# ABSTRACT

This project showcases the development and deployment of a customized Salesforce CRM solution for **HandsMen Threads**, a premium men's fashion and tailoring brand. The primary goal of the system is to streamline business operations, strengthen customer engagement, and ensure consistent data integrity across all departments.

The solution features a well-structured data model composed of five key custom objects: **Customer, Order, Product, Inventory**, and **Marketing Campaign**. Core business processes were automated using **Record-Triggered Flows, Scheduled Flows, Email Alerts**, and **Apex**, enabling seamless execution of tasks such as order confirmations, loyalty status updates, and proactive inventory notifications.

To maintain accurate and reliable data, the implementation includes comprehensive **validation rules** and a **role-based security model** tailored for the Sales, Inventory, and Marketing teams. An **Apex scheduled batch job** was also developed to automate monitoring and updates of low-stock items.

This end-to-end CRM solution enhances customer experience through personalized interactions, improves operational efficiency through automation, and establishes a scalable platform for future growth within the Salesforce ecosystem.

# OBJECTIVE

The main goal of this project is to create a customized Salesforce CRM system for **HandsMen Threads** to streamline operations, maintain accurate data, and improve customer satisfaction.

Through a centralized system for managing customers, orders, products, inventory, and marketing, the project aims to:

- Automate essential tasks such as order confirmations, loyalty updates, and stock alerts.
- Maintain accurate and consistent data using validation rules.
- Provide real-time information about inventory and customer activity.

- Improve teamwork and security through role-based access for each department.
- Offer personalized customer experiences through targeted communication and loyalty programs.

# TECHNOLOGY DESCRIPTION

## Salesforce

A cloud-based CRM platform used to manage customer information, automate business processes, and support sales, service, and marketing. Salesforce provides point-and-click tools and coding options (Apex, Flows) for advanced customization.

## Custom Objects

Custom Objects function like database tables used to store specific business data.

Examples:

- **Customer_c** – stores customer information
- **Product_c** – stores product details
- **Order_c** – stores order records

## Tabs

Tabs provide easy access to object data within Salesforce.
Example: A **Product** tab allows users to view and update product information.

## Custom App

A packaged set of tabs and tools organized to serve a specific business function.

## Profiles

Profiles control what a user can do in Salesforce—view, edit, delete, or create records. They define core permissions and access levels.

## Roles

Roles determine record visibility. Users higher in the role hierarchy can see more data.

## Permission Sets

Permission Sets grant additional access to users without modifying their default profile.

## Validation Rules

Validation Rules ensure users enter correct and complete data.

Examples:

- Email must include “@gmail.com”
- Stock value cannot be negative

## Email Templates

Predefined email layouts used to send consistent messages.
Example: **Order Confirmation Email**

## Email Alerts

Automated emails sent based on a trigger or flow action.
Example: Sending an email when a customer’s loyalty status changes.

## Flows

Automation tools that create, update, or delete records and send notifications.
Examples:

- Automatically send an order confirmation when a new order is created.
- Auto-update loyalty status based on purchase totals.

## Apex

Salesforce's object-oriented programming language used for custom logic.

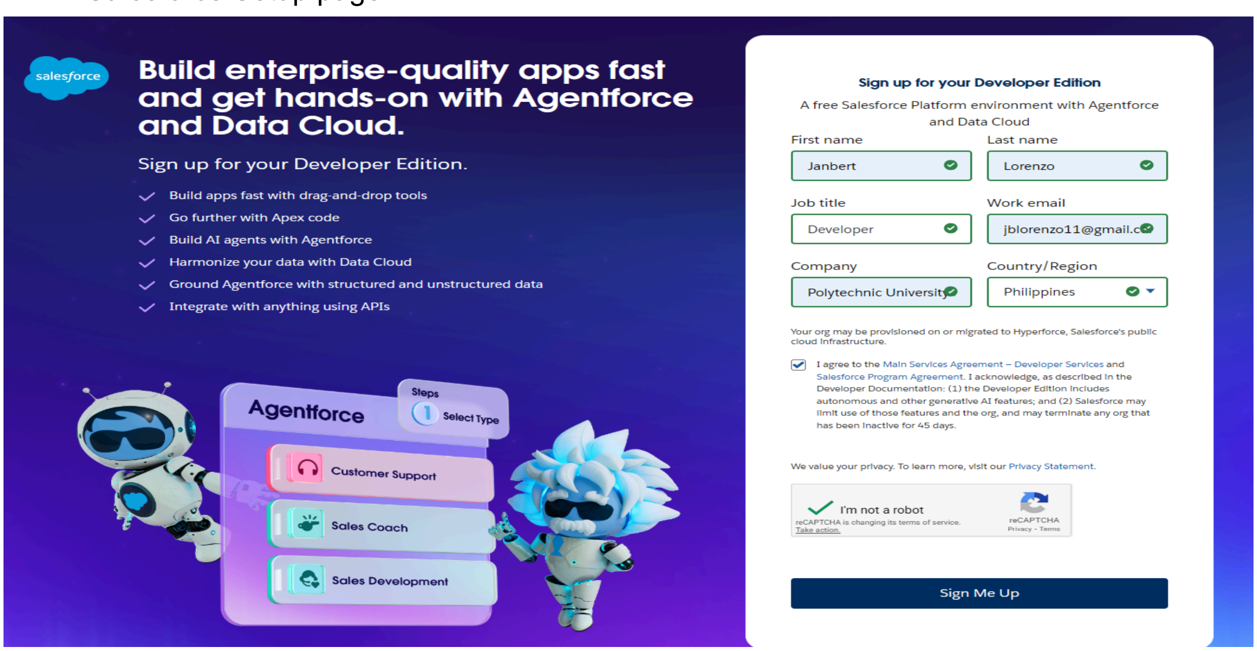
Examples of Apex Trigger usage:

- Updating the **Total_Amount_c** field in an Order.
- Reducing inventory stock when a new order is created.

# DETAILED EXECUTION OF PROJECT PHASES

## 1. Developer Org Setup

- A Salesforce Developer Org was created using: [https://developer.salesforce.com/signup](https://developer.salesforce.com/signup).
- This account was verified, password set, and access was granted to the Salesforce Setup page.



- Logged into Salesforce and accessed the **Setup** page.

