

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

**Submitted by:**

Abegail Angeles

BSIT 4-1

## **Project Overview:**

This project focuses on the development of a fully customized Salesforce CRM solution for **HandsMen Threads**, a premium men's fashion and tailoring brand seeking to modernize its internal operations and deliver a seamless, connected customer experience. The CRM was designed to address the brand's challenges in managing customer information, tracking orders, maintaining inventory accuracy, and supporting marketing activities.

The implemented solution features a well-structured data model with five essential custom objects: Customer, Order, Product, Inventory, and Marketing Campaign, providing a structured foundation for handling essential business processes. To improve efficiency and reduce manual effort, multiple automations were implemented, including Record-Triggered Flows, Scheduled Flows, Email Alerts, and Apex automation, enabling streamlined order processing, customer notifications, loyalty updates, and proactive inventory monitoring.

To ensure secure and reliable system usage, the project incorporated validation rules to maintain data quality and a role-based security model tailored to the Sales, Inventory, and Marketing teams. A Scheduled Apex Batch was also developed to automatically monitor low-stock levels and update inventory statuses, ensuring uninterrupted product availability.

Overall, this Salesforce CRM implementation enhances HandsMen Threads' customer engagement through timely and personalized interactions, optimizes internal workflows through automation, and establishes a scalable digital infrastructure capable of supporting the brand's.

## **Objective:**

The primary objective of this project is to implement a customized Salesforce CRM for HandsMen Threads to streamline operations, enhance data accuracy, and improve customer engagement. The system centralizes customer, order, product, inventory, and marketing information into a unified platform.

The project aims to:

- **Enhance customer engagement and tracking** by consolidating customer profiles, interactions, and purchase history.
- **Optimize order and inventory management** through automation and real-time monitoring of stock levels.
- **Improve operational efficiency** by reducing manual tasks and standardizing workflows across Sales, Inventory, and Marketing teams.

- **Strengthen team collaboration** by enabling secure, role-based access and coordinated processes across departments.

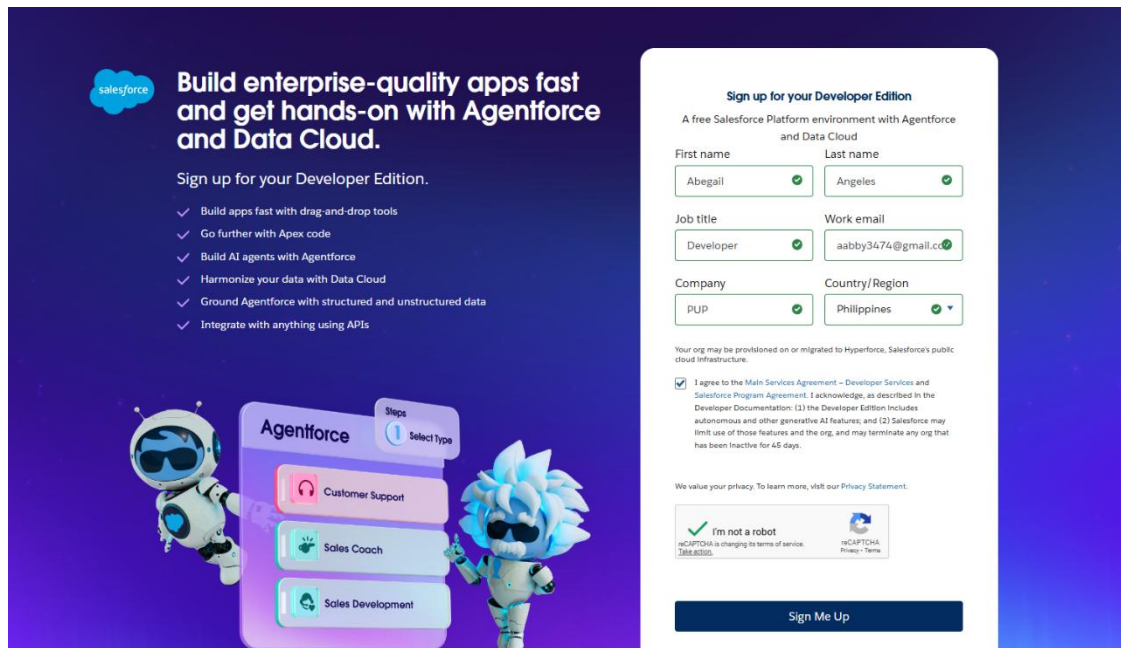
## **Phase 1: Requirement Analysis & Planning**

