

FINAL PROJECT REPORT

PROJECT TITLE

MEDICAL INVENTORY MANAGEMENT

COLLEGE NAME

**ANNAMACHARYA INSTITUTE OF
TECHNOLOGY AND SCIENCES, TIRUPATI**

TEAM MEMBERS

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1. INTRODUCTION

1.1 Project Overview:

The Medical Inventory Management project aims to develop a comprehensive inventory management system for healthcare organizations using Salesforce. The system will enable real-time tracking of medical supplies, equipment, and pharmaceuticals, ensuring that healthcare professionals have access to the resources they need to provide high-quality patient care.

This project is a comprehensive Salesforce application to streamline and manage various operational aspects of medical inventory. The system aims to efficiently maintain supplier details, manage purchase orders, track product details and transactions, and monitor the expiry dates of products. Maintain detailed records of suppliers, including contact information. Catalog product information, including descriptions, stock levels. Monitor and track product expiry dates to avoid using expired items. Comprehensive reports to track supplier performance, and purchase orders.

The Medical Inventory Management project aims to develop a comprehensive Salesforce-based solution for managing medical inventory in healthcare organizations. The system will enable healthcare professionals to track inventory levels in real-time, automate reordering processes, and gain visibility into inventory movement. This will help reduce stockouts, overstocking, and manual errors, ultimately improving patient care and operational efficiency.

By developing a Medical Inventory Management system in Salesforce, healthcare organizations can improve patient care, reduce costs, and increase efficiency, ultimately leading to better healthcare outcomes.

1.2 Purpose:

The purpose of this project is to streamline medical inventory management processes, reducing stockouts, overstocking, and manual errors, while improving patient care and operational efficiency.

- Solve complex problems in a way that fits the state of your customers.
- Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behavior.
- Sharpen your communication and marketing strategy with the right triggers and messaging.
- Increase touch-points with your company by finding the right problem-behavior fit and building trust by solving frequent annoyances, or urgent or costly problems.
 1. Streamline inventory management: Automate and optimize inventory management processes for medical supplies, equipment, and pharmaceuticals.
 2. Improve visibility and tracking: Provide real-time visibility into inventory levels, locations, and movement.
 3. Enhance patient care: Ensure that medical supplies and equipment are available when needed, improving patient care and outcomes.
 4. Reduce costs: Optimize inventory levels, reducing waste and costs associated with overstocking or understocking.
 5. Increase efficiency: Automate inventory management workflows, reducing manual errors and increasing productivity.

2. IDEATION PHASE

2.1 Problem Statement:

Healthcare organizations face challenges in managing medical inventory, including stockouts, overstocking, and manual errors, leading to wasted resources, delayed patient care, and increased costs.

The problem statement highlights the need for a comprehensive solution that can address these challenges and improve medical inventory management.

Create a problem statement to understand your customer's point of view. The Customer Problem Statement template helps you focus on what matters to create experiences people will love.

A well-articulated customer problem statement allows you and your team to find the ideal solution for the challenges your customers face. Throughout the process, you'll also be able to empathize with your customers, which helps you better understand how they perceive your product or service.

I am	Describe customer with 3-4 key characteristics - who are they?	Describe the customer and their attributes here
I'm trying to	List their outcome or "job" the care about - what are they trying to achieve?	List the thing they are trying to achieve here
but	Describe what problems or barriers stand in the way - what bothers them most?	Describe the problems or barriers that get in the way here
because	Enter the "root cause" of why the problem or barrier exists - what needs to be solved?	Describe the reason the problems or barriers exist
which makes me feel	Describe the emotions from the customer's point of view - how does it impact them emotionally?	Describe the emotions the result from experiencing the problems or barriers

2.2 Empathy Map Canvas:

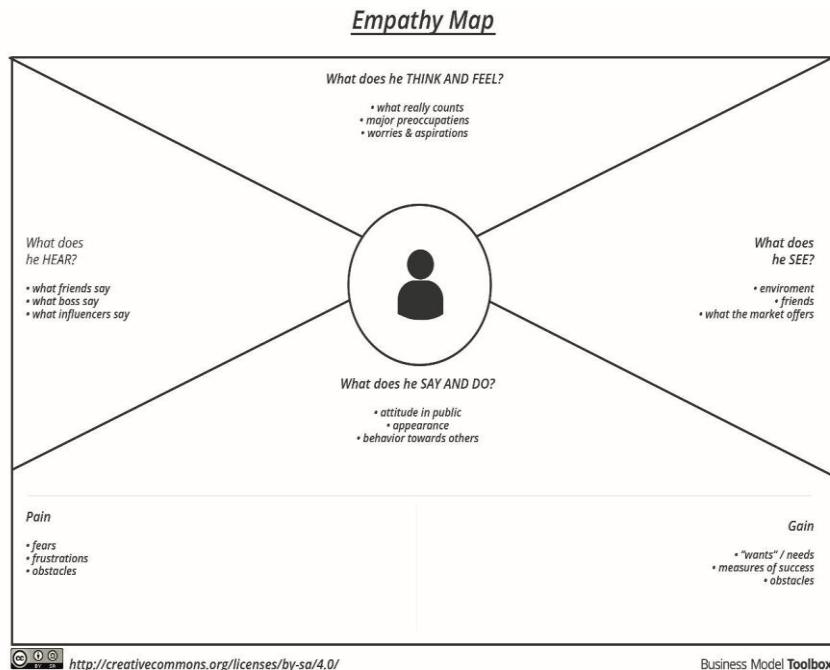
The empathy map canvas is a tool used to identify the needs, pain points, and behaviors of healthcare professionals involved in inventory management. By understanding the perspectives of these professionals, the project team can design a solution that meets their needs and addresses their pain points.

The empathy map canvas will help identify the needs, pain points, and behaviors of healthcare professionals involved in inventory management.

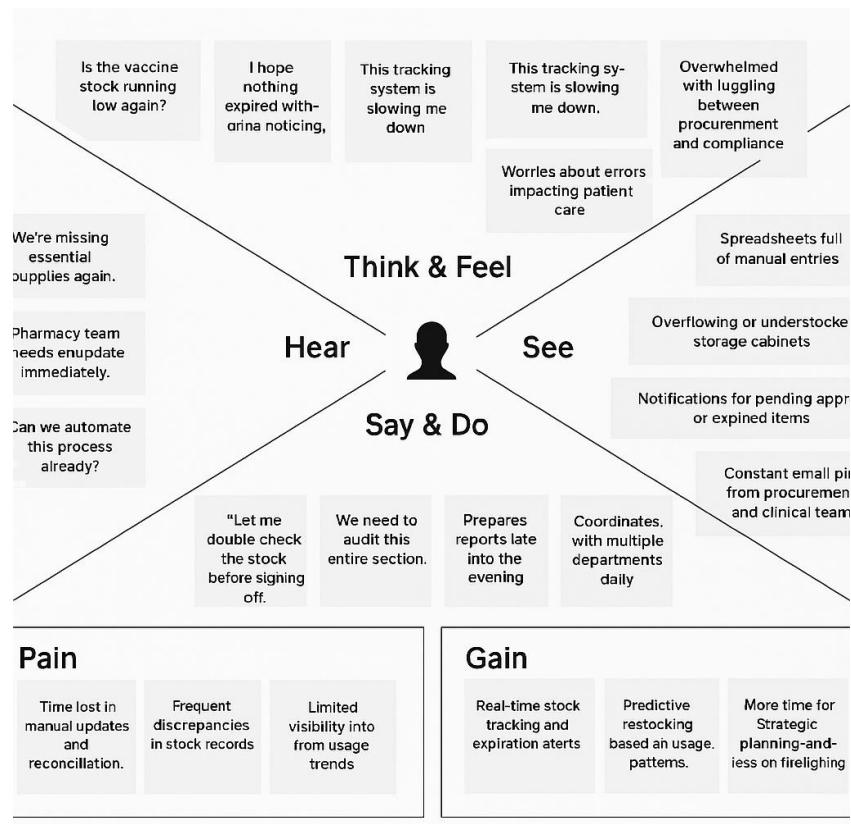
An empathy map is a simple, easy-to-digest visual that captures knowledge about a user's behaviours and attitudes. It is a useful tool to helps teams better understand their users.

Creating an effective solution requires understanding the true problem and the person who is experiencing it. The exercise of creating the map helps participants consider things from the user's perspective along with his or her goals and challenges.

EXAMPLE:



MEDICAL INVENTORY MANAGEMENT



2.3 Brainstorming:

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

Brainstorming sessions will generate ideas for improving medical inventory management, such as :

- Automating inventory tracking
- Implementing RFID technology
- Integrating with supplier systems for seamless inventory management
- Providing real-time visibility into inventory movement

Step-1: Team Gathering, Collaboration and Select the Problem Statement

The screenshot shows a digital template interface with a blue vertical sidebar labeled "Template". At the top is a circular icon with a lightbulb and wavy lines. Below it is a section titled "Brainstorm & idea prioritization" with a sub-section "Before you collaborate". It includes a tip about preparation, a timer for 10 minutes, and three steps: "Team gathering", "Set the goal", and "Learn how to use the facilitation tools". A link to an article is provided. To the right is a section titled "Define your problem statement" with a tip about healthcare facilities, a timer for 5 minutes, and a text box asking "How might we [your problem statement]?". Below these are sections for "Key rules of brainstorming" and "Group ideas".