## 2. Custom Object Creation

Five custom objects were created to store the essential data required by **HandsMen Threads**:

- **HandsMen Customer** – stores customer information such as email, phone number, and loyalty status.

- **HandsMen Product** – stores product details such as SKU, price, and current stock.

- **HandsMen Order** – stores customer order details including quantity, date, and order status.

- **Inventory** – tracks stock levels and warehouse locations.

- **Marketing Campaign** – stores promotional campaign details and schedules.

## Steps in Creating the Custom Objects

1. Navigate to **Setup** → **Object Manager** → **Create Custom Object**.

2. Enter the **Object Label** and **Object Name**.

3. Enable important settings such as:

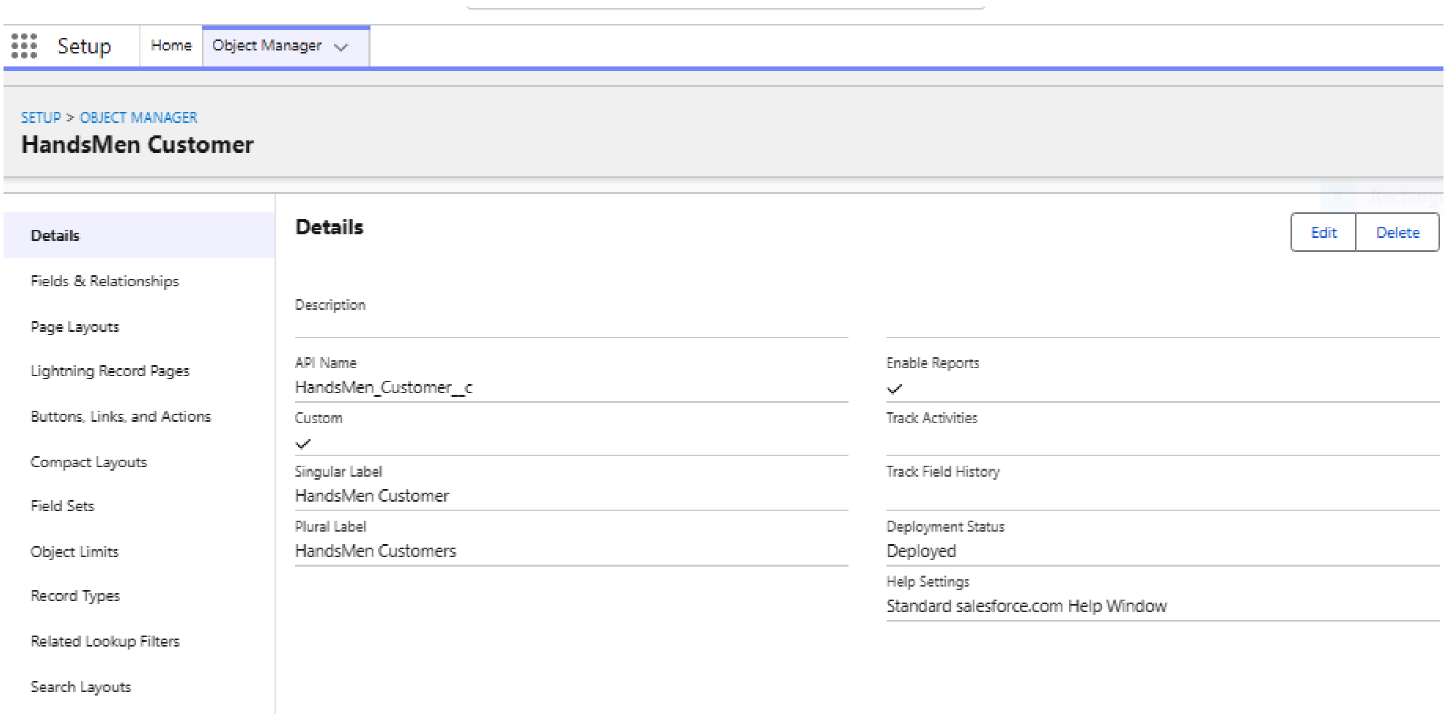
    - *Allow Reports*

    - *Allow Search*

    - *Track Activities*

4. Click **Save** to create the object.

5. Create a **Tab** for each custom object to make the data easily accessible from the Salesforce interface.




# 3. Creating the Lightning App

A custom Lightning App named **HandsMen Threads** was created to organize and centralize all key business tools.

## Configuration Summary

- Added essential tabs:
    - **HandsMen Customer**
    - **HandsMen Product**
    - **HandsMen Order**

- Inventory
- Marketing Campaign
- Reports

- Assigned the app to the **System Administrator** profile for easy access.
- Ensured simple and intuitive navigation for managing customers, products, inventory, and orders.

# 4. Validation Rules

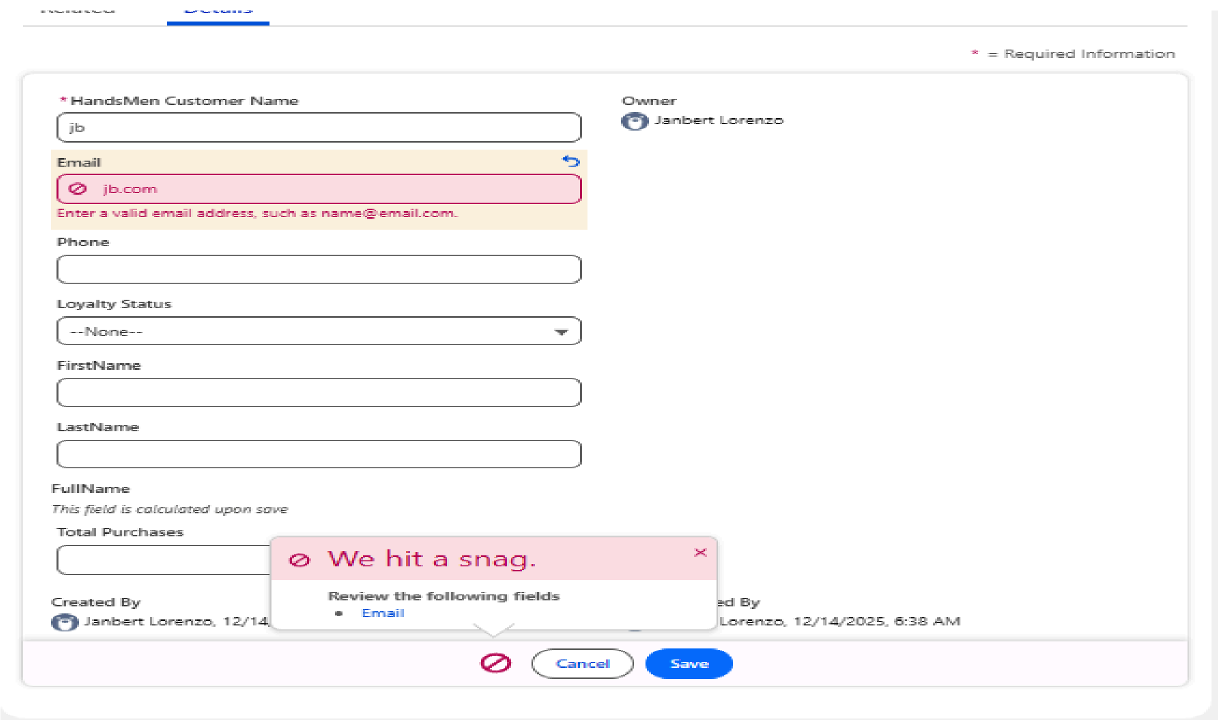
Validation rules were implemented to ensure the accuracy and completeness of data entered into the system.

