# **Project Title: Mediswift - Hyperlocal Medicine Delivery CRM**

# Phase 1: Problem Understanding & Industry Analysis

#### > Problem Statement:

The online pharmacy market is growing rapidly, yet most existing providers primarily cater to bulk medicine orders and operate on a delivery model that takes several days to fulfil. This creates a critical gap for customers who need urgent, small, and time-sensitive medicine orders fulfilled within minutes.

Currently, customers lack a seamless way to:

- Check real-time inventory of nearby pharmacies
- Place immediate orders
- Get fast delivery with live tracking

This gap leads to:

- Missed sales opportunities for pharmacies
- Poor customer experience
- Potential delays in treatment for patients

# > Proposed Solution:

A Salesforce-powered CRM platform designed to streamline the urgent medicine delivery process by providing:

- Real-time pharmacy inventory visibility for customers and staff
- Intelligent order allocation to the nearest available pharmacy
- Delivery partner assignment
- Automated notifications to keep customers updated at every stage
- Analytics and dashboards to optimize pharmacy operations and demand forecasting

Such a solution would help pharmacies maximize sales, enhance customer satisfaction, and meet the growing demand for hyperlocal medicine delivery.

## > Industry:

For Mediswift: Hyperlocal Medicine Delivery CRM, the most appropriate industry would be: Healthcare & Life Sciences

This is because:

- It deals with medicine delivery → falls under pharma & healthcare
- The CRM aspect + real-time inventory & logistics → makes it a HealthTech / PharmaTech solution

## > Target Users:

Target Users will be as follows:

- 1. Pharmacy Owners & Staff-
  - To manage real-time inventory
  - Accept and fulfil incoming orders quickly
  - Track delivery performance and sales
- 2. Customers / Patients
  - To search for medicines
  - Place urgent orders
  - Track delivery status
- 3. Delivery Partners
  - To receive delivery assignments
  - Update order status (picked up, delivered)

#### **➤** Use Cases:

Use cases will be as follows:

- 1. Real-Time Inventory Management (Pharmacy Staff / Admins)
  - Add, update, and track medicine stock levels.
  - Receive alerts for low stock or expiring medicines.
- 2. Order Placement & Management (Customers & Pharmacies)
  - Customers search for medicines and place urgent orders.
  - Pharmacies receive, confirm, and process orders efficiently.
- 3. Intelligent Order Allocation (System / CRM)
  - Automatically assign orders to the nearest pharmacy with available stock
  - Optimize order fulfilment to reduce delivery time.
- 4. Delivery Partner Assignment & Tracking (Delivery Staff / System)
  - Assign delivery partners based on proximity and availability.
  - Enable live tracking of delivery progress for customers and pharmacies.
- 5. Automated Notifications & Alerts (Customers & Pharmacies)
  - Notify customers about order confirmation, dispatch, and delivery.
  - Alert pharmacies and delivery partners of new orders and updates.
- 6. Analytics & Reporting (Pharmacy Admins)
  - Track sales trends, order volumes, and customer demand.
  - Generate reports to improve inventory management and operational efficiency.
- 7. Customer Feedback & Refill Reminders (Customers)
  - Collect customer ratings and reviews.
  - Send automated reminders for recurring medicine refills.
- 8. Prescription Management (Optional / Future Scope)
  - Upload and validate prescriptions for prescription-only medicines.
  - Ensure regulatory compliance.

## > Functional Requirements:

#### **For Customers:**

- Search for medicines by name, composition, or prescription.
- View real-time stock availability at nearby pharmacies.
- Place urgent orders and select delivery options.
- Track order status in real time (confirmation, dispatch, delivery).
- Receive automated notifications and alerts.
- Rate the delivery and provide feedback.

#### For Pharmacies Staff:

- Add, update, and manage medicine inventory.
- Receive and confirm orders assigned by the system.
- Assign orders to delivery partners manually or automatically.
- View order history and generate daily/weekly reports.
- Receive alerts for low stock, expiring medicines, and urgent orders.

## For Delivery Partners:

- Receive delivery assignments from the system.
- Update order status (picked up, in transit, delivered).
- Use GPS navigation to optimize delivery routes.

#### **System / CRM Requirements:**

- Real-time inventory synchronization across pharmacies.
- Intelligent order allocation based on proximity and stock availability.
- Automated notifications via email, SMS, or app push notifications.
- Analytics dashboard for sales trends, demand forecasting, and performance metrics.
- User authentication and role-based access control.
- Optional: Prescription validation for regulated medicines.

