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

ABSTRACT

HandsMen Threads, a fast-growing organization in the fashion industry, has initiated a comprehensive Salesforce transformation project aimed at modernizing and optimizing how business data flows across the entire company. This initiative focuses on building a complete Salesforce Developer Org from the ground up, starting with account creation, designing custom objects, configuring data security, developing Lightning apps, and implementing advanced automation using Flows and Apex.

The primary goal of the project is to create a reliable, centralized data management system capable of storing and organizing all customer, product, order, inventory, and marketing campaign information. By integrating these elements into Salesforce, HandsMen Threads ensures that business data remains accurate, consistent, and easily accessible across teams. This centralized structure supports better decision-making, improved customer service, and smoother internal operations.

To further elevate business performance, the system incorporates intelligent automation. These include automatic order confirmation emails sent directly to customers, loyalty program updates based on purchase history, warehouse stock alerts when inventory levels drop below five units, and scheduled midnight flows to process bulk orders. These automated features minimize manual work, reduce errors, and ensure processes remain timely and efficient.

Overall, Salesforce becomes the foundation of HandsMen Threads' digital operations, enhancing customer engagement, strengthening internal workflow accuracy, and enabling the business to scale its operations with confidence.

OBJECTIVES

Before building the solution, the project first defines a clear set of goals to ensure that the Salesforce system supports the real-world needs of HandsMen Threads. These objectives guide every step, from creating objects to designing automation to ensure that the CRM is fully customized for the business.

- Provide HandsMen Threads with a centralized data model where all customer, product, and order-related information can be managed efficiently.
- Improve data quality and accuracy by designing validation rules that prevent incorrect information from being entered.

- Build a Lightning App tailored to HandsMen Threads' operations for easier navigation and faster access to business records.
- Automate business processes such as order confirmations, loyalty updates, inventory notifications, and scheduled bulk processing.
- Enhance customer engagement through email notifications and loyalty tracking.
- Implement secure and structured user access through roles, profiles, and permission sets.
- Introduce Apex and asynchronous Apex for scheduled processing and complex logic that flows cannot handle.
- Create a scalable system that HandsMen Threads can grow with as the business expands.

TECHNOLOGY DESCRIPTION

Below are the key Salesforce components used in building the HandsMen Threads system. Examples are included to make the descriptions easier to understand.

1. Salesforce

A cloud CRM platform used to build custom business solutions. Here, it serves as the full backend system for handling customers, orders, inventory, and automation.

2. Customer Object

A custom object designed to store customer information.
Examples: Email, Phone, Loyalty Status (Gold/Silver/Bronze).

3. Tabs

Tabs allow users to access records from the Salesforce navigation bar.
Example: A dedicated "HandsMen Customer" tab lets staff view all customer records.

4. Custom Apps

A Lightning App containing all HandsMen-related objects in one place.
Example: The "HandsMen Threads App" shows Customers, Products, Orders, Inventory, Campaigns.

5. Profiles

Profiles determine what users can do.
Example: Sales Profile can create orders but cannot modify inventory.

6. Roles

Defines data visibility hierarchy.
Example: Sales Manager can see records owned by Sales Associates.

7. Permission Sets

Grants additional access outside the Profile.
Example: "Inventory Edit Access" permission set for warehouse staff.

8. Validation Rules

Rules that enforce correct data entry.
Example: Prevent saving a customer without an email.

9. Email Templates

Pre-designed templates for system messages.
Example: Order Confirmation Email Template.

10. Email Alerts

Automated emails triggered by flows or processes.
Example: Low Stock Alert email when inventory drops below 5 units.

11. Flows

Point-and-click automations.
Examples:

- Record-triggered flow to update loyalty points.
- Scheduled flow that runs at midnight to process bulk orders.

12. Apex

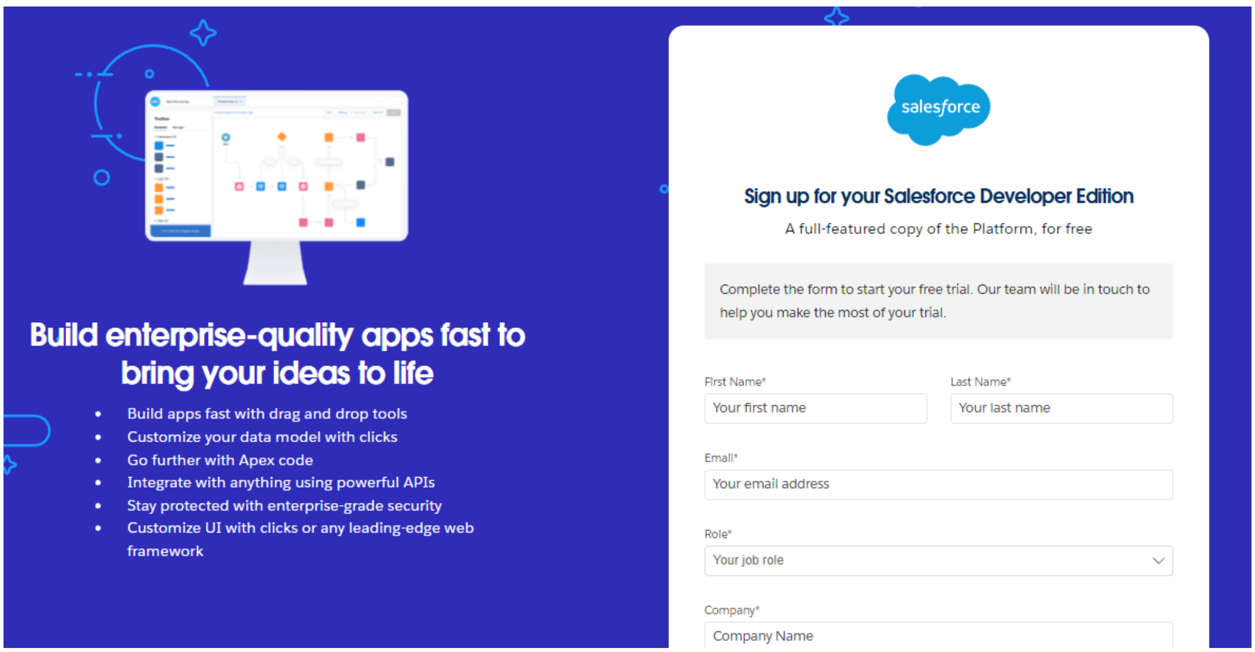
Custom code for complex logic.
Examples:

- Apex Class for custom calculations.
- Batch Apex for large-scale data updates.

DETAILED EXECUTION OF PROJECT PHASES

1. Salesforce Developer Org Setup

The development process began with the creation of a Salesforce Developer Org through here: https://developer.salesforce.com/signup, which served as the primary environment for building and testing the system. A new developer account was registered through the Salesforce Developer signup portal. Basic personal information, organizational details, and a unique username formatted as *username@organization.com* were provided during account setup. This environment enabled unrestricted access to Salesforce features, including object creation, automation tools, Apex development, and security configuration.



2. Creation of Custom Objects

After setting up the org, the core data model for HandsMen Threads was established. Five key custom objects were created to represent essential business entities:

- HandsMen Customer – Stores customer profiles, including contact information and loyalty status.
- HandsMen Product – Contains product catalog details such as product type, stock availability, and pricing.
- HandsMen Order – Captures transaction information, including product orders, customer reference, and order total.
- Inventory – Tracks stock levels and supports inventory monitoring and warehouse operations.

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

Essential fields including Email, Phone, and Loyalty Status were added to support customer profiling. Lookup relationships and formula fields were also configured to connect objects and automate calculations such as loyalty points and order totals.