## Order Object

- **Rule:** Prevent saving when `Total_Amount__c <= 0`
- **Error Message:** *"Please Enter Correct Amount"*

## Customer Object

- **Rule:** Email must contain `@gmail.com`
- **Error Message:** *"Please fill Correct Gmail"*



# 5. User Role & Profile Setup

To properly manage system access and maintain data security, user profiles and roles were configured as follows:

### Profile Setup

- A new profile named **Platform 1** was created by cloning the **Standard User** profile.
- Additional permissions were granted to allow access to all necessary custom objects.

### Role Hierarchy

Roles were created to reflect the major departments of HandsMen Threads:

- **Sales Manager**
- **Inventory Manager**
- **Marketing Team**

These roles help organize record visibility and control access based on departmental responsibilities.

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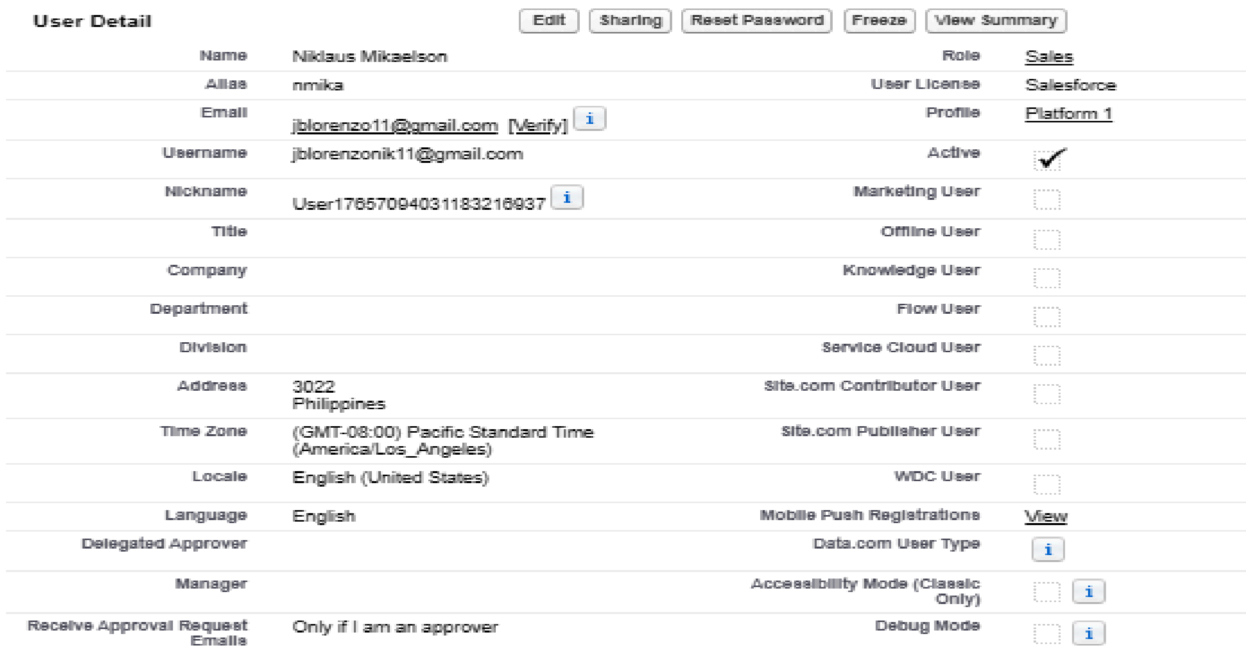
# 6. User Creation

New users were added to Salesforce and assigned appropriate roles and profiles corresponding to their job functions:

- **Niklaus Mikaelson** – Assigned to the **Sales** role
- **Kol Mikaelson** – Assigned to the **Inventory** role

