

Medical Inventory Management

College Name: Sri Krishna Adithya College of Arts and Science College

Code: Bruag

TEAM ID: NM2025TMID22657

TEAM MEMBERS:4

TEAM LEADER NAME: SUYABHARATHI.P

EMAIL:23bsds158suyabharathip@skacas.ac.in

TEAM MEMBER 1: KAVINAYA.R

EMAIL:23bsds123kavinayar@skacas.ac.in

TEAM MEMBER 2: SHALINI.S

EMAIL: 23bsds154shalinis@skacas.ac.in

TEAM MEMBER 3: SHANUMUGA PRASATH

EMAIL: 23bsds155shanumugaprasathr@skacas.ac.in

Title: Medical Inventory Management

Project Overview

The Medical Inventory Management System is a comprehensive Salesforce application designed to streamline and automate the operational aspects of managing medical stock. The system maintains detailed supplier information, manages purchase orders, tracks products and order transactions, and monitors expiry dates.

With the help of custom objects, fields, validation rules, triggers, flows, reports, and dashboards, the application ensures:

- Accurate supplier management – maintaining detailed records including contact details.
- Efficient product tracking – product catalog with descriptions, stock levels, pricing, and expiry dates.
- Transparent purchase order management – track order dates, deliveries, and costs.
- Strong reporting & insights – supplier performance, order cost analysis, and product tracking.
- Automation & efficiency – streamline workflows, reduce manual work, and minimize errors.

Objectives

- Streamline Inventory Management: Automate stock tracking, purchase orders, and supplier management.
- Enhance Accuracy: Monitor expiry dates, order costs, and delivery schedules to reduce risks.
- Improve Decision Making: Generate real-time reports on purchases, suppliers, and transactions.
- Ensure Transparency: Maintain detailed records of suppliers, products, and transactions.
- Promote Efficiency: Minimize delays in purchase order approvals and inventory movements.

Student Outcomes

- Hands-on Salesforce Experience: Students gain practical exposure in Salesforce CRM development.
- Understanding of Object Relationships: Learn how to model and relate inventory entities like Supplier, Product, Purchase Order, and Order Items.

- **Data Validation Skills:** Apply rules to ensure data integrity (e.g., delivery dates, stock levels).
- **Real-Time Automation Exposure:** Work with flows and triggers to automate inventory updates.
- **Analytical Skills:** Generate and analyze meaningful reports and dashboards.
- **Industry-Relevant Knowledge:** Exposure to CRM-based supply chain and inventory solutions.

System Requirements

Hardware Requirements

- Minimum 4 GB RAM, Dual-core processor
- Stable internet connection

Software Requirements

- Salesforce Developer Edition Org
- Modern Web Browser (Chrome / Firefox)

Project Phases

Phase No.	Phase Name	Description	Pages
1	Requirement Analysis & Planning	Gather requirements from suppliers and staff; define scope and workflows.	4
2	Salesforce Development – Backend & Configurations	Create objects (Supplier, Product, Purchase Order, Order Item, Inventory Transaction), fields, and relationships.	5–15
3	UI/UX Development & Customization	Create Lightning App, Tabs, Layouts, and Compact Layouts.	16–25
4	Automation & Security	Implement Validation Rules, Profiles, Roles, Users, Permission Sets, Flows, and Triggers.	26–40

5	Reporting Dashboards &	Configure Reports, Dashboards, and analytics for supplier and order tracking.	41–50
6	Deployment, Documentation & Maintenance	Finalize app, test features, deploy, and prepare documentation.	51–55

Project Duration: 31 Hours

Project Flow (Milestones)

1. Creation of Developer Account

- Sign up for a free Salesforce Developer Account at <https://developer.salesforce.com/signup>.
- Fill in details: First & Last Name, Email, Role = Developer, Company = College Name, Country = India, Postal Code = XXXX.
- Choose a Username in the format: username@organization.com.
- Click Sign Me Up → Check email → Verify account.

- Set password, security question → Login to Salesforce Org.



Hi Suyabharathi,

Thanks for signing up for a Developer Edition. Now you can start building on Salesforce for free and get hands-on with Agentforce and Data Cloud.

There's just one more step. Use the following link to reset the password for your Developer Edition. This link expires in 24 hours.

[Reset Password](#)

To easily log in later, save this URL:

<https://orgfarm-099c758dca-dev-ed.develop.my.salesforce.com>

Here's the username for your Developer Edition:

23bsds158suyabharathip969@agentforce.com

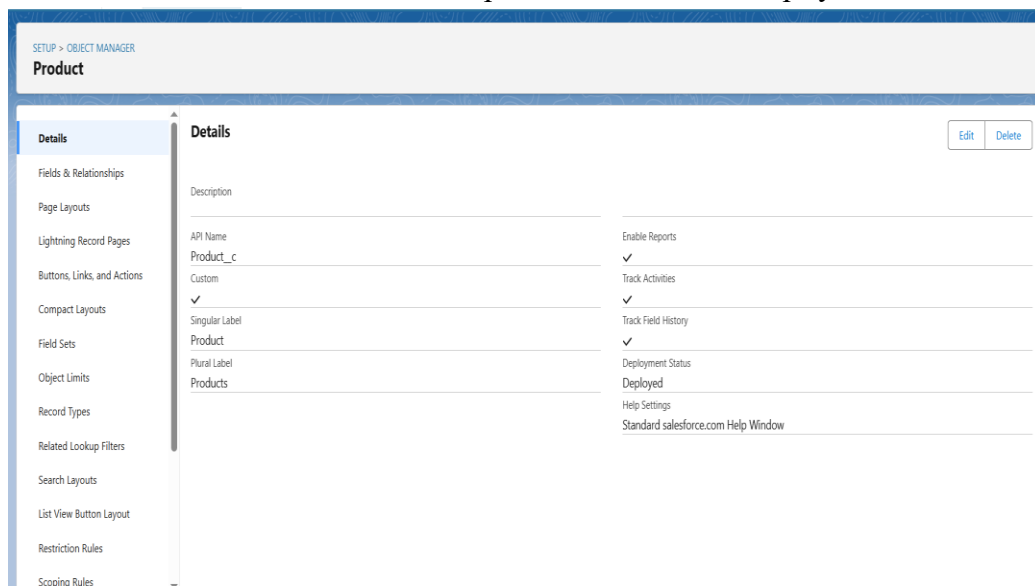
Your Developer Edition, now enabled with Agentforce and Data Cloud, remains active as long as you continue to use it. It expires after 45 days of non-usage.