The first phase of the project focused on identifying the core operational needs of HandsMen Threads to ensure the Salesforce CRM would fully support its tailoring and fashion business processes. This involved analyzing how the business manages customer details, processes orders, tracks inventory levels, records products, and handles marketing activities. Based on these needs, the project scope and objectives were clearly defined to ensure the CRM would improve data accuracy, automate workflows, and enhance customer engagement. A detailed data model was then designed to outline how the key custom objects : Customer, Order, Product, Inventory, and Marketing Campaign would connect and support daily operations. Alongside this, a security model was planned to establish role-based access for Sales, Inventory, and Marketing teams, ensuring data protection and proper permission levels. Stakeholders involved in using or maintaining the system were mapped to understand their responsibilities and areas of interaction within the CRM. Finally, an execution roadmap was developed to guide the implementation process, outlining the sequence of configuration, automation, testing, and deployment activities required to successfully deliver the solution.

## **Phase 2:Salesforce Development - Backend & Configurations**

### **❖ Setup Environment & DevOps Workflow**

A Salesforce Developer Org was created using <https://developer.salesforce.com/signup>. Account verification was completed, the password finalized, and access to the Salesforce Setup interface was authorized. This environment served as the main workspace for building and testing all CRM components.



## ❖ Custom Objects and Fields

The following five custom objects were created to manage the data of HandsMen Threads. These fields ensure accurate tracking of customers, products, orders, inventory, and campaigns for reporting, automation, and operational efficiency.

- **HandsMen Customer** – Stores customer details
  - Name, Email, Phone, Loyalty\_Status\_\_c (*Bronze, Silver, Gold*), Total\_Purchases\_\_c
- **HandsMen Product** – Stores product information
  - Name, SKU, Price, Stock\_Quantity\_\_c
- **HandsMen Order** – Tracks customer orders
  - Order\_Number, Status (*Pending, Confirmed, Rejected*), Quantity\_\_c, Total\_Amount\_\_c
- **Inventory** – Monitors stock levels
  - Auto Number, Warehouse, Stock\_Quantity\_\_c
- **Marketing Campaign** – Manages promotions
  - Campaign\_Name, Start\_Date, End\_Date

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Email	Email__c	Email		
FirstName	FirstName__c	Text(50)		
FullName	FullName__c	Formula (Text)		
HandsMen Customer Name	Name	Text(50)		✓
Last Modified By	LastModifiedById	Lookup(User)		
LastName	LastName__c	Text(50)		
Loyalty Status	Loyalty_Status__c	Picklist		
Owner	OwnerId	Lookup(User,Group)		✓
Phone	Phone__c	Phone		
Total Purchases	Total_Purchases__c	Number(18, 0)		

## Example of Custom Object and Fields in Handsmen Customer

### ❖ Validation Rules

Validation rules were applied to maintain data accuracy:

- **Order Object:** Prevents saving if  $\text{Total\_Amount\_c} \leq 0$   
**Error Message:** “Please enter a valid amount.”
- **Inventory Object:** Prevents saving if  $\text{Stock\_Quantity\_c} \leq 0$   
**Error Message:** “Stock quantity cannot be zero or negative.”
- **Customer Object:** Email must contain “@gmail.com”  
**Error Message:** “Please enter a valid Gmail address.”

\* = Required Information

Information

\* HandsMen Customer Name  Owner Abigail Angeles

Email

Phone

Loyalty Status

FirstName

LastName

Total Purchases

We hit a snag. Review the errors on this page.  
• Please fill Correct Gmail

**Example :** Invalid customer Object

## ❖ Automation (Flows, Workflow Rules, Approval Processes)

Multiple automations were implemented to reduce manual work:

- **Record-Triggered Flow:** Updates Inventory quantity when an order is created/updated
- **Scheduled Flow:** Checks low-stock items daily and updates inventory status
- **Email Alerts:** Sends order confirmation emails to customers
- **Workflow Rule :** Updates customer loyalty status based on total purchases
- **Approval Process:** Manages approvals for marketing campaign budget.