3. Creating the Lightning App

A dedicated HandsMen Threads Lightning App was developed to consolidate all relevant objects, tabs, and tools into a single workspace. This app served as the primary interface for staff members, enabling them to manage customers, products, orders, inventory, and campaigns efficiently. The app structure was designed to minimize navigation complexity and streamline daily workflows.

4. Validation Rules

As part of ensuring data integrity within the Salesforce environment, several validation rules were implemented across the custom objects. These rules were designed to prevent incomplete, inconsistent, or incorrect data from being saved into the system. By enforcing these conditions directly from the user interface, the system maintains clean and reliable records that support accurate reporting and automation.

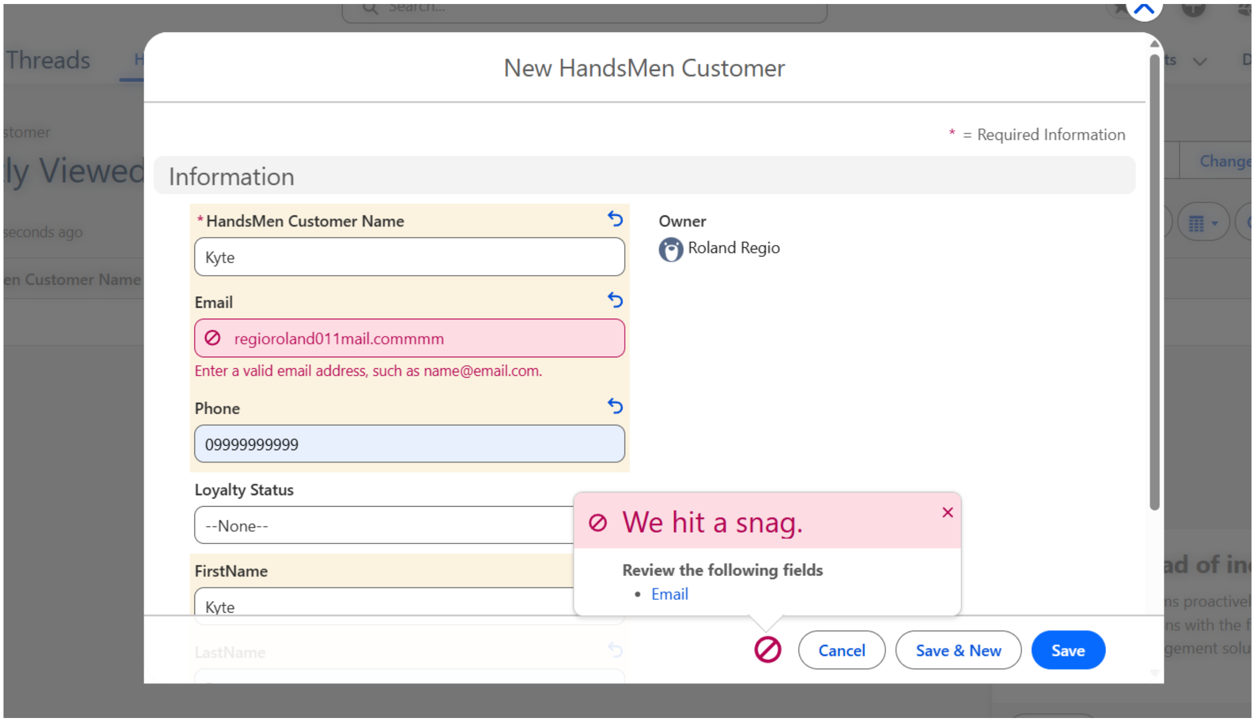
The validation rules introduced in the system include:

1. **Required Customer Information**

   A rule was implemented to ensure that critical customer details such as Email and Phone are not left blank during record creation. This prevented incomplete customer profiles, which are essential for communication and loyalty tracking.

2. **Valid Email Format Enforcement**

   A validation rule was added to check whether the email field follows the proper email structure (e.g., *name@example.com*). This reduces risks associated with invalid contact information that may affect email notifications.



3. **Non-Negative Inventory Levels**

For the Inventory object, a rule was applied to prevent users from entering negative stock values. This ensured consistency in inventory tracking and prevented erroneous data from affecting stock alerts or scheduled updates.

4. **Mandatory Order Details**

The HandsMen Order object includes rules that ensure an order cannot be saved without referencing a valid customer and at least one product. This prevents the creation of orphaned or incomplete order records.

These validation rules collectively strengthened the system's reliability by ensuring that all stored data accurately reflects real-world business processes

5. User Role and Profile Setup

To ensure proper access control, the security model was configured using Salesforce's hierarchical security tools:

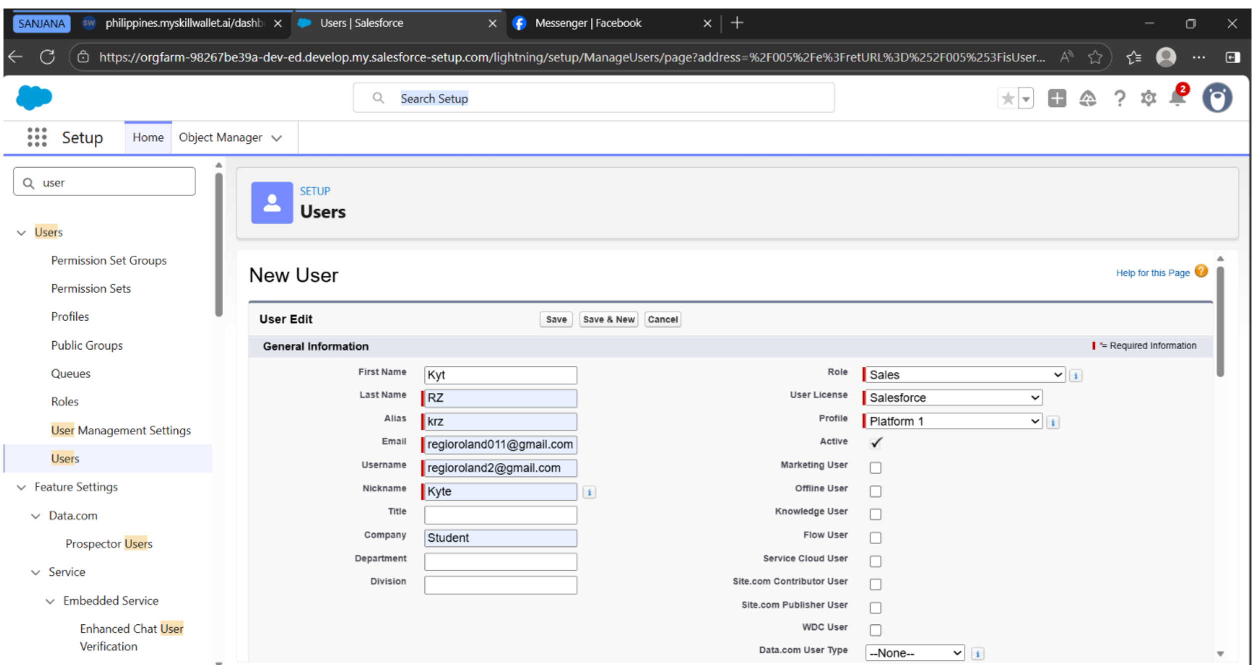
- **Roles**
  A *Sales* role was created to represent users responsible for customer and order management. Roles determined visibility and access to records in the system hierarchy.
- **Profiles**
  A *Sales Profile* was set up to control permissions such as object-level and field-level

access. This ensured users could perform only the tasks relevant to their job responsibilities.

- **Permission Sets**
  Additional access was granted through permission sets, allowing for flexibility without modifying user profiles. This included permissions related to inventory editing or campaign management when needed.