Step-2: Brainstorm, Idea Listing and Grouping

The screenshot shows a digital template interface with a blue vertical sidebar. It starts with a section titled "Brainstorm" with a tip about sticky notes, a timer for 10 minutes, and a list of four people (Person 1 to Person 4) each with a row of yellow sticky notes. Below this is a section titled "Group ideas" with a tip about clustering, a timer for 20 minutes, and a list of eight people (Person 5 to Person 8) each with a row of yellow sticky notes.

Step-3: Idea Prioritization

4

Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

⌚ 20 minutes

TIP

Participants can use their cursors to point at where sticky notes should go on the grid. A small dot will appear to confirm the spot by using the laser pointer holding the **H key** on the keyboard.



After you collaborate

You can export the mural as an image or pdf to share with members of your company who might find it helpful.

Quick add-ons

Share the mural

Share a [view link](#) to the mural with stakeholders to keep them in the loop about the outcomes of the session.

Export the mural

Export a copy of the mural as a PNG or PDF to attach to emails, include in slides, or save in your drive.

Keep moving forward

Strategy blueprint

Define the components of a new idea or strategy

[Open the template →](#)

Customer experience journey map

Understand customer needs, motivations, and obstacles for an experience.

[Open the template →](#)

Strengths, weaknesses, opportunities & threats

Identify strengths, weaknesses, opportunities, and threats (SWOT) to develop a plan.

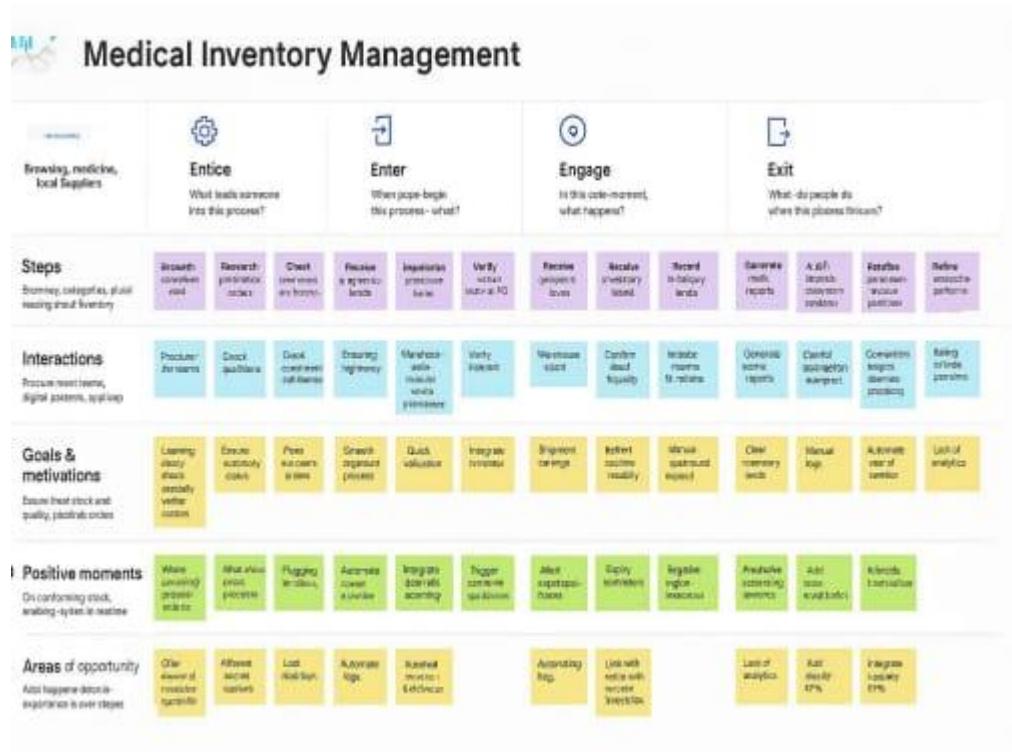
[Open the template →](#)

3. REQUIREMENT ANALYSIS

3.1 Customer Journey Map

The customer journey map will illustrate the steps involved in managing medical inventory, highlighting pain points and areas for improvement.

This will help the project team design a solution that addresses the specific needs of healthcare professionals.



3.2 Solution Requirement

The solution requirements will include features such as

- Inventory tracking Management
- Automated reordering Processes
- Real-time visibility into inventory movement
- Integration with supplier systems.
- Reporting and analytics
- **Functional Requirements:**
- Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Login	Login with Email and Password Login with Social Accounts(Gmail,LinkedIn) Forgot Password/Password Reset
FR-4	Dashboard	View Inventory Summary View Notifications (Low stock, Expiry alerts) Quick Access to Recent Orders / Shipments
FR-5	Inventory Management	Add New Medical Stock Edit or Delete Existing Stock View Medicine Details Filter/Search by Category or Medicine Name
FR-6	Stock Alerts	Auto-alerts for Low Stock Auto-alerts for Expiring Medicines

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

	Non-Functional Requirement	Description
	Usability	The system should be easy to use and understand for all users.
	Security	The system should keep all data safe and allow access only to the right people.
	Reliability	The system should work properly all the time without losing any data.
	Performance	The system should respond quickly when users search, add, or update stock.
	Availability	The system should be available all the

		time, with very little downtime
	Scalability	The system should be able to handle more users and stock as the business grows.

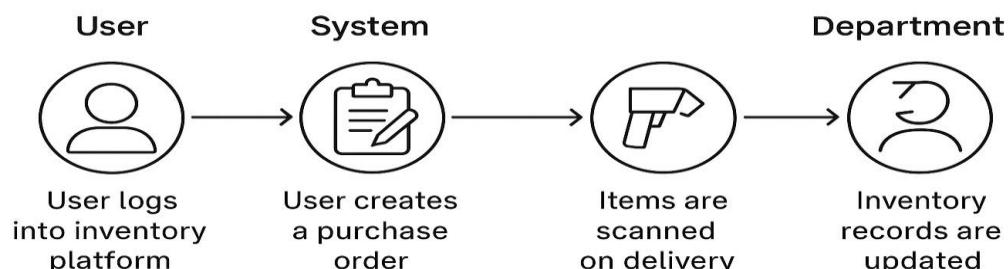
3.3 Data Flow Diagram

The data flow diagram will illustrate the flow of data between different components of the system, including inventory tracking, ordering, and supplier integration.

This will help the project team design a solution that is efficient, scalable, and effective.

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

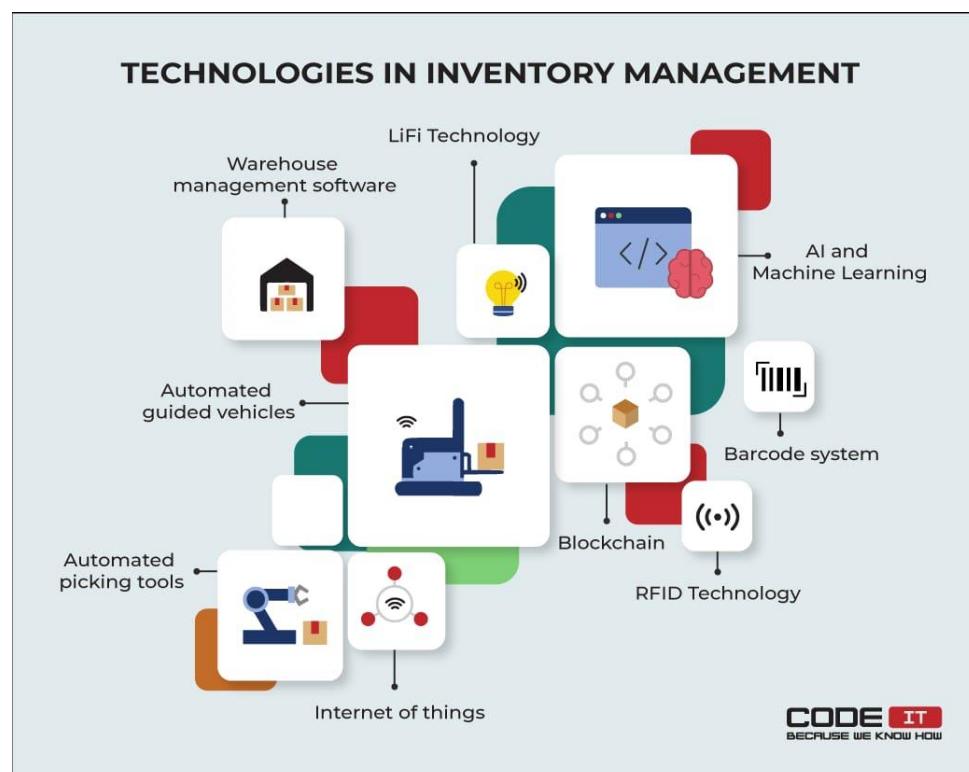
Medical Inventory Management



3.4 Technology Stack

The technology stack will include:

- Salesforce: A cloud-based platform for building custom applications
- Apex: A programming language used for developing custom logic on the Salesforce platform
- Lightning: A framework for building custom user interfaces on the Salesforce platform
- RFID or barcode scanning: Technologies used for automating inventory tracking



4. PROJECT DESIGN

4.1 Problem Solution fit

The proposed solution will address the challenges of medical inventory management by providing real-time visibility, automating inventory tracking, and streamlining ordering processes.