2. Object Creation

Objects are like database tables in Salesforce.

Custom Objects Created:

- Product → Product Name, Description, Unit Price, Expiry Date, Stock Level.



- Supplier → Supplier Name, Contact Person, Phone, Email.

SETUP > OBJECT MANAGER

Purchase Order

Details

- Fields & Relationships
- 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
- Restriction Rules
- Scoping Rules

Details

Edit Delete

Description

API Name
Purchase_Order__c

Custom
✓

Singular Label
Purchase Order

Plural Label
Purchase Orders

Enable Reports
✓

Track Activities

Track Field History

Deployment Status
Deployed

Help Settings
Standard salesforce.com Help Window

- Purchase Order → Supplier (Lookup), Order Date, Delivery Date, Total Cost.
- Order Item → Product (Lookup), Quantity Ordered, Amount.
- Inventory Transaction → Transaction Date, Type (Picklist: Issue/Receipt), Total Order Cost.

SETUP > OBJECT MANAGER

Inventory Transaction

Details

- Fields & Relationships
- 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
- Restriction Rules
- Scoping Rules

Details

Edit Delete

Description

API Name
Inventory_Transaction__c

Custom
✓

Singular Label
Inventory Transaction

Plural Label
Inventory Transactions

Enable Reports
✓

Track Activities
✓

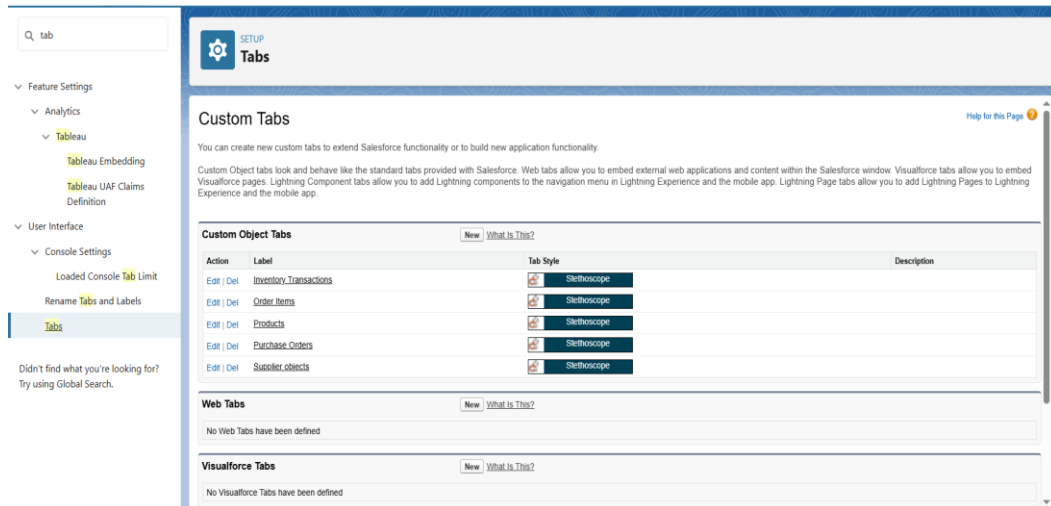
Track Field History

Deployment Status
Deployed

Help Settings
Standard salesforce.com Help Window

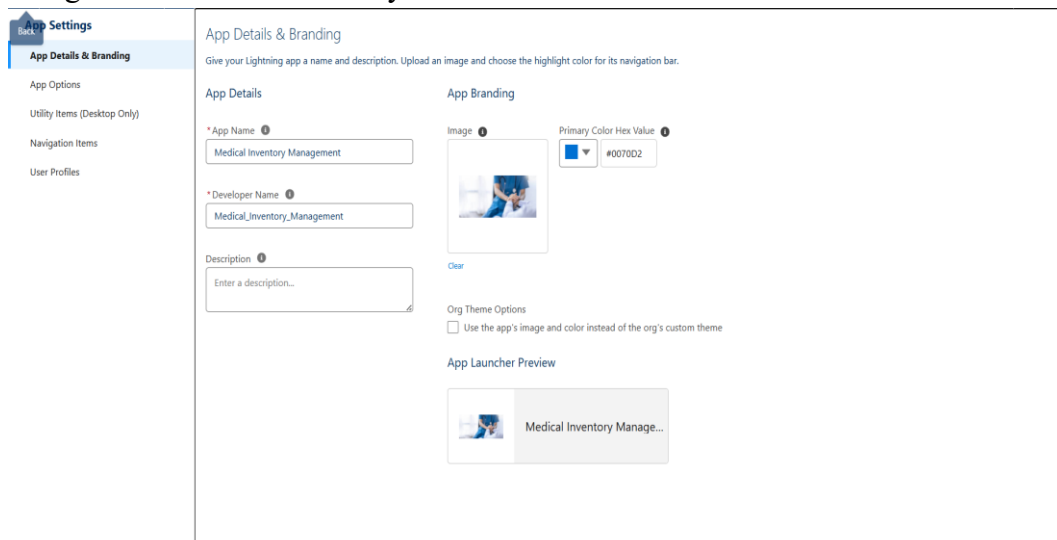
3. Tabs

- Create Tabs for each custom object to make them visible to users.
- Example: Product Tab → Setup → Tabs → New → Select Object → Choose Style → Save.
- Repeat for: Purchase Order, Order Item, Inventory Transaction, Supplier.



