



RETAIL MANAGEMENT APPLICATION



SALESFORCE NAAN MUDHALVAN PROJECT REPORT

Submitted By

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BONAFIDE CERTIFICATE

Certified that this project report titled “**RETAIL MANAGEMENT APPLICATION**” is the Bonafide work of “**KARTHICK S P (611220205015), RESHINATH A (611220205028), JEFFERY ROZARIO J (611220205305), KALEESWARAN S (611220205306), ROHAN N P (611220205309)**” who carried out the project work under my supervision.

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ACKNOWLEDGEMENT

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1. INTRODUCTION

Salesforce, a leading cloud-based Customer Relationship Management (CRM) platform, is a pivotal tool for organizations to manage customer data, optimize sales processes, and elevate customer interactions. Its multifaceted features include Sales Cloud, which enhances sales management through lead tracking, opportunity management, and seamless email integration. Service Cloud focuses

on exceptional customer support, featuring case management, knowledge base development, and multi-channel support. Marketing Cloud empowers businesses with marketing automation, email campaigns, social media engagement, and in-depth analytics. Salesforce's hallmark is its customizability, allowing businesses to tailor the platform to meet specific requirements, while robust integration capabilities facilitate seamless connections with other business applications.

The platform equips businesses with powerful reporting and analytics tools, enabling data-driven decisions and insightful, customized reports and dashboards. Salesforce ensures mobile accessibility, enabling users to stay connected and productive while on the move. A paramount emphasis on data security and compliance guarantees data protection and privacy. Whether you're a small start-up or a large enterprise, Salesforce offers scalability to accommodate your evolving needs.

Through Salesforce, organizations foster improved customer relationships, increased sales efficiency, and superior customer support. It empowers businesses to make data-driven decisions, streamline operations, and create impactful, targeted marketing campaigns. This introduction encapsulates Salesforce's capabilities and benefits, offering a concise overview for your project document, allowing for a better understanding of how the platform can contribute to your specific project goals.

2.PROJECT SPECIFICATIONS

2.1 Project Goal Retailing encompasses the business activities involved in selling goods and services to consumers for their personal, family, or household etc. A CRM product owner has requested to create two applications, one is a sales app for sales reps to use this

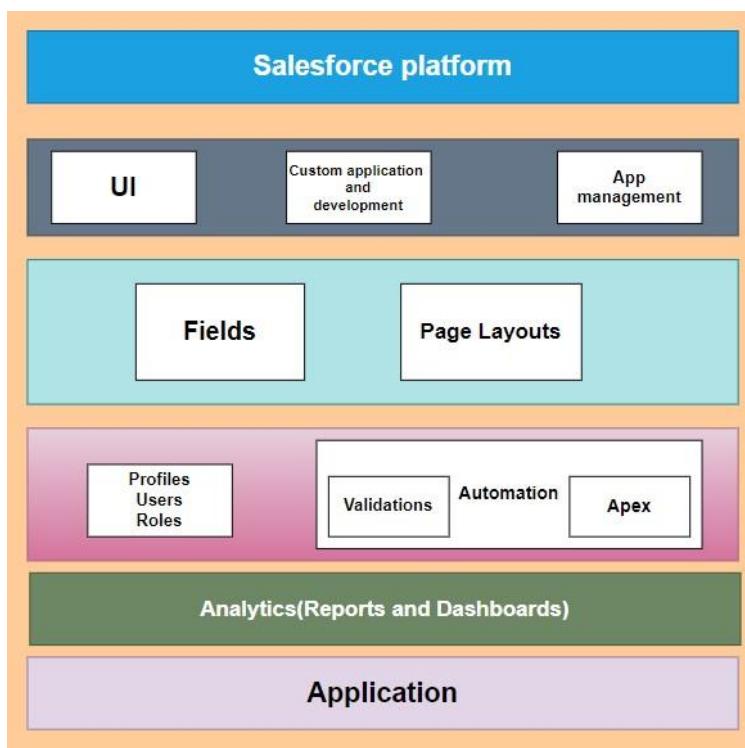
application and store customers data, and the second application is a service app for service reps/agents to provide support to customers in dealing cases. To generate business on top of the customers.

2.2 Project Scope

- **Object Creation (Milestone 1):** Custom objects and relationships will be defined to efficiently store and manage data related to Warehouse, Sales order and other relevant information.
- **Tabs Creation (Milestone 2):** Tabs will be configured to provide user-friendly access to different sections and functionalities within the CRM application.
- **Lightning App (Milestone 3):** The CRM application will be created, and it will serve as the central hub for managing application function by working together as a unit.
- **Fields & Relationships (Milestone 4):** Custom fields and relationships will be established to capture specific data attribute values that are required for a particular object in a record.
- **Users (Milestone 5):** A user is anyone who logs in to Salesforce. Users are employees at your company, such as sales reps, managers, and IT specialists, who need access to the company's records. Every user in Salesforce has a user account.
- **Validation Rules (Milestone 6):** As a crm product owner they requested to create a validation rule on account object on the phone field. It verify that the data a user enters in a record meets the standards you specify before the user can save the record
- **User Adoption (Milestone 7):** Strategies and tools will be implemented to encourage user adoption and make the application user-friendly.
- **Reports (Milestone 8):** Custom reports will be created to track and analyse data, providing valuable insights for users.

- **Dashboards (Milestone 9):** Dashboards will be designed to display key performance indicators and visual summaries of application data.
- **Flows (Milestone 10):** Flow is the most powerful automation tool. It can be trigger for record insert, update and. record delete and it can be run for both after and before events
- The project aims to create a CRM product owner has requested to create two applications, one is a sales app for sales reps to use this application and store customers data, and the second application is a service app for service reps/agents to provide support to customers in dealing cases. To generate business on top of the customers.

2.3 Technical Requirements



2.4 Functional Requirements

Customer Management: Create and manage customer profiles. Track customer purchase history and preferences. Implement loyalty programs and rewards.

Inventory Management: Maintain a database of products, including descriptions, prices, and quantities. Handle stock levels, reordering, and alerts for low inventory. Integrate with barcode scanners for efficient stock management.

Sales Order Processing: Create and process sales orders. Generate invoices and receipts. Handle returns and refunds.

Point of Sale (POS):

Implement a user-friendly POS system for in-store sales. Process payments, including cash, card, and digital payments. Issue receipts and track real-time sales data.

E-commerce Integration: Integrate with e-commerce platforms for online sales. Synchronize product catalog, pricing, and inventory.

Multi-Channel Sales: Support sales across various channels, including brick-and-mortar stores, online, and mobile apps.

Reporting and Analytics: Generate sales reports, including sales by product, store, and region. Provide real-time analytics to help with decision-making.

Employee Management: Manage employee schedules and time tracking. Track employee performance and incentives.

Supplier Management: Maintain a database of suppliers and their products. Automate purchase order creation.

Customer Support and CRM: Implement customer support features.

Integrate with customer relationship management tools.

Inventory Forecasting: Use data analytics to predict inventory needs.

Minimize overstock and understock situations.

Security and Compliance: Ensure data security and compliance with industry regulations.

Integration with Payment Gateways: Support various payment gateways and ensure secure transactions.

Mobile Accessibility: Provide mobile access for on-the-go management.

User Permissions and Roles: Define roles and permissions for different users to control access to sensitive data.

Marketing and Promotions: Implement marketing campaigns, discounts, and promotions.

Localization: Support multiple languages, currencies, and tax regulations for global retail operations.

Feedback and Reviews: Collect and manage customer feedback and reviews.

Returns and Refunds Management: Handle returns and refunds efficiently, including inventory adjustments.

Third-Party Integrations: Integrate with third-party systems for accounting, shipping, and more

3. PREPARATION DATA MODELING

Objects:

Salesforce objects are database tables that permit you to store data that is specific to an organization. It consists of fields (columns) and records (rows).

Salesforce objects are of two types:

1.Standard Objects: Standard objects are the kind of objects that are provided by salesforce.com such as users, contracts, reports, dashboards, etc.

2.Custom Objects: Custom objects are those objects that are created by users. They supply information that is unique and essential to their organization. They are the heart of any application and provide a structure for sharing data.

In This Application We Use 4 Custom Objects:

- 1.Warehouse
- 2.Sales order
- 3.Dispatch/Tracking
- 4.Dispatch/Delivery

1)Create A Custom Object for Warehouse:

- 1.From setup click on object manager.
- 2.Click create, select custom object.
- 3.Fill in the label as " Warehouse ".
- 4.Fill in the plural label as " Warehouses".
- 5.Record name: " Warehouse Name"
- 6.Select the data type as "Text".
- 7.In the Optional Features section, select Allow Reports .
- 8.In the Search Status section, select Allow Search.
- 9.In the Object Creation Options section, select Add Notes and Attachments related list to default page layout.

The screenshot shows the Salesforce Object Manager interface. In the top navigation bar, there are two tabs: 'Home | Salesforce' and 'Warehouse | Salesforce'. The main content area is titled 'Edit Custom Object Warehouse'. The 'Custom Object Information' section contains fields for 'Label' (set to 'Warehouse') and 'Plural Label' (set to 'Warehouses'). Below these, a note states: 'The singular and plural labels are used in tabs, page layouts, and reports. Be careful when changing the name or label as it may affect existing integrations and merge templates.' There is also a 'Description' field, which is currently empty. At the bottom of the page, there are 'Save', 'Save & New', and 'Cancel' buttons.