## ❖ Apex Classes & Triggers (No Asynchronous Apex Developed)

An **Apex Trigger** was developed on the **HandsMen Order** object to implement custom logic that cannot be fully handled by standard automation.

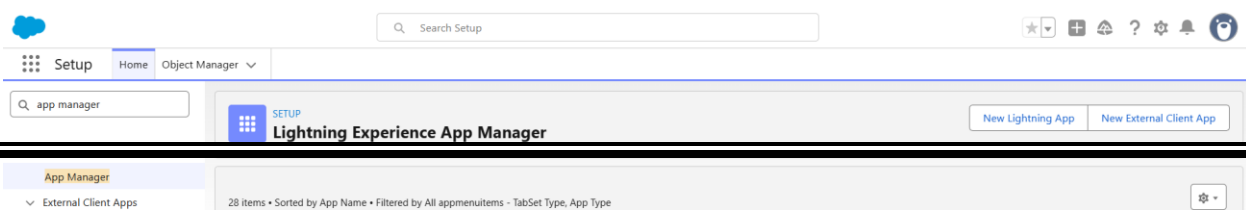
### Functionality Implemented:

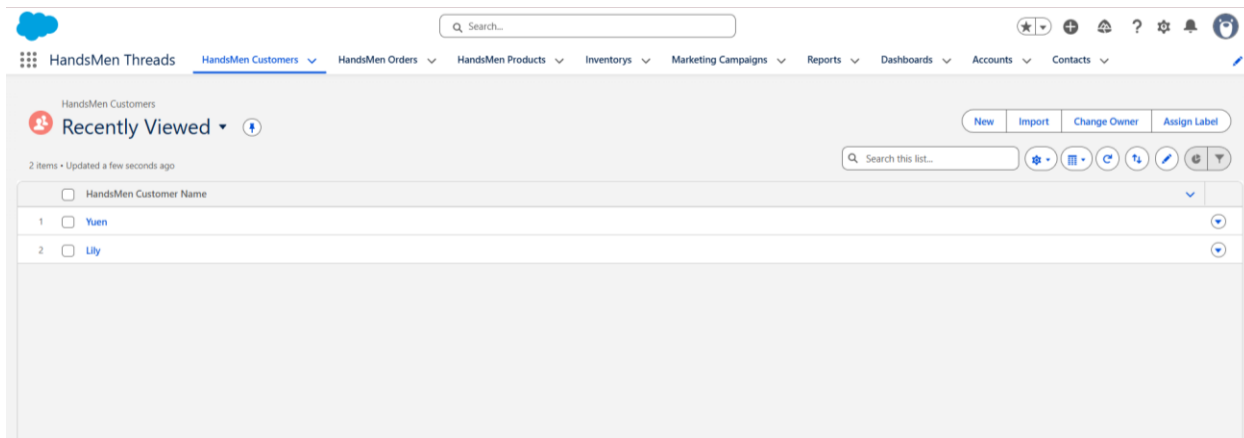
1. Automatically updates the customer's Total\_Purchases\_\_c whenever a new order is confirmed.
2. Deducts the ordered quantity from the **Inventory object's** Stock\_Quantity\_\_c to maintain accurate stock levels.

## Phase 3: UI/UX Development & Customization

### ❖ Lightning App setup through App Manager

A custom **Lightning App** named *HandsMen Threads* was created using Salesforce App Manager to centralize access to all CRM objects and features. The app details and branding were configured with a meaningful name and description, while default settings were kept for colors and utility items. Navigation items added to the app included **HandsMen Customer, HandsMen Order, Inventory, HandsMen Product, Reports, Dashboards, Account, Contact, and Marketing Campaign** to provide users quick access to all relevant CRM data. The **System Administrator** profile was assigned to access the app, ensuring the appropriate users could view and use it efficiently. This setup allows for organized navigation and streamlined access to CRM functionality.

