Amount
 - Description:** (empty)
 - Created By:** Rei Laurence Artaga, 11/27/2025, 9:57 PM
 - Modified By:** Rei Laurence Artaga, 11/27/2025, 9:57 PM
- Buttons:** Edit, Clone

Automation Tools Used

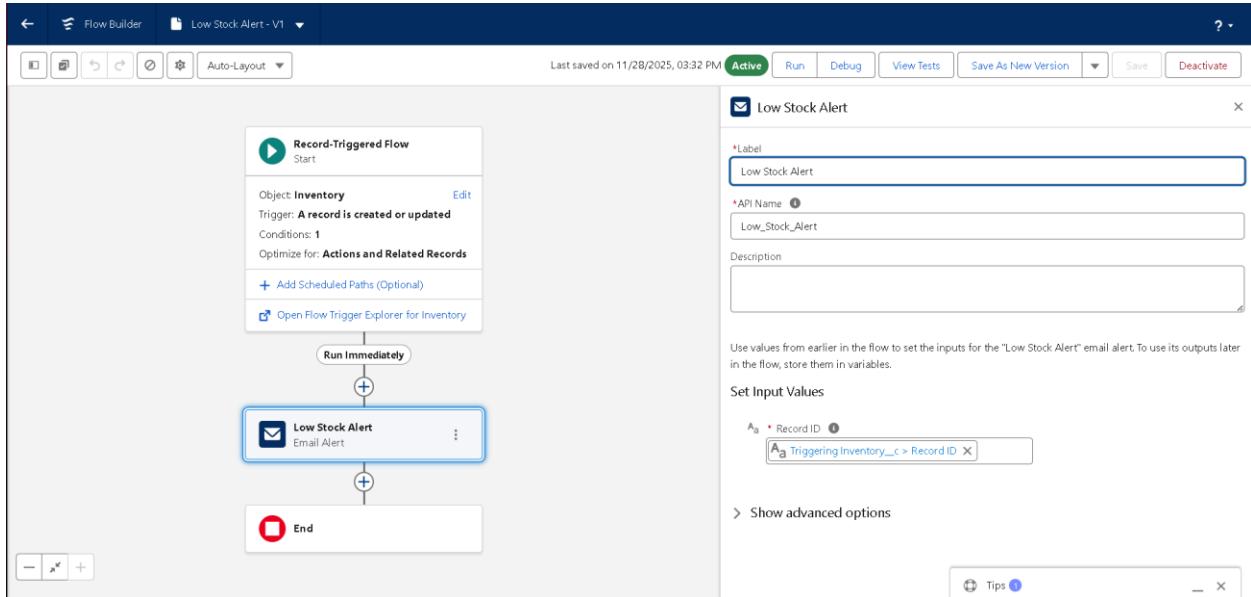
Flows implemented

1. **Order Confirmation Flow** – Sends email when order is confirmed

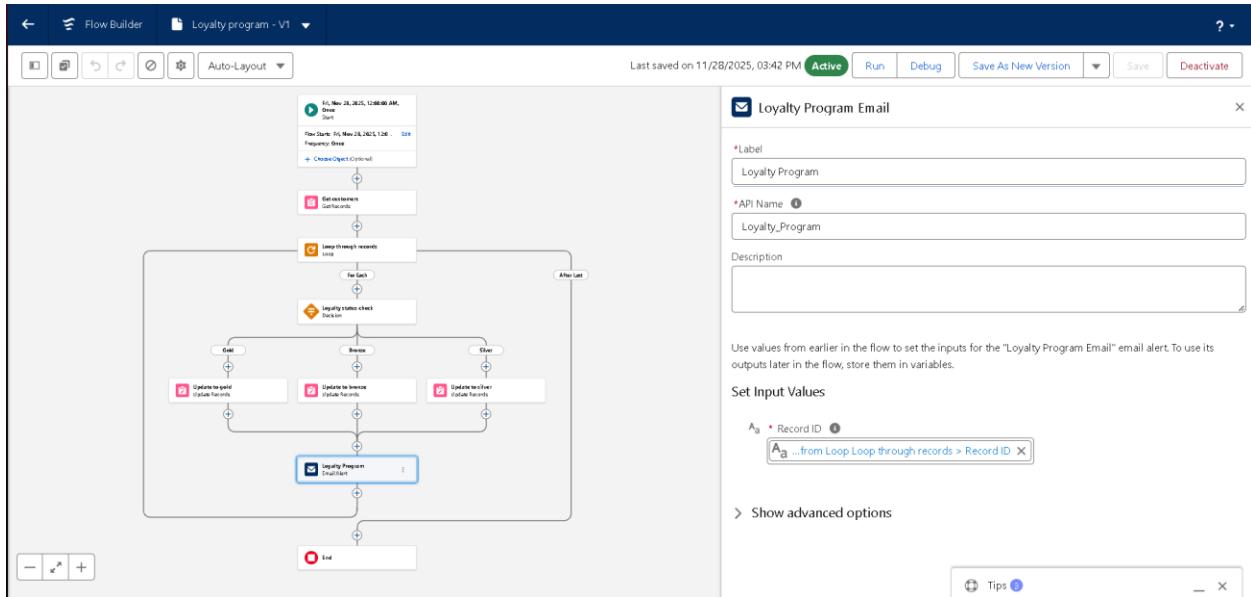
The screenshot shows the Salesforce Flow builder with the following configuration:

- Record-triggered flow** for the **HandsMen Order** object.
- Configure Start:** Set Object is **HandsMen Order**.
- Configure Trigger:** Topic is **Order updated**, Type is **Record**, and Condition is **Order is updated**.
- Configure Conditions:** Condition is **Order is confirmed**.
- Configure Actions:** Action is **Send Email** with the following settings:
 - To:** Order Confirmation Email
 - Subject:** Order Confirmation
 - Body:** Order has been confirmed.
- Final Step:** End.

2. Stock Alert Flow – Triggers email when stock < 5



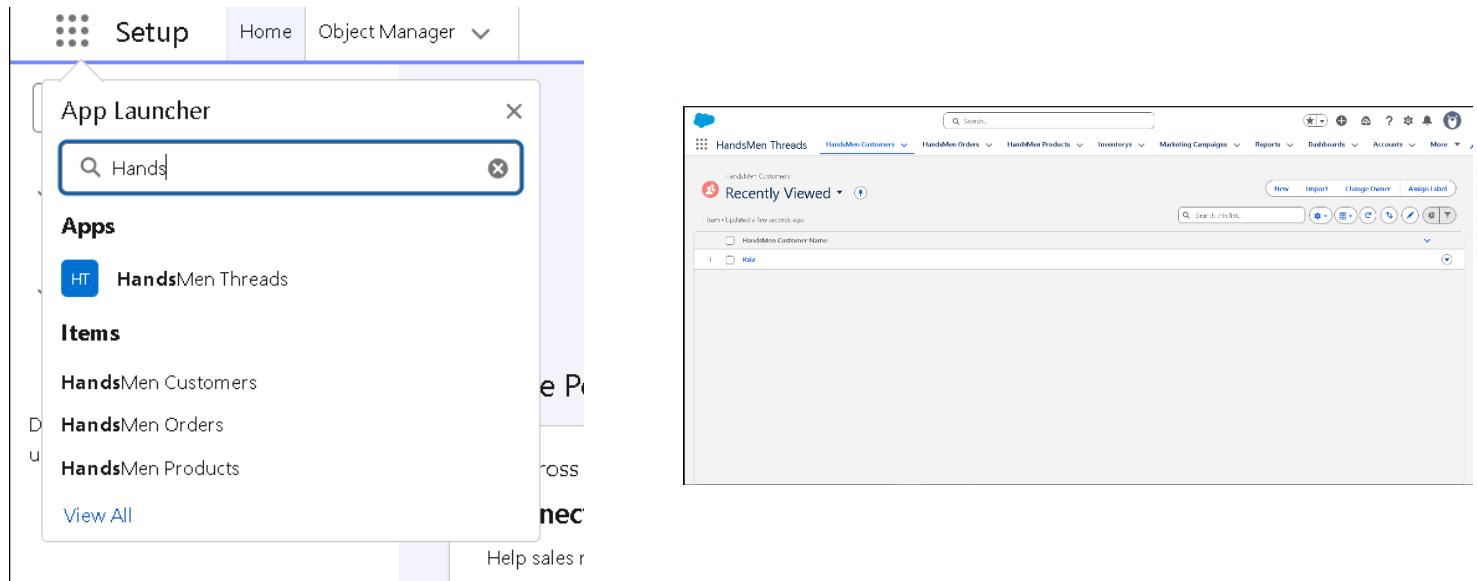
3. Loyalty Status Update (Scheduled Flow) – Runs at midnight