4. The Lightning App

- Go to Setup → App Manager → New Lightning App.
- Name: Medical Inventory Management.
- Add Navigation Items: Product, Supplier, Purchase Order, Order Item, Inventory Transaction, Reports, Dashboards.
- Assign to System Administrator → Save.



5. Fields

- Create fields for each object.
- Examples:
 - *Product*: Product Name (Text), Description (Text Area), Unit Price (Currency), Stock Level (Number), Expiry Date (Date).
 - *Purchase Order*: Order Date (Date), Supplier (Lookup), Total Order Cost (Currency).
 - *Order Item*: Quantity Ordered (Number), Unit Price (Formula), Amount (Formula).
 - *Inventory Transaction*: Transaction Type (Picklist: Issue, Receipt, Adjustment).

Details	Fields & Relationships 15 Items, Sorted by Field Label				
	<input type="text" value="Q Quick Find"/> New Deleted Fields Field Dependencies Set History Tracking				
Fields & Relationships	FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Page Layouts	Available Quantity	AvailableQuantity	Number(16, 2)		
Lightning Record Pages	Created By	CreatedById	Lookup(User)		
Buttons and Links	End Date	EndDate	Date		
Compact Layouts	Last Modified By	LastModifiedById	Lookup(User)		
Field Sets	Line Description	Description	Text(255)		
Object Limits	List Price	ListPrice	Currency(16, 2)		
Triggers	Order	OrderId	Lookup(Order)		✓
Flow Triggers	Order Product Number	OrderItemNumber	Auto Number		✓
Validation Rules	Original Order Product	OriginalOrderItemId	Lookup(Order Product)		✓
Conditional Field Formatting	Product	Product2Id	Lookup(Product)		✓
	Quantity	Quantity	Number(16, 2)		
	Reference Price	ReferencePrice	Currency(16, 2)		

Fields & Relationships 15 Items, Sorted by Field Label			<input type="text" value="Q Quick Find"/>	New	Deleted Fields	Field Dependencies	Set History Tracking
End Date	EndDate	Date					
Last Modified By	LastModifiedById	Lookup(User)					
Line Description	Description	Text(255)					
List Price	ListPrice	Currency(16, 2)					
Order	OrderId	Lookup(Order)					✓
Order Product Number	OrderItemNumber	Auto Number					✓
Original Order Product	OriginalOrderItemId	Lookup(Order Product)					✓
Product	Product2Id	Lookup(Product)					✓
Quantity	Quantity	Number(16, 2)					
Reference Price	ReferencePrice	Currency(16, 2)					
Start Date	ServiceDate	Date					
Total Price	TotalPrice	Currency(16, 2)					
Unit Price	UnitPrice	Currency(16, 2)					

6. Page Layouts

- Customize layouts for each object.

The screenshot shows the 'Purchase Order Detail' layout configuration. The left sidebar lists various configuration options, with 'Page Layouts' selected. The main area displays the layout properties for the 'Purchase Order' object. The layout is organized into sections: 'Information' (header visible on edit only), 'System Information' (header visible on edit only), and 'Custom Links' (header visible on edit only). The 'Information' section contains fields for 'Purchase Order ID', 'Supplier ID', 'Order Date', 'Expected Delivery Date', 'Actual Delivery Date', 'Order Count', 'Total Order Cost', 'Owner', and 'Order Item'. The 'System Information' section contains fields for 'Created By' and 'Last Modified By'. The 'Custom Links' section is currently empty.

- Example: Purchase Order Layout → Make *Order Date* Required, *Total Cost* Read-Only.

The screenshot shows the 'Inventory Transaction Detail' layout configuration. The left sidebar lists various configuration options, with 'Page Layouts' selected. The main area displays the layout properties for the 'Inventory Transaction' object. The layout is organized into sections: 'Information' (header visible on edit only), 'System Information' (header visible on edit only), and 'Custom Links' (header visible on edit only). The 'Information' section contains fields for 'Transaction ID', 'Purchase Order ID', 'Transaction Type', 'Transaction Date', 'Total Order Cost', 'Owner', 'Inventory Transaction Name', and 'Transaction ID'. The 'System Information' section contains fields for 'Created By' and 'Last Modified By'. The 'Custom Links' section is currently empty.

- Arrange related fields logically.

The screenshot shows the 'Product Information' layout configuration. The left sidebar lists various configuration options, with 'Page Layouts' selected. The main area displays the layout properties for the 'Product' object. The layout is organized into sections: 'Product Information' (header visible on edit only), 'System Information' (header not visible), 'Description Information' (header not visible), and 'Additional Information' (header not visible). The 'Product Information' section contains fields for 'Product Code', 'List Price', 'Unit Price', 'Quantity', 'Total Price', 'Order', 'Order Product Number', 'Original Order Pt...', 'Reference Price', 'Start Date', 'End Date', 'Last Modified By', 'Line Description', and 'List Price'. The 'System Information' section contains fields for 'Created By' and 'Last Modified By'. The 'Description Information' section contains the 'Line Description' field. The 'Additional Information' section is currently empty.

7. Compact Layouts

- Create Compact Layouts to show important fields at record highlights.
- *Product Compact Layout:* Product Name, Unit Price, Stock Level.

The screenshot shows the 'Compact Layout Assignment' page for a 'Product' object. On the left is a navigation menu with options like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts (selected), Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, Restriction Rules, and Scoping Rules. The main content area is titled 'Compact Layout Assignment' and includes a 'Primary Compact Layout' section with a dropdown menu currently set to 'Product Compact Layout'. There are 'Save' and 'Cancel' buttons at the top and bottom of the main section.

- *Purchase Order Compact Layout:* Order ID, Order Date, Supplier, Total Cost.