The screenshot shows the 'Warehouse' object details page. The top navigation bar has tabs for 'Service Setup', 'Home', and 'Object Manager'. The main content area is titled 'Warehouse' and shows the 'Details' tab selected. On the left, a sidebar lists various setup options like 'Fields & Relationships', 'Page Layouts', etc. The main details pane shows the API name 'Warehouse__c', a checked 'Custom' checkbox, and dropdowns for 'Singular Label' (set to 'Warehouse') and 'Plural Label' (set to 'Warehouses'). To the right, there are sections for 'Enable Reports' (checked), 'Track Activities', 'Track Field History', 'Deployment Status' (set to 'Deployed'), and 'Help Settings' (set to 'Standard salesforce.com Help Window'). At the bottom right are 'Edit' and 'Delete' buttons.

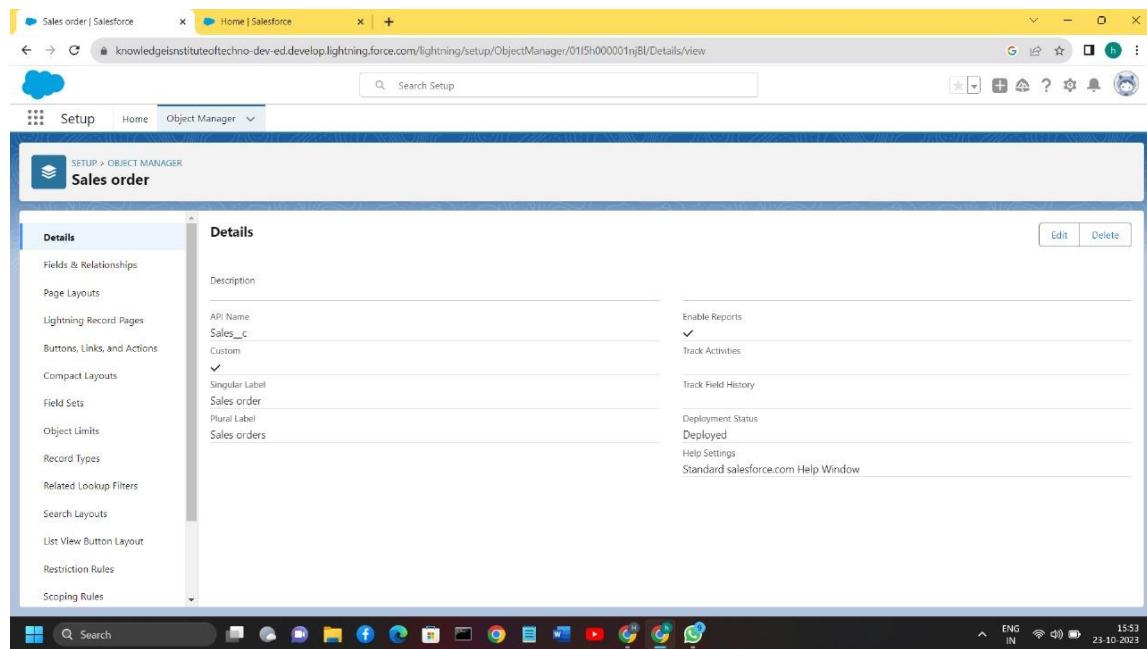
10. Leave everything else as is, and click Save.

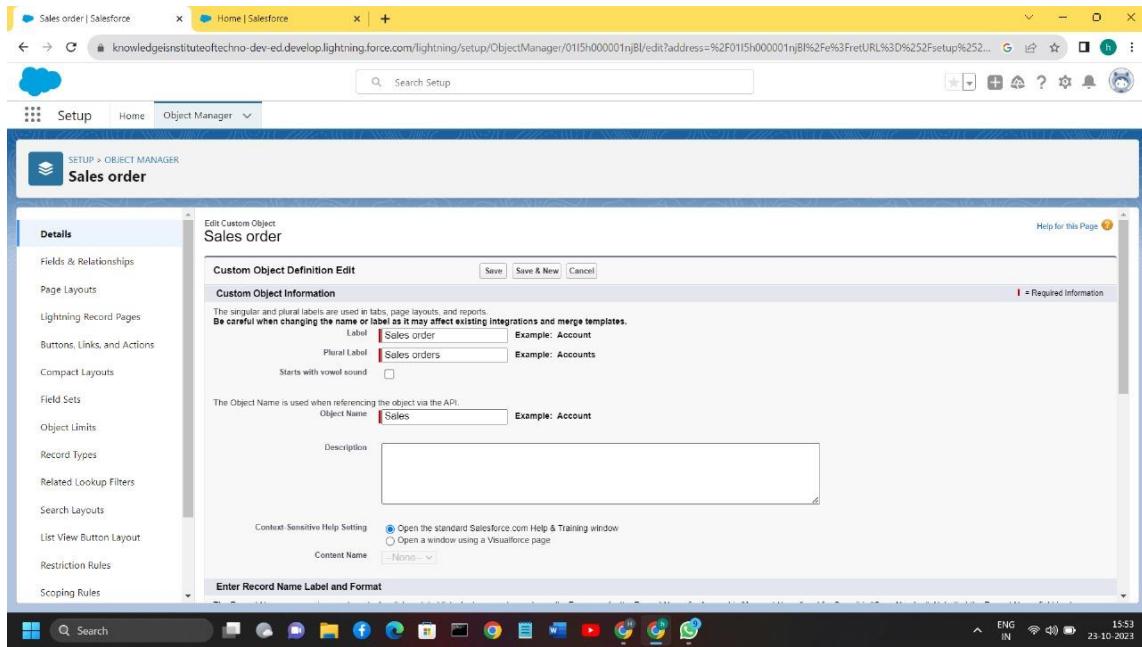
2) Creation of Jobs Object

1. Click on the gear icon and then select Setup.

2. Click on the object manager tab just beside the home tab.

3. After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object.
4. On the Custom Object Definition page, create the object as follows:
 5. Label: Sales order
 6. Plural Label: Sales orders
 7. Record Name: Sales Name
 8. Select the data type as "Text".
 9. Check the Allow Reports checkbox
 10. Check the Allow Search checkbox
11. In the Object Creation Options section, select Add Notes and Attachments related list to default page layout
12. Click Save.