PHASE 3: UI/UX DEVELOPMENT & CUSTOMIZATION

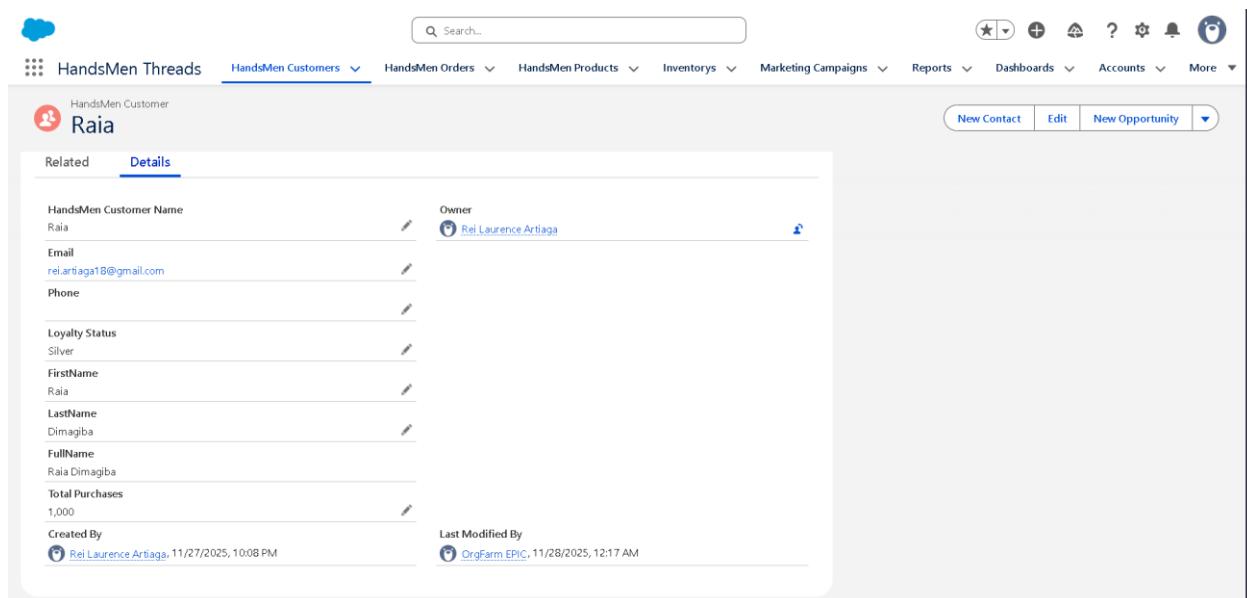
1. Lightning App Setup

App Name: HandsMen Threads – Features navigation tabs for managing customers, orders, inventory, and products.



2. Page Layouts & Dynamic Forms

- **Customer Info** – Displays key customer details, including name, email, loyalty status, and total purchase value.



- **Loyalty Summary** – Displays the customer's loyalty tier (Bronze, Silver, or Gold) based on their total purchase amount.

The screenshot shows the HandsMen Customer detail page for a contact named Raia. The top navigation bar includes links for HandsMen Threads, HandsMen Customers (selected), HandsMen Orders, HandsMen Products, Inventory, Marketing Campaigns, Reports, Dashboards, Accounts, and More. The main content area displays the following fields:

HandsMen Customer Name	Raia	Owner	Rei Laurence Artiaga
Email	rei.artiaga18@gmail.com		
Phone			
Loyalty Status	Silver		
FirstName	Raia		
LastName	Dimagiba		
FullName	Raia Dimagiba		
Total Purchases	1,000		
Created By	Rei Laurence Artiaga, 11/27/2025, 10:08 PM	Last Modified By	OrgFarm EPIC, 11/28/2025, 12:17 AM