8. Validation Rules

- Add data quality rules. Example: Purchase Order Delivery Date Validation

The screenshot displays the 'Purchase Order Validation Rule' configuration page. The left sidebar shows a navigation menu with options like Details, Fields & Relationships, 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, Restriction Rules, and Scoping Rules. The main content area is titled 'Purchase Order Validation Rule' and includes a 'Validation Rule Edit' section. The 'Rule Name' is 'Expected_Delivery_Date_Validation', and the 'Active' checkbox is checked. The 'Error Condition Formula' is '(Expected_Delivery_Date__c - Order_Date__c) > 7'. The 'Error Message' is 'The Expected Delivery Date should not exceed 7 days.' The 'Error Location' is set to 'Top of Page'. There are 'Save', 'Save & New', and 'Cancel' buttons at the bottom.

- $(\text{Expected_Delivery_Date_c} - \text{Order_Date_c}) > 7$

Error: *Expected Delivery Date cannot exceed 7 days.*

9. Profiles

- Define user permissions.
- Profiles Created:

Inventory Manager → Access to Product & Inventory

Profile Edit

Standard User

Help for this Page

Set the permissions and page layouts for this profile.

Profile Edit

Save

Save & New

Cancel

Name

Standard User

User License

Salesforce

Custom Profile

☐

Custom App Settings

Required Information

	Visible	Default		Visible	Default
All Tabs (standard__AllTabSet)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	My Service Journey (standard__MSJApp)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Analytics Studio (standard__Insights)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Queue Management (standard__QueueManagement)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
App Launcher (standard__AppLauncher)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sales (standard__LightningSales)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Approvals (standard__Approvals)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sales (standard__Sales)	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>
Automation (standard__FlowsApp)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sales Cloud Mobile (standard__SalesCloudMobile)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bolt Solutions (standard__LightningBolt)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sales Console (standard__LightningSalesConsole)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Community (standard__Community)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Salesforce Chatter (standard__Chatter)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Content (standard__Content)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Salesforce Scheduler Setup (standard__LightningScheduler)	<input type="checkbox"/>	<input type="checkbox"/>
Data Cloud (standard__Audience360)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample Console (standard__ServiceConsole)	<input type="checkbox"/>	<input type="checkbox"/>

Custom Object Permissions

	Basic Access				Data Administration				Basic Access				Data Administration		
	Read	Create	Edit	Delete	View All Records	Modify All Records	View All Fields		Read	Create	Edit	Delete	View All Records	Modify All Records	View All Fields
Inventory Transactions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Order Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Purchase Orders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Order Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Supplier objects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Order Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>								

Session Settings

Session Times Out After

2 hours of inactivity

Session Security Level Required at Login

--None--

Password Policies

User passwords expire in

90 days

Enforce password history

3 passwords remembered

Minimum password length

8

Password complexity requirement

Must include alpha and numeric characters

Password question requirement

Cannot contain password

Maximum invalid login attempts

10

Lockout effective period

15 minutes

Obscure secret answer for password resets

☐

Require a minimum 1 day password

☐

- Purchase Manager → Access to Suppliers & Orders.

10. Roles

- Define record-level access.
- Roles Created:

The screenshot shows the Salesforce Setup interface for editing a user. The left sidebar contains navigation links: Setup, Home, Object Manager, Users, Roles, and Feature Settings. The main content area is titled 'User Edit' and includes a 'General Information' section with fields for First Name, Last Name, Email, Username, Nickname, Title, Company, Department, and Division. The 'Role' dropdown is set to 'Inventory Manager'. The 'User License' dropdown is set to 'Salesforce'. The 'Profile' dropdown is set to 'Inventory Manager'. The 'Active' checkbox is checked. The 'Marketing User' checkbox is unchecked. The 'Offline User' checkbox is unchecked. The 'Knowledge User' checkbox is unchecked. The 'Flow User' checkbox is unchecked. The 'Service Cloud User' checkbox is unchecked. The 'Site.com Contributor User' checkbox is unchecked. The 'Site.com Publisher User' checkbox is unchecked. The 'Web User' checkbox is unchecked. The 'Data.com User Type' dropdown is set to 'None'. The 'Data.com Monthly Addition Limit' dropdown is set to 'None'. The 'Accessibility Mode (Classic Only)' dropdown is set to 'None'. The 'High-Contrast Palette on Charts' checkbox is checked. The 'Load Lightning Pages While Scrolling' checkbox is checked. The 'Debug Mode' checkbox is checked.

Understanding Roles

Set up your Role Hierarchy to control how your organization reports on and accesses data.

Sample Role Hierarchy

View other sample Role Hierarchies: [Territory-based Sample](#)



[Set Up Roles](#)

☐ Don't show this page again

The screenshot shows the Salesforce Setup interface for editing a role. The left sidebar contains navigation links: Setup, Home, Object Manager, Users, Roles, and Feature Settings. The main content area is titled 'Role Edit' and includes a 'Purchasing Manager' section. The 'Label' field is set to 'Purchasing Manager'. The 'Role Name' dropdown is set to 'Purchasing_Manager'. The 'This role reports to' dropdown is set to 'SVP, Sales & Marketing'. The 'Role Name as displayed on reports' field is empty. The 'Save', 'Save & New', and 'Cancel' buttons are visible.

The screenshot shows the Salesforce Setup interface for editing a role. The left sidebar contains navigation links: Setup, Home, Object Manager, Users, Roles, and Feature Settings. The main content area is titled 'Role Edit' and includes an 'Inventory Manager' section. The 'Label' field is set to 'Inventory Manager'. The 'Role Name' dropdown is set to 'Inventory_Manager'. The 'This role reports to' dropdown is set to 'SVP, Sales & Marketing'. The 'Role Name as displayed on reports' field is empty. The 'Save', 'Save & New', and 'Cancel' buttons are visible.

11. Users

- Add users and assign Roles & Profiles.
- Example:
 - John → Role: Purchase Manager, Profile: Purchase Manager.