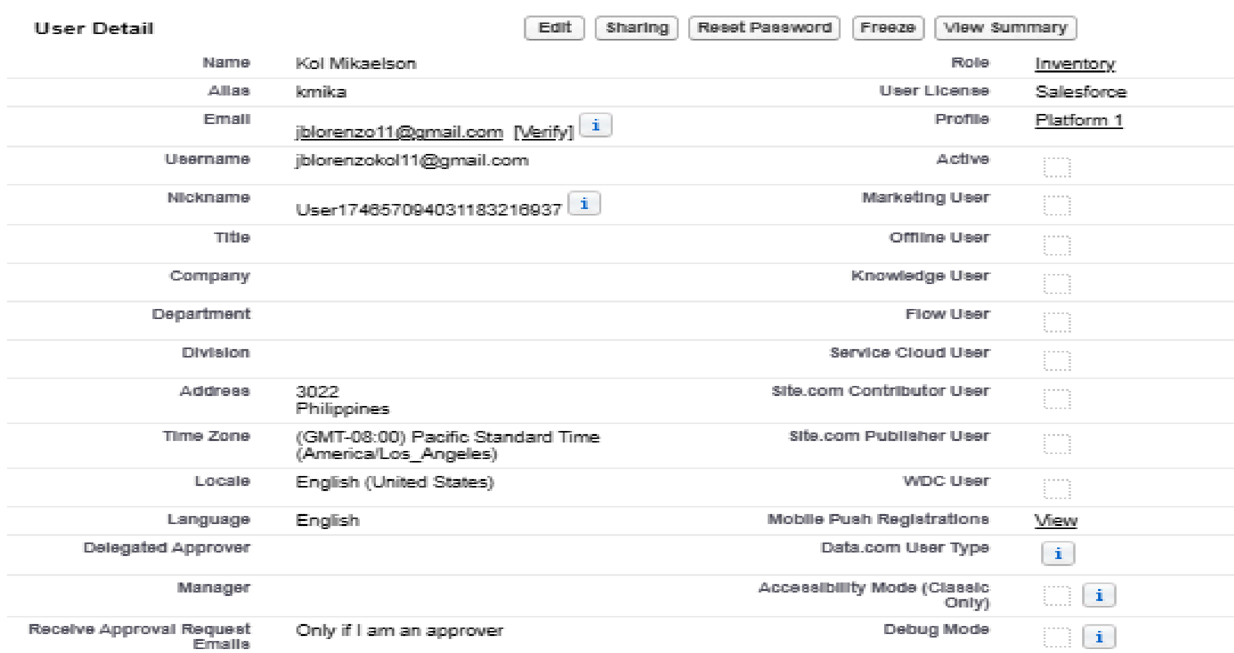
Assigning users to the correct roles and profiles ensures they can access only the data they need and follow the proper processes in the system.



User Detail

Edit | Sharing | Reset Password | Freeze | View Summary

| | | | |
|---|---|---|---|
| Name | Niklaus Mikaelson | Role | Sales |
| Alias | nmika | User License | Salesforce |
| Email | jblorenzo11@gmail.com [Verify] | Profile | Platform 1 |
| Username | jblorenzonik11@gmail.com | Active | ✓ |
| Nickname | User17657094031183216937 | Marketing User | |
| Title | | Offline User | |
| Company | | Knowledge User | |
| Department | | Flow User | |
| Division | | Service Cloud User | |
| Address | 3022<br>Philippines | Site.com Contributor User | |
| Time Zone | (GMT-08:00) Pacific Standard Time (America/Los_Angeles) | Site.com Publisher User | |
| Locale | English (United States) | WDC User | |
| Language | English | Mobile Push Registrations | View |
| Delegated Approver | | Data.com User Type | |
| Manager | | Accessibility Mode (Classic Only) | |
| Receive Approval Request Emails | Only if I am an approver | Debug Mode | |



User Detail

Edit | Sharing | Reset Password | Freeze | View Summary

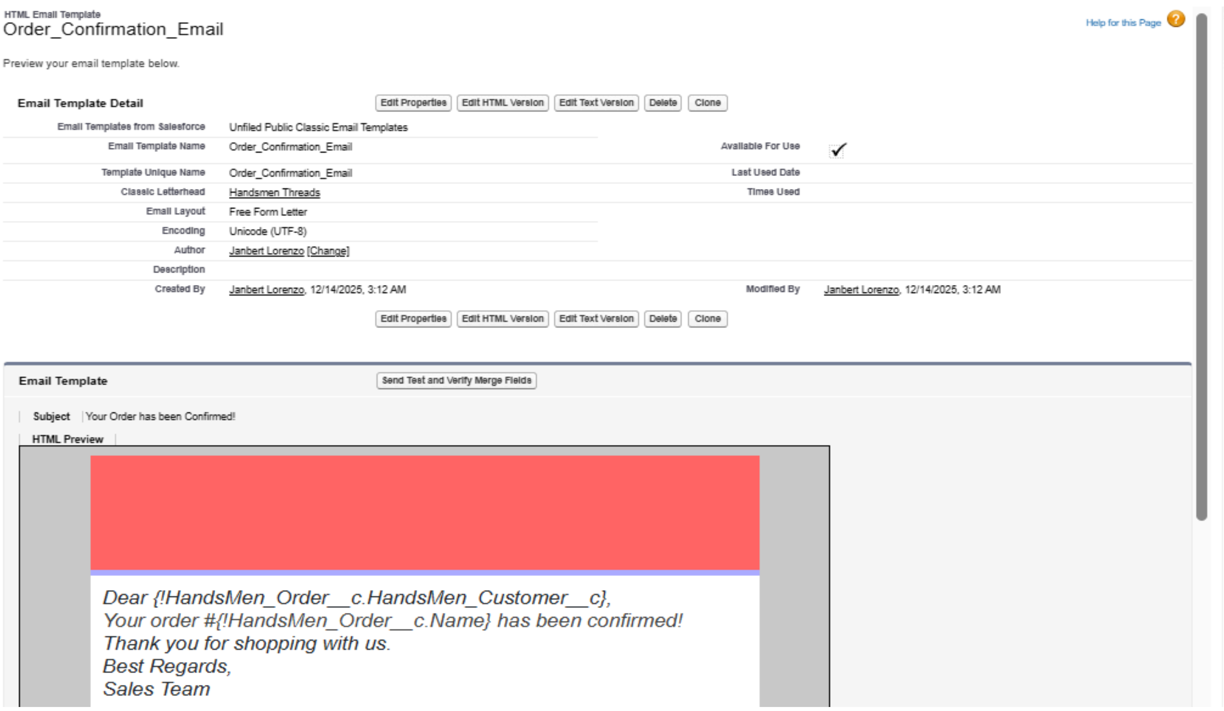
| | | | |
|---|---|---|---|
| Name | Kol Mikaelson | Role | Inventory |
| Alias | kmika | User License | Salesforce |
| Email | jblorenzo11@gmail.com [Verify] | Profile | Platform 1 |
| Username | jblorenzokol11@gmail.com | Active | |
| Nickname | User17465709403118321693 7 | Marketing User | |
| Title | | Offline User | |
| Company | | Knowledge User | |
| Department | | Flow User | |
| Division | | Service Cloud User | |
| Address | 3022<br>Philippines | Site.com Contributor User | |
| Time Zone | (GMT-08:00) Pacific Standard Time (America/Los_Angeles) | Site.com Publisher User | |
| Locale | English (United States) | WDC User | |
| Language | English | Mobile Push Registrations | View |
| Delegated Approver | | Data.com User Type | |
| Manager | | Accessibility Mode (Classic Only) | |
| Receive Approval Request Emails | Only if I am an approver | Debug Mode | |

# 7. Email Templates & Email Alerts

Three email templates were created to support automated communication within the system:

- **Order Confirmation** – sent when an order's status is updated to *Confirmed*.
- **Low Stock Alert** – sent when a product's inventory drops below **5 units**.
- **Loyalty Program Email** – sent whenever a customer's loyalty status changes.