6. User Creation

- Added new users into Salesforce.
- Assigned them the correct profiles and roles.
  - Niklaus Mikaelson – Assigned as Sales Role
  - Kol Mikaelson - Assigned as Inventory Role
- Granted additional permissions through permission sets.

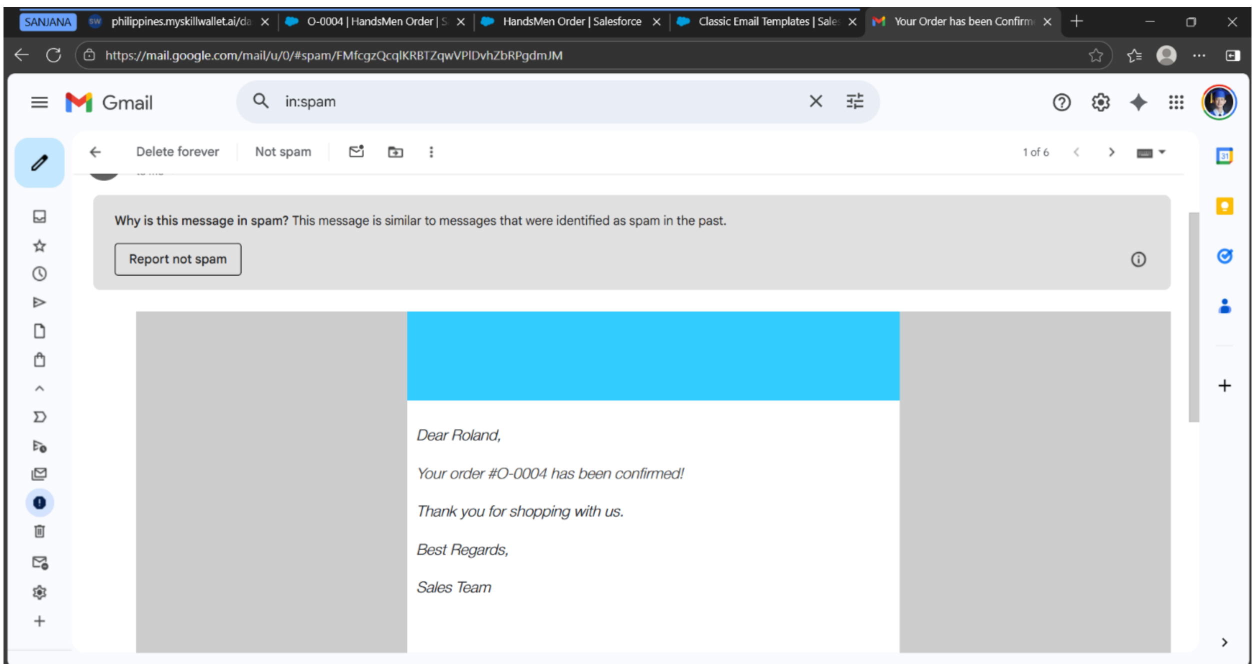


7. Email Templates & Alerts

To support automated communication, professionally formatted email templates were created. These included:

- **Order Confirmation Email Template** – Sent to customers after order submission.
- **Stock Alert Email Template** – Triggered when inventory levels fall below the defined threshold.
- **Loyalty program templates** for loyalty status changes

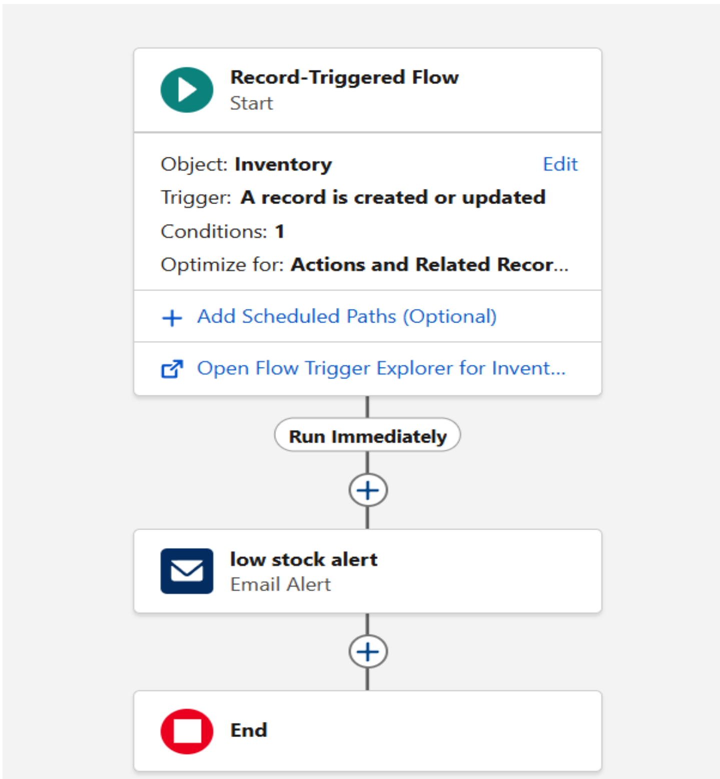
Email Alerts were configured to use these templates within Flows and other automation tools, enabling hands-free communication across different business scenarios.



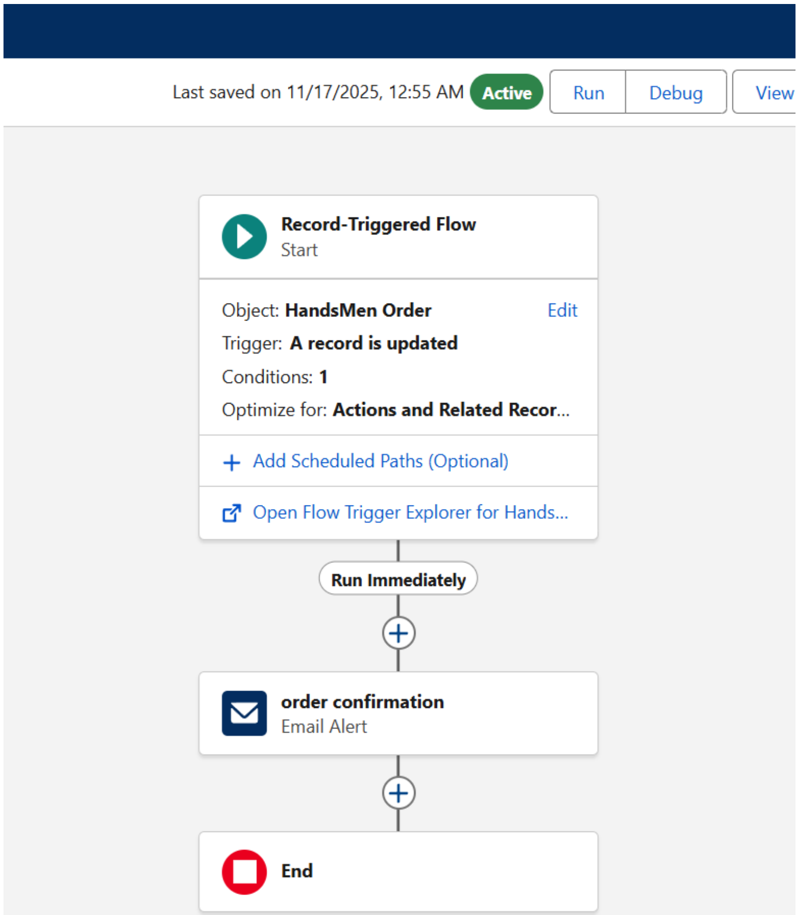
8. Flow Implementation

A series of Flows were developed to automate business processes and reduce manual intervention:

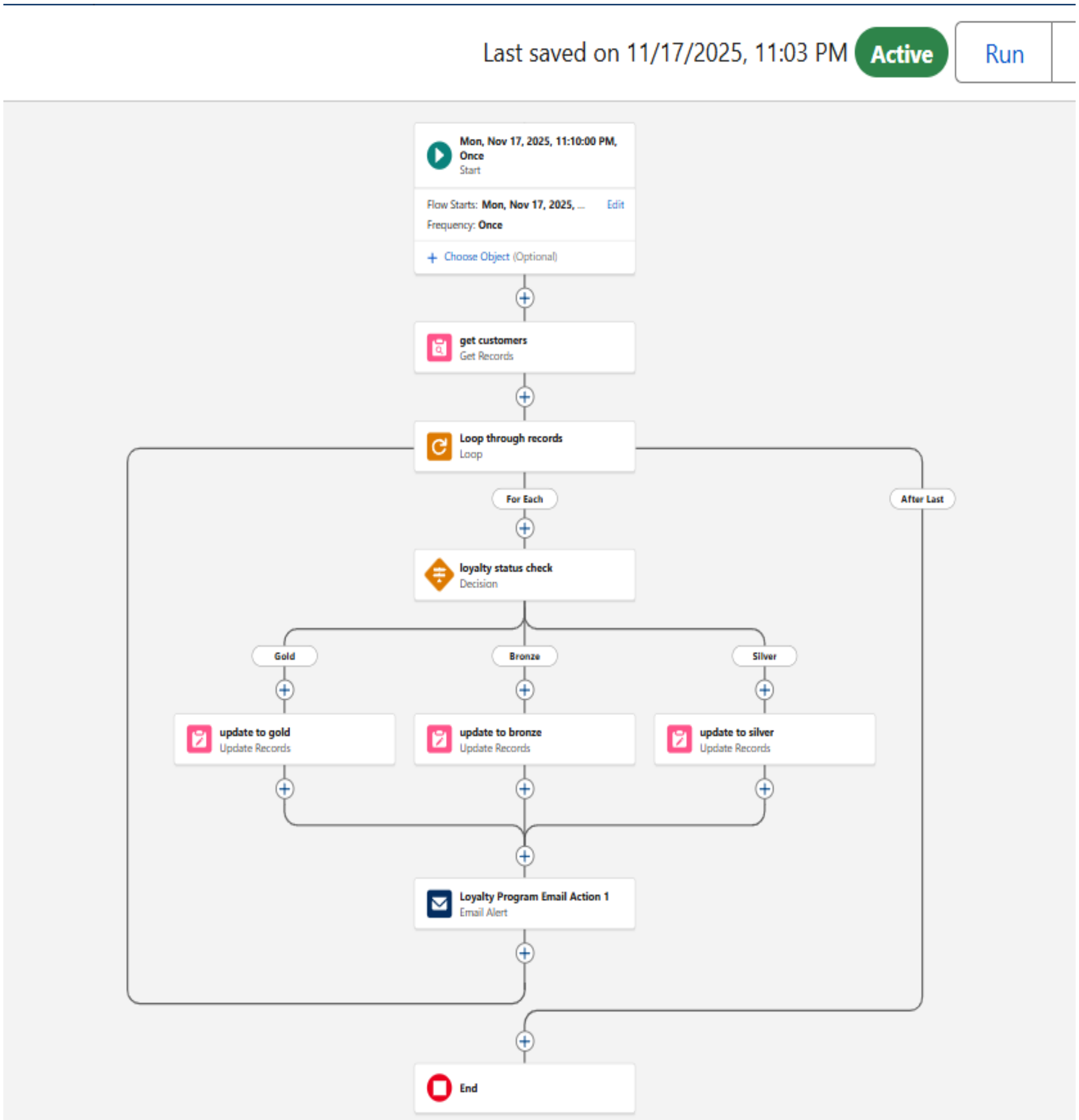
- **Record-Triggered Flow for Stock Alerts**
  Automatically notifies the warehouse when inventory drops below five units.



- **Order Confirmation Flow**
  Sends an automated email to customers upon order creation.



- **Scheduled Flow**
  A midnight scheduled flow processes the loyalty statuses of customers



These flows ensured timely, accurate, and consistent business operations.

9. Apex Triggers Development

To support advanced business logic that could not be fully achieved using declarative tools, Apex was introduced into the system. Apex provided the precision, scalability, and flexibility needed to handle complex processing requirements. Three Apex Triggers were developed as part of the automation framework, each addressing a key operational requirement for HandsMen Threads.

1. Order Confirmation Trigger

A trigger was implemented on the HandsMen Order object to automatically initiate back-end processing whenever a new order was created. This trigger ensured that additional server-side logic such as generating confirmation details was executed before or after the order was committed to the database. It acted as the foundation for more advanced order-handling processes that complemented email alerts and inventory updates.

2. Inventory Update Trigger

An Apex Trigger was implemented on the Inventory or Order object (depending on design flow) to adjust product stock levels when an order was placed. This trigger automatically deducted purchased quantities from the inventory record, ensuring that stock levels remained accurate at all times. By having inventory updated in real time, the system prevented overselling and improved operational transparency between sales and warehouse teams.

3. Loyalty Status Update Trigger

A trigger was added on the HandsMen Customer or HandsMen Order object to update the customer's Loyalty Status based on their accumulated purchase history. Once a qualifying transaction was recorded, the trigger recalculated total spending and updated the customer's loyalty tier. This ensured that loyalty rewards such as discounts or benefits were automatically and consistently applied.

PROJECT EXPLORATION WITH REAL-WORLD EXAMPLE

This section illustrates how the Salesforce setup functions in real business scenarios inside HandsMen Threads. These examples show how different users, customers, staff members, and warehouse personnel interact with the system and how Salesforce automations respond behind the scenes.

1. Customer Registration

A sales representative named Maria adds a new customer, Andy Dela Cruz, into the *HandsMen Customer* object.

When Maria fills out the registration form, she enters Andy's details including:

- Name: *Andy Dela Cruz*
- Email: *andy.delacruz@example.com*
- Phone: *0917 555 1022*

- Address: *Quezon City, Metro Manila*

  As soon as she clicks Save, the system performs several actions:

- Salesforce checks whether Andy's email address is valid.
- The system verifies that both Email and Phone fields are not empty.
- Andy is automatically assigned an Initial Loyalty Status such as *Bronze*.
- His profile becomes instantly available for product purchases.

This ensures that every new customer record entering the database is complete and ready for transaction flows.

2. Product Setup

An inventory admin named Carlos updates the product catalog by adding a new item:

- Product Name: *Classic Denim Jacket*
- Category: *Men's Outerwear*
- Price: *₱1,499*
- Initial Stock: *40 units*

  Carlos creates this entry in the *HandsMen Product* object. Once the product is saved:

- The item is automatically linked to the Inventory object.
- A corresponding Inventory record is created showing:
  - *Stock = 40*
  - *Reorder Level = 5*
- The product becomes immediately available for orders.

This setup ensures that both sales and warehouse teams have full visibility of product availability.

3. Order Placement

A sales agent named Jessa receives a phone call from Andy, who wants to purchase:

- 2 units of Classic Denim Jacket

  Jessa opens the *HandsMen Order* object and creates a new order under Andy's profile.

  After entering the quantity and selecting the product, she clicks Submit Order. At this moment, Salesforce triggers:

- An Order Confirmation Email sent directly to Andy's inbox.
- Automatic calculation of the total order amount.
- A link created between the order, the customer, and the purchased product.