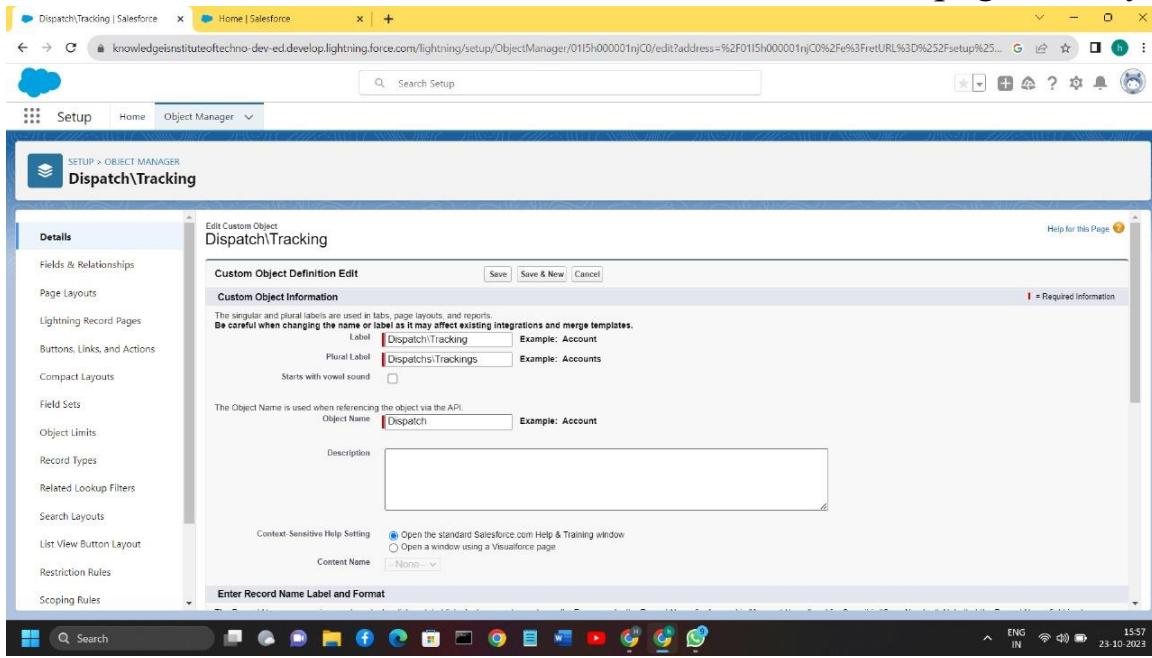




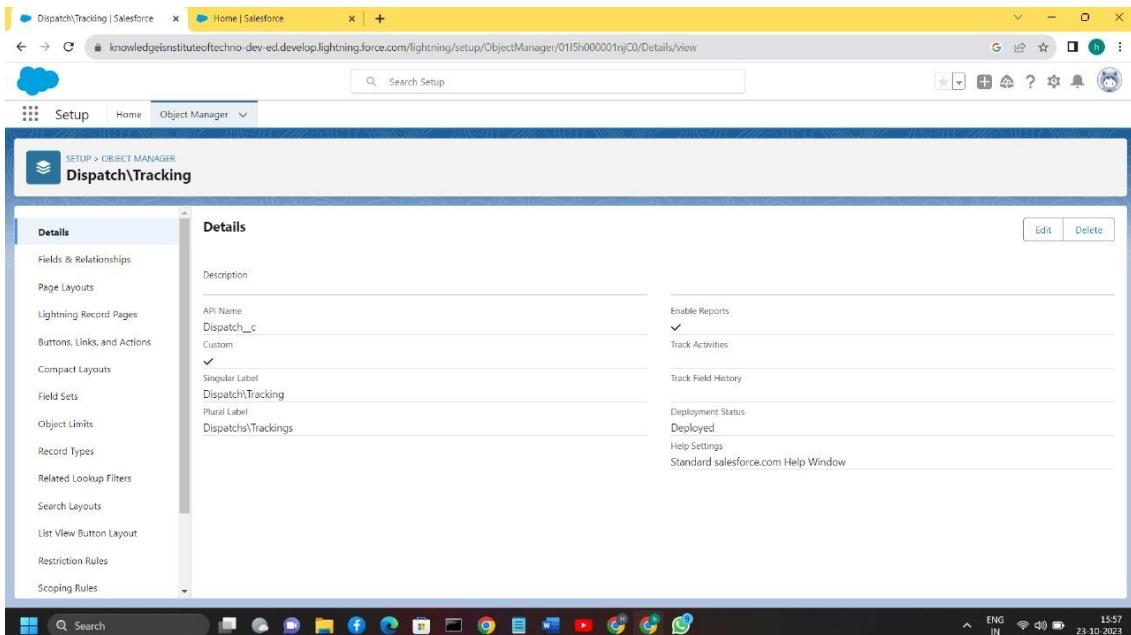
3) Creation of Dispatch/Tracking Object

1. Click on the gear icon and then select Setup.
2. Click on the object manager tab just beside the home tab.
3. After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object.
4. On the Custom Object Definition page, create the object as follows:
 5. Label: Dispatch/Tracking
 6. PluralLabel:
Dispatches/Trackings
 7. Record Name: dispatch Name
 8. Select the data type as "Text".
 9. Check the Allow Reports checkbox.
 10. Check the Allow Search checkbox.

11. In the Object Creation Options section, select Add Notes and Attachments related list to default page layout.



The screenshot shows the 'Edit Custom Object' screen for 'Dispatch\Tracking'. The 'Custom Object Information' section includes fields for Label (Dispatch\Tracking), Plural Label (Dispatchs\Trackings), and Object Name (Dispatch). The 'Description' field is empty. Context-Sensitive Help Setting is set to 'Open the standard Salesforce.com Help & Training window'. Content Name is listed as 'None'.



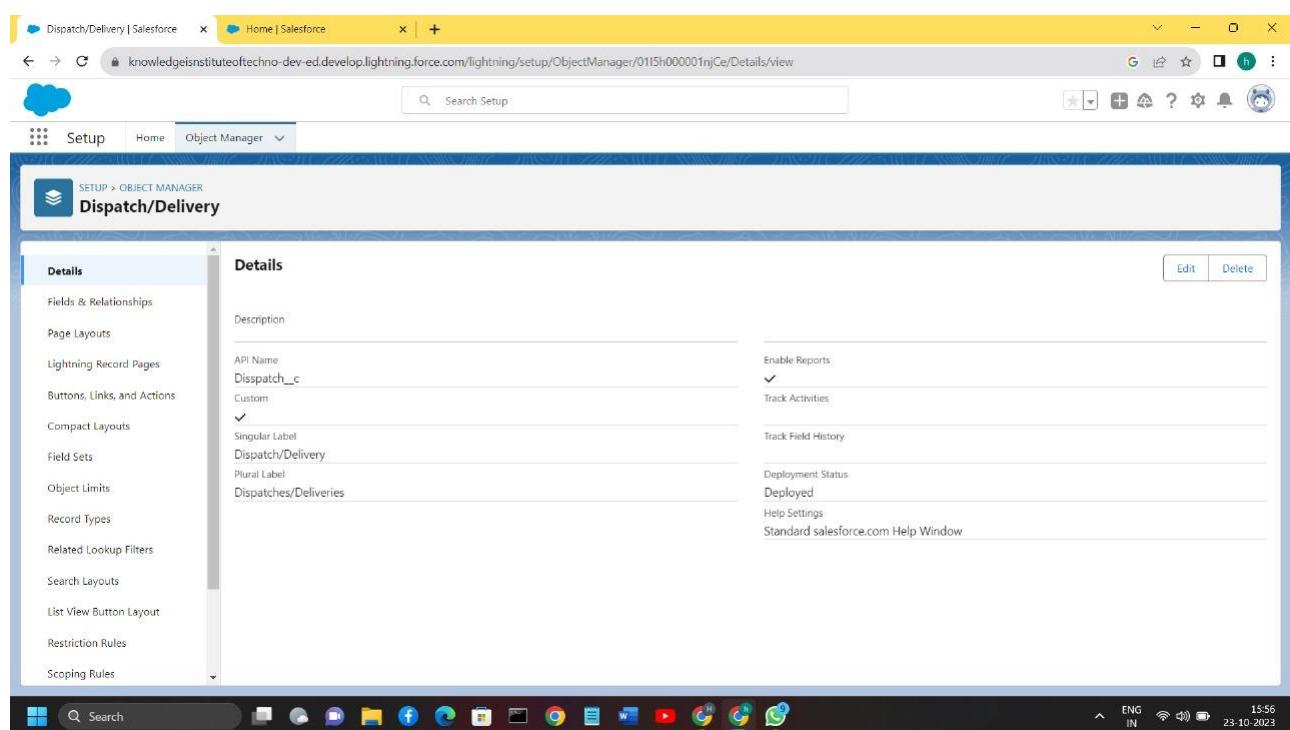
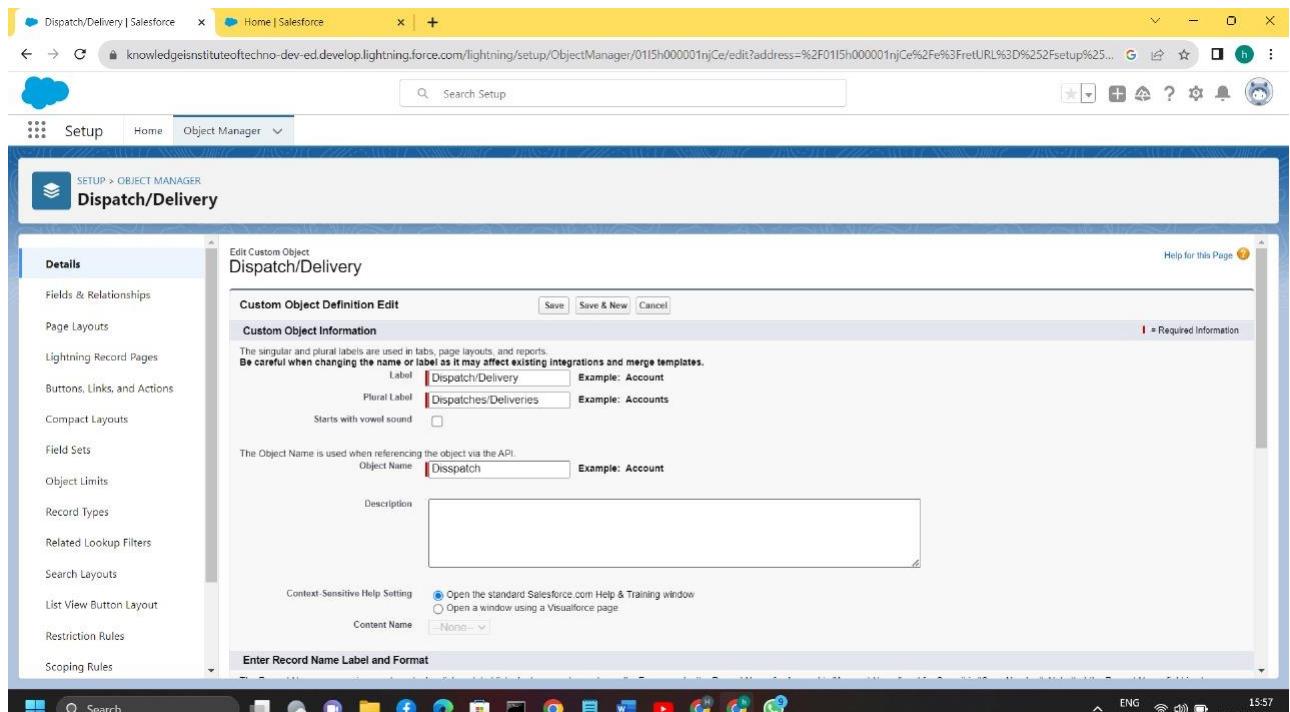
The screenshot shows the 'Details' tab for the 'Dispatch\Tracking' object. The API Name is set to 'Dispatch__c'. Other settings include Singular Label (Dispatch\Tracking) and Plural Label (Dispatchs\Trackings). The 'Edit' and 'Delete' buttons are visible at the top right.

12. Click Save.

4) Creation of Dispatch/Delivery Object

1. Click on the gear icon and then select Setup.

- 2.Click on the object manager tab just beside the home tab.
- 3.After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object.
- 4.On the Custom Object Definition page, create the object as follows:
 - 5.Label: Dispatch/Delivery
 - 6.Plural Label: Dispatches/Deliveries
 - 7.Record Name: Dispatch/Delivery
Number
 - 8.Select the data type as "Auto Number".
 - 9.Under display format enter "JP- {0000}"
 - 10.Enter starting number as 1 11.Check
the Allow Reports checkbox.
 - 12.Check the Allow Search checkbox.
 - 13.In the Object Creation Options section, select Add Notes and Attachments related list to default page layout.
 - 14.Click Save.