The screenshot shows the Salesforce 'User Edit' page for 'John Puchasem'. The left sidebar contains navigation links: Setup, Home, Object Manager, Users, Permission Set Groups, Permission Sets, Profiles, Public Groups, Queues, Roles, and User Management Settings. The main content area is titled 'User Edit: John Puchasem' and includes buttons for 'Save', 'Save & New', and 'Cancel'. The 'General Information' section contains fields for First Name (John), Last Name (Puchasem), Alias (jpuch), Email (23bsds158suyabharathip@skacas.ac.in), Username (rfd@gmail.com), Nickname (User175795051153481465), Title, Company, Department, and Division. On the right, there are dropdown menus for Role (Purchasing Manager), User License (Salesforce), and Profile (Purchase Manager), along with checkboxes for Active, Marketing User, Offline User, Knowledge User, Flow User, Service Cloud User, Site.com Contributor User, Site.com Publisher User, WDC User, Data.com User Type, and Data.com Monthly Addition Limit.

- Ram → Role: Inventory Manager, Profile: Inventory Manager.

The screenshot shows the Salesforce 'User Detail' page for 'Ram Krishna'. The page includes a header with navigation links and a 'User Detail' section with buttons for 'Edit', 'Sharing', 'Reset Password', 'Freeze', and 'View Summary'. The user information is displayed in a table-like format with fields for Name, Alias, Email, Username, Nickname, Title, Company, Department, Division, Address, Time Zone, Locale, Language, Delegated Approver, Manager, Receive Approval Request Emails, and Federation ID. On the right, there are dropdown menus for Role (Inventory Manager), User License (Salesforce), and Profile (Inventory Manager), along with checkboxes for Active, Marketing User, Offline User, Knowledge User, Flow User, Service Cloud User, Site.com Contributor User, Site.com Publisher User, WDC User, Mobile Push Registrations, Data.com User Type, Accessibility Mode (Classic Only), Debug Mode, and High-Contrast Palette on Charts.

The screenshot shows the Salesforce 'User Detail' page for 'John Puchasem'. The page includes a header with navigation links and a 'User Detail' section with buttons for 'Edit', 'Sharing', 'Reset Password', 'Freeze', and 'View Summary'. The user information is displayed in a table-like format with fields for Name, Alias, Email, Username, Nickname, Title, Company, Department, Division, Address, Time Zone, Locale, Language, Delegated Approver, Manager, Receive Approval Request Emails, and Federation ID. On the right, there are dropdown menus for Role (Purchasing Manager), User License (Salesforce), and Profile (Purchase Manager), along with checkboxes for Active, Marketing User, Offline User, Knowledge User, Flow User, Service Cloud User, Site.com Contributor User, Site.com Publisher User, WDC User, Mobile Push Registrations, Data.com User Type, Accessibility Mode (Classic Only), Debug Mode, and High-Contrast Palette on Charts.

- 12. Permission Sets

- Extra access beyond profiles.

Permission Set

Purchase Manager Create Access 1

Find Settings...CloneEdit PropertiesManage AssignmentsView Summary

Permission Set Overview > Object Settings > Order Items

Order Items

Tab Settings

Available

Visible

Object Permissions

Permission Name	Enabled
Read	<input checked="" type="checkbox"/>
Create	<input checked="" type="checkbox"/>
Edit	<input type="checkbox"/>
Delete	<input type="checkbox"/>
View All Records	<input type="checkbox"/>
Modify All Records	<input type="checkbox"/>
View All Fields	<input type="checkbox"/>

- Example: Create Purchase Manager Create Access → Assign to John.

All Users

7 items • Sorted by Full Name • Filtered by All users • Updated a few seconds ago

Search this list...

	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/>	Chatter Expert	Chatter	chatty.00dgl00000biuj3uap.heckpoyhvg1@chatter.salesforce.com		<input checked="" type="checkbox"/>	Chatter Free User
<input type="checkbox"/>	Integration User	integ	integration@00dgl00000biuj3uap.com		<input checked="" type="checkbox"/>	Analytics Cloud Integration User
<input type="checkbox"/>	John PuchaseM	jpuch	rfd@gmail.com	Purchasing...	<input checked="" type="checkbox"/>	Purchase Manager
<input type="checkbox"/>	Orgfarm EPIC	OEPIC	epic.e5d59ccd38d1@orgfarm.salesforce.com		<input checked="" type="checkbox"/>	System Administrator
<input type="checkbox"/>	Ram Krishna	r kri	23bsds158suyabharathihgp@skacas.ac.in	Inventory ...	<input checked="" type="checkbox"/>	Inventory Manager
<input type="checkbox"/>	Security User	sec	insightssecurity@00dgl00000biuj3uap.com		<input checked="" type="checkbox"/>	Analytics Cloud Security User
<input type="checkbox"/>	Suyabharathi P	23b	23bsds158suyabharathip969@agentforce.com		<input checked="" type="checkbox"/>	System Administrator