The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why

1. CUSTOMER SEGMENT(S) Who is your customer? I.e. working parents of 0-5 y.o. kids	CS What constraints prevent your customers from taking action or limit their choices of solutions? I.e. spending power, budget, no cash, network connection, available devices.	CC What solutions are available to the customers when they face the problem or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? I.e. pen and paper is an alternative to digital note-taking.
2. JOBS-TO-BE-DONE / PROBLEMS Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.	J&P What is the real reason that this problem exists? What is the back story behind the need to do this job? I.e. customers have to do it because of the change in regulations.	RC What does your customer do to address the problem and get the job done? I.e. directly related: find the right solar panel installer, calculate usage and benefits; Indirectly associated: customers spend free time on volunteering work (I.e. Greenpeace)
3. TRIGGERS What triggers customers to act? I.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.	TR If you are working on an existing business, write down your current solution first, fill in the gaps, and check how much it fits reality. If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.	SL 8. CHANNELS OF BEHAVIOUR 8.1 ONLINE What kind of actions do customers take online? Extract online channels from #7
4. EMOTIONS: BEFORE / AFTER How do customers feel when they face a problem or a job and afterwards? I.e. lost, insecure > confident, in control - use it in your communication strategy & design.	EM	CH 8.2 OFFLINE What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.

Define CS, fit into CC

Focus on J&P, tap into BE, understand RC

Identify strong TR & EM

Explore AS, differentiate

Focus on J&P, tap into BE, understand RC

Extract online & offline CH of BE

4.2 Proposed Solution

The proposed solution will include features such as inventory tracking, automated reordering, and real-time visibility, leveraging Salesforce's capabilities.

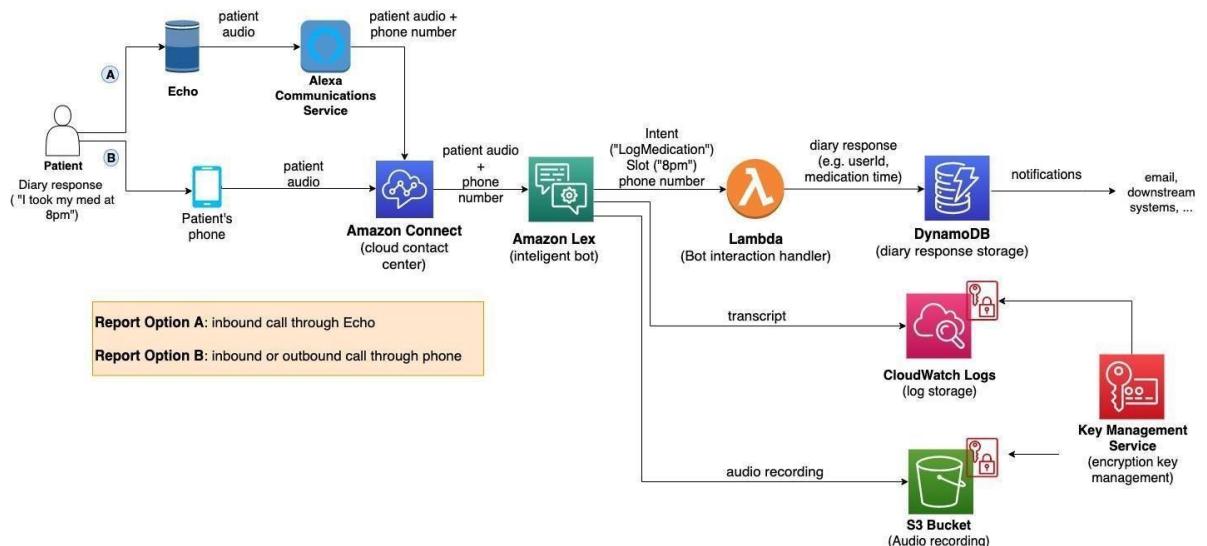
S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Inefficient tracking, stockouts, overstocking, and wastage of critical medical supplies in healthcare facilities due to lack of real-time visibility and automation in inventory management
2.	Idea / Solution description	Develop a cloud-based Medical Inventory Management System using Salesforce to automate stock tracking, generate alerts for low/expired stock, streamline reordering, and provide real-time inventory insights.
3.	Novelty / Uniqueness	Uses Salesforce's low-code/no-code capabilities and Health Cloud integration for a healthcare-specific inventory solution. Incorporates intelligent reordering logic and compliance tracking for medical use.
4.	Social Impact / Customer Satisfaction	Ensures critical medical supplies are always available, directly impacting patient care quality. Reduces waste, improves operational efficiency, and increases satisfaction for both patients and medical staff.
5.	Business Model (Revenue Model)	SaaS model: Monthly or annual subscription fees charged to hospitals, clinics, and pharmacies. Optional customization, training, and support packages available as premium services
6.	Scalability of the Solution	Easily scalable across different sizes of healthcare facilities. Built on Salesforce's cloud platform, allowing integration with other systems and expansion to multiple locations or regions effortlessly.

4.3 Solution Architecture

The solution architecture will include components such as:

- Inventory tracking: A module for tracking inventory levels and movement
- Ordering: A module for automating reordering processes
- Supplier integration: A module for integrating with supplier systems
- Reporting and analytics: A module for providing insights into inventory management

The solution architecture will be designed to be efficient, scalable, and effective, leveraging the capabilities of the Salesforce platform.



5. PROJECT PLANNING

&

SCHEDULING

5.1 Project planning

The project plan will outline the scope, timeline, and resources required for the project, including development, testing, and deployment.

Product Backlog, Sprint Schedule, and Estimation (4 Marks)			
Product Backlog – Medical Inventory Management			
User Story	Priority	Effort (Story Points)	Justification
As an inventory manager, I want real-time stock visibility, so I can avoid shortages or overstocking.	High	8	Critical to reduce manual oversight and errors.
As a user, I want automated expiration alerts for medicines and vaccines, so I can prevent waste.	High	5	Aligns with pain of missed expirations.
As a staff member, I want to generate and export inventory reports, so I can share them during audits.	Medium	5	Supports efficient audits mentioned in "Say & Do."
As a procurement officer, I want stock threshold notifications, so I can restock before critical lows.	High	3	Helps with proactive restocking.
As a manager, I want to view usage trends of items over time, so I can plan procurement intelligently.	Medium	8	Addresses "Limited visibility into usage trends."

User Story	Priority	Effort (Story Points)	Justification
As a pharmacy team member, I want to collaborate via system messages or flags, so we can coordinate easily.	Low	5	Reduces reliance on "constant emails."
As an admin, I want to manage multi-department access, so the right teams can see relevant inventory.	Medium	3	Enables streamlined departmental coordination.
As a user, I want to scan barcodes or QR codes for quick inventory updates, so I don't rely on manual entry.	High	8	Helps eliminate spreadsheet-based updates.

6.FUNCTIONAL

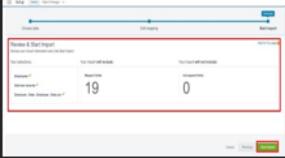
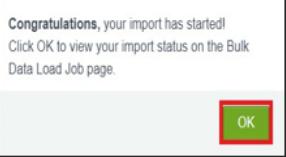
AND

PERFORMANCE TESTING

6.1 Performance Testing

Performance testing will ensure the system can handle expected loads and user traffic, providing a seamless user experience

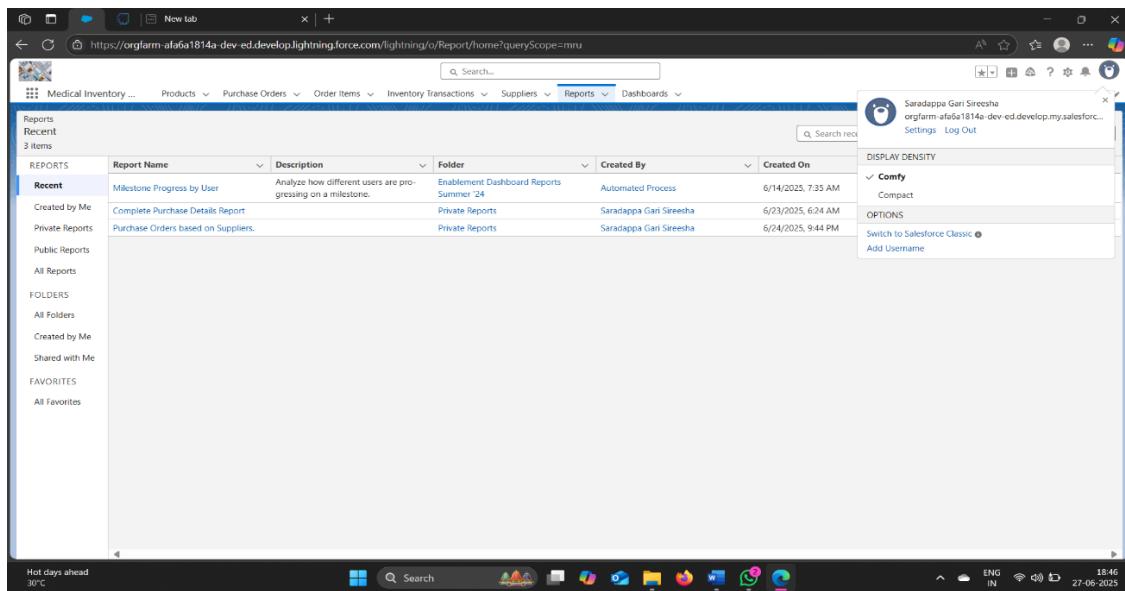
Project team shall fill the following information in model performance testing template.