Tabs:

Tabs in Salesforce help users view the information at a glance. It displays the data of objects and other web content in the application.

There are mainly 4 types of tabs:

1. Standard Object Tabs: Standard object tabs display data related to standard objects.

2. Custom Object Tabs: Custom object tabs display data related to custom objects. These tabs look and function just like standard tabs.

3. Web Tabs: Web Tabs display any external Web-based application or Web page in a Salesforce tab.

4. Visualforce Tabs: Visualforce Tabs display data from a Visualforce Page.

1) Creation of Tab Warehouse

1. Now create a custom tab.

2. Click on Home tab, enter Tabs in Quick Find and select Tabs.

Under custom object tabs, click New

3. For Object, select Warehouse.

4. For Tab Style, select any icon.

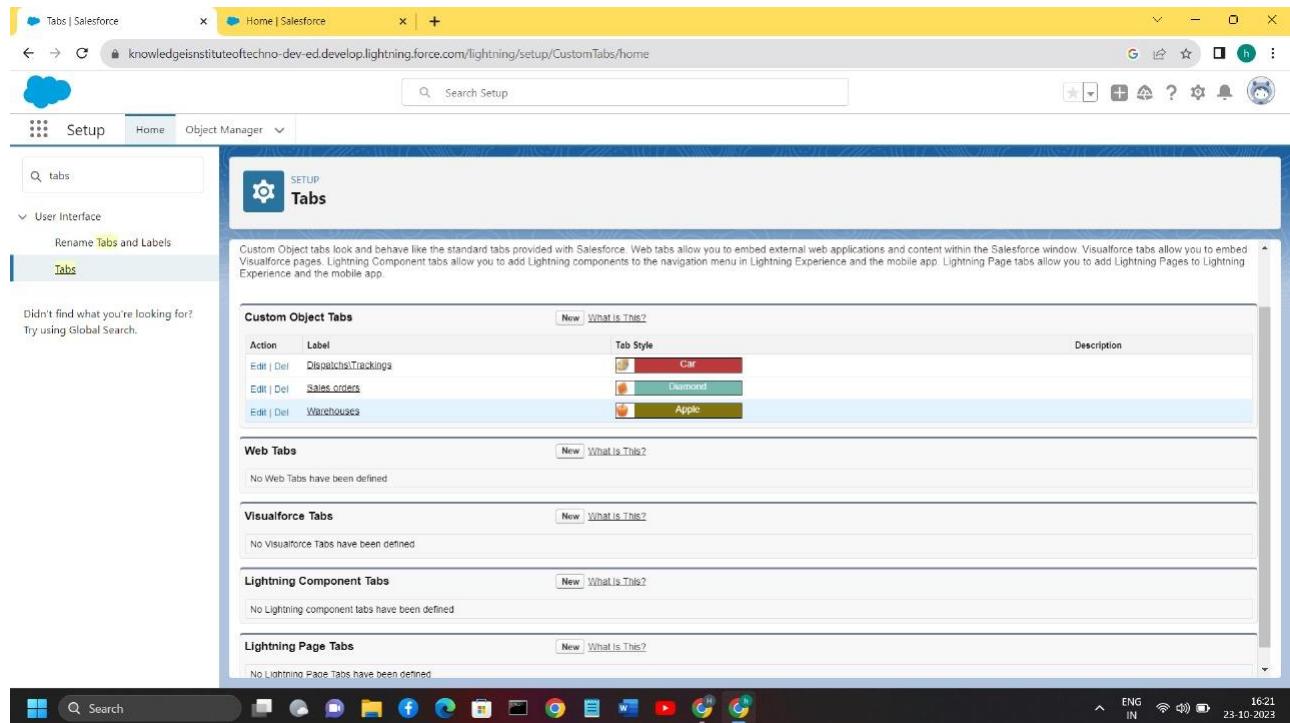
5. Leave all defaults as is. Click Next, Next, and Save.

The screenshot shows the Salesforce Setup interface with the 'Tabs' page selected. The 'Custom Object Tabs' section is visible, displaying three tabs: 'DispatchTracking', 'Sales_order', and 'Warehouses'. Each tab has a 'Tab Style' icon: 'Car' for DispatchTracking, 'Diamond' for Sales_order, and 'Apple' for Warehouses. The 'Warehouses' tab is currently selected. Below the tabs, sections for 'Web Tabs', 'Visualforce Tabs', 'Lightning Component Tabs', and 'Lightning Page Tabs' are shown, each with a 'New' button and a note indicating no tabs have been defined.

2) Creation of Sales order Tab

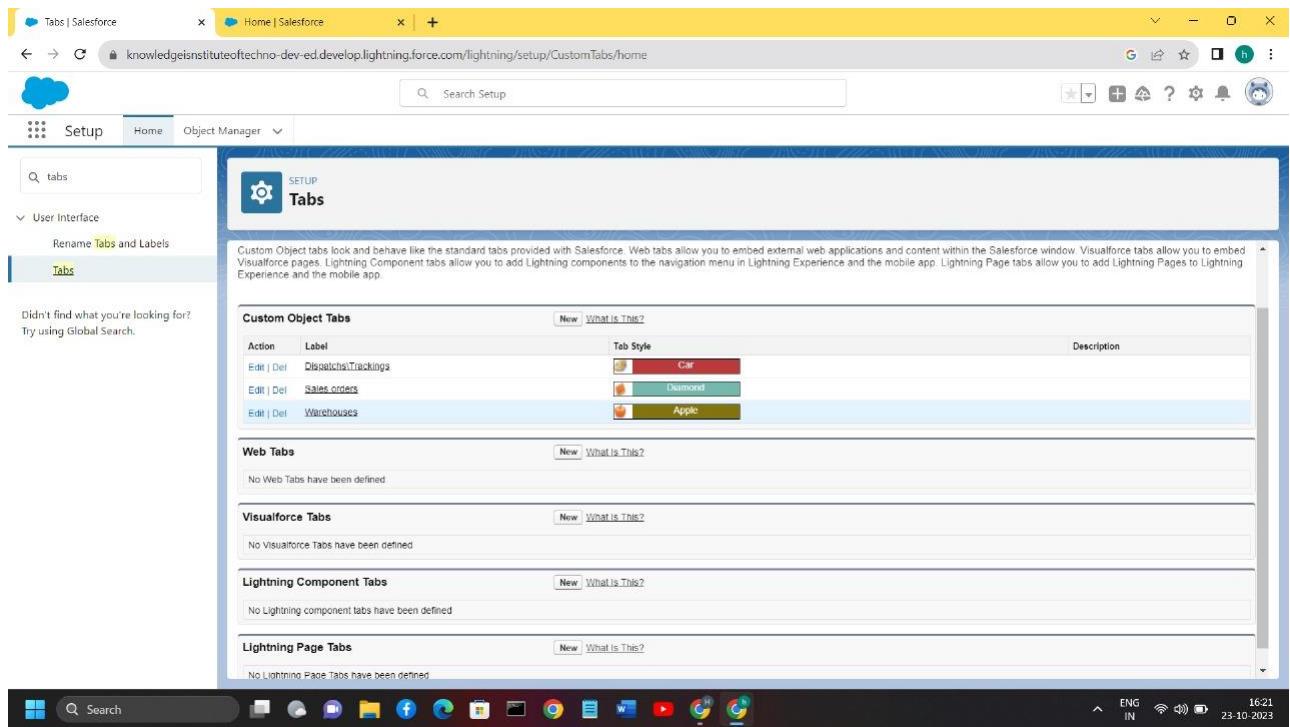
1. Now create a custom tab.

- 2.Click on Home tab, enter Tabs in Quick Find and select Tabs.
- 3.Under custom object tabs, click New.
- 4.For Object, select Sales order.
- 5.For Tab Style, select any icon.
- 6.Leave all defaults as is. Click Next, Next, and Save.



3)Creation of Dispatch/Tracking Tab

- 1.Now create a custom tab.
- 2.Click on Home tab, enter Tabs in Quick Find and select Tabs.
- 3.Under custom object tabs, click New.
- 4.For Object, select Dispatch/Tracking.
- 5.For Tab Style, select any icon.
- 6.Leave all defaults as is. Click Next, Next, and Save



Lightning App:

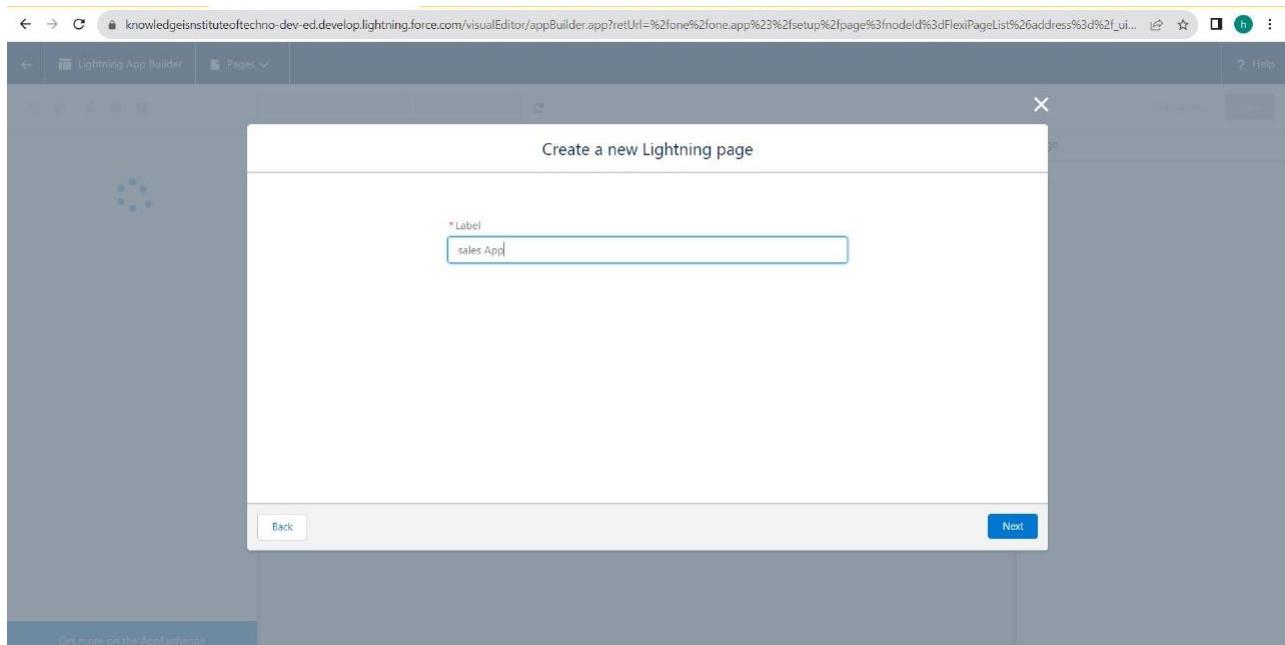
Apps in Salesforce are a group of tabs that help the application function by working together as a unit. It has a name, a logo, and a particular set of tabs. The simplest app usually has just two tabs.

There are 2 types of Salesforce applications:

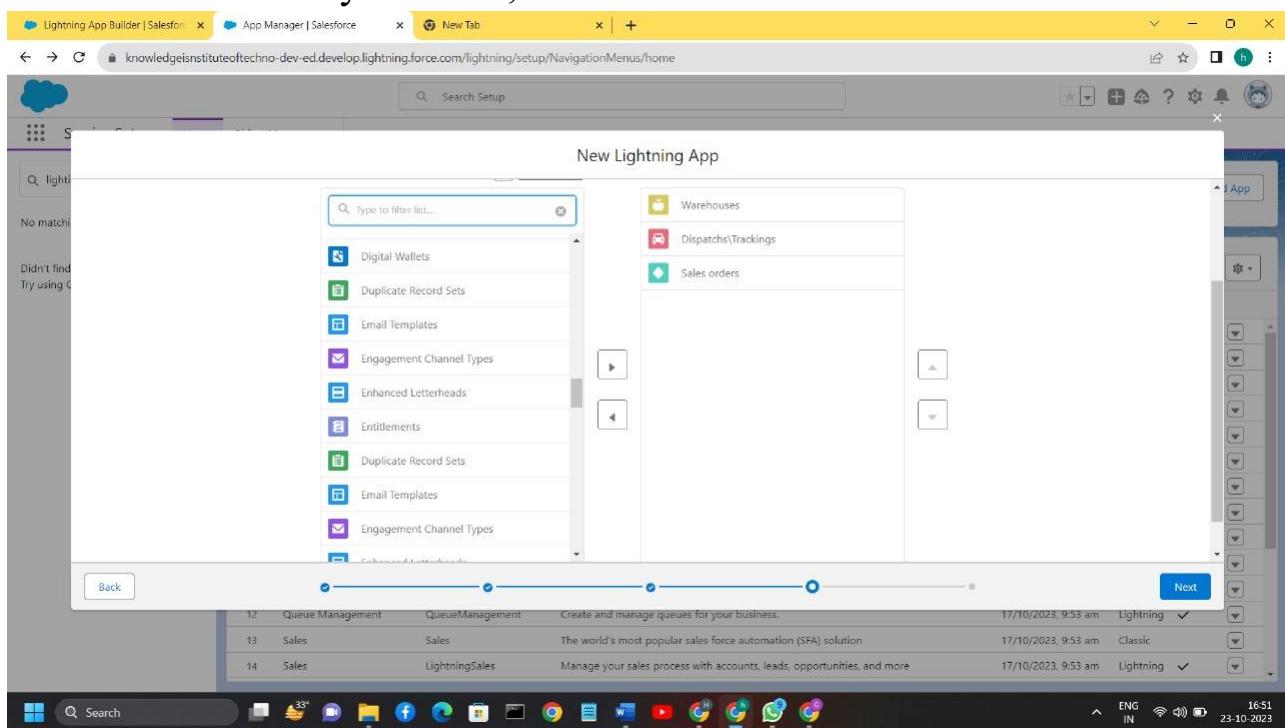
Standard apps: these apps come with every occurrence of Salesforce as default. Community, Call Centre, Content, Sales, Marketing, Salesforce Chatter, Site.com, and App Launcher are included in these apps. The description, logo, and label of a standard app cannot be altered.

Custom apps: these apps are created according to the needs of a company. They can be made by putting custom and standard tabs together. Logos for custom apps can be changed.

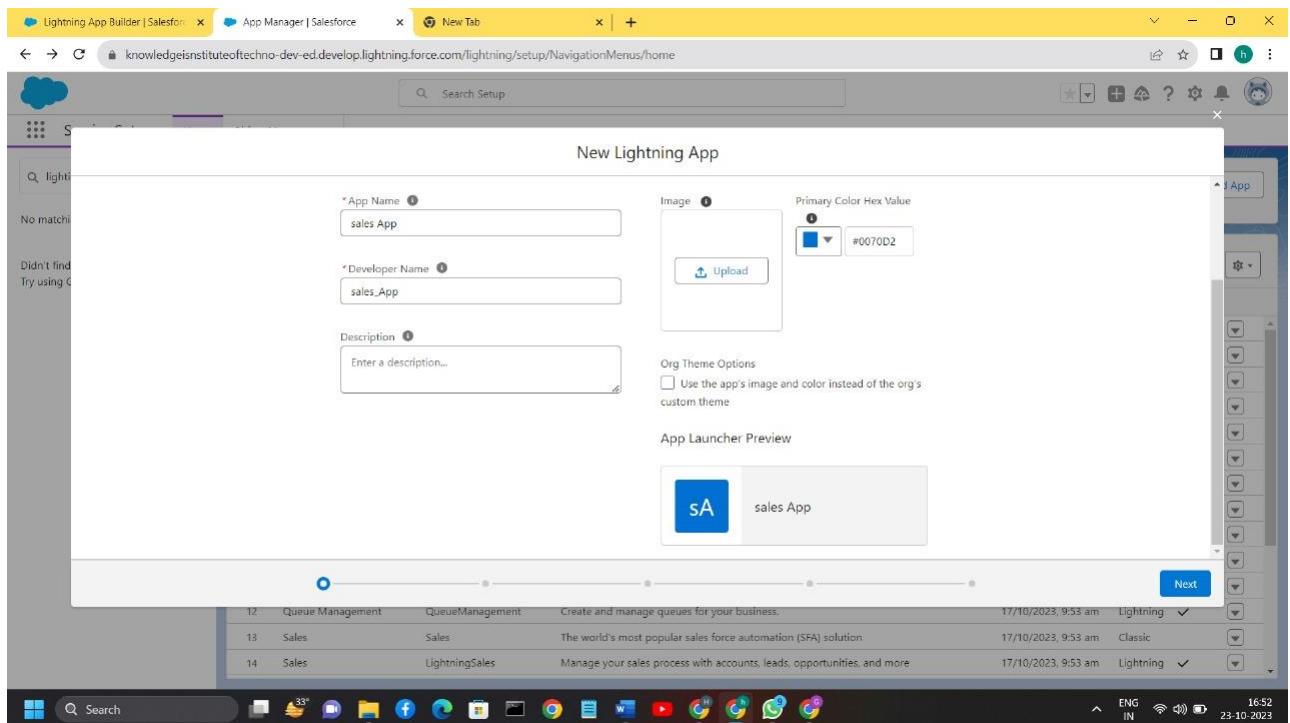
1. Click New Lightning App. Job Application Tracking as the App Name, then click Next



4. Under App Options, leave the default selections and click Next.
5. Under Utility Items, leave as is and click Next.



6. From Available Items, select Campaign, Leads, Accounts, Contacts, Opportunities, Products, Warehouse, Sales order, Dispatch/Tracking, Reports, and Dashboards and move them to Selected Items. Click Next.



7. From Available Profiles, select System Administrator and move it to Selected Profiles. Click Save & Finish

Fields and Relationship:

Fields in Salesforce represent what the columns represent in relational databases. It can store data values which are required for a particular object in a record.

There are 2 types of fields in salesforce:

Standard fields: There are four standard fields in every custom object that are Created By, Last Modified By, Owner, and the field created at the time of the creation of an object. These fields cannot be deleted or edited and they are always required. For standard objects, the fields which are present by default in them and cannot be deleted from standard objects are standard fields.

Custom fields: The Custom fields which are added by the administrator/developer to meet the business requirements of any organization. They may or may not be required. **1)Creation of Fields for The Dispatch/Tracking**

- 1.click the gear icon and select Setup. This launches Setup in a new tab.
- 2.Click the Object Manager tab next to Home.
- 3.Select Dispatch/Tracking.
- 4.Select Fields & Relationships from the left navigation, and click New
- 5.Choose the data type as Text, click next
- 6.For Field Label, enter Tracking ID & length = 40
- 7.Next, Next and Click save.
8. Now let's create the other fields and we must choose the data types of the fields carefully. Let's have a look at it. Similarly create fields for Warehouse object- Address, Location select datatype according table. Similarly create fields for Dispatch/Delivery object- Dispatched, Expected date of delivery select datatype according table
- 9.Click Next, Next, then Save & New.