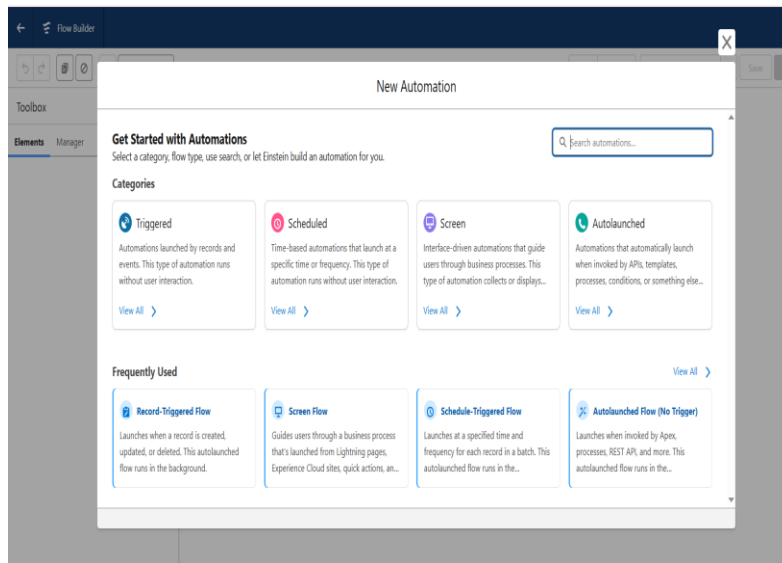
Current Assignments

Add Assignment

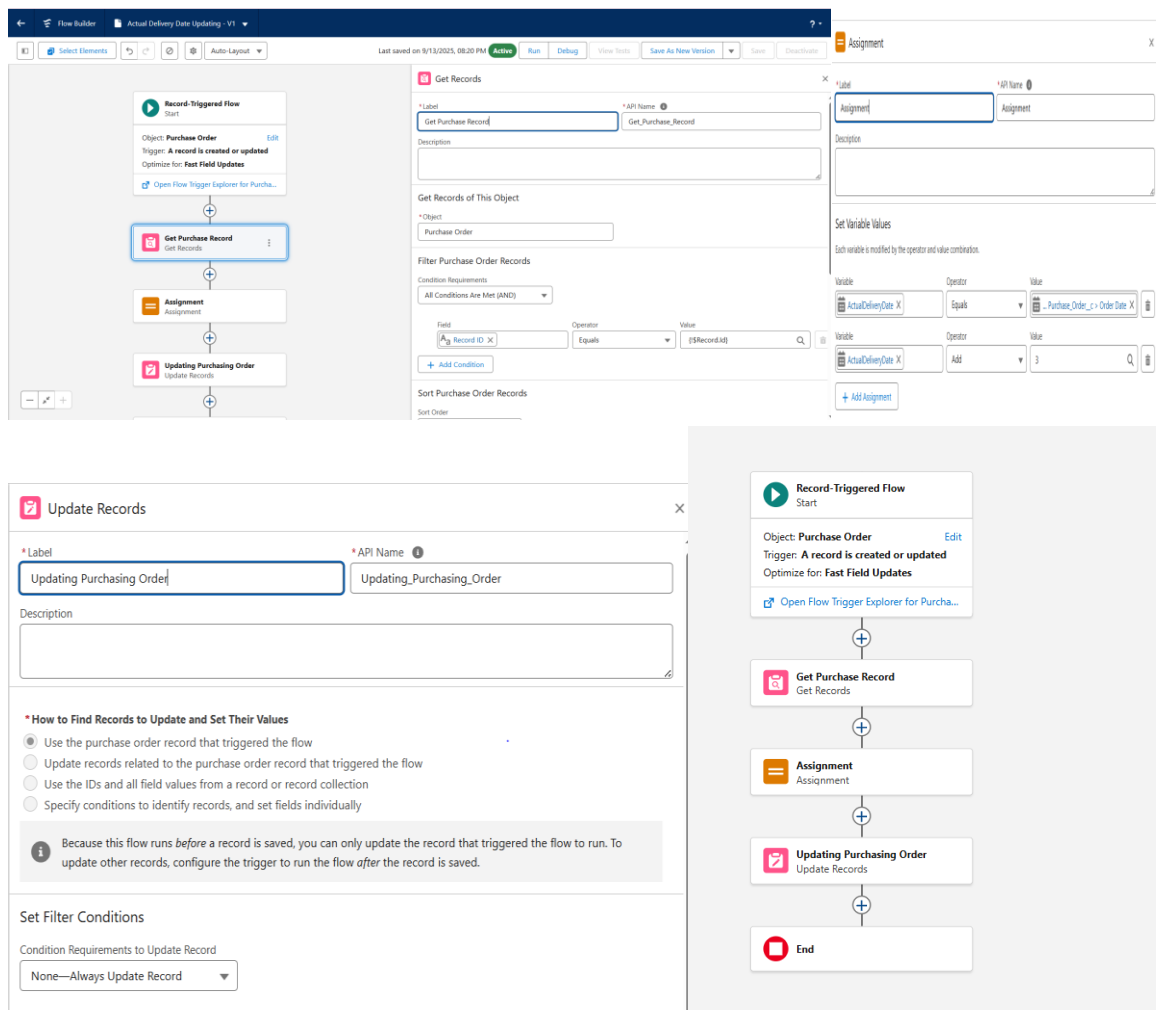
	Full Name	Active	Role	Profile	User License	Expires On
<input type="checkbox"/>	Suyabharathi P	<input checked="" type="checkbox"/>		System Administrator	Salesforce	

13. Flows

- Automate processes using Flows.



- Example: Auto-Update Actual Delivery Date = Order Date + 3 days.



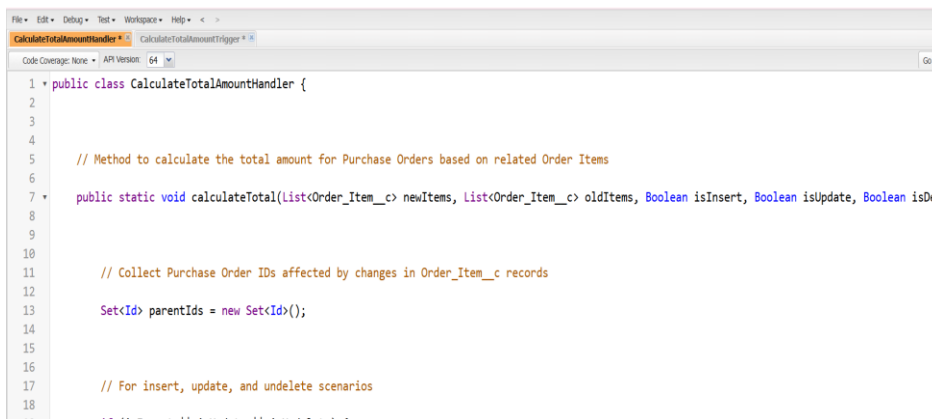
14. Triggers

- Use Apex Triggers for automation beyond Flows.



```
1 trigger CalculateTotalAmountTrigger on Order_Item__c (after insert, after update, after delete, after undelete) {
2
3     // Call the handler class to handle the logic
4
5     CalculateTotalAmountHandler.calculateTotal(trigger.new, trigger.old, trigger.isInsert, trigger.isUpdate, trigger.isDelete, trigger.isUndelete);
6
7 }
8
9
```

- Example: Trigger to calculate Total Order Cost from related Order Items and update PurchaseOrder.