Model Performance Testing:			
Project team shall fill the following information in model performance testing template.			
S.No.	Parameter	Values	Screenshot
1.	Model Summary	<p>Salesforce automation setup for Data management using Object, Fields and Reports.</p> <p>Note : Import Records if data Match Correctly then Records will Created or Else it will Show Error</p>	
	Accuracy	<p>Training Accuracy - 98%</p> <p>Validation Accuracy - 98%</p>	
3.	Confidence Score (Only Yolo Projects)	<p>Class Detected - If detecting Object and fields name if wrong and other activity</p> <p>Confidence Score - If the model is 92% sure the object is correctly detected</p>	

7. RESULTS

7.1 Output Screenshots

MILESTONE 1: CREATION OF DEVELOPER ACCOUNT

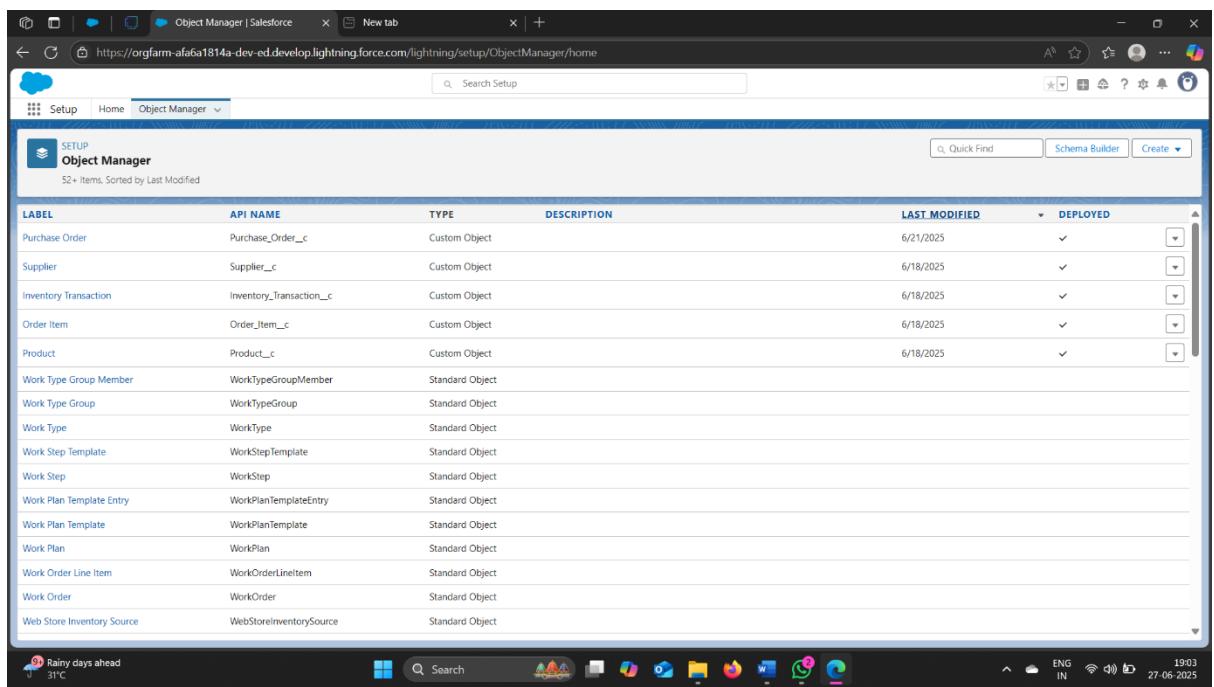


The screenshot shows the Salesforce Reports page. The top navigation bar includes links for Medical Inventory, Products, Purchase Orders, Order Items, Inventory Transactions, Suppliers, Reports, and Dashboards. A search bar is at the top right. On the left, a sidebar lists categories like Reports, Recent, Folders, Favorites, and Public Reports. The main content area displays a table of recent reports:

REPORTS	Report Name	Description	Folder	Created By	Created On
Recent	Milestone Progress by User	Analyze how different users are progressing on a milestone.	Enablement Dashboard Reports	Automated Process	6/14/2025, 7:35 AM
	Complete Purchase Details Report	Private Reports	Saradappa Gari Sreetha	6/23/2025, 6:24 AM	
	Purchase Orders based on Suppliers.	Private Reports	Saradappa Gari Sreetha	6/24/2025, 9:44 PM	

The right side of the screen features a user profile for Saradappa Gari Sreetha, options for DISPLAY DENSITY (Compact), and links for SETTINGS, LOG OUT, and OPTIONS (Switch to Salesforce Classic, Add Username).

MILESTONE 2: OBJECT CREATION



The screenshot shows the Salesforce Object Manager page. The top navigation bar includes links for Setup, Home, and Object Manager. A search bar is at the top right. The main content area displays a table of objects:

LABEL	API NAME	TYPE	DESCRIPTION	LAST_MODIFIED	DEPLOYED
Purchase Order	Purchase_Order__c	Custom Object		6/21/2025	✓
Supplier	Supplier__c	Custom Object		6/18/2025	✓
Inventory Transaction	Inventory_Transaction__c	Custom Object		6/18/2025	✓
Order Item	Order_Item__c	Custom Object		6/18/2025	✓
Product	Product__c	Custom Object		6/18/2025	✓
Work Type Group Member	WorkTypeGroupMember	Standard Object			
Work Type Group	WorkTypeGroup	Standard Object			
Work Type	WorkType	Standard Object			
Work Step Template	WorkStepTemplate	Standard Object			
Work Step	WorkStep	Standard Object			
Work Plan Template Entry	WorkPlanTemplateEntry	Standard Object			
Work Plan Template	WorkPlanTemplate	Standard Object			
Work Plan	WorkPlan	Standard Object			
Work Order Line Item	WorkOrderLineitem	Standard Object			
Work Order	WorkOrder	Standard Object			
Web Store Inventory Source	WebStoreInventorySource	Standard Object			

The right side of the screen features a user profile for Saradappa Gari Sreetha, options for DISPLAY DENSITY (Compact), and links for SETTINGS, LOG OUT, and OPTIONS (Switch to Salesforce Classic, Add Username).

MILESTONE 3: TABS

The screenshot shows the Salesforce Setup interface with the 'Custom Tabs' page open. The left sidebar has 'User Interface' expanded, with 'Tabs' selected. The main content area is titled 'Custom Tabs' and contains sections for 'Custom Object Tabs', 'Web Tabs', 'Visualforce Tabs', and 'Lightning Component Tabs'. Under 'Custom Object Tabs', there is a table listing six tabs:

Action	Label	Tab Style	Description
Edit Del	Inventory Transactions	Stethoscope	
Edit Del	Order Items	Stethoscope	
Edit Del	Products	Stethoscope	
Edit Del	Purchase Orders	Stethoscope	
Edit Del	Suppliers	Stethoscope	

Below the table, there are three empty sections for 'Web Tabs', 'Visualforce Tabs', and 'Lightning Component Tabs'.

MILESTONE 4: The Lightning App

The screenshot shows the Lightning App Builder interface with a list view for 'Product_c'. The top navigation bar includes 'Products', 'Purchase Orders', 'Order Items', 'Inventory Transactions', 'Suppliers', 'Reports', and 'Dashboards'. On the left, an 'App Launcher' sidebar shows a search field with 'med' and a list for 'Medical Inventory Management' with 'Items' and 'No results'.

The main content area features a blue-toned illustration of a city skyline with clouds and birds. Below the illustration, a message reads:

Nothing to see here
There's nothing in your list yet. Try adding a new record.

At the bottom, there are standard Windows taskbar icons and system status indicators.

MILESTONE 5: Fields

The screenshot shows the Salesforce Object Manager interface for the 'Product' object. The left sidebar lists various setup options like Page Layouts, Lightning Record Pages, and Field Sets. The main content area displays a table titled 'Fields & Relationships' with 12 items. The columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The data includes:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedBy	Lookup(User)		
Current Stock Level	Current_Stock_Level__c	Number(18, 0)		
Expiry Date	Expiry_Date__c	Date		
Last Modified By	LastModifiedBy	Lookup(User)		
Minimum Stock Level	Minimum_Stock_Level__c	Number(18, 0)		
Order Date	Order_Date__c	Date		
Owner	OwnerId	Lookup(User,Group)		✓
Product Description	Product_Description__c	Text Area(255)		
Product ID	Name	Text(80)		✓
Product Name*	Product_Name__c	Text(255)		
Supplier ID	Supplier_ID__c	Lookup(Supplier)		✓
Unit Price	Unit_Price__c	Currency(16, 2)		

The screenshot shows the Salesforce Object Manager interface for the 'Purchase Order' object. The left sidebar lists various setup options. The main content area displays a table titled 'Fields & Relationships' with 16 items. The columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The data includes:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Actual Delivery Date	Actual_Delivery_Date__c	Date		
Amount	Amount__c	Number(18, 0)		
Created By	CreatedBy	Lookup(User)		
Expected Delivery Date	Expected_Delivery_Date__c	Date		
Last Modified By	LastModifiedBy	Lookup(User)		
Order Count	Order_Count__c	Roll-Up Summary (COUNT Order Item)		
Order Date	Order_Date__c	Date		
Owner	OwnerId	Lookup(User,Group)		✓
Product ID	Product_ID__c	Number(18, 0)		
Product Name	Product_Name__c	Text(18)		
Purchase Order ID	Purchase_Order_ID__c	Text(18)		
Purchase Order Name	Name	Text(80)		✓
Quantity Received	Quantity_Received__c	Number(18, 0)		
Supplier ID	Supplier_ID__c	Lookup(Supplier)		