The screenshot shows the Salesforce Setup interface with the following details:

- Tab Bar:** Lightning App Builder | Salesforce, Dispatch\Tracking | Salesforce, New Tab
- Header:** knowledgeisinstiuteoftechno-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01I5h000001njC0/FieldsAndRelationships/view
- Search Bar:** Search Setup
- Left Navigation:** Service Setup, Home, Object Manager
- Page Title:** SETUP > OBJECT MANAGER Dispatch\Tracking
- Section:** Details, Fields & Relationships (selected)
- Table:** Fields & Relationships (5 items, Sorted by Field Label)

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Dispatch Name	Name	Text(90)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		
Tracking ID	Tracking_ID__c	Text(40)		
- Bottom:** Windows taskbar showing various application icons and system status.

2)Creation of Fields for The Warehouse Objects

- 1.Select the Location as the Data Type, then click Next.
- 2.For Field Label as Address Click Next, Next, then Save & New
- 3.Select the Address as the Data Type, then click Next. For Field Label, Location Description.
- 4.Click Next, Next, then Save & New.

The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes tabs for Service Setup, Home, and Object Manager. The main content area is titled 'Fields & Relationships' under the 'Warehouse' object. A table lists five fields: Address, Created By, Last Modified By, Owner, and Warehouse Name. The 'Address' field is highlighted. The table columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The 'Address' row shows Address__c, Geolocation, and Lookup(User). The 'Owner' row shows OwnerId, Lookup(User/Group), and a checked 'INDEXED' box. The 'Warehouse Name' row shows Name, Text(80), and a checked 'INDEXED' box. The sidebar on the left lists various setup options like 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.

3)Creation of Dispatch/Delivery for Job Object

- 1.From Setup, go to Object Manager
- 2.On the sidebar, click Fields & Relationships.
- 3.Click New.
- 4.Choose Dispatch/Delivery and click Next
- 5.Choose the datatype as date and select the label name Expected date.
6. Click Next, Next, then Save

Fields & Relationships					
	FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Page Layouts	Created By	CreatedById	Lookup(User)		
Lightning Record Pages	Dispatch Name	Name	Text(80)		✓
Buttons, Links, and Actions	Expected	Expected__c	Date		▼
Compact Layouts	Last Modified By	LastModifiedById	Lookup(User)		
Field Sets	Sales order	Sales_order__c	Master-Detail(Sales order)		✓
Object Limits					▼
Record Types					
Related Lookup Filters					
Search Layouts					
List View Button Layout					
Restriction Rules					
Scoping Rules					

4)Master detail relationship Dispatch /Delivery

Let's create a master-detail relationship on Dispatch/Delivery object.

- 1.Select Master-Detail Relationship as the Data Type and click Next.
- 2.For Related to, enter Sales order.
- 3.Click Next.
- 4.For Field Label, enter Sales order.
- 5.Click Next, Next, Next and Save.

Custom Field Definition Edit					
Field Information				Master-Detail Options	
Details	Field Label	Sales order	Data Type	Master-Detail	
Fields & Relationships	Field Name	Sales_order		I = Required Information	
Page Layouts	Description				
Lightning Record Pages	Help Text				
Buttons, Links, and Actions	Data Owner	User			
Compact Layouts	Field Usage	—None—			
Field Sets	Data Sensitivity Level	—None—			
Object Limits	Compliance Categorization	<div style="display: flex; align-items: center;"> <div style="flex: 1;"> Available PII HIPAA GDPR PCI </div> <div style="margin: 0 10px;"> <input checked="" type="checkbox"/> </div> <div style="flex: 1;"> Chosen </div> </div>			
Record Types	Related To	Sales_order	Child Relationship Name	Dispatches_Deliveries	
Related Lookup Filters	Related List Label	Dispatches/Deliveries			
Search Layouts	Sharing Setting	Select the minimum access level required on the Master record to create, edit, or delete related Detail records: <input type="radio"/> Read Only Allows users with at least Read access to the Master record to create, edit, or delete related Detail records.			
List View Button Layout					
Restriction Rules					
Scoping Rules					

5)Create Picklist Fields on Sales order

- 1.From Setup, click Object Manager and select Sales order.
- 2.Click Fields & Relationships, then New.
- 3.Select Picklist as the Data Type and click Next.
- 4.For Field Label enter Status
- 5.Select Enter values, with each value separated by a new line and enter these values:
Open,Hold,Shipped,Returned
- 6.Open,Hold,Shipped,Returned
- 7.Click Next, Next, then Save & New

The screenshot shows the Salesforce Object Manager interface for creating a custom field. The page title is "Edit Sales order Custom Field Status". The top navigation bar includes "Setup", "Home", and "Object Manager". The main section is titled "Step 2. Enter the details". The "Field Label" is set to "Status". Below this, there is a table listing the picklist values:

Action	Values	API Name	Default	Chart Colors	Modified By
<input type="checkbox"/> Edit Del	Open	Open	<input type="checkbox"/>	Assigned dynamically	GIRIHARAN S. 19/10/2023, 3:53 pm
<input type="checkbox"/> Edit Del	Hold	Hold	<input type="checkbox"/>	Assigned dynamically	GIRIHARAN S. 19/10/2023, 3:53 pm
<input type="checkbox"/> Edit Del	Shipped	Shipped	<input type="checkbox"/>	Assigned dynamically	GIRIHARAN S. 19/10/2023, 3:53 pm
<input type="checkbox"/> Edit Del	Returned	Returned	<input type="checkbox"/>	Assigned dynamically	GIRIHARAN S. 19/10/2023, 3:53 pm

Below the table, there are fields for "Field Name" (Status), "Description", and "Help Text". At the bottom, there are "Required" and "Always require a value in this field in order to save a record" checkboxes.

Setup > Object Manager > Sales Order

Status

Custom Field Definition Edit

Field Information

- Field Label: Status
- Field Name: Status
- Description:
- Help Text:
- Data Owner: User
- Field Usage: None
- Data Sensitivity Level: None
- Compliance Categorization: Available (PII, HIPAA, GDPR, PCI) / Chosen

General Options

- Required: Always require a value in this field in order to save a record
- Default Value: Show Formula Editor

6)Lookup Relationship

1. Select look up Relationship as the Data Type and click Next.
2. For Related to, enter Account.
3. Click Next.
4. For Field Label, enter Customer.
5. Click Next, Next, Next and Save.

Setup > Object Manager > Sales Order

Step 2. Enter the label and name for the lookup field

Field Label: Customer

Field Name: Customer

Description:

Help Text:

Child Relationship Name: Sales_orders

Required: Always require a value in this field in order to save a record
 Clear the value of this field. You can't choose this option if you make this field required.
 Don't allow deletion of the lookup record that's part of a lookup relationship.

Lookup Filter

Automatically creates a filter to limit the records available to choose in this lookup field. Tell me more

6. Click lookup filter.

7. Provide filter as given below & also refer picture (Screenshot of Step Contact: Account ID equals Sales Order: Customer)

8. Click Next, Next, Next and Save

The screenshot displays the Salesforce Object Manager interface for the Sales_order object. On the left, a sidebar lists various setup options: Details, Fields & Relationships (selected), 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 "Custom Field Definition Detail" for the field "Contact". The "Field Information" section includes fields for Field Label (Contact), Field Name (Contact), API Name (Contact__c), Object Name (Sales_order), and Data Type (Lookup). The "Lookup Options" section shows "Related To" as Contact and "Child Relationship Name" as Sales_orders. The "Lookup Filter" section contains a filter criterion: "Filter Criteria" is set to "Contact: Account Name ID EQUALS Sales order: Customer ID", and the "Error Message" is "Required. The user-entered value must match filter criteria. Value does not exist or does not match filter criteria." The status bar at the bottom indicates the field was created by GIRI HARAN S on 20/10/2023, 11:25 am, and modified by GIRI HARAN S on 20/10/2023, 11:35 am.

7) Create Field Dependency (On Candidate Object)

1. Create a dependency between these two picklists, so that when a state is selected, only respective Values are available.

2. The below steps will assist you in creating Field Dependencies.

3. Click on the gear icon and then select Setup.

4. Click on the object manager tab just beside the home tab.

5. After the above steps, Select Candidate Object

6. Now Select Fields and relationships from setup menu of the Candidate object.

7. Click Field Dependencies.

8. Click New.

9. Select State as the Controlling Field and select City as the Dependent Field.

10. Click Continue.

11. Select the appropriate Value in each column by double-clicking them. For Ex. Rajasthan - Jaipur

12.Click Include Values. And it is also same for UP, MP& Punjab with its city.

13.Click Preview, then test the dependency by selecting different State and viewing the associate Values available for Particular state.

14.Click Close to close the preview window.

15.Click Save.

Setup | Home | Object Manager | Candidate

Controlling Field: State
Dependent Field: City

Instructions:

- Double click on a cell to toggle its visibility for the Controlling Field value shown in the column heading.
- To change multiple cells at once, select multiple cells and then click the Include Values or Exclude Values button to change the visibility of all selected cells at once.
- Use SHIFT + click to select a range of adjacent cells. Use CTRL + click to select multiple cells that are not adjacent.
- Use the Preview button to test the results.