## > Stakeholder Analysis:

Stakeholder	Role	<b>Key Interest</b>	Impact
Customers /	Place medicine	Fast delivery,	High
Patients	orders	accurate stock info,	
		smooth app	
		experience	
Pharmacy	Manage inventory &	Efficient operations,	High
Owners / Staff	orders	more sales, fewer	
		stock-outs	
<b>Delivery Partners</b>	Deliver medicines	Clear assignments,	Medium
		optimized routes,	
		timely payments	

## > AppExchange Exploration:

- 1. Salesforce Maps (formerly MapAnything): Geolocation, route optimization, and live tracking of deliveries.
- 2. Twilio for Salesforce / SMS Magic: Automates SMS notifications and alerts.
- 3. Salesforce Inventory & Order Management (Salesforce Labs): Real-time inventory tracking, order capture, and fulfilment automation.
- 4. Einstein Analytics / Tableau CRM (Optional, Advanced): Advanced analytics and dashboards.

# Phase 2: Org Setup & Configuration

#### > Salesforce Editions:

Edition Used: Salesforce Developer Edition (Free)

The **Developer Edition** provides a fully functional Salesforce environment with:

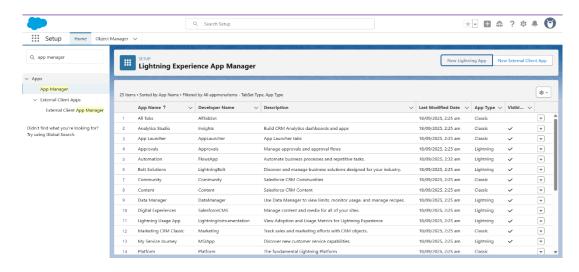
- Access to Salesforce CRM Core features (Leads, Accounts, Contacts, Opportunities, etc.).
- Customization tools like Objects, Fields, Flows, Validation Rules, and Reports.
- Apex and Lightning Components development capability.
- API access for integrations.

## **➤** Lightning App Creation – MediSwift

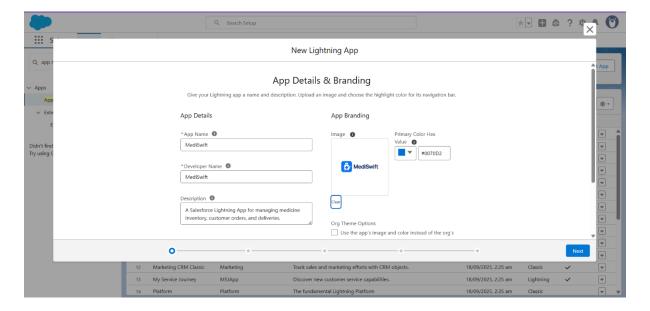
Objective: To create a dedicated **Lightning App** named *MediSwift* for managing medicines, pharmacies, orders, and deliveries efficiently within Salesforce.

Steps to Create the Lightning App:

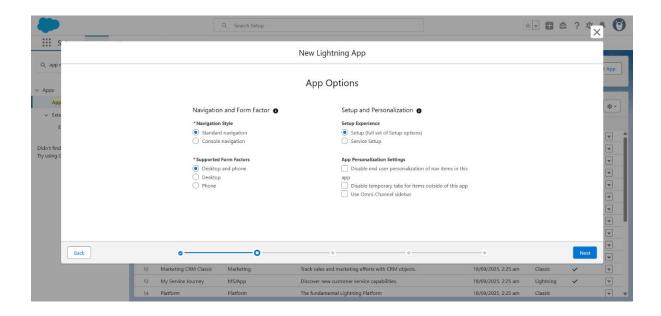
- Step 1: From Setup, search and open App Manager.
- Step 2: Click New Lightning App button.



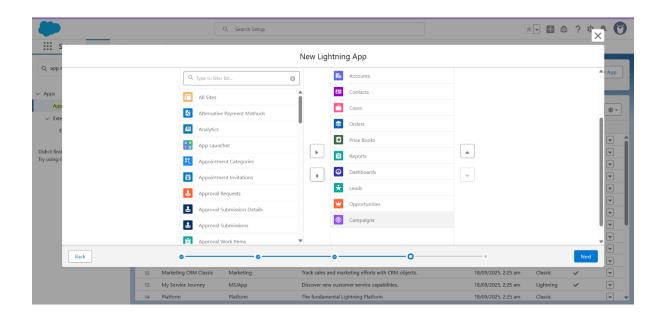
• Step 3: Enter app details.