Inventory Transaction | Salesforce

https://orgfarm-afaf6a1814a-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01lgK00000zCkD/FieldsAndRelationships/view

Setup Home Object Manager

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 Restriction Rules Scoping Rules Object Access Triggers Flow Triggers Validation Rules

Fields & Relationships 8 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedBy	Lookup(User)		✓
Inventory Transaction Name	Name	Text(80)		✓
Last Modified By	LastModifiedBy	Lookup(User)		✓
Owner	OwnerId	Lookup(User,Group)		✓
Purchase Order ID	Purchase_Order_ID_c	Lookup(Purchase Order)		✓
Total Order Cost	Total_Order_Cost_c	Formula (Currency)		✓
Transaction Date	Transaction_Date_c	Date		✓
Transaction Type	Transaction_Type_c	Picklist		✓

1 cm of rain Wednesday ENG IN 27-06-2025

Supplier | Salesforce

https://orgfarm-afaf6a1814a-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01lgK00000zCnR/FieldsAndRelationships/view

Setup Home Object Manager

SETUP > OBJECT MANAGER
Supplier

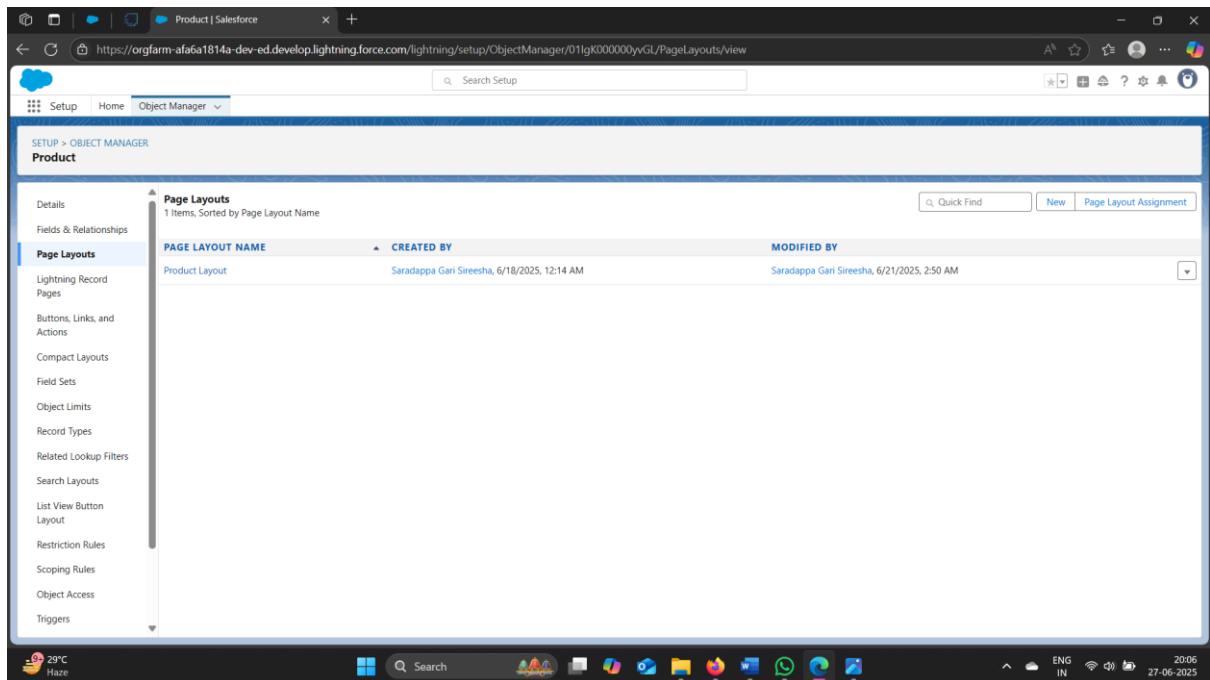
Details Fields & Relationships Page Layouts Lightning Record Pages Buttons, Links, and Actions Compact Layouts Field Sets Object Limits Record Types Related Lookup Filters Restriction Rules Scoping Rules Object Access Triggers Flow Triggers Validation Rules

Fields & Relationships 9 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address_c	Text(18)		✓
Contact Person	Contact_Person_c	Text(18)		✓
Created By	CreatedBy	Lookup(User)		✓
Email	Email_c	Email		✓
Last Modified By	LastModifiedBy	Lookup(User)		✓
Owner	OwnerId	Lookup(User,Group)		✓
Phone Number	Phone_Number_c	Phone		✓
Supplier ID	Supplier_ID_c	Text(18)		✓
Supplier Name	Name	Text(80)		✓

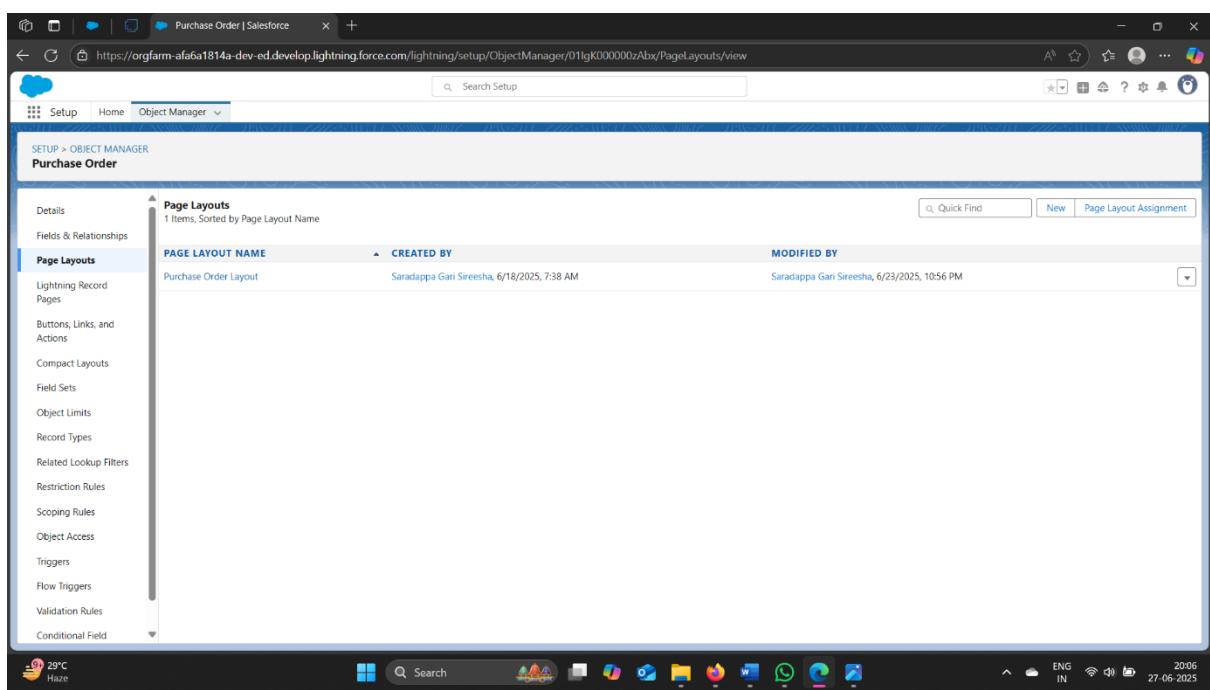
1 cm of rain Wednesday ENG IN 27-06-2025

MILESTONE 6: Editing of Page Layouts



The screenshot shows the Salesforce Object Manager interface for the 'Product' object. The left sidebar is collapsed, and the main area displays the 'Page Layouts' section. A single layout named 'Product Layout' is listed, created by Saradappa Gari Sireesha on June 18, 2025, at 12:14 AM, and last modified by the same user on June 21, 2025, at 2:50 AM.

PAGE LAYOUT NAME	CREATED BY	MODIFIED BY
Product Layout	Saradappa Gari Sireesha, 6/18/2025, 12:14 AM	Saradappa Gari Sireesha, 6/21/2025, 2:50 AM



The screenshot shows the Salesforce Object Manager interface for the 'Purchase Order' object. The left sidebar is collapsed, and the main area displays the 'Page Layouts' section. A single layout named 'Purchase Order Layout' is listed, created by Saradappa Gari Sireesha on June 18, 2025, at 7:38 AM, and last modified by the same user on June 23, 2025, at 10:56 PM.