Legend:
Excluded Value (White)
Included Value (Yellow)

State:	Rajasthan	UP	MP	Punjab
City:	Jaipur	Jaipur	Jaipur	Jaipur
	Jalandhar	Jalandhar	Jalandhar	Jalandhar
	Lucknow	Lucknow	Lucknow	Lucknow
	Bhopal	Bhopal	Bhopal	Bhopal

8)Cross-Object Formula Field

Cross-object formula field- A cross-object formula field is basically a formula field. A cross-object formula can reference merge fields from a master (“parent”) object if an object is on the detail side of a master-detail relationship. A cross-object formula works with Lookup relationships as well as in Master detail relationship. You can reference fields from objects that are up to 10 relationships away. Creation of cross object formula field

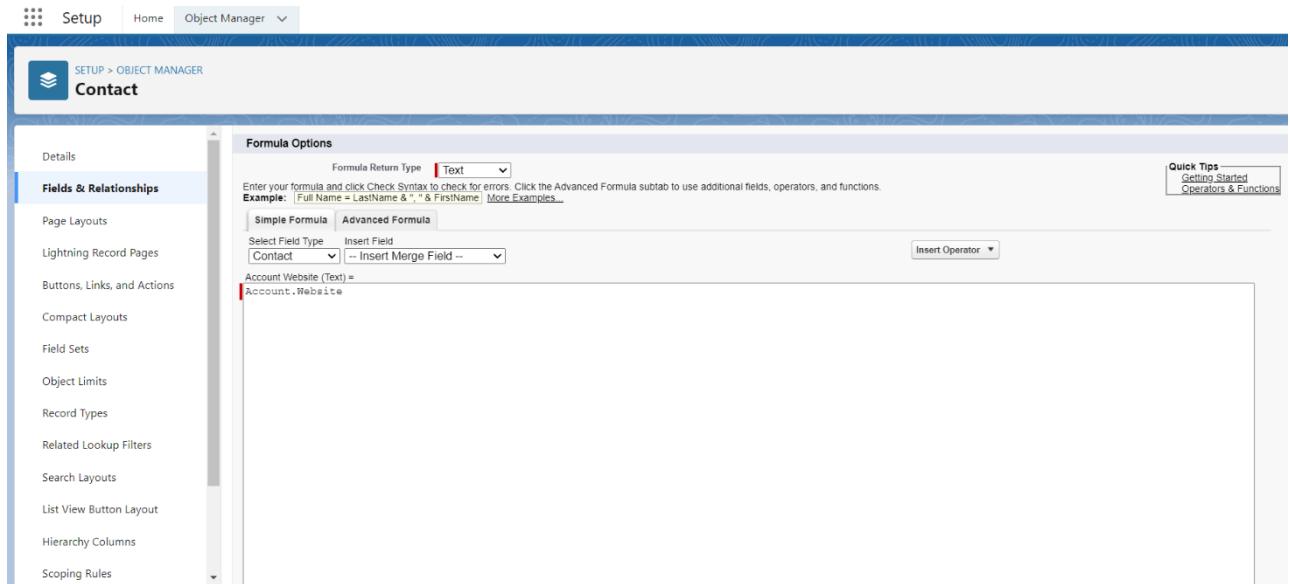
- 1.Select your object from object selection has Contact.
- 2.Select the option fields and relationships.
- 3.That will navigate to enter the details page where you give the field label.
4. Give the label name has Account Website

5. Select formula return type Text

6. In the formula field enter this formula Account. Website.

7. Click next you will navigate to field level security click on visible checkbox so that it is visible to all profiles.

8. Select the next option, select the page layout and save it.



4. USER & DATA SECURITY

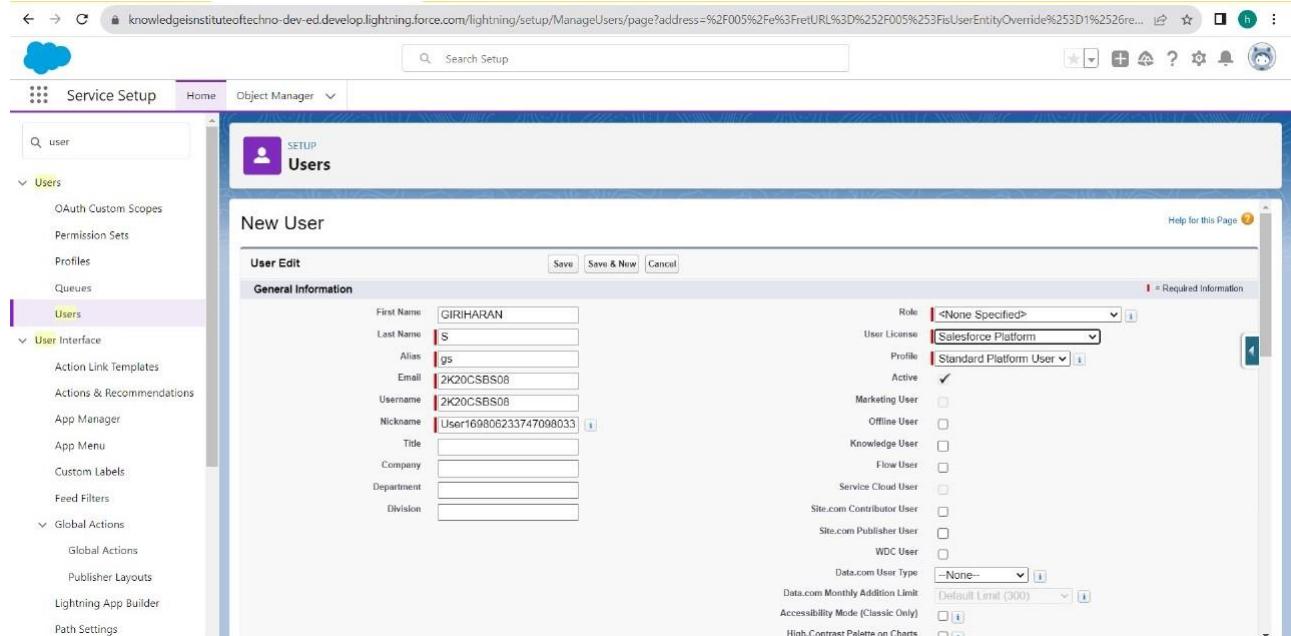
User

A user is anyone who logs in to Salesforce. Users are employees at your company, such as sales reps, managers, and IT specialists, who need access to the company's records. Every user in Salesforce has a user account. The user account identifies the user, and the user account settings determine what features and records the user can access.

1) To Create A User

1. From Setup, enter Users in the Quick Find box, then select Users.
2. Click New User.
3. Enter First name as Girihsaran and last name as S.
4. Enter the user's name and email address and a unique username in the form of an email address. By default, the username is the same as the email address.
5. Select user License as Salesfoce Platform User.
7. Select profile (salesforce).

8. Click 



The screenshot shows the 'New User' page in the Salesforce Setup. The 'General Information' section contains the following data:

Field	Value
First Name	GIRIHSARAN
Last Name	S
Alias	gs
Email	2K20CSBS08
Username	2K20CSBS08
Nickname	User169806233747098033
Title	(empty)
Company	(empty)
Department	(empty)
Division	(empty)

The 'User License' field is set to 'Salesforce Platform' and the 'Profile' is 'Standard Platform User'. The 'Active' checkbox is checked. On the right side, there are several other user type checkboxes available but not selected, including 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, Data.com Monthly Addition Limit, Accessibility Mode (Classic Only), and High Contrast Palette on Charts.

Validation Rules

Validation rules verify that the data a user enters in a record meets the standards you specify before the user can save the record. As a CRM product owner they requested to create a validation rule on account object on the phone field.

5. Then create a new role HR Manager.

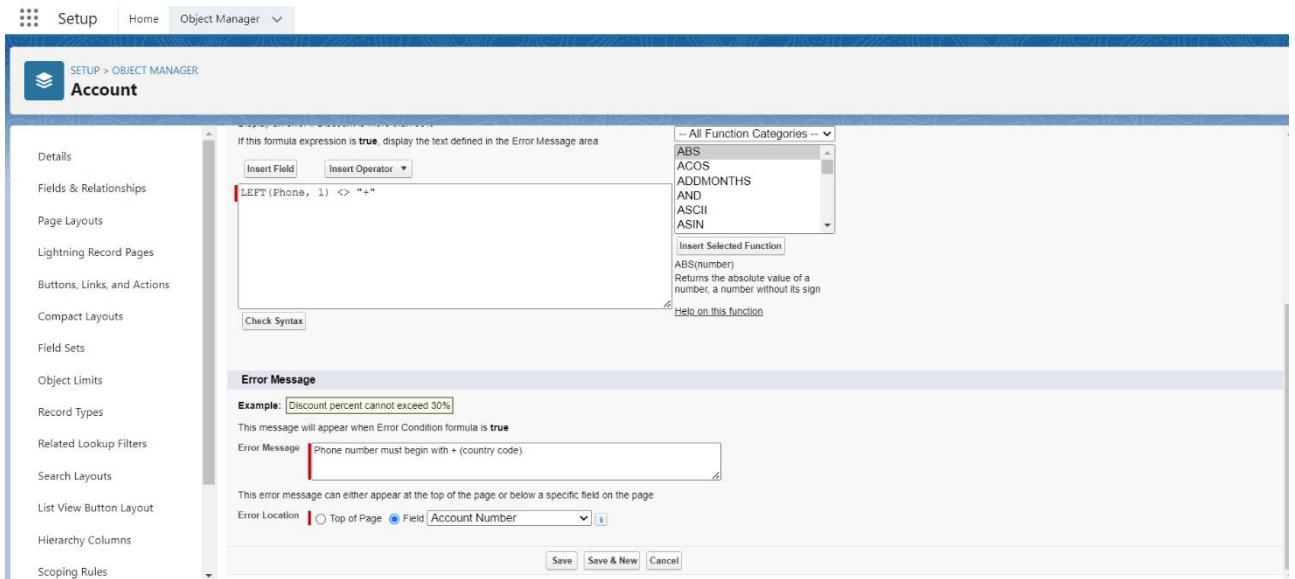
Creation Of Validation Rule

1. Navigate to object manager and select Account object.
2. In details section scroll down and find validation rule in it.
3. Click new, give the label name and in edit error conditional formula give the formula- LEFT(Phone, 1) <> "+" .
4. In error message give the description has Phone number must begin with + (country code).
5. In error location select field.