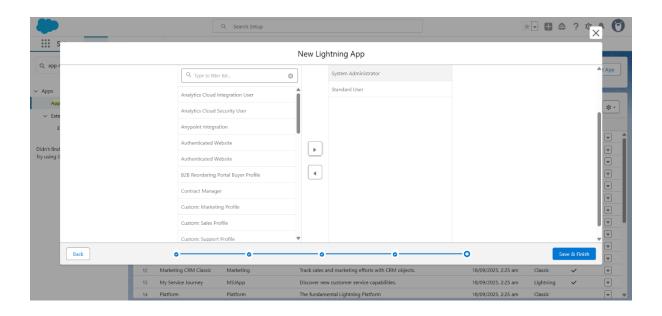
• Step 4: Select Standard Navigation for CRM-like experience.



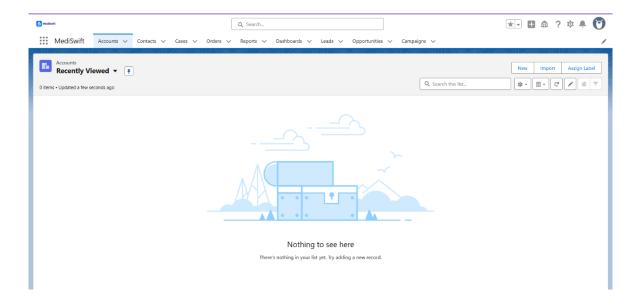
• Step 5: Add standard objects like Accounts, Contacts, Products, Orders, Reports, Dashboards.



• Step 6: Assign System Administrator profile for access.



• Step 7: click Save & Finish. Launch the app from App Launcher.



# > Company Profile Setup

Objective: To configure the organization details in Salesforce to align with MediSwift's business information.

#### Steps:

- Step 1: Go to Setup → Search for Company Information.
- Step 2: Click Edit on the Company Information page. Fill the following details.

· Organization Name: MediSwift

· Primary Contact: Apurva Dolas

· Street: Sai Nagar, Amravati

City: Amravati
Zip/Postal Code: 444607
State/Province: Maharashtra

· Country: India

• Step 3: Set Locale Settings

· Default Locale: English (India)

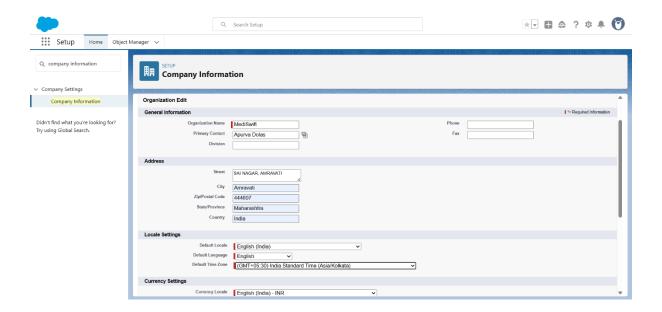
· Default Language: English

· Default Time Zone: (GMT+05:30) India Standard Time

• Step 4: Set Currency Settings

· Currency Locale: English (India) – INR

• Step 5: Click **Save** to apply organization settings.

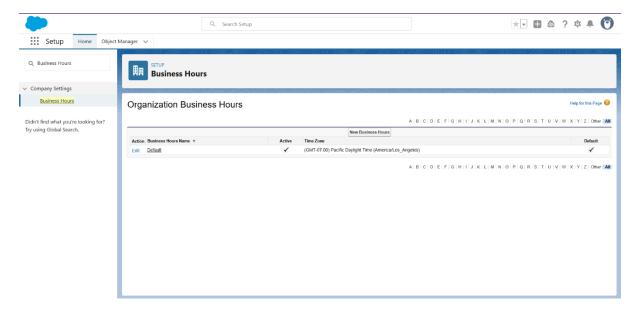


## > Business Hours and Holidays

Objective: To configure MediSwift's standard business hours and holidays in Salesforce.

Business Hours Setup:

- Step 1: Go to **Setup**  $\rightarrow$  search for **Business Hours**.
- Step 2: Click New Business Hours.