After creating these templates, **Email Alerts** were configured and linked to automation flows so they are sent automatically based on specific triggers.




# 8. Flow Implementation

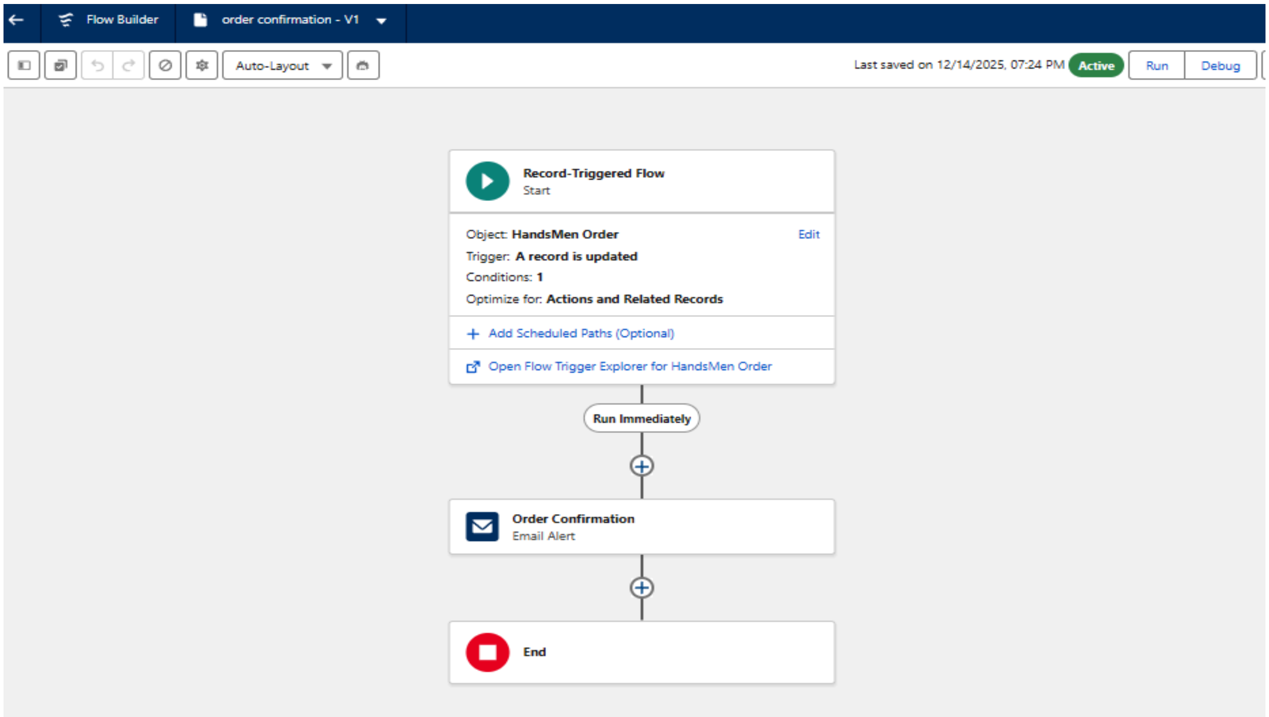
## a. Order Confirmation Flow

This flow is triggered whenever an order's status is changed to **Confirmed**.

## Flow Behavior

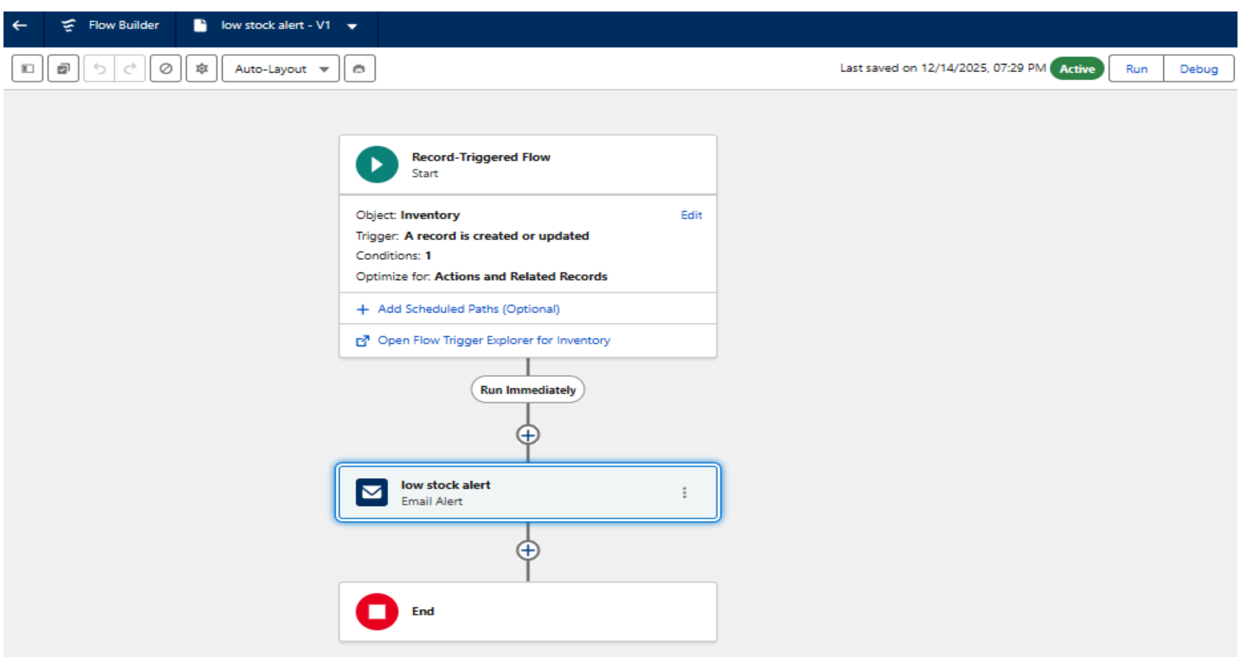
- Automatically sends an **Order Confirmation Email** to the customer associated with the order.