- **Order Items** – list of orders

The screenshot shows the HandsMen Orders list page. The top navigation bar includes links for HandsMen Threads, HandsMen Customers, HandsMen Orders (selected), HandsMen Products, Inventory, Marketing Campaigns, Reports, Dashboards, Accounts, and More. The main content area displays a list titled "Recently Viewed" with the following data:

Order Number	Order Name	Action Buttons
1 O-0005		(View, Edit, Delete)
2 O-0004		(View, Edit, Delete)
3 O-0003		(View, Edit, Delete)
4 O-0002		(View, Edit, Delete)
5 O-0001		(View, Edit, Delete)

3. User Management

Users: Kol Mickaelson, Niklaus Mickaelson (I just added Michael Mickaelson)

The screenshot shows the Salesforce Setup interface under the 'Users' section. On the left, there's a sidebar with links like 'Permission Set Groups', 'Profiles', 'Public Groups', 'Queues', 'Roles', 'User Management Settings', and 'Users'. Under 'Users', there are sections for 'Feature Settings' and 'Data.com'. A note says 'Didnt find what you're looking for? Try using Global Search.' The main area is titled 'All Users' and shows a table of users with columns for Action, Full Name, Alias, Username, Role, Active, and Profile. The table includes rows for Rei Artiga, Chatter Expert, EPIC_OrgFarm, Kol Mickaelson, Michael Mickaelson, Niklaus Mickaelson, User_Integration, and User_Security.

Action	Full Name	Alias	Username	Role	Active	Profile
Edit	Artiga, Rei Laurence	rei	rei.artiga18859@agentforce.com		<input checked="" type="checkbox"/>	System Administrator
Edit	Chatter Expert		chatty.000d000000ag9vus.1beyz1ysvetl@chatter.salesforce.com		<input checked="" type="checkbox"/>	Chatter Free User
Edit	EPIC_OrgFarm	QEPIIC	epic.02104e407949@orgfarm.salesforce.com		<input checked="" type="checkbox"/>	System Administrator
Edit	Mickaelson, Kol	kmika	rei.artiga181921@gmail.com	Inventory	<input type="checkbox"/>	Platform_1
Edit	Mickaelson, Michael	mmika	rei.artiga181922@gmail.com	Marketing	<input checked="" type="checkbox"/>	Platform_1
Edit	Mickaelson, Niklaus	nmika	rei.artiga181920@gmail.com	Sales	<input checked="" type="checkbox"/>	Platform_1
Edit	User_Integration	integ	integration@00dt000000ag9vus.com		<input checked="" type="checkbox"/>	Analytics Cloud Integration User
Edit	User_Security	sec	insightssecurity@00dt000000ag9vus.com		<input checked="" type="checkbox"/>	Analytics Cloud Security User

4. Reports & Dashboards

The screenshot shows the HandsMen Threads report builder. At the top, there are navigation tabs: HandsMen Customers, HandsMen Orders, HandsMen Products, Inventory, Marketing Campaigns, Reports, Dashboards, Accounts, More, and a search bar. Below the tabs, there's a preview message: 'Previewing a limited number of records. Run the report to see everything.' The main area is divided into 'Fields' and 'Columns'. The 'Fields' section contains 'Groups' (with 'GROUP ROWS' selected) and 'Add group...'. The 'Columns' section lists 'HandsMen Customer: HandsMen Customer Name', 'HandsMen Customer: ID', 'Loyalty Status', 'Total Purchases', and 'Email'. A table below shows two rows of data: Row 1 has 'Raia' in the name column and 'Silver' in the loyalty status column; Row 2 has an empty name column and '1,000' in the total purchases column. There are buttons for 'Add Chart', 'Save & Run', 'Save', 'Close', and 'Run'.

HandsMen Customer: HandsMen Customer Name	HandsMen Customer: ID	Loyalty Status	Total Purchases	Email
Raia	a00d00002T5YH	Silver	1,000	rei.artiga18@gmail.com
			1,000	

PHASE 4: DATA MIGRATION, TESTING & SECURITY

1. Security Settings

Profiles – Shows Platform 1 profile

The screenshot shows the Salesforce Setup interface with the 'Profiles' page selected. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. A search bar and various icons are also present.