PAGE LAYOUT NAME	CREATED BY	MODIFIED BY
Purchase Order Layout	Saradappa Gari Sireesha, 6/18/2025, 7:38 AM	Saradappa Gari Sireesha, 6/23/2025, 10:56 PM

Inventory Transaction | Salesforce

https://orgfarm-afab6a1814a-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01gK00000zckD/PageLayouts/view

Setup Home Object Manager

SETUP > OBJECT MANAGER
Inventory Transaction

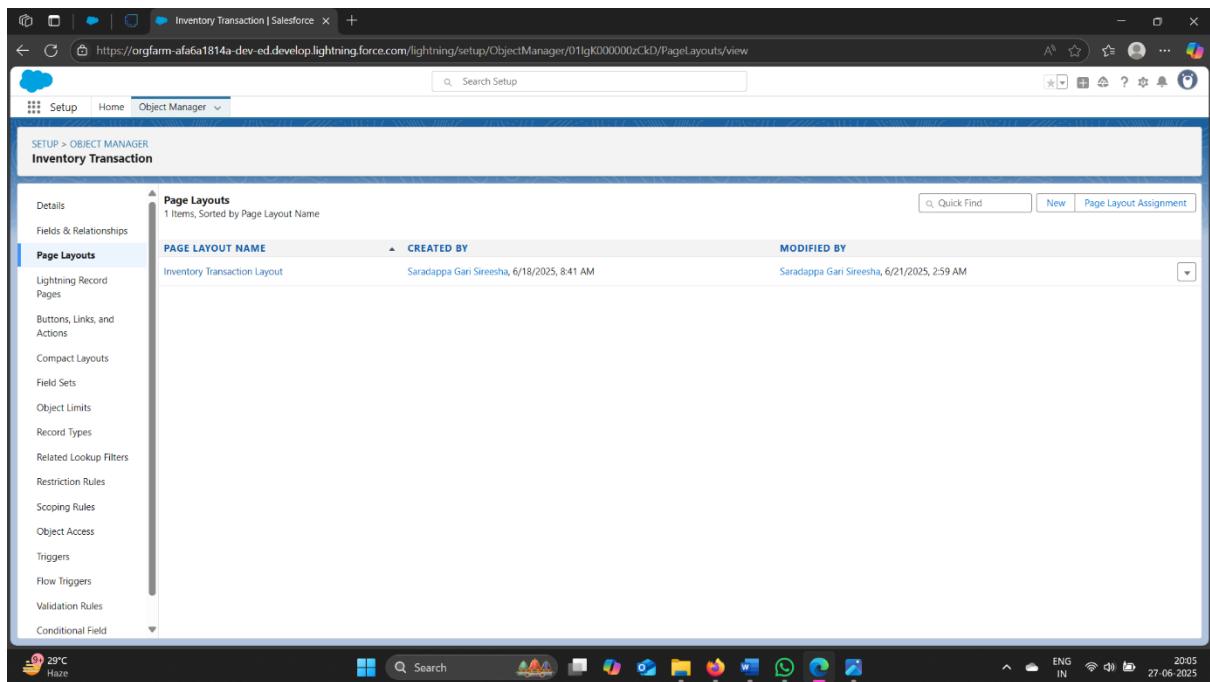
Page Layouts

1 items, Sorted by Page Layout Name

PAGE LAYOUT NAME	CREATED BY	MODIFIED BY
Inventory Transaction Layout	Saradappa Gari Sireesha, 6/18/2025, 8:41 AM	Saradappa Gari Sireesha, 6/21/2025, 2:59 AM

Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Restriction Rules
Scoping Rules
Object Access
Triggers
Flow Triggers
Validation Rules
Conditional Field

29°C Haze ENG IN 27-06-2025



Supplier | Salesforce

https://orgfarm-afab6a1814a-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01gK00000zCnR/PageLayouts/view

Setup Home Object Manager

SETUP > OBJECT MANAGER
Supplier

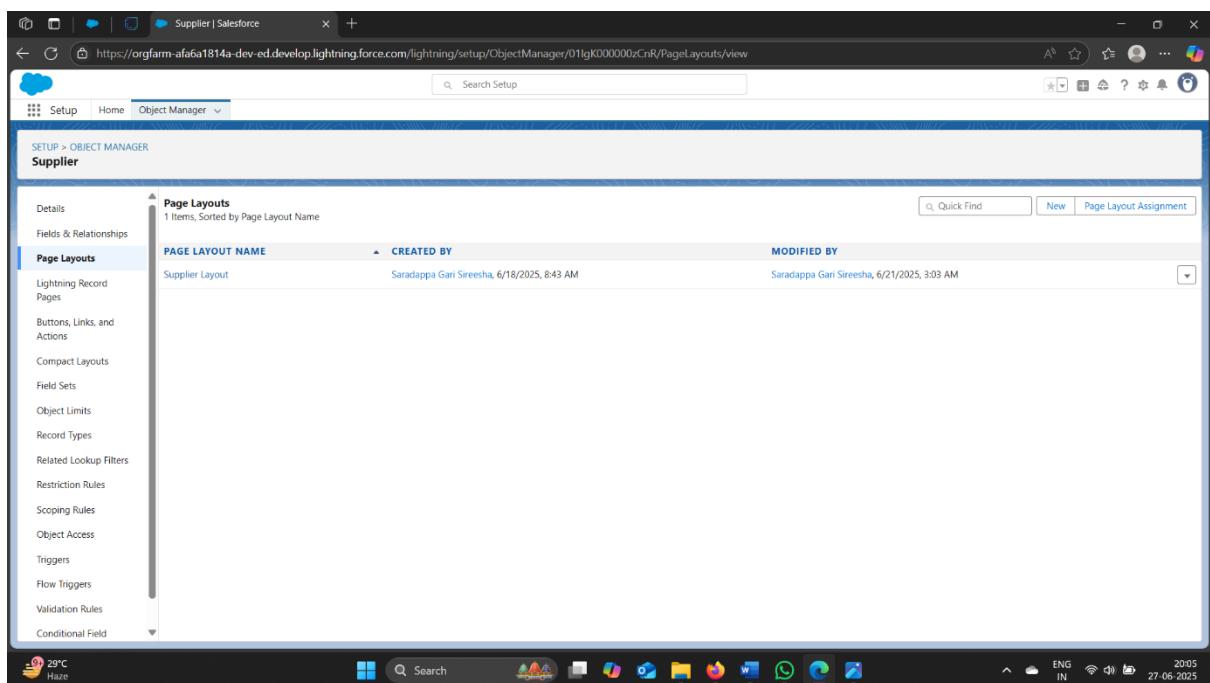
Page Layouts

1 items, Sorted by Page Layout Name

PAGE LAYOUT NAME	CREATED BY	MODIFIED BY
Supplier Layout	Saradappa Gari Sireesha, 6/18/2025, 8:43 AM	Saradappa Gari Sireesha, 6/21/2025, 3:03 AM

Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Restriction Rules
Scoping Rules
Object Access
Triggers
Flow Triggers
Validation Rules
Conditional Field

29°C Haze ENG IN 27-06-2025



MILESTONE 7: Compact Layouts

The screenshot shows the Salesforce Object Manager interface for the 'Product' object. The left sidebar navigation menu is visible, with 'Compact Layouts' selected under the 'Layouts' section. The main content area displays a table titled 'Compact Layouts' with two items:

LABEL	API NAME	PRIMARY	MODIFIED BY	LAST MODIFIED
Product Compact Layout	Product_Compact_Layout	✓	Saradappa Gari Sireesha	6/21/2025, 3:04 AM
System Default	SYSTEM			

The status bar at the bottom indicates it's a Windows 10 desktop environment with a temperature of 29°C and a date of 27-06-2025.

The screenshot shows the Salesforce Object Manager interface for the 'Purchase Order' object. The left sidebar navigation menu is visible, with 'Compact Layouts' selected under the 'Layouts' section. The main content area displays a table titled 'Compact Layouts' with two items:

LABEL	API NAME	PRIMARY	MODIFIED BY	LAST MODIFIED
Purchase Order Compact Layout	Purchase_Order_Compact_Layout	✓	Saradappa Gari Sireesha	6/21/2025, 3:05 AM
System Default	SYSTEM			

The status bar at the bottom indicates it's a Windows 10 desktop environment with a temperature of 29°C and a date of 27-06-2025.

MILESTONE 8: Validation Rules

The screenshot shows the Salesforce Object Manager interface for the Purchase Order object. The left sidebar lists various setup options like Details, Fields & Relationships, Page Layouts, and Validation Rules, with Validation Rules currently selected. The main content area displays a table titled "Validation Rules" with one item listed:

RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
Expected_Delivery_Date_Validation	Top of Page	The Expected Delivery Date should not exceed 7 days.	✓	Saradappa Gari Sireesha, 6/21/2025, 3:07 AM

The browser address bar shows the URL: https://orgfarm-afa6a1814a-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01lgk000000zAbx/ValidationRules/view. The system status bar at the bottom indicates it's 27-06-2025, 20:11, ENG IN, with a battery level of 29%.

MILESTONE 9: Profiles

The screenshot shows the Salesforce Setup interface under the Profiles section. The left sidebar includes categories like Hyperforce Assistant, Users, Data, Feature Settings, Data.com, Sales, and Marketing. The main content area displays the 'Inventory Manager' profile details. The profile name is 'Inventory Manager', user license is 'Salesforce', and it was created by 'Saradappa Gari Sireesha' on 6/20/2025, 3:26 AM. The 'Custom Profile' checkbox is checked. The 'Page Layouts' section lists various standard object layouts such as Global Layout, Email Application, Home Page Layout, Account, Alternative Payment Method, Appointment Invitation, and Asset, each with a 'View Assignment' link. A large number of record types are listed under 'Record Types' with their respective layouts and assignment links.

The screenshot shows the Salesforce Setup interface under the Profiles section. The left sidebar includes categories like Hyperforce Assistant, Users, Data, Feature Settings, Data.com, Sales, and Marketing. The main content area displays the 'Purchase Manager' profile details. The profile name is 'Purchase Manager', user license is 'Salesforce', and it was created by 'Saradappa Gari Sireesha' on 6/20/2025, 3:33 AM. The 'Custom Profile' checkbox is checked. The 'Page Layouts' section lists various standard object layouts such as Global Layout, Email Application, Home Page Layout, Account, Alternative Payment Method, Appointment Invitation, and Asset, each with a 'View Assignment' link. A large number of record types are listed under 'Record Types' with their respective layouts and assignment links.