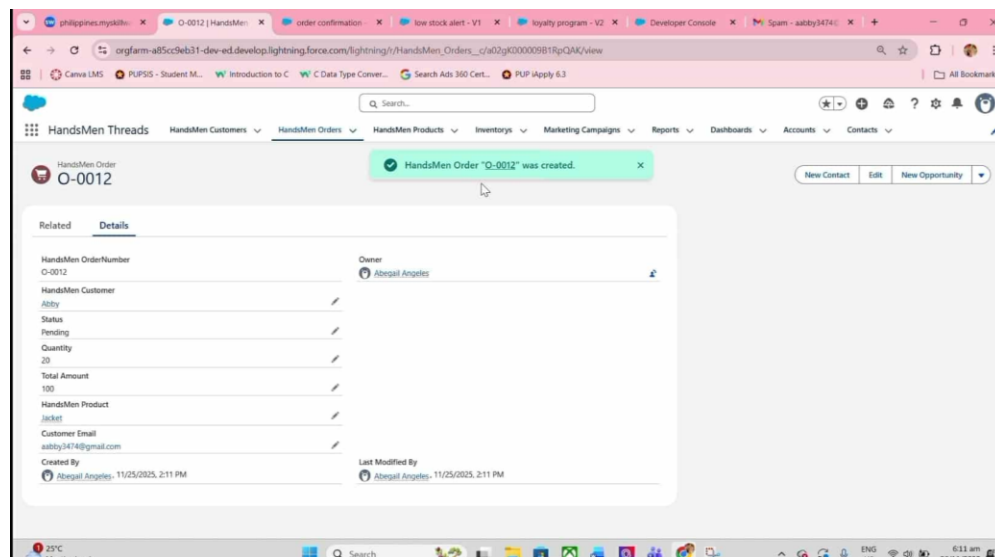




## Phase 4: Data Migration, Testing & Security

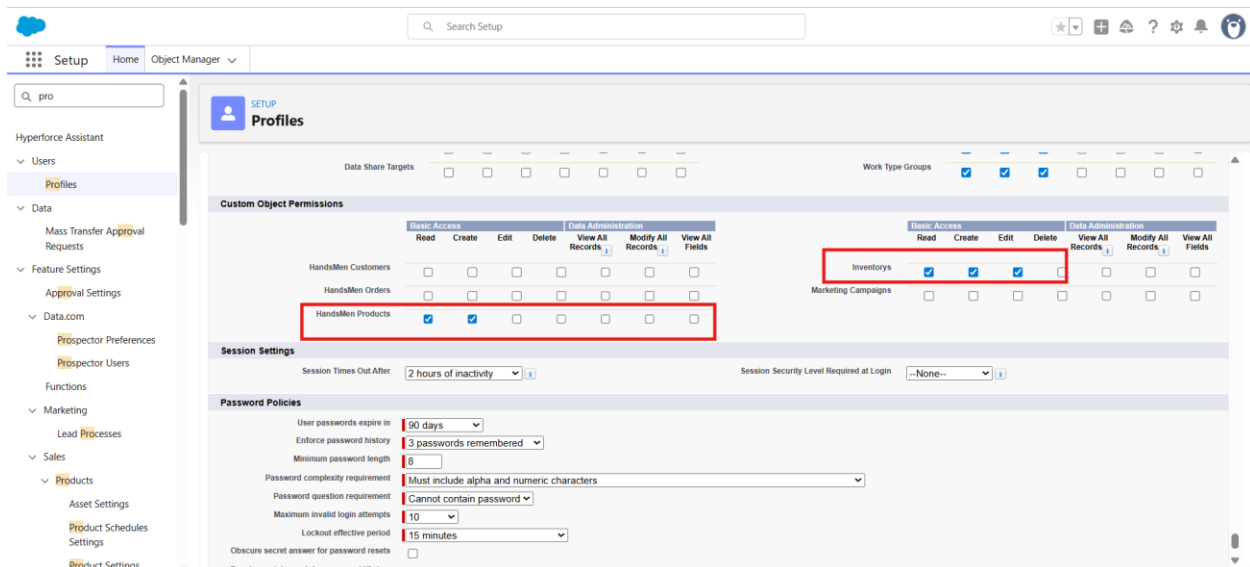
### 1. Data Loading / Migration

- **Manual record creation for all key objects:**
  - **HandsMen Customer:** Input First Name, Last Name, Email; Output: Customer record saved successfully.
  - **HandsMen Product:** Input Product Name, SKU, Price; Output: Product saved.
  - **Inventory:** Input Product, Stock Quantity, Warehouse; Output: Stock Status updates (Low Stock if <10).
  - **Marketing Campaign:** Input Campaign Name, Start Date, End Date; Output: Campaign saved successfully.