The main content area displays the 'Platform 1' profile details:

- Name:** Platform 1
- User License:** Salesforce
- Description:** (empty)
- Created By:** Rel Laurence Ardaga, 11/27/2025, 10:52 PM
- Modified By:** Rel Laurence Ardaga, 11/27/2025, 10:53 PM

A note states: "Users with this profile have the permissions and page layouts listed below. Administrators can change a user's profile by editing that user's personal information." It also mentions Record Types and Record Type Settings.

The 'Profile Detail' section shows various permission links:

- Login IP Ranges [0]
- Enabled Apex Class Access [2]
- Enabled Visualforce Page Access [0]
- Enabled External Data Source Access [0]
- Enabled Named Credential Access [0]
- Enabled External Credential Principal Access [0]
- Enabled Custom Metadata Type Access [0]
- Enabled Custom Setting Definitions Access [0]
- Enabled Flow Access [0]
- Enabled Service Presence Status Access [0]
- Enabled Custom Permissions [0]

The 'Page Layouts' section lists standard object layouts:

Standard Object Layouts	Global	Location Group Assignment	Location Group Assignment Layout
Email Application	Not Assigned [View Assignment]	Macro	Macro Layout [View Assignment]
Home Page Layout	Home Page Default [View Assignment]	Object Milestone	Object Milestone Layout [View Assignment]
Account	Account Layout [View Assignment]	Operating Hours	Operating Hours Layout [View Assignment]
Alternative Payment Method	Alternative Payment Method Layout [View Assignment]	Opportunity	Opportunity Layout [View Assignment]

Roles & Role Hierarchy – Inventory, Marketing, Sales under CEO

The screenshot shows the Salesforce Setup Roles page. On the left, there's a sidebar with categories like Feature Settings, Sales, Service, and Case Teams. The main area is titled "Creating the Role Hierarchy" and displays the "Your Organization's Role Hierarchy". The hierarchy tree includes the following roles:

- Polytechnic University of the Philippines Santa Maria Bulacan Campus
 - CEO** (Edit | Del | Assign)
 - CFO** (Edit | Del | Assign)
 - Add Role**
 - COO** (Edit | Del | Assign)
 - Add Role**
 - Marketing** (Edit | Del | Assign)
 - Add Role**
 - Inventory** (Edit | Del | Assign)
 - Add Role**
 - Sales** (Edit | Del | Assign)
 - Add Role**
 - SVP.Customer Service & Support** (Edit | Del | Assign)
 - Add Role**
 - Customer Support International** (Edit | Del | Assign)
 - Add Role**
 - Customer Support North America** (Edit | Del | Assign)

Permission Set: Marketing and Inventory Permission Set (I assigned it to a Platform 1 User: Niklaus Mickaelson and Kol Mickaelson)

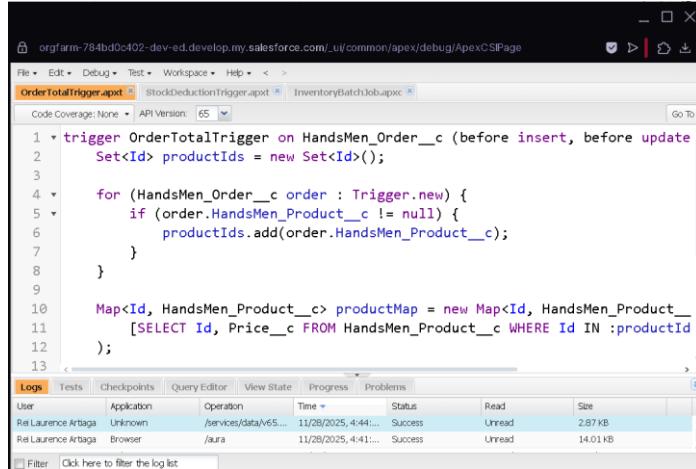
The screenshot shows the Salesforce Setup Permission Sets page. The sidebar includes sections for Permission Set Groups, Custom Code, and Custom Permissions. The main area is titled "Permission Sets" and displays a table of existing permission sets:

Action	Permission Set Name *	Description	License
<input type="checkbox"/>	Clone (Legacy) Data Cloud Data Aware Specialist	This Data Cloud permission set will be deprecated in Spring '24. L...	Customer Data Platform
<input type="checkbox"/>	Clone (Legacy) Data Cloud Marketing Admin	Allows access to Data Cloud Setup if the user is also a Salesforce ...	Customer Data Cloud for Marketing
<input type="checkbox"/>	Clone (Legacy) Data Cloud Marketing Manager	This Data Cloud permission set will be deprecated in Spring '24. Lear...	Customer Data Platform
<input type="checkbox"/>	Clone (Legacy) Data Cloud Marketing Specialist	This Data Cloud permission set will be deprecated in Spring '24. Lear...	Customer Data Platform
<input type="checkbox"/>	Clone (Legacy) Data Cloud for Marketing Data Aware Specialist	This Data Cloud permission set will be deprecated in Spring '24. Lear...	Customer Data Cloud for Marketing
<input type="checkbox"/>	Clone (Legacy) Data Cloud for Marketing Manager	This Data Cloud permission set will be deprecated in Spring '24. Lear...	Customer Data Cloud for Marketing
<input type="checkbox"/>	Clone (Legacy) Data Cloud for Marketing Specialist	This Data Cloud permission set will be deprecated in Spring '24. Lear...	Customer Data Cloud for Marketing
<input type="checkbox"/>	Access Agentforce Default Agent	Gives users access to the default Agentforce agent in Salesforce.	Agentforce (Default)
<input type="checkbox"/>	ActorCASC_PermissionSet		Cloud Integration User
<input type="checkbox"/>	Agent Platform Builder	Allow access to agent platform.	Agent platform builder
<input type="checkbox"/>	Agentforce Default Admin	Allows users to build and manage in-org copilot.	Agentforce (Default)
<input type="checkbox"/>	Agentforce Service Agent Configuration	Build and manage autonomous AI service agents.	Agentforce Service Agent Configuration
<input type="checkbox"/>	Agentforce Service Agent Object Access	Access knowledge articles and manage cases and contacts as an ...	Agentforce Service Agent User

At the bottom, there are navigation links for "1-25 of 97" and "Selected", and a page footer indicating "Page 1 of 4".

2. Test Classes

- Triggers – OrderTotalTrigger, StockDeductionTrigger, OrderTrigger

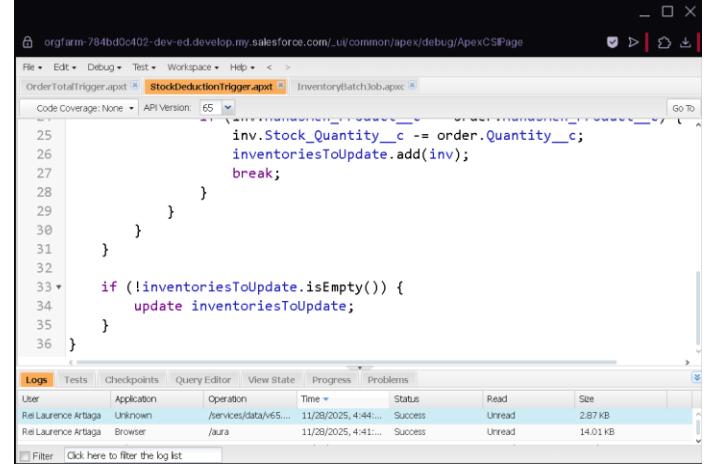


```
trigger OrderTotalTrigger on HandsMen_Order__c (before insert, before update)
    Set<Id> productIds = new Set<Id>();

    for (HandsMen_Order__c order : Trigger.new) {
        if (order.HandsMen_Product__c != null) {
            productIds.add(order.HandsMen_Product__c);
        }
    }

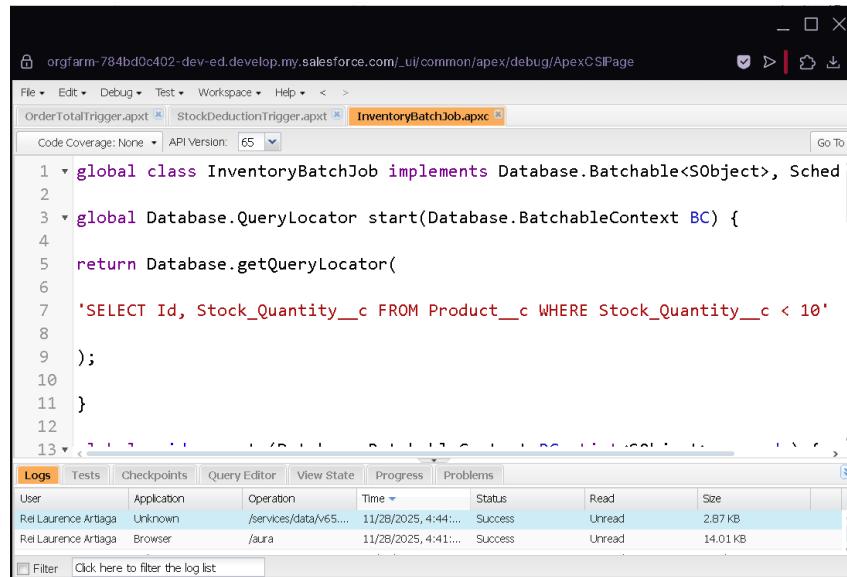
    Map<Id, HandsMen_Product__c> productMap = new Map<Id, HandsMen_Product__c>(
        [SELECT Id, Price__c FROM HandsMen_Product__c WHERE Id IN :productIds]
    );