- Ensures timely communication and improves the customer experience.



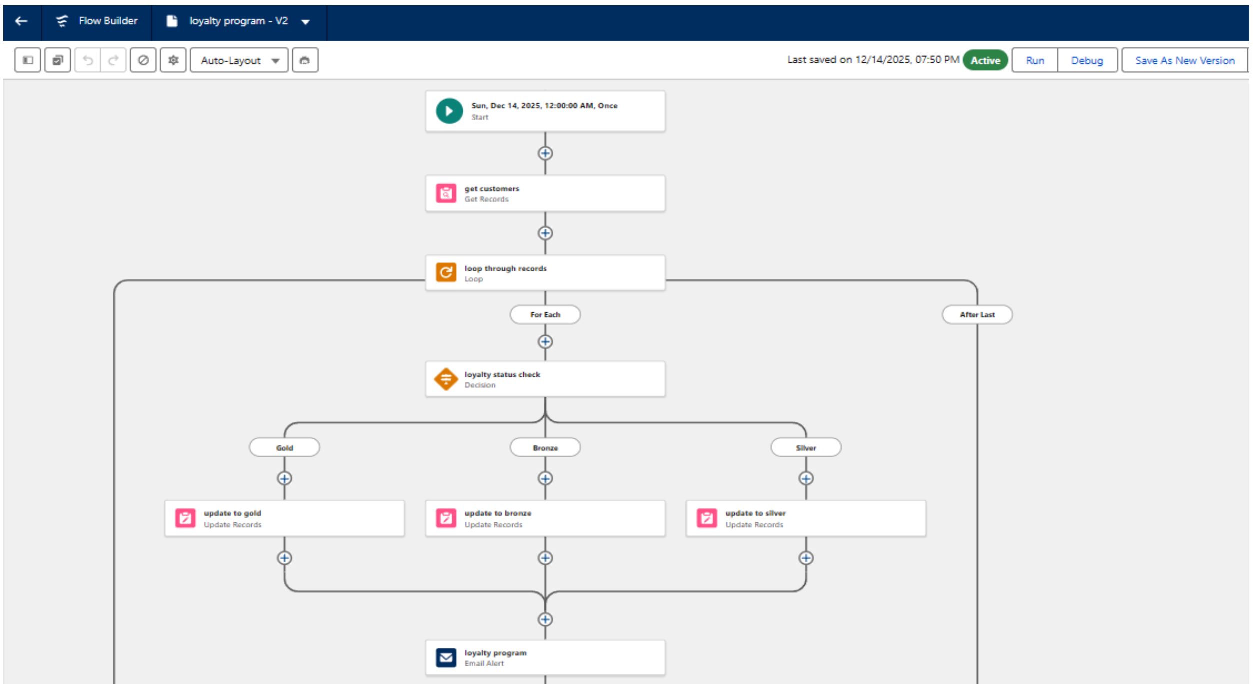

## b. Stock Alert Flow

- This flow is triggered when a product's inventory drops below **5 units**.
- Once triggered, it automatically sends a **Low Stock Alert Email** to the **Inventory Manager**.



### c. Loyalty Update (Scheduled Flow)

- This scheduled flow runs **daily at midnight**.
- It checks all customer records and automatically updates their **Loyalty Status** based on their total purchases.




# 9. Apex Triggers

Several Apex Triggers were created to automate key business processes that cannot be handled through Flows alone:

- **Order Total Trigger**
  - Automatically calculates the total amount of an order by multiplying the quantity with the product's unit price.
- **Stock Deduction Trigger**
  - Automatically reduces the product's inventory count whenever a new order is placed.
- **Loyalty Status Trigger**
  - Updates a customer's loyalty status based on their accumulated purchases.

# PROJECT EXPLANATION WITH REAL-WORLD EXAMPLE

This section demonstrates how the Salesforce CRM works in a real business scenario for **HandsMen Threads**, showing the full customer interaction flow from registration to order completion.

## 1. Customer Registration

### Scenario:

A customer, **Elijah Mikaelson**, visits the store or browses the website.

### Salesforce Action:

A new record is created in the **Customer** object with details such as:

- Name
- Phone
- Email

### Validation Rule:

Ensures the email contains **@gmail.com** to maintain consistent formatting.

## 2. Product Setup

### Scenario:

The admin adds products like **Yuniklo** and **Binch** into the **Product** object.

### Details:

Each product includes key information such as:

- Price

- SKU
- Product Category

### Inventory Management:

A corresponding **Inventory** record is created to monitor stock levels.

## 3. Order Placement

### Scenario:

Iyah wants to buy **2 Yuniklo** priced at **$10 each**.

### Salesforce Action:

A new **Order** record is created.

### Apex Trigger:

Automatically calculates the total amount:

**Total_Amount    c = 2 × 10 = $10**

## 4. Inventory Update

### Scenario:

Once Iyah placed the order for 2 Yuniklo.

### Salesforce Outcome:

- Stock is automatically reduced through the **Stock Deduction Trigger**.
- Inventory remains accurate and prevents negative stock levels.
- Ensures reliable data for future orders.

# 5. Loyalty Program

### Scenario:

Iyah's total purchase is now **$20**.

### Salesforce Action:

An Apex Trigger evaluates the customer's total purchases and updates their loyalty status.

### Loyalty Status Rules:

- Less than **$500** → **Bronze**
- **$500 - $1000** → **Silver**
- Above **$1000** → **Gold**

### Outcome:

Iyah's loyalty status is updated to **Bronze**.

# 6. Email Notifications

### Scenario:

A new order is placed or a loyalty status changes.

### Salesforce Action:

- A Flow triggers an **Email Alert**.
- Iyah receives an automated message:
  **"Thanks for your purchase! Your loyalty status is now Silver."**

# 7. Users and Roles

### Scenario:

Salesforce users are created for staff members.