  Andy receives an email saying:

  "Thank you for your purchase, Andy! Your order for 2 Classic Denim Jackets has been successfully placed."

4. Inventory Update

Once Andy's order is saved, the system automatically updates stock levels.

The Inventory record for *Classic Denim Jacket* (initially 40 units) is adjusted:

- New Stock Level: 38 units

  Salesforce then checks whether the product has reached the low-stock threshold (5 units). Since the stock is still above 5, no alert is triggered yet.

  However, if future orders bring the stock down to 4 units, the system immediately sends a Warehouse Stock Alert Email to warehouse staff:

  "Warning: Classic Denim Jacket inventory is below safety level (4 units remaining). Please restock."

  This ensures timely replenishment and prevents stockouts.

5. Loyalty Program

After Andy completes his purchase, the system reviews his total spending.

For example:

- Previous Spending: ₱0
- Current Order: ₱1,499 × 2 = ₱2,998
- New Total Spending: ₱2,998

Based on HandsMen Thread's loyalty rules, any customer who reaches ₱3,000 is upgraded to Silver Loyalty Status.

Andy is now just ₱2 short of leveling up.

The next time he buys anything, even a low-cost accessory, the system detects he crossed the silver threshold and automatically updates his loyalty tier. He receives an email:

"Congratulations Andy! You've reached Silver Loyalty Status. Enjoy exclusive rewards!"

6. Email Notifications

Multiple automated emails are generated through the system:

Customer Emails

- Order Confirmation (sent to Andy)
- Loyalty Upgrade Notification

Warehouse Emails

- Low Stock Alert (when inventory < 5 units)

Admin Emails

- Daily Midnight Batch Summary
  - Shows bulk order updates
  - Lists inventory adjustments
  - Provides financial totals for the day

These automated notifications reduce manual workload and improve business coordination.

7. Users and Roles

Salesforce security ensures that every user has access only to the tools they need.

For example:

- Maria (Sales Representative)
  - Can register customers
  - Can create orders
  - Cannot modify system settings
  - Assigned Role: *Sales*
  - Profile: *Sales Profile*
- Carlos (Inventory Admin)
  - Can update product stock
  - Can add new items
  - Cannot view customer financial records
  - Assigned Role: *Operations*
  - Profile: *Inventory Profile*

- Jessa (Sales Agent)
    - Can enter orders and manage customer purchases
    - Permission Set: “View Inventory Levels” to help her check stock before confirming orders

This structure keeps the environment secure, organized, and aligned with each employee’s responsibilities.

SCREENSHOTS

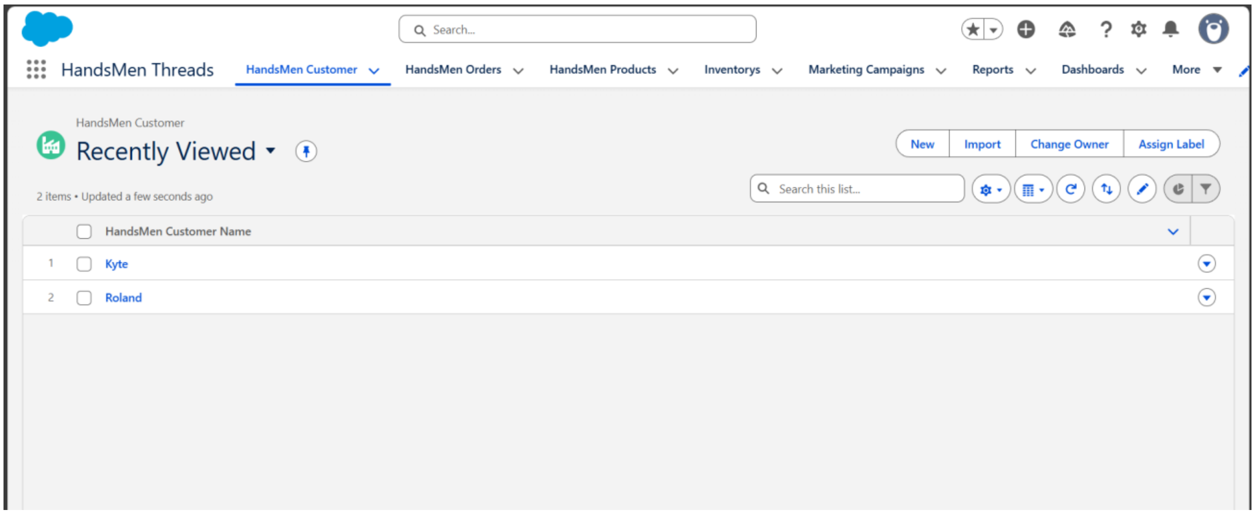


Fig. 1: HandsMen Threads App Launcher

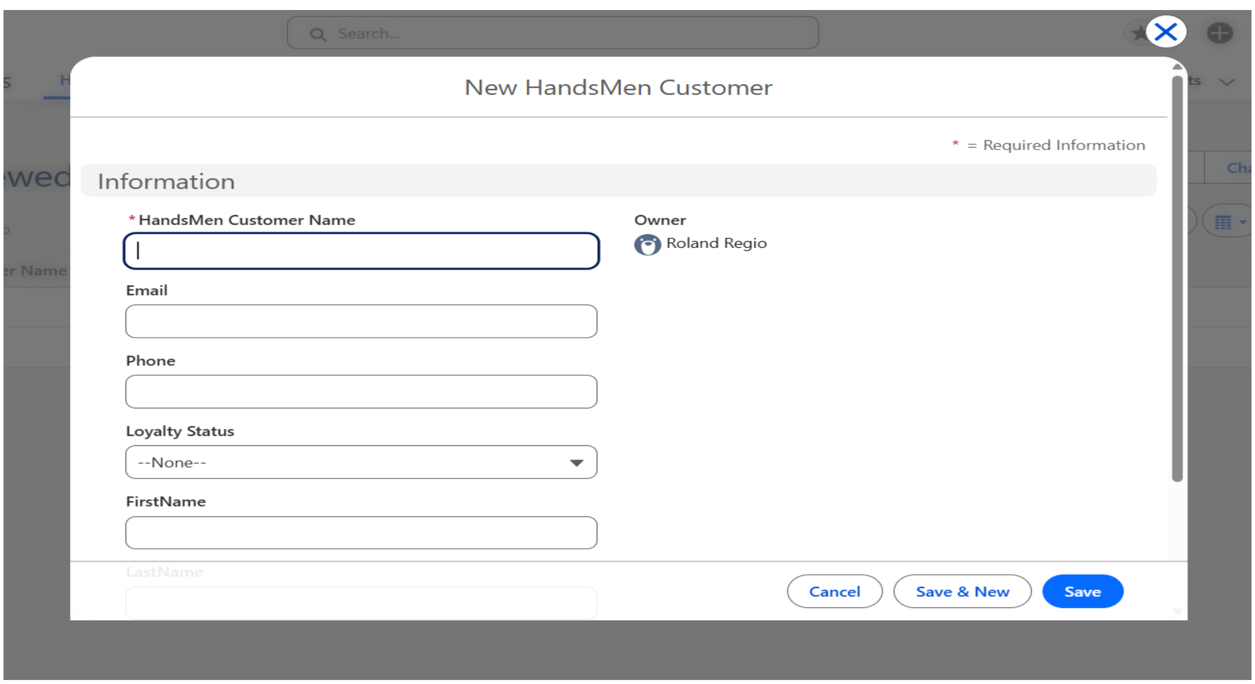


Fig. 2: Creating a New Customer Record (HandsMen Customer)