### 3. Profiles, Roles, Permission Sets, Sharing Rules

- **Custom Profile (Platform 1):** Cloned from Standard User, granted access to HandsMen Product and Inventory.
- **Sales Role:** Added under CEO in the role hierarchy to manage record-level visibility.
- **Permission Sets & Sharing Rules:** Reviewed and applied as needed for correct access.



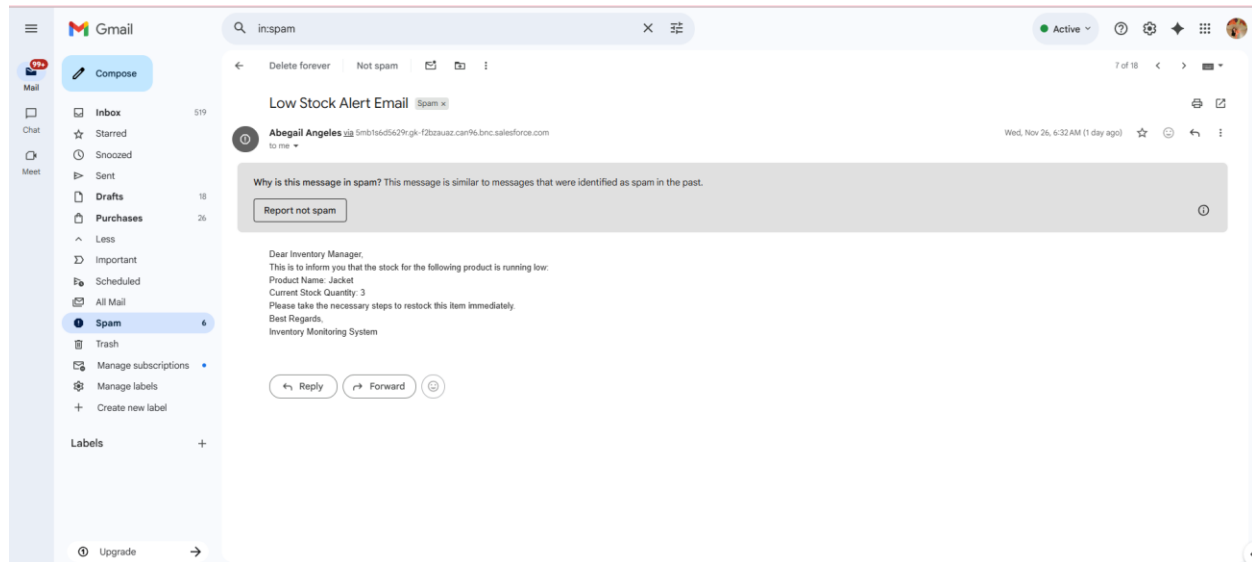
### Profiles

### 4. Test Cases / Apex Classes

- **Order Trigger Test Class:** Validates automatic Total Amount calculation and Inventory stock deduction.
- **Order Creation & Automation:**
  - Input: Create HandsMen Order (customer, product, quantity, status).
  - Output: Total Amount calculated, Inventory stock updated automatically.
- **Flows Automation:**
  - **Order Confirmation Flow:** Automatic email sent when order status is Confirmed.



- **Low Stock Flow:** Stock Status updates to “Low Stock” and email sent when inventory falls below threshold.
- **Loyalty Status Flow:** Updates customer loyalty status (Bronze/Silver/Gold) based on Total Purchases, scheduled at 12 AM; email sent automatically.



## Phase 5: Deployment & Maintenance

For deployment, the completed HandsMen Threads CRM— including custom objects, flows, validation rules, email alerts, reports, dashboards, and Apex triggers will be migrated from the sandbox environment to production using **Change Sets**. This method ensures all metadata such as objects, fields, page layouts, flows (Order Confirmation, Low Stock, Loyalty Status), and the Apex trigger for order calculation and stock deduction are securely packaged and deployed together. Before deployment, the system components undergo final testing to ensure that all automations, formulas, and email alerts function exactly as expected in the target environment.