• Step 3: Fill in the details:

· Name: MediSwift Business Hours

Default: 
 ✓ (Check to make these default hours)

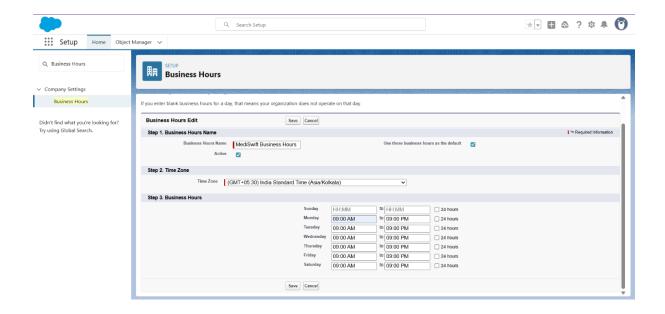
Time Zone: (GMT+05:30) India Standard Time

· Business Days & Hours:

o Monday – Saturday: 09:00 AM to 09:00 PM

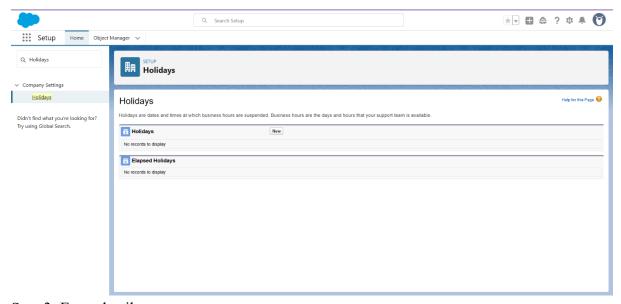
o Sunday: Close

• Step 4: Click Save.



## Holiday Setup:

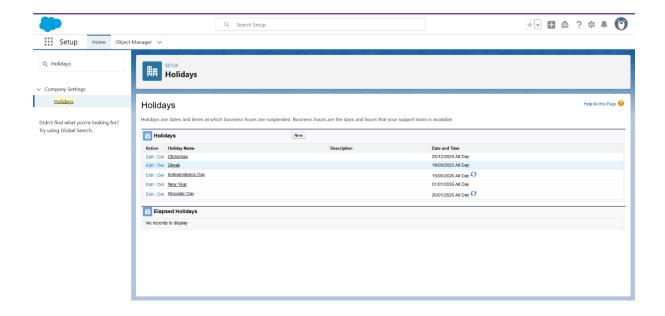
- Step 1: Go to Setup  $\rightarrow$  search for Holidays.
- Step 2: Click New Holiday



• Step 3: Enter details:

Holiday Name: DiwaliDate: 18/10/25

- Step 4: Repeat for all company holidays.
- Step 5: Click Save.



## > Fiscal Year Setting:

Objective: To configure MediSwift's fiscal year in Salesforce for accurate forecasting, reporting, and quota management.

#### Steps:

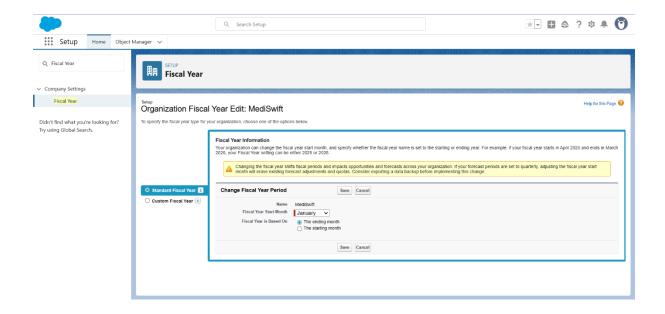
- Step 1: Go to Setup  $\rightarrow$  search for Fiscal Year.
- Step 2: Select Standard Fiscal Year (recommended for most organizations).
   (If a unique cycle is needed, select Custom Fiscal Year but this is not required for MediSwift.)
- Step 3: Configure Fiscal Year Period

Name: MediSwift

· Fiscal Year Start Month: January

· Fiscal Year is Based On: The Ending Month

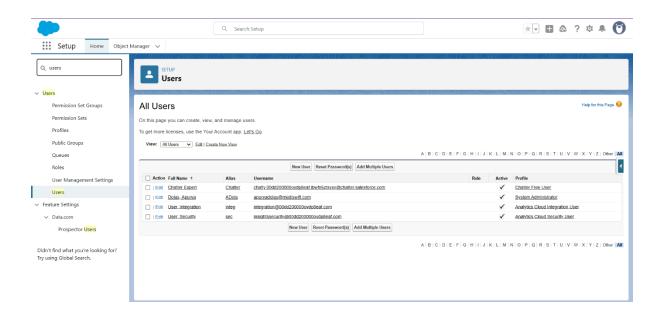
• Step 4: Click Save to apply fiscal year settings.