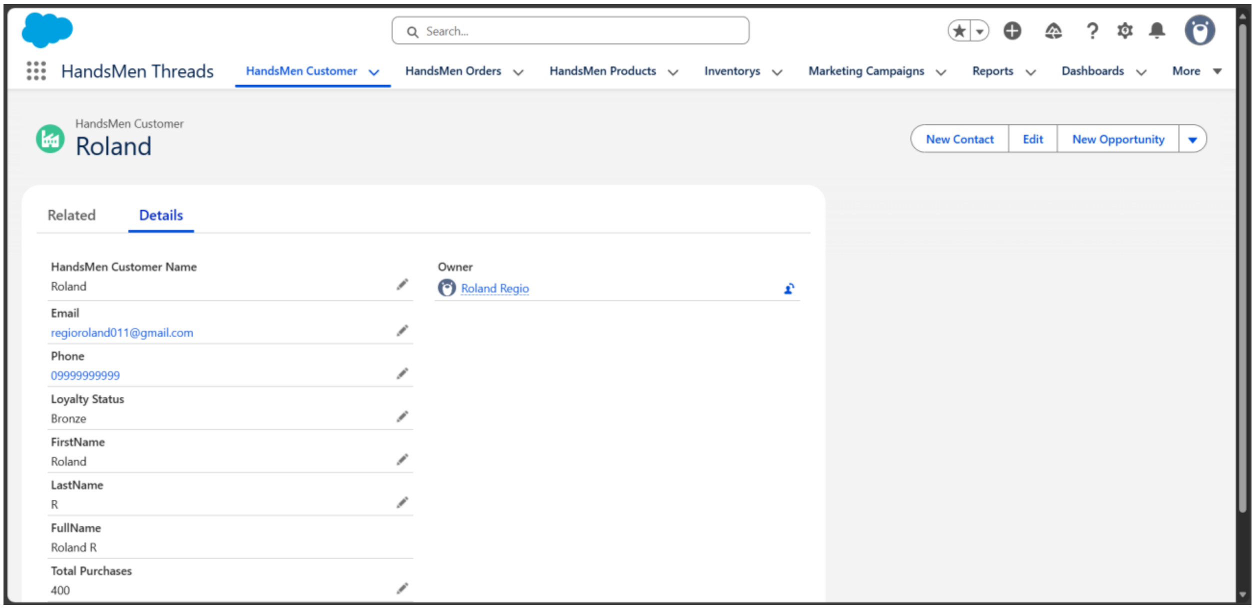


Fig. 3: Customer Record Detail Page

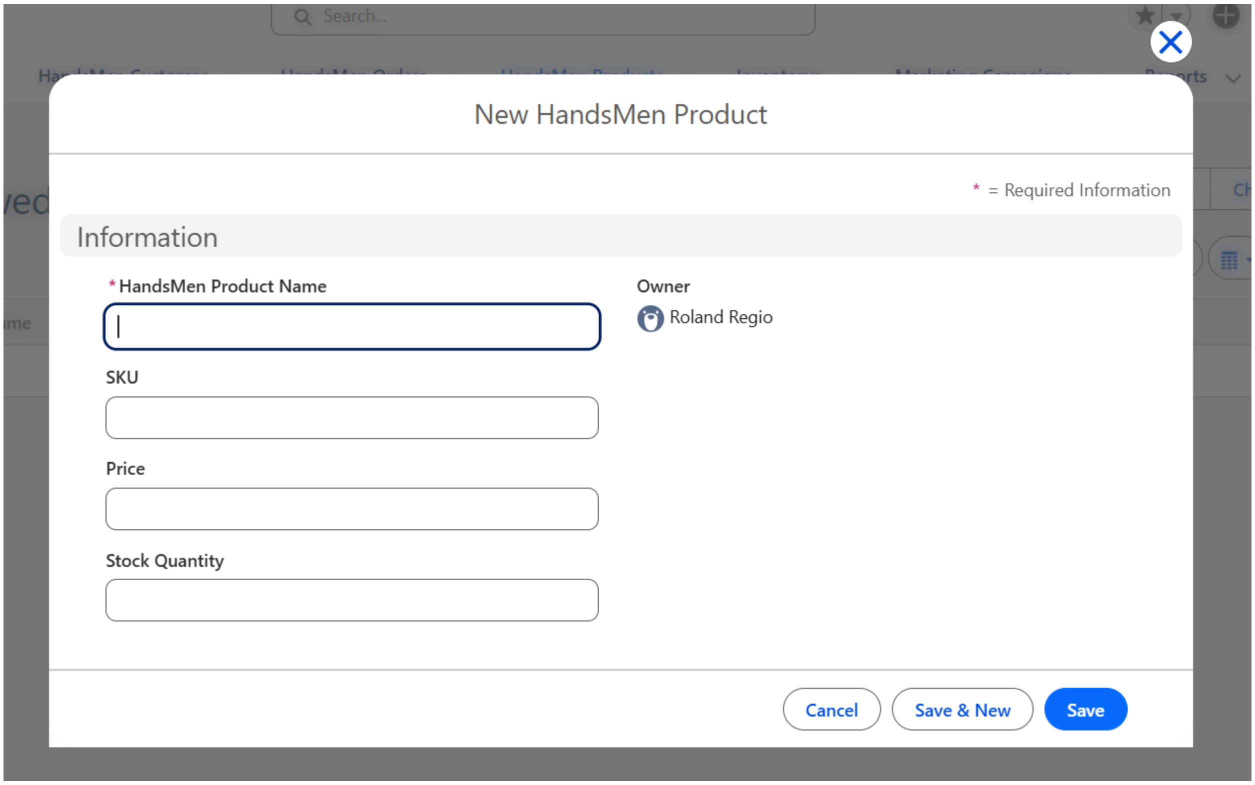


Fig. 4: Creating a New Product Record

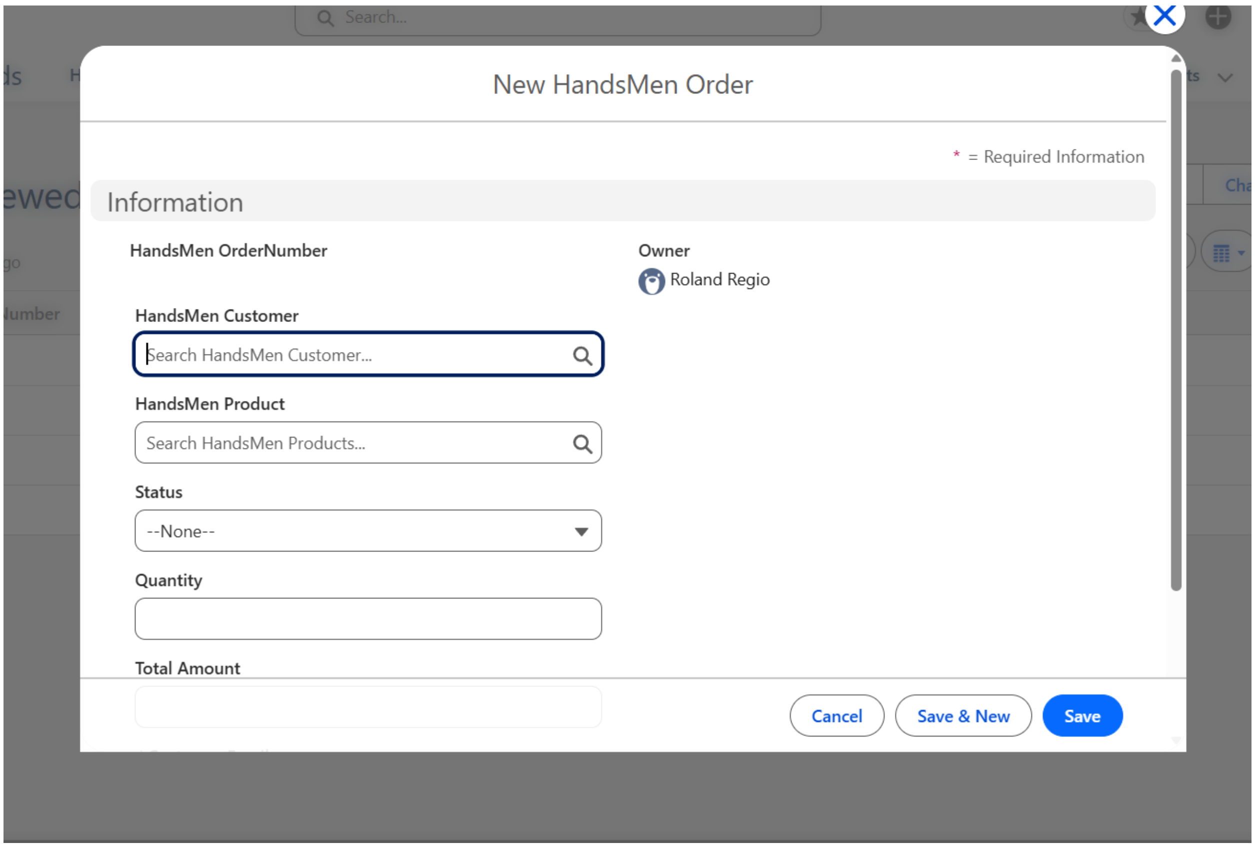


Fig. 5: Creating a New Order Record

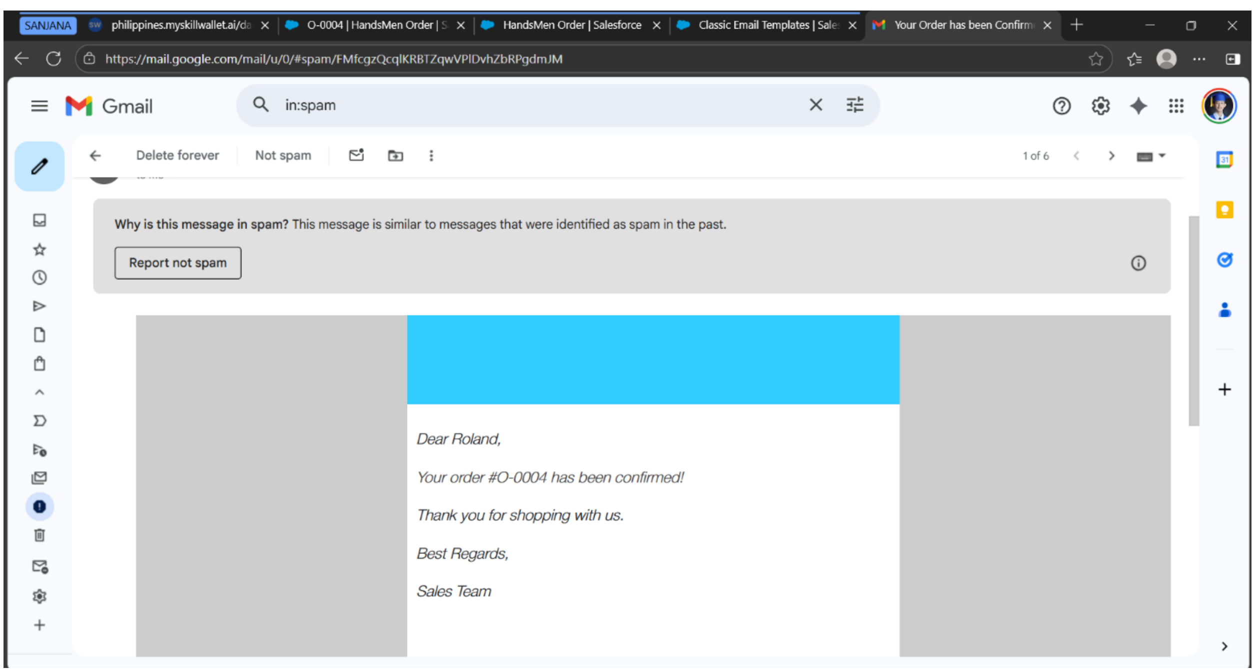


Fig. 6: Order Confirmation Email Received by Customer

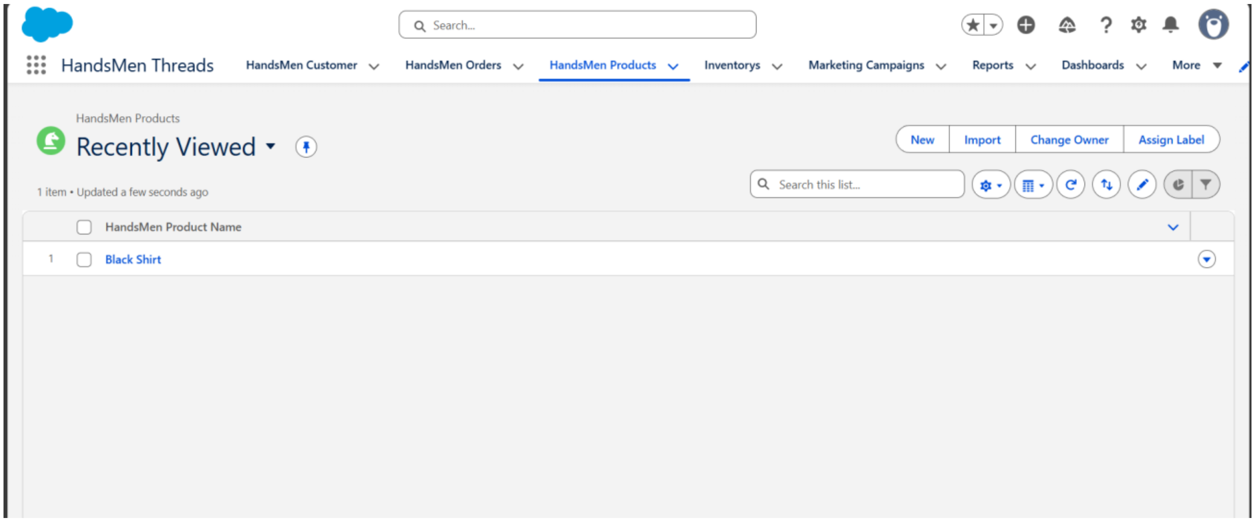


Fig. 7: Product List View Page

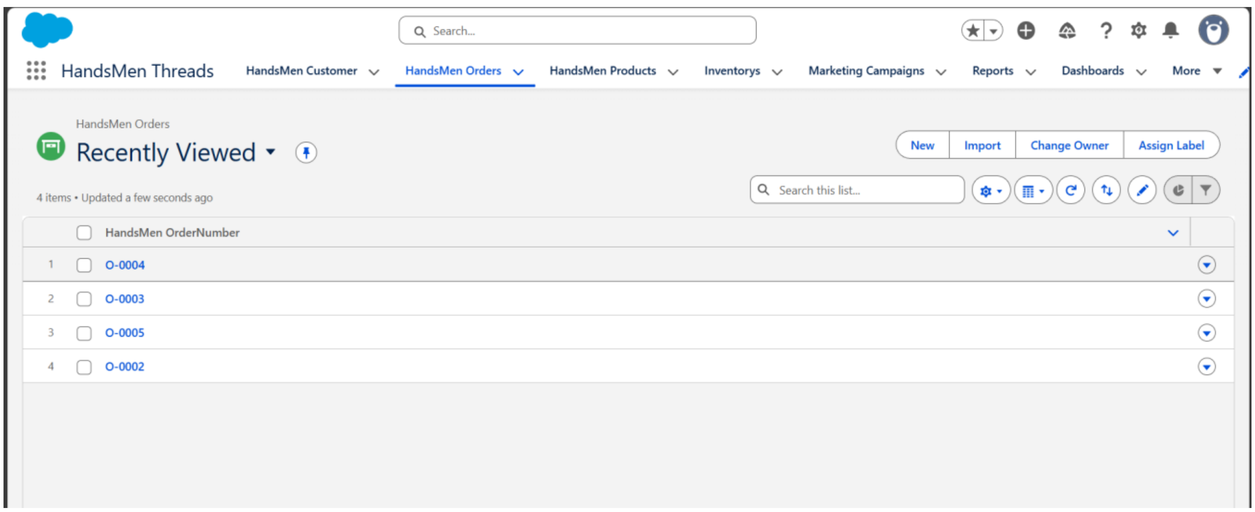


Fig. 8: HandsMen Order List View

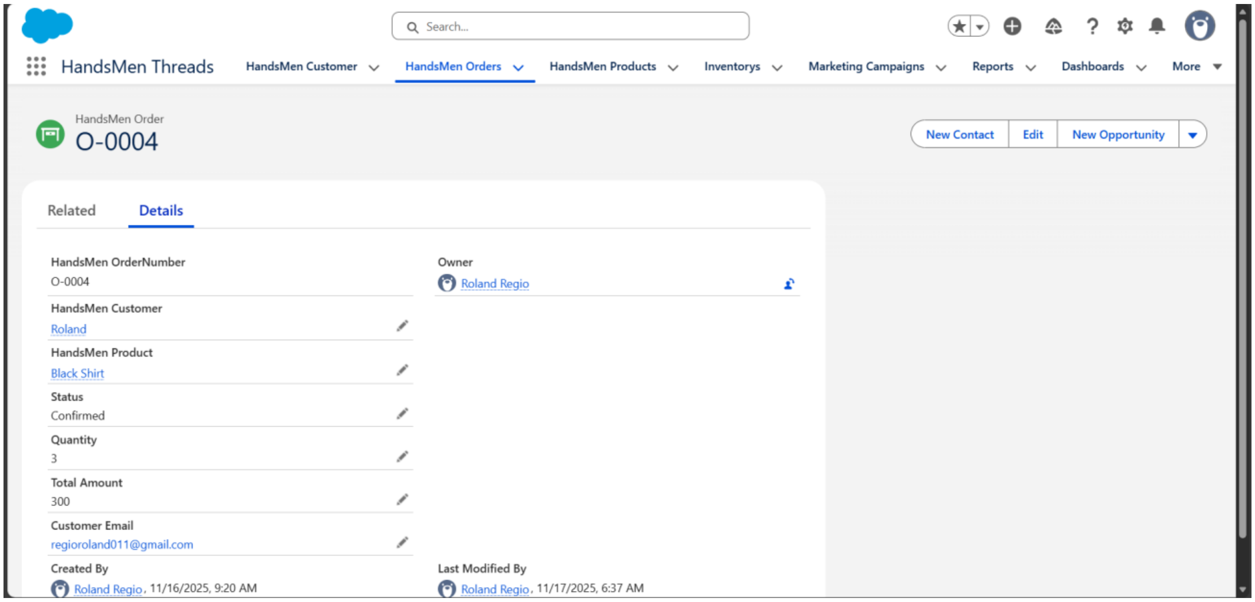


Fig. 9: Order Record Detail Page

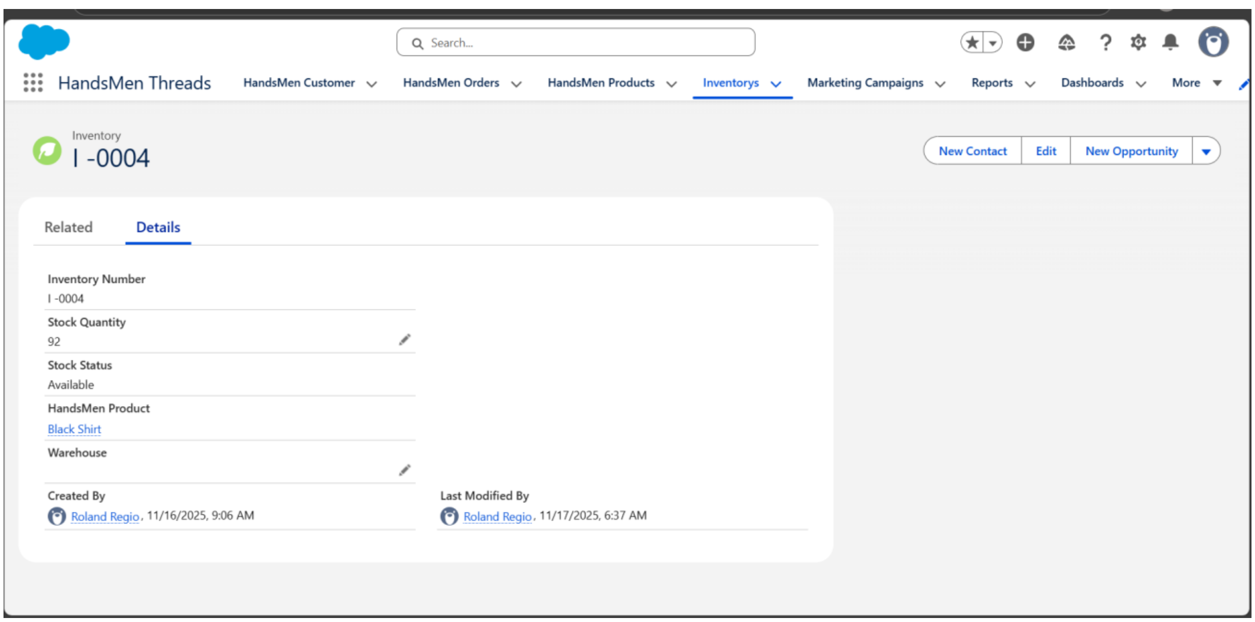


Fig. 10: Inventory Management Page

CONCLUSION

The HandsMen Threads Salesforce transformation project successfully modernized the company's data management ecosystem by creating a centralized and automated business process environment. Through