## Assignments:

- **Niklaus Mikaelson** – Sales Role, **Platform 1 Profile**
- **Kol Mikaelson** – Inventory Role, **Platform 1 Profile**

## Purpose:

Ensures each staff member has:

- Proper system access
- Visibility to only the data needed for their responsibilities
- Accurate permissions aligned with their role

# SCREENSHOTS

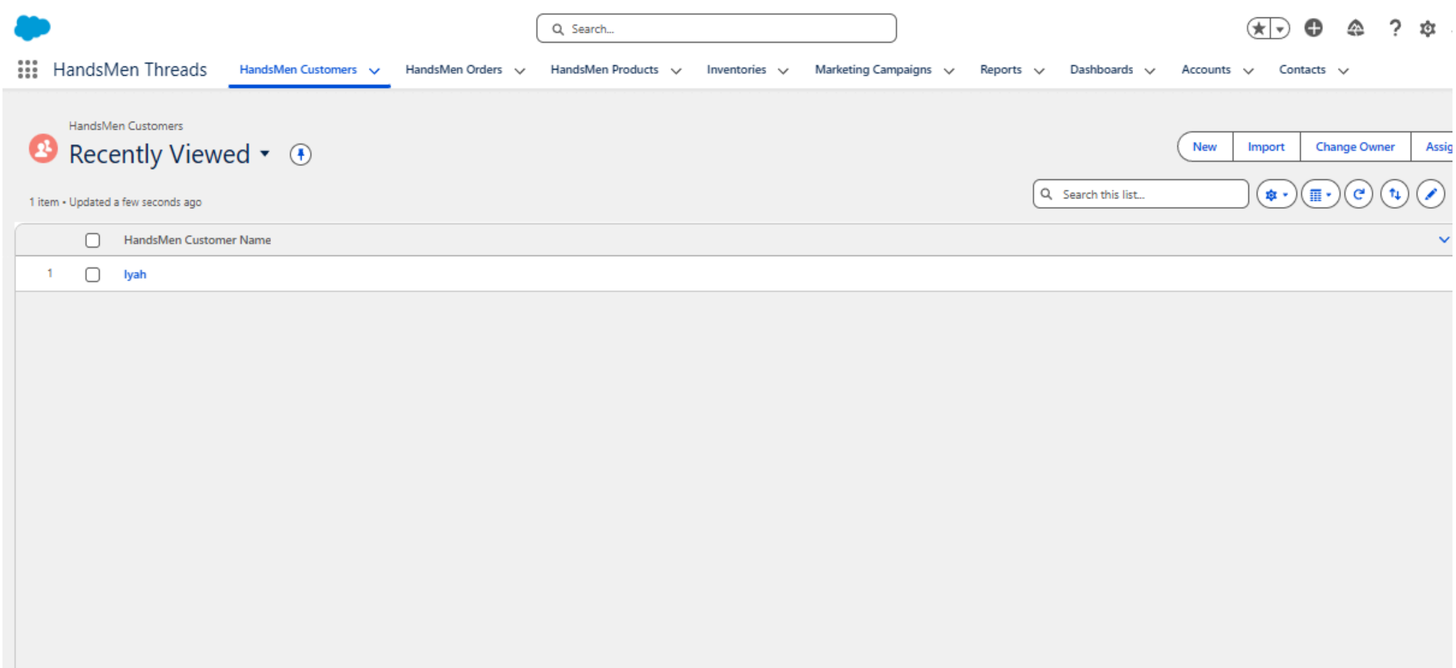



***Figure 1: Custom App in HandsMen Threads***

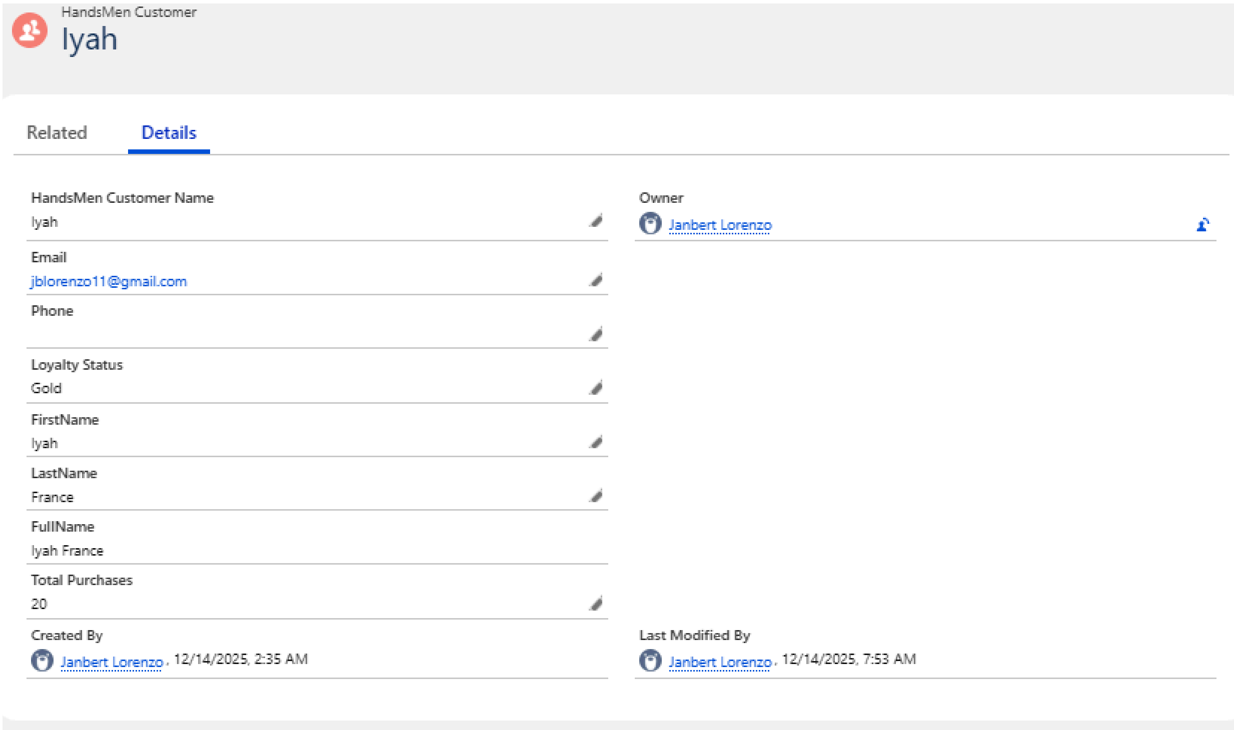



***Figure 2: Custom Creation in HandsMen Threads***

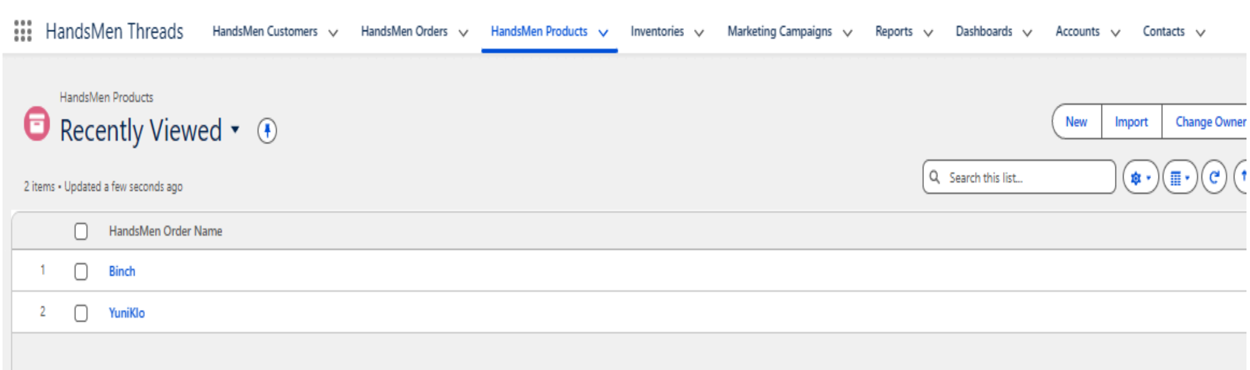



***Figure 3: Products In Handsmen Threads***

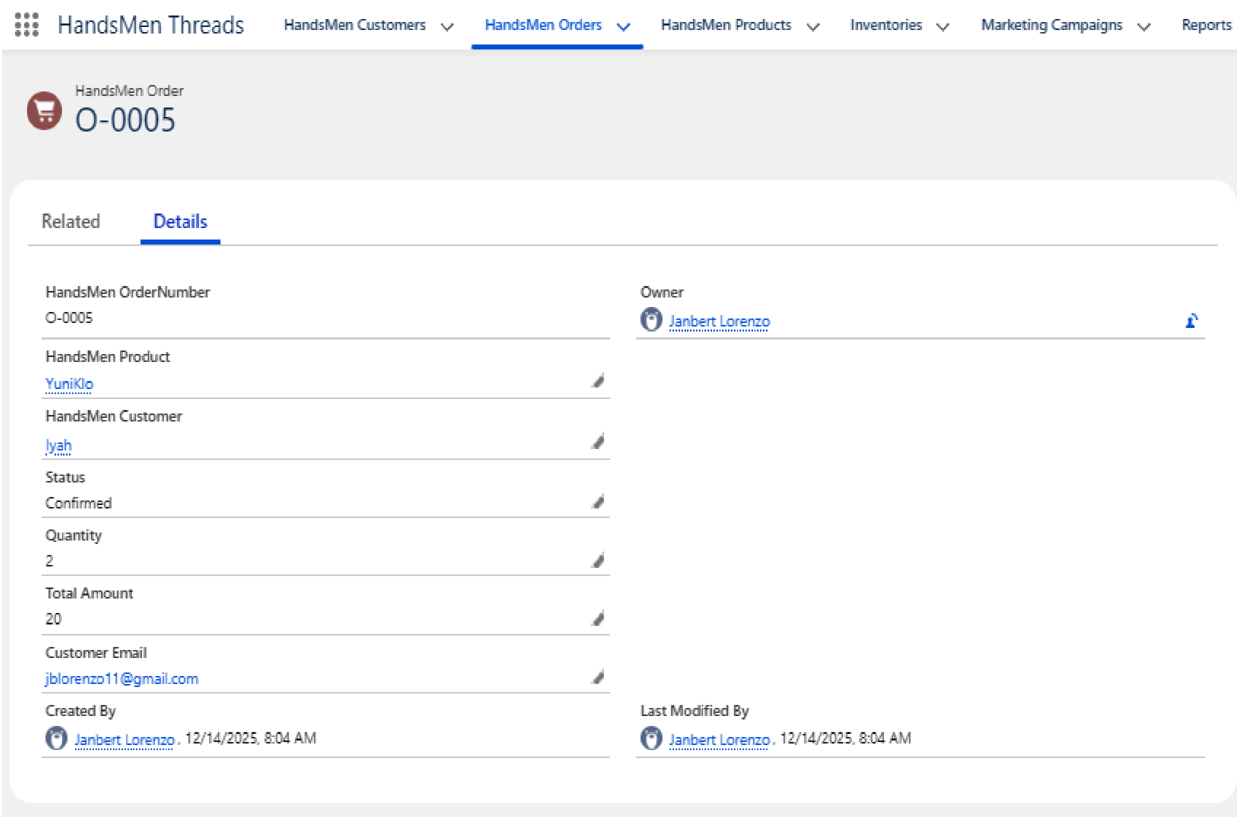



***Figure 4: Order Confirmation***

# CONCLUSION

The **HandsMen Threads CRM system**, built on the Salesforce platform, successfully streamlines key business processes including customer management, product cataloging, order processing, inventory tracking, and loyalty program automation.

By leveraging Salesforce features such as **Custom Objects, Flows, Validation Rules, Email Alerts**, and **Apex Triggers**, the system ensures:

- Accurate and consistent data entry

- Real-time updates across business operations
- Enhanced customer experience through automation and personalized communication

Overall, the solution improves operational efficiency, supports data-driven decision-making, and provides a scalable foundation for future business growth.

# FUTURE SCOPE

To further enhance the system, the following improvements can be implemented:

**1. Customer Portal Integration**

Develop a **Customer Community Portal** that allows customers to:

- Log in securely
- View order history
- Track loyalty status

**2. Mobile App using Salesforce Mobile SDK**

Enable store staff to manage:

- Inventory
- Orders
- Customer interactions
  on-the-go through a mobile-friendly interface.

**3. Reports & Dashboards**

Create detailed **sales and inventory dashboards** to help management:

- Monitor performance
- Track trends
- Make informed decisions in real time

### 4. AI-Powered Recommendations (Salesforce Einstein)

Utilize **Salesforce Einstein AI** to deliver personalized product recommendations based on customer purchase history.

### 5. WhatsApp / SMS Integration

Integrate WhatsApp or SMS notifications to keep customers informed about:

- Order confirmations
- Shipping updates
- Loyalty program changes