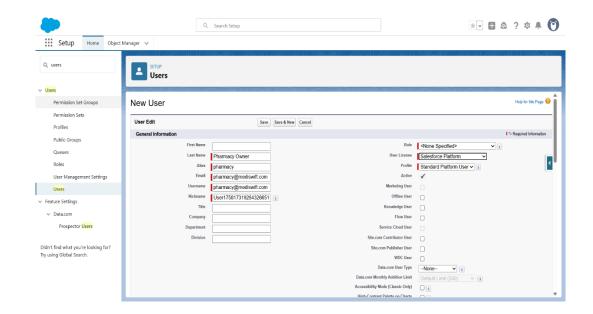
## > User Setup & Licenses

Objective: To create dedicated Salesforce users for key MediSwift stakeholders to enable secure access and role-based functionality.

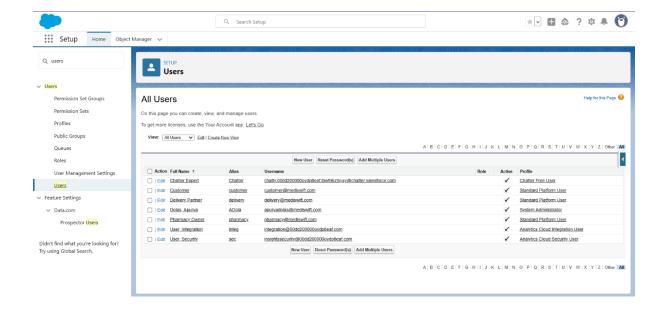
- Step 1: Go to **Setup**  $\rightarrow$  search for **Users**.
- Step 2: Click New User.



- Step 3: Create Users.
  - · Fill in First Name, Last Name, Email, Username, Alias, Nickname.
  - · Assign Salesforce Platform License
  - · Select appropriate Profile
  - · Set Active checkbox.



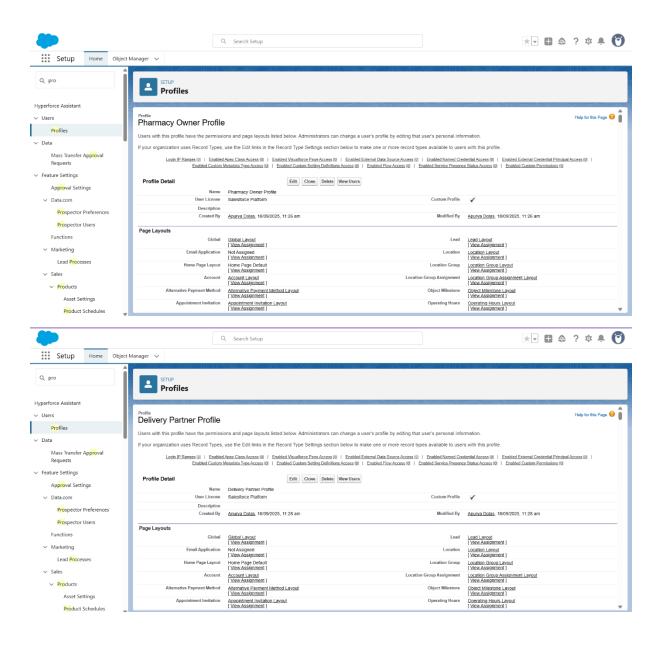
• Step 4: Save. Repeat the process for each stakeholder type.

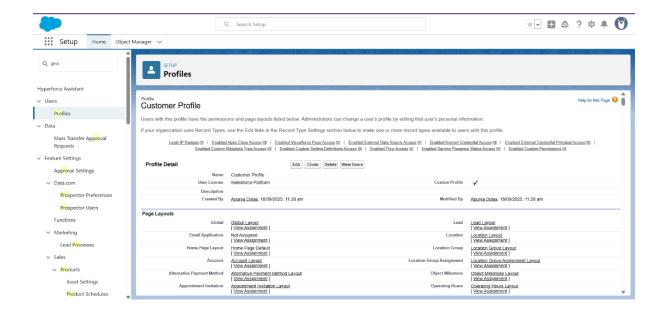


#### > Profiles

To control data access and permissions for different user types, three custom profiles were created by cloning the Standard Platform User profile. Each profile is tailored to match the responsibilities of the respective user group.