```



```
inv.Stock_Quantity__c -= order.Quantity__c;
inventoriesToUpdate.add(inv);
break;
}
}
}

if (!inventoriesToUpdate.isEmpty()) {
    update inventoriesToUpdate;
}
```



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

3. Testing Approach

1. Customer Creation

The screenshot shows the 'New HandsMen Customer' form. The 'Information' section contains fields for HandsMen Customer Name (Rai), Email (ra.artaga@gmail.com), Phone, Loyalty Status (Silver), FirstName (Rai), LastName (Dimagiba), and Total Purchases (1,000). The form includes standard buttons: Cancel, Save & New, and Save.

On the right, the customer record 'Rai' is displayed in the customer details view. It shows the same information: Rai, ra.artaga@gmail.com, Silver Loyalty Status, Rai Dimagiba as FirstName and LastName, and a total purchase count of 1,000. The record was created by Rei Laurence Artaga on 11/27/2025 at 10:08 PM and last modified by the same user on 11/28/2025 at 12:17 AM.

2. Products Creation

The screenshot shows the 'New HandsMen Product' form. The 'Information' section contains fields for HandsMen Product Name (T-shirt Cloth), SKU, Price (\$3), and Stock Quantity. The form includes standard buttons: Cancel, Save & New, and Save.

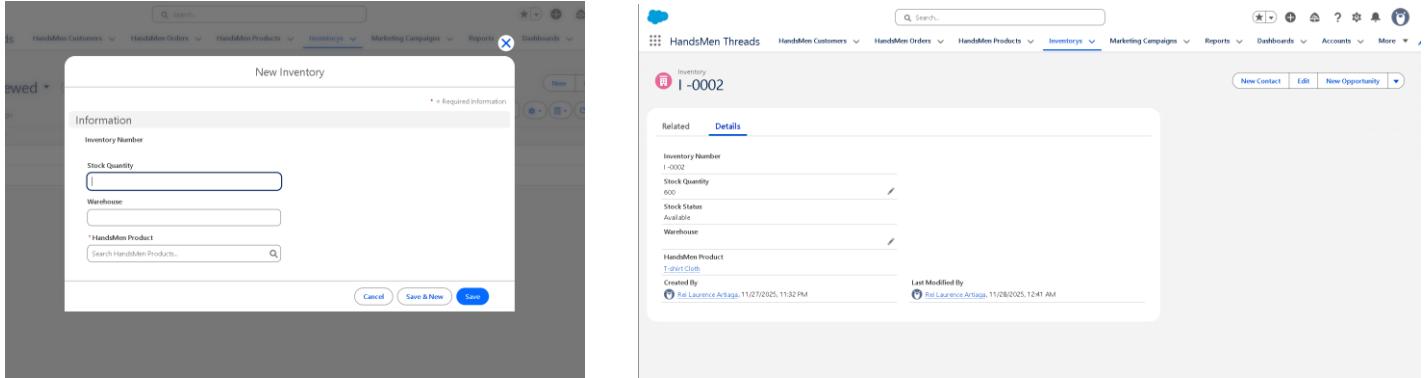
On the right, the product record 'T-shirt Cloth' is displayed in the product details view. It shows the same information: T-shirt Cloth, \$3 Price, and a stock quantity of 1. The record was created by Rei Laurence Artaga on 11/27/2025 at 10:16 PM and last modified by the same user on 11/28/2025 at 12:39 AM.