Maintenance involves continuously monitoring the system to ensure smooth daily operations. Key activities include reviewing **Flow Error Logs**, **Debug Logs**, and **Email Logs** to identify issues like failed automation runs or incorrect data updates. Admins must also periodically check inventory calculations, loyalty status updates (scheduled at 12 AM), and stock deduction accuracy to avoid data inconsistencies. Any errors found during order processing, email alerts, or validation checks are troubleshooted using Salesforce setup tools such as the Flow Debugger and Object Manager auditing. The documentation created in earlier phases supports quick diagnosis, ensuring that the CRM remains stable, accurate, and ready for future enhancements as business needs grow.

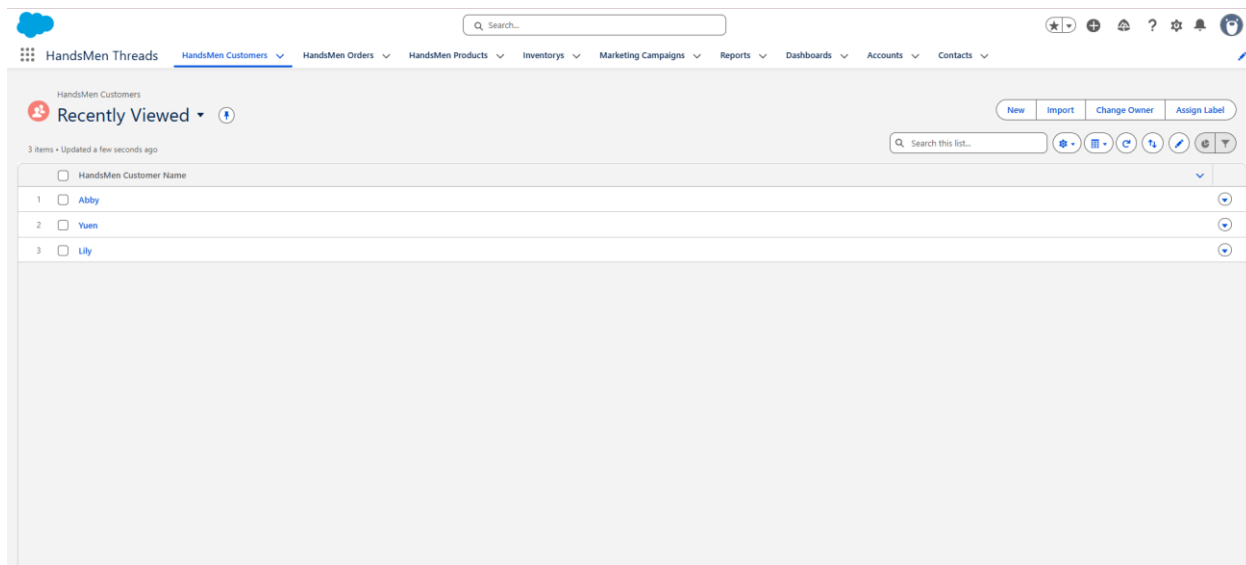
## Conclusion

The HandsMen Threads Salesforce CRM project successfully delivered a fully customized system that centralizes customer, product, order, inventory, and marketing data while automating essential business processes. With structured data, robust validation rules, and intelligent automations—such as order confirmation emails, scheduled loyalty updates, and proactive low-stock alerts—the CRM ensures accuracy, consistency, and reliability across daily operations. Apex triggers and flows work together to calculate order totals, adjust inventory, and update customer statuses, guaranteeing timely communication and seamless workflow execution.

Beyond process automation, the system strengthens operational efficiency through strong security controls, role-based access, and real-time monitoring of data changes. Inventory levels, customer loyalty, and order transactions are maintained with precision, minimizing manual work and enabling faster decision-making. Overall, the CRM enhances efficiency, customer engagement, and scalability, providing HandsMen Threads with a solid technological foundation to support ongoing growth and deliver an improved customer experience.