Profile Name	Purpose
Pharmacy Owner Profile	For pharmacy owners and staff who manage inventory and fulfil customer orders.
Delivery Partner Profile	For delivery partners who pick up and deliver medicines.
Customer Profile	For end users (patients) placing medicine orders through the platform.





## > Roles

Objectives: To define a role hierarchy in Salesforce that controls data visibility between users while supporting MediSwift's business model.

Role Hierarchy Example:

MediSwift Admin

Pharmacy Owner Role

L—Delivery Partner Role

Customer Role

# **Phase 3: Data Modelling & Relationships**

# > Standard Objects and Fields

## I. Accounts

Purpose in MediSwift: The Account object is used to represent pharmacies participating in the MediSwift platform. Each account stores pharmacy-specific details such as contact information, business type, operating hours, and coverage area.

Field Label	Purpose
Account Name	Name of the pharmacy
Account Owner	Salesforce user responsible for managing this pharmacy's data.
Account Type	Used to classify the account as Customer, Partner, or Vendor.
Industry	Set to Healthcare & Life Sciences for all pharmacies.
Phone	Contact numbers of the pharmacy.
Billing / Shipping Address	Pharmacy's address for billing and delivery operations.
Website	Pharmacy's official website (if available).
Pharmacy ID	Unique code to identify each pharmacy.
Operating Hours	Defines the business operating hours
Location Coordinates	Used for mapping and nearest pharmacy search.
Number of Staff	Total number of employees at the pharmacy.
Delivery Coverage Area	Defines the area where this pharmacy can deliver medicines
Pharmacy Manager	Links the account to the responsible pharmacy manager's contact.
Inventory Threshold Alert	Enables low-stock alert notification when inventory falls below a certain level.

## II. Contacts

Purpose: The Contact object is used to represent individuals associated with pharmacies (staff, managers, delivery partners) as well as customers. Contacts store personal and professional information, and link back to the relevant Account (pharmacy).

Field Label	Purpose
First Name / Last Name	Name of the contact person
Account Name	Lookup to Account; associates the contact with a pharmacy or business account.
Email / Phone	Contact details for communication
Title / Role	The person's designation or role
Mailing Address	Contact's address
User Type	Identifies whether the contact is a Customer, Staff, or Delivery Partner.
Assigned Pharmacy	Links the contact to their primary pharmacy (for staff/delivery partners).
Delivery Partner ID	Unique identifier for delivery partners.
Customer Loyalty Points	Tracks reward points earned by customers for orders.
Prescription Upload Link	Allows storing a link or file for the customer's prescription.

# III. Order

Purpose: The Order object is used to track urgent medicine orders placed by customers. It links the customer (Contact) with the fulfilling pharmacy (Account) and manages the complete order lifecycle from creation to delivery.

Field Label	Purpose
Order Number	Unique identifier for each order.
Account (Pharmacy)	Lookup to Account; specifies which pharmacy is fulfilling the order.
Contact (Customer)	Lookup to Contact; identifies the customer placing the order.
Order Date	Date on which the order was placed.
Status	Tracks the order stage: New → Processing → Ready for Dispatch → Dispatched → Delivered.
Total Amount	Total cost of medicines in the order.
Delivery Partner	Assigns a delivery partner to the order.
Delivery ETA	Estimated delivery date and time for the order.
Priority	Marks the order as Urgent or Normal for prioritization.
Payment Mode	Captures payment method: Online or Cash on Delivery.
Prescription Required	Indicates whether a valid prescription is required.
Order Source	Tracks order channel: Mobile App / Web / Call Center.

## IV. Product

Purpose: The Product object serves as the medicine catalog for MediSwift. It stores details about each medicine, including its name, category, pricing, dosage form, and availability status. Products are linked to Price Books for managing prices across pharmacies.