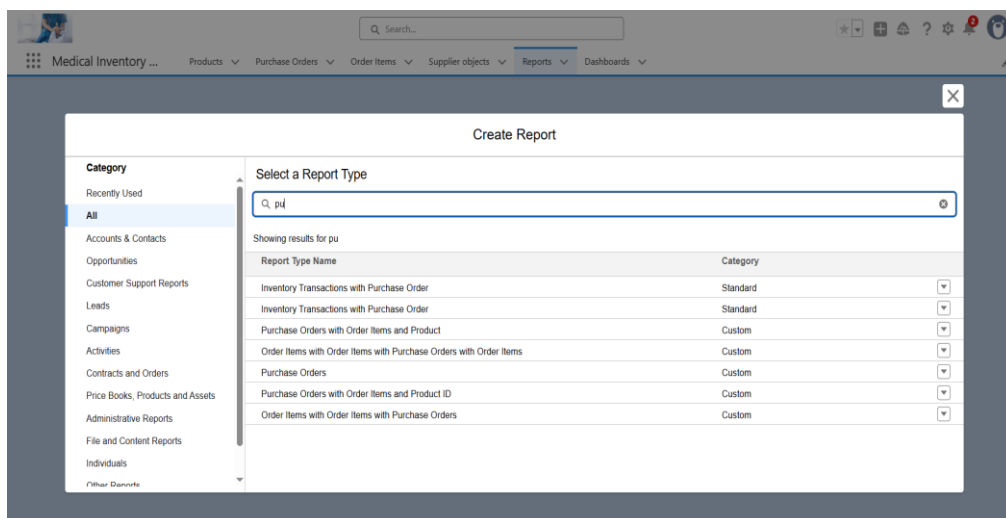


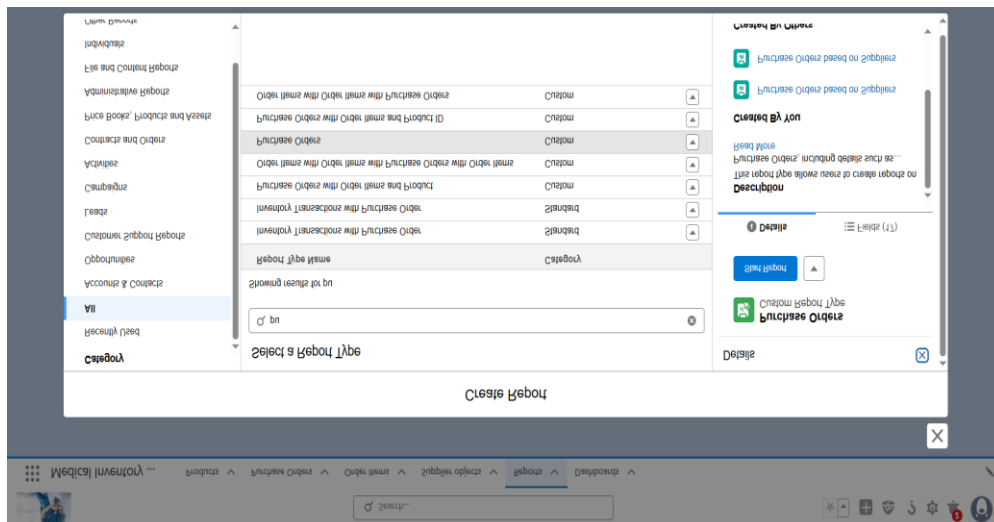
```
1 public class CalculateTotalAmountHandler {
2
3
4
5     // Method to calculate the total amount for Purchase Orders based on related Order Items
6
7     public static void calculateTotal(List<Order_Item__c> newItems, List<Order_Item__c> oldItems, Boolean isInsert, Boolean isUpdate, Boolean isDelete) {
8
9
10
11         // Collect Purchase Order IDs affected by changes in Order_Item__c records
12
13         Set<Id> parentIds = new Set<Id>();
14
15
16
17         // For insert, update, and undelete scenarios
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

```

15. Reports

Purchase Orders by Supplier Report – Group by Supplier ID, show Total Order Cost.





- Complete Purchase Details Report – Show Supplier, Purchase Order, Products, Quantity, Amount.

Medical Inventory ... Products Purchase Orders Order Items Supplier objects Reports Dashboards

Search...

Report: Purchase Orders
Purchase Orders based on Suppliers

Enable Field Editing Q Add Chart Edit

Total Records: 6 Total Total Order Cost: \$10,000 Total Order Count: 0

Supplier ID: Supplier objects Name	Purchase Order ID	Purchase Order Name	Total Order Cost	Order Count
Recruiter (6)	a01g1.00000NbnK (1)	Initial Review	\$2,000	0
	a01g1.00000NnPGc (1)	Initial Review	\$1,000	0
	a01g1.00000NnRWv (1)	Recruiter	\$1,000	0
	a01g1.00000NnWZ (1)	Recruiter	\$2,000	0
	a01g1.00000NnXMD (1)	Recruiter	\$2,000	0
	a01g1.00000NnmsQ (1)	Recruiter	\$2,000	0
Total (6)			\$10,000	0

Medical Inventory ... Products Purchase Orders Order Items Supplier objects Reports Dashboards

Search...