## Screenshots

### In the Handsmen Thread App



## Creating Handsmen Customer

HandsMen Threads

[HandsMen Customers](#)
[HandsMen Orders](#)
[HandsMen Products](#)
[Inventories](#)
[Marketing Campaigns](#)
[Reports](#)
[Dashboards](#)
[Accounts](#)
[Contacts](#)

HandsMen Customer

[Abby](#)

[New Contact](#)
[Edit](#)
[New Opportunity](#)

Related
Details

HandsMen Customer Name

Abby

Email

abby3474@gmail.com

Phone

Loyalty Status

FirstName

Abby

LastName

Angeles

FullName

Abby Angeles

Total Purchases

500

Created By

Abigail Angeles 11/25/2025, 2:09 PM

Owner

Abigail Angeles

Last Modified By

Abigail Angeles 11/25/2025, 2:23 PM

## In the Handsmen Order

HandsMen Threads

HandsMen Customers
HandsMen Orders
HandsMen Products
Inventoris
Marketing Campaigns
Reports
Dashboards
Accounts
Contacts

HandsMen Order

O-0012

New Contact

Edit

New Opportunity

Related

Details

HandsMen OrderNumber

O-0012

Owner

Abigail Angeles

HandsMen Customer

Abby

Status

Pending

Quantity

20

Total Amount

100

HandsMen Product

Jacket

Customer Email

aabby3474@gmail.com

Created By

Abigail Angeles

Last Modified By

Abigail Angeles

11/25/2025, 2:11 PM

11/27/2025, 1:03 AM

## In the Handsmen Product

HandsMen Threads

HandsMen Customers

HandsMen Orders

**HandsMen Products**

Inventories

Marketing Campaigns

Reports

Dashboards

Accounts

Contacts

Q Search...

★

+

🔍

?

⚙️

🔔

👤

HandsMen Product

Jacket

New Contact

Edit

New Opportunity

Related

Details

HandsMen Product Name

Jacket

Order

SKU

0008

Price

\$5

Stock Quantity

200

Created By

Abigail Angeles

11/25/2025, 2:10 PM

Owner

Abigail Angeles

Last Modified By

Abigail Angeles

11/27/2025, 1:04 AM

Rainy days ahead

29°C

Q Search

🚗

📁

📅

📧

📊

📌

📱

📺

📷

📖

📎

📧

📺

📷

📖

📎

ENG

US

🔊

🔌

🌐

🕒

5:13 pm

27/11/2025

## In the Inventory

HandsMen Threads

HandsMen Customers

HandsMen Orders

**HandsMen Products**

**Inventories**

Marketing Campaigns

Reports

Dashboards

Accounts

Contacts

Q Search...

★

+

🔍

?

⚙️

🔔

👤

Inventory

I-0013

New Contact

Edit

New Opportunity

Related

Details

Inventory Number

I-0013

HandsMen Product

[Jacket](#)

Stock Quantity

3

Stock Status

Low Stock

Warehouse

99Z

Created By

Abigail Angeles

11/25/2025, 2:11 PM

Last Modified By

Abigail Angeles

11/25/2025, 2:32 PM

Rainy days ahead

29°C

Q Search

🚗

📁

📅

📧

📊

📌

📱

📺

📷

📖

📎

📧

📺

📷

📖

📎

ENG

US

🔊

🔌

🌐

🕒

5:14 pm

27/11/2025

## Order Confirmation Flow

The screenshot displays the Salesforce Flow Builder interface for a flow named "order confirmation - V1". The flow is a "Record-Triggered Flow" that starts when a "HandsMen Order" record is updated. The flow consists of three steps: "Run Immediately", "order confirmation Email Alert", and "End". The right-hand pane shows the "Configure Start" configuration for the flow.

**Configure Start**

Select Object  
Select the object whose records trigger the flow when they're created, updated, or deleted.  
\*Object: HandsMen Order

Configure Trigger  
Trigger the Flow When:  
☐ A record is created  
☒ A record is updated  
☐ A record is created or updated  
☐ A record is deleted

Set Entry Conditions  
Specify entry conditions to reduce the number of records that trigger the flow and the number of times the flow is executed. Minimizing unnecessary flow executions helps to conserve your org's resources.  
If you create a flow that's triggered when a record is updated, we recommend first defining entry conditions. Then select the **Only when a record is updated to meet the condition requirements** option for When to Run the Flow for Updated Records.

Condition Requirements  
All Conditions Are Met (AND)

Field	Operator	Value
Status X	Equals	Confirmed X

+ Add Condition

When to Run the Flow for Updated Records  
All Conditions Are Met (AND)

5:16 pm 27/11/2025

## Low stock flow

The screenshot displays the Salesforce Flow Builder interface for a flow named "low stock alert - V1". The flow is a "Record-Triggered Flow" that starts when an "Inventory" record is created or updated. The flow consists of three steps: "Run Immediately", "low stock alert Email Alert", and "End". The right-hand pane shows the "Configure Start" configuration for the flow.