Field Label	Purpose
Product Name	Name of the medicine (e.g., <i>Paracetamol 500mg</i> ).
Product Code	SKU or internal batch code for inventory tracking
Active	Checkbox indicating whether the medicine is available for sale.
Product Description	Detailed information like composition, usage instructions, etc.
Product Family	Categorizes the product (e.g., Tablet, Syrup, Injection).
Batch Number	Identifies a specific medicine batch (important for expiry & recalls).
Manufacturer	Specifies the manufacturer or supplier of the medicine
Expiry Date	Expiration date of the batch.
MRP (Maximum Retail Price)	Displays the official maximum retail price.
Dosage Form	Specifies the medicine form: Tablet, Capsule, Syrup, Injection.
Concentration	Medicine potency (e.g., 500mg, 250mg/5ml).
Prescription Required?	Indicates whether a doctor's prescription is required.
Storage Instructions	Storage guidelines (e.g., <i>Store in a cool, dry place</i> ).

# V. Price Book

Purpose: The Price Book object is used to manage and group medicine prices. MediSwift uses a Standard Price Book for default pricing and can have Pharmacy-Specific Price Books if individual pharmacies offer custom pricing for medicines.

Fields Label	Purpose
Price Book Name	Name of price list (Standard Price Book, Pharmacy-Specific Price Book)
Active	Indicates if this price book can be used
Product	The product
Price Book	The price book where this price is listed
List Price	Selling price of medicine for this price book
Use Standard Price	Option to use product's standard price

# VI. Assets

Purpose: The Asset object is used to track the stock of medicines available at each pharmacy. Each asset record represents a batch of a particular medicine stored in a specific pharmacy, along with its availability status and quantity.

Field Label	Purpose
Asset Name	Name of the stock record
Account (Pharmacy)	Lookup to Account; specifies which pharmacy holds this stock.
Product Name (Medicine)	Lookup to Product; links the asset to the medicine being stocked.
Status	Tracks stock status: In Stock / Low Stock / Out of Stock.
Install Date	Used to log the date when the batch was added to inventory.
Batch Number	Identifies the medicine batch for tracking and recall purposes.
Expiry Date	Expiration date of the batch.
Quantity Available	Current available stock quantity for the batch.
Inventory Alert Level	Defines the threshold quantity at which low- stock alerts are triggered.

## VII. Case

Purpose: The Case object is used to manage customer complaints, inquiries, and order-related issues. Each case record tracks the issue reported, its status, priority, and resolution details, helping pharmacies and MediSwift support staff ensure quick and efficient customer service.

Fields Label	Purpose
Case Number	Unique identifier for each case.
Account / Contact	Links the case to the customer and/or their pharmacy account.
Subject	Brief title or summary of the issue.
Priority	Indicates urgency of the case (Low, Medium, High).
Order Linked	Connects the case to a specific medicine order.
Issue Type	Classifies issue: Delivery / Medicine / Payment / Others.
Resolution Notes	Stores resolution details, steps taken, or remarks after case closure.

# > Custom Objects and Fields

# I. Delivery

Purpose: The Delivery object is used to manage the assignment of orders to delivery partners, track pickup and drop details, and record delivery status with timestamps.

Field Label	Purpose
Delivery ID	Unique identifier for each delivery record.
Order	Links the delivery to the associated order.
Delivery Partner	Assigns a delivery partner (rider) responsible for delivery
Pickup Location	The pharmacy (account) from which the medicine is picked up.
Drop Location	Delivery drop-off address or coordinates.
Status	Tracks delivery progress: Assigned, Picked Up, In Transit, Delivered.
ETA	Expected delivery date and time.
Actual Delivery Time	Actual time when the delivery was completed.
Notes	Special delivery instructions or remarks.

# II. Prescription

Purpose: The **Prescription** object is used to store and validate prescriptions uploaded by customers for medicines that require a doctor's prescription, ensuring regulatory compliance.

Fields Label	Purpose
Prescription ID	Unique identifier for each prescription record.
Order	Links the prescription to the order that requires it.
Customer	Customer who uploaded the prescription.
Status	Validation state of the prescription: Pending Validation, Approved, Rejected.
Issue Date	Date on which the prescription was issued by the doctor.
Expiry Date	Expiration date of the prescription (if applicable)

# III. Notification

Purpose: The Notification / Alert object is used to track automated alerts and messages sent to customers, pharmacy staff, or delivery partners regarding order updates, deliveries, or system notifications.

Field Label	Purpose
Notification ID	Unique identifier for each notification record.
Туре	Medium of notification: SMS, Email, Push.
Recipient	Person (customer, staff, delivery partner) who receives the notification.
Related Order / Delivery	Links notification to the related order or delivery.
Status	Status of notification: Sent, Failed, Pending.
Message Content	Body/content of the notification sent.
Timestamp	Date and time when the notification was generated/sent.