3. Order Creation & Status Update

The screenshot shows the 'New HandsMen Order' form. The 'Information' section contains fields for HandsMen Order Number (O-0005), HandsMen Product (Search HandsMen Products...), HandsMen Customer (Search HandsMen Customers...), Status (Status: None), Quantity (400), and Total Amount (1,200). The form includes standard buttons: Cancel, Save & New, and Save.

On the right, the order record 'O-0005' is displayed in the order details view. It shows the same information: O-0005 Order Number, T-shirt Cloth Product, Rai Dimagiba Customer, Status: Confirmed, a quantity of 400, a total amount of 1,200, and an email address (ra.artaga@gmail.com). The record was created by Rei Laurence Artaga on 11/28/2025 at 12:40 AM and last modified by the same user on 11/28/2025 at 12:41 AM.

4. Inventory Update



PHASE 5: DEPLOYMENT, DOCUMENTATION & MAINTENANCE

A. Deployment Strategy

The HandsMen Threads CRM was deployed through a structured, carefully managed process using Salesforce Outbound and Inbound Change Sets, ensuring the safe migration of all customizations from Sandbox to Production.

Components Deployed via Change Sets

All project components, including custom objects (HandsMen Customer, Product, Order, Inventory, Marketing Campaign), fields, validation rules, flows, email alerts, Apex classes, permission sets, and page layouts, were bundled into an Outbound Change Set from the Sandbox. In Production, the Inbound Change Set was validated and deployed only after passing all Apex test requirements and dependency checks.

User Acceptance Testing (UAT)

UAT was conducted in the Sandbox to verify the functionality of core features such as order confirmation flows, stock alert automation, scheduled processes, validation rules, email notifications, security configurations, and Apex logic. Test scenarios were designed to mirror real-world business operations and received approval before deployment.

Deployment Logging

A detailed deployment log was maintained to track all actions including deployed components, test results, validation summaries, UAT approvals, issue resolutions, and final deployment status, ensuring complete traceability and accountability throughout the rollout.

B. Maintenance and Monitoring

- Conduct monthly checks of Apex job execution logs.
- Review and adjust inventory threshold settings.
- Add or remove users as needed based on staffing changes.

C. Troubleshooting Approach

- Utilize Debug Logs for automation-related issues.
- Monitor Flow Error Email Notifications.
- Track batch failures through Apex exception logging.

Future Enhancements

To continue improving the HandsMen Threads CRM and enhance overall business efficiency, the following initiatives are recommended:

1. **Enhanced Reporting and Dashboards:** Develop interactive dashboards that track sales trends, customer activity, and inventory levels in real time to support faster, data-driven decisions.
2. **Customer Segmentation and Targeted Marketing:** Implement tools to segment customers based on purchase history, loyalty status, and preferences, enabling personalized promotions and campaigns.
3. **Mobile Accessibility Improvements:** Optimize the CRM interface for mobile devices, ensuring staff can manage orders, inventory, and customer interactions on the go.
4. **Automated Customer Feedback Collection:** Integrate feedback forms or surveys to capture customer insights automatically after purchase, helping improve service quality and product offerings.
5. **Process Automation Expansion:** Identify repetitive tasks such as inventory alerts, order approvals, or follow-up emails and automate them further using Salesforce Flows or Apex to save time and reduce errors.

CONCLUSION

The HandsMen Threads CRM successfully enhances customer engagement, automates order management, and improves operational efficiency. Leveraging custom objects, flows, Apex logic, and robust security measures, the system provides a scalable and reliable foundation for the business while supporting future growth through additional automation, analytics, and customer-focused enhancements.