MILESTONE 10: Roles

The screenshot shows the Salesforce Lightning Setup interface. The top navigation bar includes tabs for Roles | Salesforce and a search bar labeled "Search Setup". The left sidebar has sections for Setup, Home, Object Manager, and a search bar for "Q_ users". Under "Users", there are links for Permission Set Groups, Permission Sets, Profiles, Public Groups, Queues, Roles (which is selected), User Management Settings, and Users. Under "Feature Settings", there are links for Data.com and Prospector. A note at the bottom says " Didn't find what you're looking for? Try using Global Search." The main content area is titled "SETUP Roles" and contains a table with columns: Action, Role +, Reports to, and Report Display Name. The table lists various roles such as CEO, CFO, COO, Director, Channel Sales, SVP, Customer Support, International, Customer Support, North America, VP, North American Sales, Director, Channel Sales, Director, Direct Sales, Eastern Sales Team, Director, Direct Sales, Installation & Repair Services, Inventory Manager, SVP, Customer Service & Support, Marketing Team, Purchasing Manager, VP, Marketing, SVP, Sales & Marketing, VP, International Sales, SVP, Sales & Marketing, VP, Marketing, VP, North American Sales, Western Sales Team, and Director, Direct Sales. The "Report Display Name" column provides a more readable version of the role names. At the bottom of the table, there are buttons for "Show me fewer" and "New Role". The footer includes a navigation bar with letters A-Z and Other, and icons for ENG IN, battery, signal, and volume.

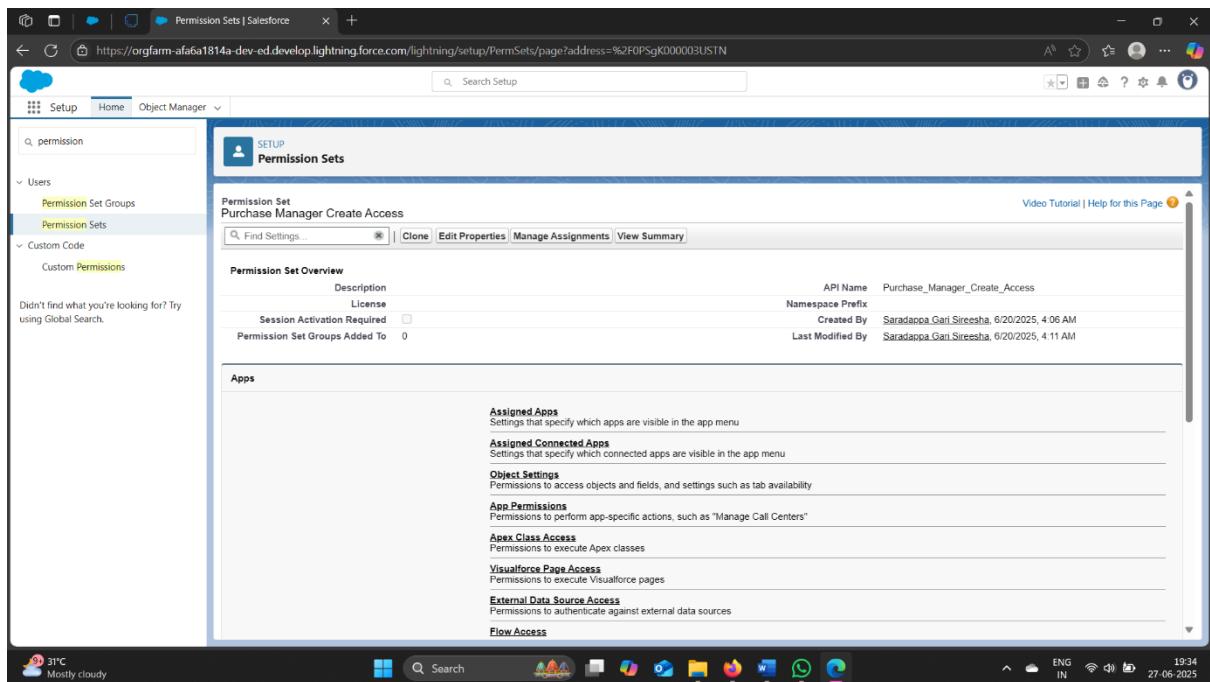
Action	Role +	Reports to	Report Display Name
Edit Del Assign	CEO	CEO	CEO
Edit Del Assign	CFO	CEO	CFO
Edit Del Assign	Channel Sales Team	Director, Channel Sales	Channel Sales Team
Edit Del Assign	COO	CEO	COO
Edit Del Assign	Customer Support, International	SVP, Customer Service & Support	Customer Support, International
Edit Del Assign	Customer Support, North America	SVP, Customer Service & Support	Customer Support, North America
Edit Del Assign	Director, Channel Sales	VP, North American Sales	Director, Channel Sales
Edit Del Assign	Director, Direct Sales	VP, North American Sales	Director, Direct Sales
Edit Del Assign	Eastern Sales Team	Director, Direct Sales	Eastern Sales Team
Edit Del Assign	Installation & Repair Services	SVP, Customer Service & Support	Installation & Repair Services
Edit Del Assign	Inventory Manager	SVP, Sales & Marketing	Sales & Marketing
Edit Del Assign	Marketing Team	VP, Marketing	Marketing Team
Edit Del Assign	Purchasing Manager	SVP, Sales & Marketing	Sales & Marketing
Edit Del Assign	SVP, Customer Service & Support	CEO	SVP, Customer Service & Support
Edit Del Assign	SVP, Human Resources	CEO	SVP, Human Resources
Edit Del Assign	SVP, Sales & Marketing	CEO	SVP, Sales & Marketing
Edit Del Assign	VP, International Sales	SVP, Sales & Marketing	VP, International Sales
Edit Del Assign	VP, Marketing	SVP, Sales & Marketing	VP, Marketing
Edit Del Assign	VP, North American Sales	SVP, Sales & Marketing	VP, North American Sales
Edit Del Assign	Western Sales Team	Director, Direct Sales	Western Sales Team

MILESTONE 11: Users

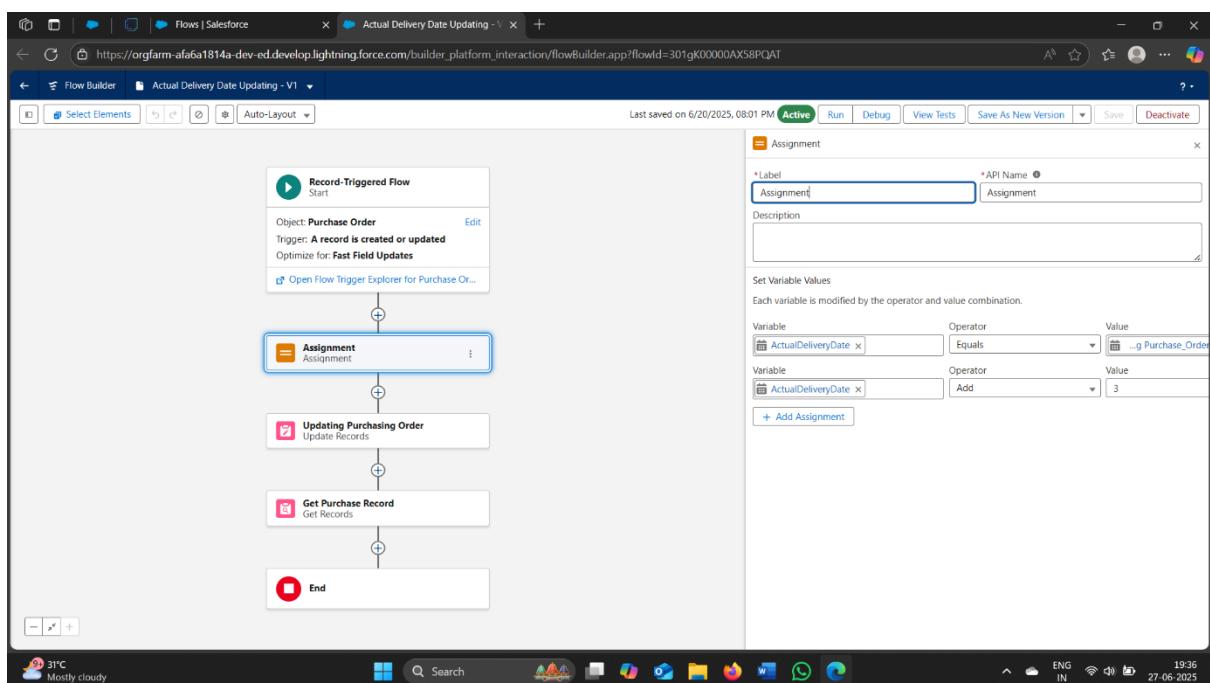
The screenshot shows the Salesforce Lightning Experience interface. The top navigation bar includes links for Home, Object Manager, and a search bar labeled "Search Setup". The left sidebar is titled "SETUP" and contains sections for "Permission Set Groups", "Profiles", "Public Groups", "Queues", "Roles", "User Management Settings", and "Users". Under "Users", there are sub-sections for "Feature Settings" and "Prospector Users". A global search bar at the bottom left says " Didn't find what you're looking for? Try using Global Search." The main content area is titled "Active Users" and displays a list of users with columns for Action, Full Name, Alias, Username, Role, Active, and Profile. Each user row includes edit and delete icons. The "Profile" column lists the profiles assigned to each user. At the bottom of the user list are buttons for "New User", "Reset Password(s)", and "Add Multiple Users". The bottom navigation bar features icons for Home, Search, and various system functions.