## IV. Customer Feedback

Purpose: The **Customer Feedback** object is used to capture ratings and comments from customers after an order is delivered. This helps pharmacies and admins track service quality, improve delivery experience, and resolve recurring issues.

Field Label	Purpose
Feedback ID	Unique identifier for each feedback record.
Order	Links feedback to the specific order delivered.
Customer	The customer who provided the feedback.
Rating	Customer rating (1–5 scale) for order/delivery.
Comments	Optional text feedback shared by customer.
Date Submitted	The date and time when the feedback was submitted.

## Object Relationship

In Salesforce, relationships define how objects are connected and share information. MediSwift relies on these relationships to ensure smooth interaction between customers, pharmacies, delivery partners, and the system.

To maintain relational data integrity across objects, MediSwift uses multiple lookup relationships between standard and custom objects. Below is a summary of all key lookups:

#### **Standard Object Lookups**

• Contact  $\rightarrow$  Account

Each Contact (Customer, Staff, Delivery Partner) is linked to a Pharmacy (Account).

• Order  $\rightarrow$  Account

Every Order is associated with a Pharmacy.

• Asset  $\rightarrow$  Account

Medicine stock (Asset) belongs to a specific Pharmacy.

• Asset  $\rightarrow$  Product

Asset is tied to a specific Medicine from the Product Catalog.

• Case → Account / Contact

Cases are associated with a Pharmacy and Customer.

#### **Custom Object Lookups**

• Delivery  $\rightarrow$  Order

Tracks which order is being delivered.

• Delivery  $\rightarrow$  Contact

Assigns a Delivery Partner to the Delivery record.

• Delivery  $\rightarrow$  Account

Links Delivery to the pickup Pharmacy.

• Prescription  $\rightarrow$  Order

Prescription is tied to the related Order.

• Prescription → Contact

Prescription uploaded by a customer.

• Notification → Contact

Identifies the recipient of the notification.

• Notification → Order / Delivery

Associates the notification with a specific Order or Delivery.

• Customer Feedback  $\rightarrow$  Order

Feedback is tied to the Order delivered.

• Customer Feedback → Contact

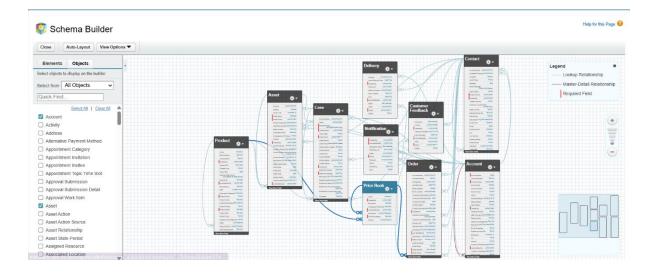
Feedback submitted by the Customer.

#### > Schema Builder

Schema Builder in Salesforce provides a visual representation of the data model used in the MediSwift application. It allows developers and admins to view objects, fields, and their relationships in a single interactive diagram. For MediSwift, Schema Builder was crucial to design a system that supports pharmacies, customers, staff, and delivery partners in a connected way.

#### Highlights from MediSwift Schema

- Accounts ↔ Contacts: Connects pharmacies with their staff, delivery partners, and customers.
- Orders ↔ Accounts / Contacts / Deliveries: Central object linking customers, pharmacies, and delivery logistics.
- **Products** ↔ **Price Books** ↔ **Assets**: Manages medicine catalog, pricing, and pharmacy stock.
- Cases ↔ Orders: Tracks customer complaints related to orders.
- **Custom Objects** (Delivery, Prescription, Notification, Customer Feedback) extend the standard model to cover urgent medicine delivery, compliance, communication, and service quality.



#### **Outcome**

The Schema Builder view of MediSwift acts as a **blueprint (ERD)** of the system. It not only helps during development but also serves as documentation for stakeholders to quickly understand:

- How data flows between pharmacies, customers, and delivery operations.
- How the system enforces regulatory needs (prescriptions) and customer experience features (notifications, feedback).

# > Record Types

For the MediSwift project, record types have not been implemented. Since this is a student project, the primary focus is to demonstrate the creation of standard and custom objects, fields, relationships, schema design, and automation within Salesforce.

All variations in user roles (Customer, Pharmacy Owner, Delivery Partner) are managed using profiles and custom fields rather than separate record types. This approach keeps the system simple while still fulfilling the project's requirements.