structured object design, role-based access, custom UI components, automated email alerts, and advanced Apex-based logic, the system now provides improved operational efficiency and strong data reliability.

All core business functions, customer tracking, order management, product inventory, email notifications, and loyalty programs are now integrated into one cohesive platform. Manual tasks were replaced with a combination of Flows and Apex automation, resulting in faster processing, reduced human error, and a better customer experience.

This implementation not only fulfills current requirements but also sets a scalable foundation for future enhancements.

FUTURE SCOPE

To further strengthen and expand the system, the following improvements can be implemented in future phases:

1. Integration with POS and E-Commerce Systems

- Sync real-time orders from online stores or physical branches.
- Unified backend for all customer and order data.

2. Advanced Analytics and Dashboards

- Create dashboards for:
  - Sales performance
  - Customer loyalty ranking
  - Marketing campaign effectiveness

3. Mobile Application Integration

- Allow staff to view customer info, place orders, and update stock directly from mobile devices.

4. Automated Marketing Journeys (Marketing Cloud / Pardot)

- Personalized promotional emails and SMS based on:
  - Customer behavior

    - Loyalty points
    - Purchase history

5. AI Recommendation System

- Einstein AI can recommend:
    - Best-selling products
    - Upsell items for each customer
    - Predicted low-stock dates

6. Enhanced Inventory Tracking

- Barcode or QR Scanner integration
- Auto-reorder flows for suppliers when stock reaches critical levels