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/> Edit	Chatter Expert	Chatter	chatty_00dgk000005oyctuaw_yhjwymfvzr@chatter.salesforce.com		<input checked="" type="checkbox"/>	Chatter Free User
<input type="checkbox"/> Edit	EPIC_OrgFarm	OEPIIC	epic_c7afe0da26f@orgfarm.com		<input checked="" type="checkbox"/>	System Administrator
<input type="checkbox"/> Edit	Krishna_Ram	rkris	iswathi385@gmail.com	Inventory_Manager	<input checked="" type="checkbox"/>	Inventory_Manager
<input type="checkbox"/> Edit	PurchaseM_John	jouch	swathi@purchasecom.com	Purchasing_Manager	<input checked="" type="checkbox"/>	Purchase Manager
<input type="checkbox"/> Edit	Sreetha_Saradappa_Gan	jaw	iswathi385451@agentforce.com		<input checked="" type="checkbox"/>	System Administrator
<input type="checkbox"/> Edit	User_Integration	integ	integration@00dgk000005oyctuaw.com		<input checked="" type="checkbox"/>	Analytics Cloud Integration User
<input type="checkbox"/> Edit	User_Security	sec	insightssecurity@00dgk000005oyctuaw.com		<input checked="" type="checkbox"/>	Analytics Cloud Security User

MILESTONE 12: Permission Sets



MILESTONE 13: Flows



MILESTONE 14: Triggers

The screenshot shows the Salesforce Setup interface for Apex Triggers. The left sidebar navigation includes Feature Settings, Chatter, Groups, Triggers (selected), Objects and Fields, and Custom Code. The main content area displays the details for the 'CalculateTotalAmountTrigger'. The trigger's name is 'CalculateTotalAmountTrigger', it was created by Saradappa Gari Sireesha on 6/20/2025 at 7:43 AM, and it is active. The trigger code is:

```
1Trigger CalculateTotalAmountTrigger on Order__Item__c (before insert) {  
2    3}  
4
```

At the bottom of the page, there are links for Apex Trigger, Version Settings, and Trace Flags.

MILESTONE 15: REPORTS

The screenshot shows a web browser window displaying a Salesforce Lightning application. The URL is <https://orgfarm-af6a1814a-dev-ed.lightning.force.com/lightning/o/Report/home?queryScope=mr>. The main content area is titled "RECENT" and lists three reports:

Report Name	Description	Folder	Created By	Created On	Subscribed
Milestone Progress by User	Analyze how different users are progressing on a milestone.	Enablement Dashboard Reports Summer '24	Automated Process	6/14/2025, 7:35 AM	<input checked="" type="checkbox"/>
Complete Purchase Details Report	Private Reports	Saradappa Gari Sireesha	Saradappa Gari Sireesha	6/23/2025, 6:24 AM	<input checked="" type="checkbox"/>
Purchase Orders based on Suppliers.	Private Reports	Saradappa Gari Sireesha	Saradappa Gari Sireesha	6/24/2025, 9:44 PM	<input checked="" type="checkbox"/>

The left sidebar contains navigation links for "Medical Inventory ...", "Products", "Purchase Orders", "Order Items", "Inventory Transactions", "Suppliers", "Reports", and "Dashboards". A search bar at the top right says "Search recent reports...". The bottom of the screen shows a Windows taskbar with various pinned icons and system status indicators.

MILESTONE 16: DASHBOARDS

The screenshot shows the Salesforce Lightning interface for managing dashboards. The URL is https://orgfarm-af6a1814a-dev-ed.lightning.force.com/lightning/o/Dashboard/home?queryScope=everything. The top navigation bar includes links for Medical Inventory, Products, Purchase Orders, Order Items, Inventory Transactions, Suppliers, Reports, and Dashboards. The left sidebar has sections for Dashboards (Recent, Created by Me, Private Dashboards), All Dashboards (selected), Folders (All Folders, Created by Me), and Favorites (All Favorites). The main content area displays a table of dashboards:

Dashboard Name	Description	Folder	Created By	Created On	Subscribed
Enablement Dashboard	View data on how Enablement helps drive your business outcomes. This is your main dashboard for all Enablement analytics. Don't delete it. If you want to make changes to this dashboard, duplicate it.	Enablement Dashboard Spring '24	Automated Process	6/14/2025, 7:35 AM	<input type="checkbox"/>
Enablement Dashboard	View data on how Enablement helps drive your business outcomes. This is your main dashboard for all Enablement analytics. Don't delete it. If you want to make changes to this dashboard, duplicate it.	Enablement Dashboard Summer '24	Automated Process	6/14/2025, 7:35 AM	<input type="checkbox"/>
Medical Inventory Dashboard	Private Dashboards	Saradappa Gari Sreesha	6/24/2025, 10:09 PM	<input type="checkbox"/>	

The bottom status bar shows system information: ENG IN, 27-06-2025, 15:56.

8. ADVANTAGES

AND

DISADVANTAGES

ADVANTAGES

- **Improved Accuracy:** Real-time tracking of inventory levels eliminates manual errors and ensures accurate stock counts.
- **Optimized Stock Levels:** Ensures essential medical supplies are available without overstocking, reducing waste and costs.
- **Cost Efficiency:** Reduces procurement costs through better planning and minimizes unnecessary expenses.
- **Enhanced Patient Care:** Timely availability of critical medicines and equipment improves patient care and outcomes.
- **Regulatory Compliance:** Helps maintain adherence to healthcare standards and safety regulations.
- **Supply Chain Visibility:** Provides transparency across procurement, storage, and distribution.
- **Automated Workflows:** Streamlines inventory management processes, reducing manual efforts and increasing efficiency.
- **Predictive Analytics:** Enables demand forecasting and better planning, reducing stockouts and overstocking .
- **Custom Objects:** Create custom objects to track medical inventory, including products, warehouses, and inventory transactions.
- **Lightning Components:** Use Lightning Components to build custom user interfaces for inventory management.
- **Apex Triggers:** Use Apex triggers to automate inventory management workflows and enforce business rules.
- **Salesforce Mobile App:** Use the Salesforce Mobile App to access inventory management functionality on-the-go.

DISADVANTAGES

- **Implementation Challenges:** Integrating inventory management software with existing systems can be complex and time-consuming.
- **Data Security Risks:** Storing sensitive inventory data in the cloud may pose security risks if not properly protected.
- **Dependence on Technology:** Over-reliance on automated systems can lead to inefficiencies if technical issues arise.
- **High Upfront Costs:** Implementing a comprehensive inventory management system can require significant upfront investment.
- **Training and Support:** Requires training for staff to effectively use the system, which can be time-consuming and costly.

Best Practices to Overcome Disadvantages:

- **Assess Needs:** Conduct thorough needs assessment before implementing inventory management software.
- **Choose the Right Solution:** Select a solution that integrates with existing systems and meets specific needs.
- **Training and Support:** Provide comprehensive training and ongoing support to staff.
- **Data Security Measures:** Implement robust security measures to protect sensitive data.
- **Regular Audits:** Conduct regular audits to ensure data accuracy and compliance.

9.CONCLUSION

The Medical Inventory Management project will provide a comprehensive solution for healthcare organizations to manage medical inventory, improving patient care and operational efficiency.

The Medical Inventory Management project in Salesforce is a comprehensive solution designed to streamline inventory management processes for healthcare organizations. By leveraging the Salesforce platform, this project aims to provide real-time tracking of medical supplies, equipment, and pharmaceuticals, ensuring that healthcare professionals have access to the resources they need to provide high-quality patient care.

Challenges and Limitations:

- 1. Data Security and Compliance:*** Ensuring that patient data and inventory information are secure and compliant with regulatory requirements.
- 2. Integration with Existing Systems:*** Integrating with existing healthcare systems and ensuring seamless data exchange.
- 3. User Adoption:*** Ensuring that healthcare professionals adopt the new system and use it effectively.

By developing a Medical Inventory Management system in Salesforce, healthcare organizations can improve patient care, reduce costs, and increase efficiency, ultimately leading to better healthcare outcomes.

10. FUTURE SCOPE

FUTURE ENHANCEMENTS

Future enhancements may include integration with other healthcare systems, advanced analytics, and artificial intelligence-powered inventory management.

- **Automated Inventory Tracking:** Implement barcode scanning and RFID tracking to ensure accurate and real-time inventory updates
- **Predictive Analytics:** Leverage machine learning algorithms to forecast demand and optimize inventory levels, reducing stockouts and overstocking
- **Smart Reordering:** Automate reordering processes based on predefined thresholds, lead times, and supplier constraints
- **Inventory Visibility:** Provide real-time visibility into inventory levels, locations, and movement across multiple warehouses and facilities
- **Salesforce Health Cloud Integration:** Integrate with Salesforce Health Cloud to leverage its capabilities in managing medical inventory, tracking product information, and streamlining sales processes
- **Electronic Health Records (EHRs) Integration:** Integrate with EHR systems to ensure seamless data exchange and accurate inventory management
- **Supplier Integration:** Integrate with supplier systems to enable real-time inventory updates, automated ordering, and streamlined communication

11.APPENDIX

- *Source Code*

- *Dataset Link*

-*Github & Project Demo Link*

<https://github.com/YashwithaPalla/Medical-Inventory-Management/blob/main/Video%20demo/demo%20video.mp4>