**Configure Start**

Select Object  
Select the object whose records trigger the flow when they're created, updated, or deleted.  
\*Object: Inventory

Configure Trigger  
Trigger the Flow When:  
☐ A record is created  
☐ A record is updated  
☒ A record is created or updated  
☐ A record is deleted

Set Entry Conditions  
Specify entry conditions to reduce the number of records that trigger the flow and the number of times the flow is executed. Minimizing unnecessary flow executions helps to conserve your org's resources.  
If you create a flow that's triggered when a record is updated, we recommend first defining entry conditions. Then select the **Only when a record is updated to meet the condition requirements** option for When to Run the Flow for Updated Records.

Condition Requirements  
All Conditions Are Met (AND)

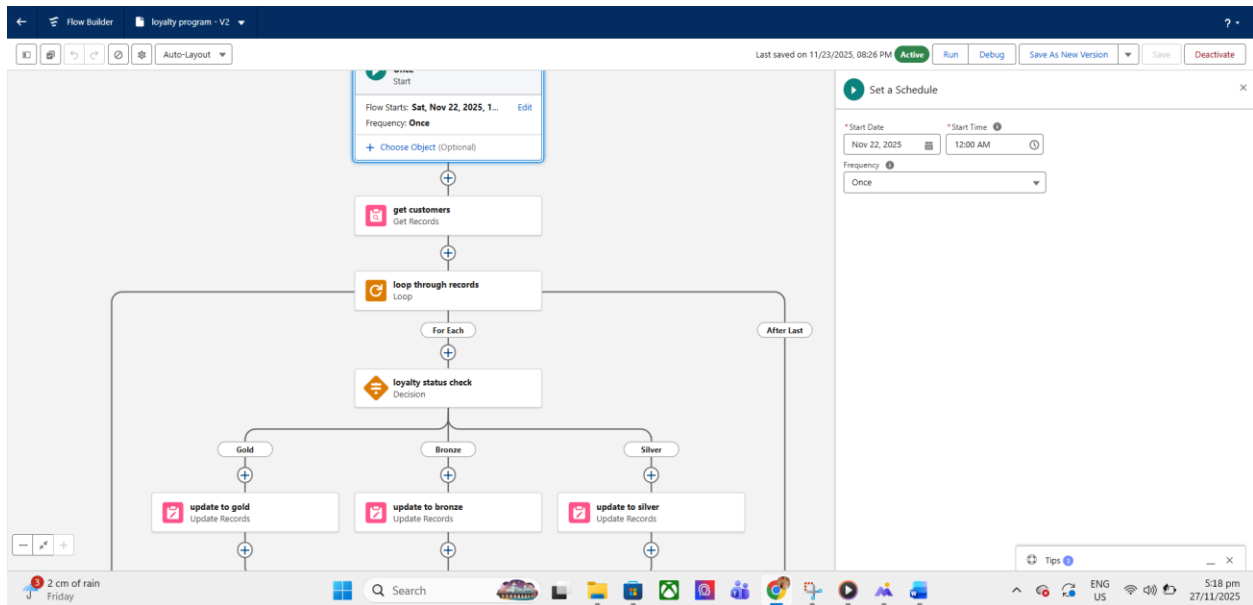
Field	Operator	Value
Stock Quantity X	Less Than	5

+ Add Condition

When to Run the Flow for Updated Records  
All Conditions Are Met (AND)

5:17 pm 27/11/2025

## Loyalty Program Flow



## Apex

### Order Total

```
1 trigger OrderTotalTrigger on HandsMen_Orders__c (before insert, before update) {
2     Set<Id> productIds = new Set<Id>();
3
4     for (HandsMen_Orders__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_Orders__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 }
```

# Stock Deduction

```
1 trigger StockDeductionTrigger on HandsMen_Orders__c (after insert, after update) {  
2     Set<Id> productIds = new Set<Id>();  
3  
4     for (HandsMen_Orders__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_Orders__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) {
```

User	Application	Operation	Time	Status	Read	Size
------	-------------	-----------	------	--------	------	------

29°C  
Lightning nearby

Search

ENG US

5:19 pm  
27/11/2025