Report: Purchase Orders with Order Items and Product
Complete Purchase Details Report

Enable Field Editing Q Add Chart Edit

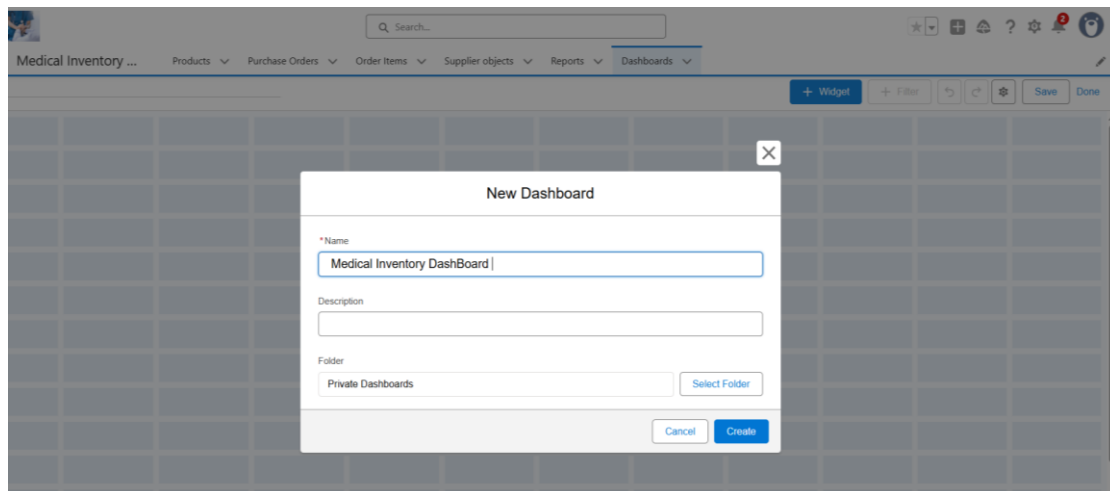
Total Records: 6

Supplier ID: Supplier objects Name	Total Order Cost	Purchase Order ID	Product ID	Expected Delivery Date	Purchase Order Name
Recruiter (6)	\$1,000 (2)	a01g1.00000NnPGc (1)	-	9/24/2025	Initial Review
		Subtotal			
		a01g1.00000NnRWv (1)	-	9/14/2025	Recruiter
	\$2,000 (4)	a01g1.00000NbnK (1)	-	9/23/2025	Initial Review
		Subtotal			
		a01g1.00000NnWZ (1)	-	10/1/2025	Recruiter
		a01g1.00000NnXMD (1)	-	9/20/2025	Recruiter
		Subtotal			
		a01g1.00000NnmsQ (1)	-	9/13/2025	Recruiter
	Subtotal				

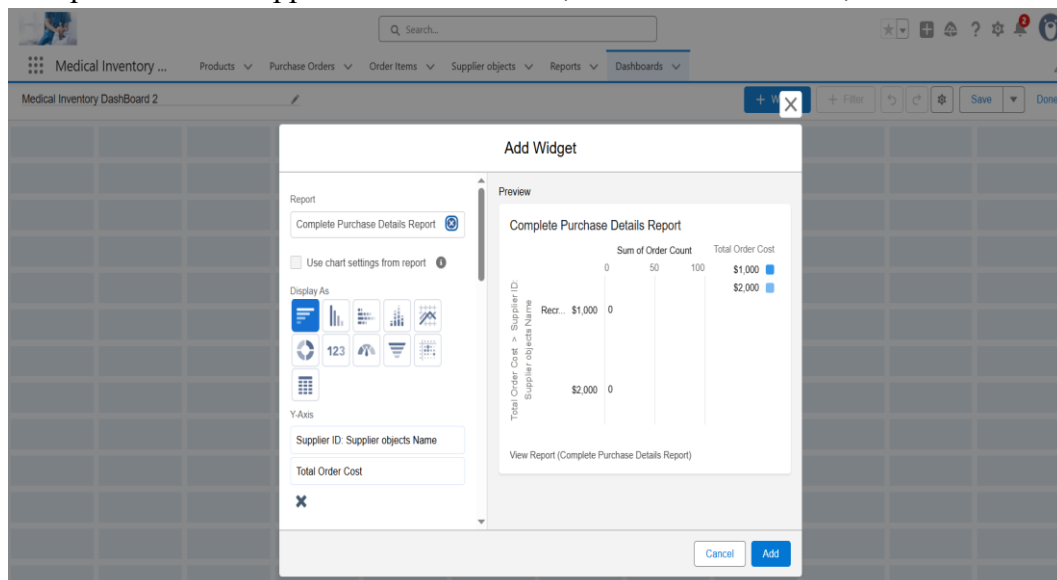
Row Counts Detail Rows Subtotals Grand Total

16. Dashboards

- Create Medical Inventory Dashboard.



- Components: Supplier-wise Orders, Stock Status, Total Costs.



Conclusion

The **Medical Inventory Management System** developed on Salesforce successfully demonstrates how CRM platforms can be leveraged to manage real-time inventory operations in the medical field. By creating **custom objects, fields, validation rules, flows, triggers, reports, and dashboards**, the project ensures accurate tracking of suppliers, products, purchase orders, and inventory transactions.

Project Achievements:

- Created a streamlined system for supplier and purchase order management.
- Automated order tracking and product stock updates using Flows and Triggers.
- Implemented strong security using Profiles, Roles, and Permission Sets.
- Generated real-time insights through Reports and Dashboards.

Student Learning Outcomes:

- Hands-on Salesforce CRM skills in a real-time use case.
- Ability to design custom objects, automation, and security models.
- Improved teamwork and collaboration in managing project lifecycle.
- Exposure to industry practices in CRM and inventory management.

Future Scope:

- Integration with barcode scanners for product entry.
- Mobile App support for order approvals and supplier management.
- Advanced AI-driven demand forecasting and stock optimization.
- Multi-branch scalability for large healthcare organizations.