The screenshot shows the Salesforce Object Manager interface for the Account object. The left sidebar lists various configuration options like Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, Hierarchy Columns, Scoping Rules, Triggers, Flow Triggers, and Validation Rules. The Validation Rules section is 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
Phone_number_has_International_format	Account Number	Phone number must begin with + (country code).	✓	GIRIHARAN S, 20/10/2023, 12:55 pm

8. Click save



User Adoption

1.Create Record

2.View Record

3.Delete Record

1)Create Record

1.Click on App Launcher on left side of screen.

2.Search Sales App & click on it.

3.Click on Sales Order tab.

4.Click new button

5.Fill all Sales Order record details.

6.Click on Save Button

Sales App

Recently Viewed

Sales order Number: N-0000

Status: Open

Customer: Search Accounts...

Contact: Search Contacts...

Sales order: 22/10/2023

Created By: GIRI HARAN S, 20/10/2023, 2:01 pm

Last Modified By: GIRI HARAN S, 20/10/2023, 2:01 pm

Buttons: Cancel, Save & New, Save

2)View Record

- 1.Click on App Launcher on left side of screen.
- 2.Search Sales App & click on it.
- 3.Click on Sales Order Tab.
- 4.Click on any record name. you can see the details of the Sales Order

Sales App

Recently Viewed

Sales order Number: N-0000

Buttons: New, Import, Change Owner, Search this list...

Delete Record

- 1.Click on App Launcher on left side of screen.
- 2.Search Sales App & click on it.

- 3.Click on Sales Order Tab.
- 4.Click on Arrow at right hand side on that Particular record.
- 5.Click delete and delete again.

The screenshot shows a CRM application interface with a blue header bar. The header includes a cloud icon, the text "Sales App", and various navigation links: Home, Campaigns, Leads, Accounts, Contacts, Opportunities, Products, Warehouses, Sales orders (which is currently selected), Dispatches\Trackings, Reports, Dashboards, and a gear icon. Below the header is a search bar with placeholder text "Search...". To the right of the search bar are several small icons for filtering and sorting. The main content area is titled "Sales orders" and has a sub-section titled "Recently Viewed". It displays one item, updated 6 minutes ago, with a sales order number "N-0000". On the far right of this row is a context menu with three options: "Edit", "Delete", and "Change Owner".

5.AUTOMATION

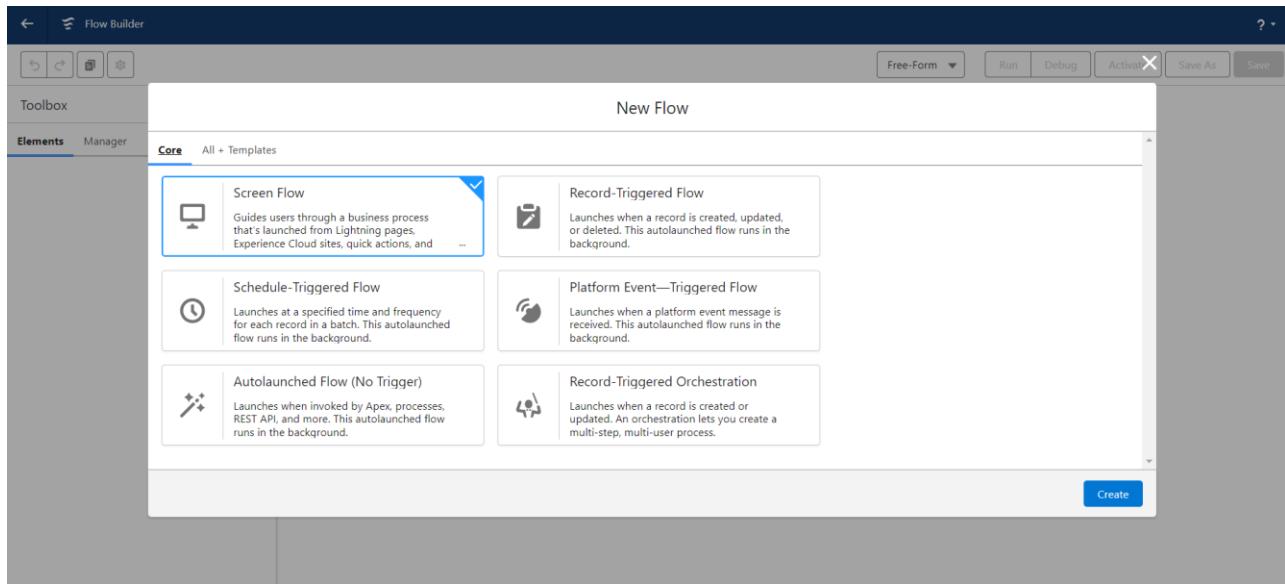
Flow:

Flows in Salesforce, a flow is a tool that automates complex business processes. Simply put, it collects data and then does something with that data. Flow Builder is the declarative interface used to build individual flows. Flow Builder can be used to build code-like logic without using a programming language. Flows fall into five categories:

- 1.Screen Flows
- 2.Schedule-Triggered Flows
- 3.Autolaunched Flows
- 4.Record-Triggered Flows
- 5.Platform Event-Triggered Flows

1)Create A Screen Flow

- 1.Click on Gear icon and select setup
- 2.In Quick find Box enter flow and select the flows
- 3.Click on New flow and Select Screen Flow.



4. Select resource type has variable.

5. Give api name as Recordid.

6. Select data type as Text.

5. At bottom for Availability outside the flow check box as Available for Input.

6. Click on done.

New Resource

* Resource Type
Variable

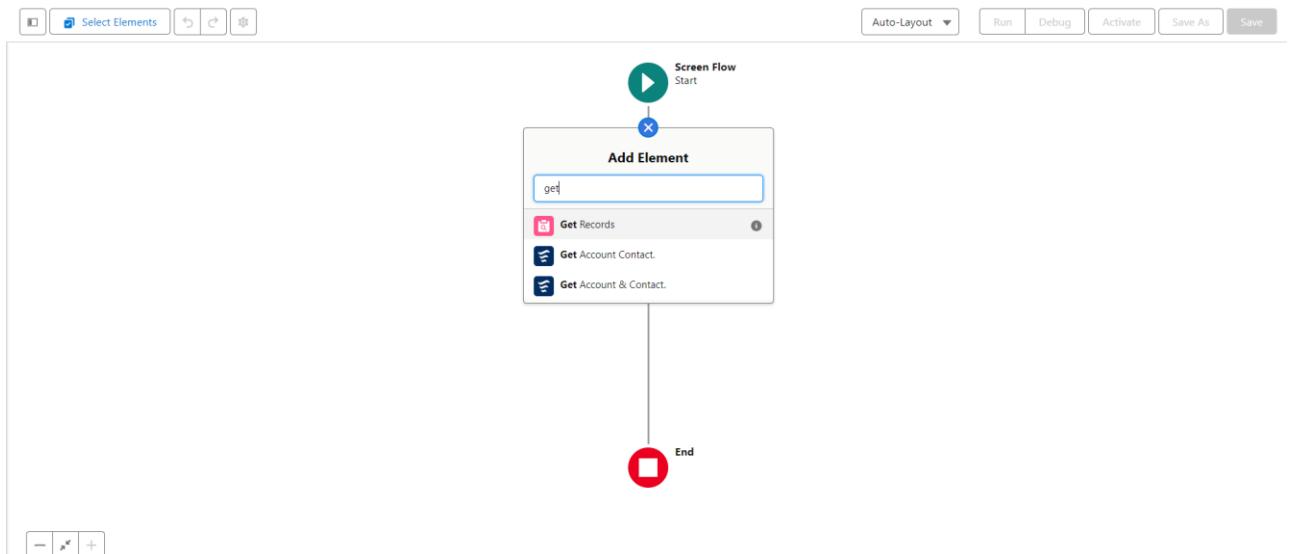
* API Name
Recordid

Description

* Data Type
Text Allow multiple values (collection) ?

Default Value
Enter value or search resources...

7. Now give the label name as Get Account Record



8. For Get record of object choose object as - Account

9. For Filter account records condition requirements are - All conditions are met

10. Field- Account id Operator- equals Value-Recordid (variable which we had created)

11. For how many records to share - Only the first record

12.How to store record data- Automatically stores all fields.

13.Click on done.

* Object
Account

Filter Account Records

Condition Requirements
All Conditions Are Met (AND)

Field	Operator	Value
Id	Equals	Aa Recordid X

+ Add Condition

Sort Account Records

Sort Order
Not Sorted ▼ ⚠ If you store only the first record, filter by a unique field, such as ID.

How Many Records to Store
 Only the first record
 All records

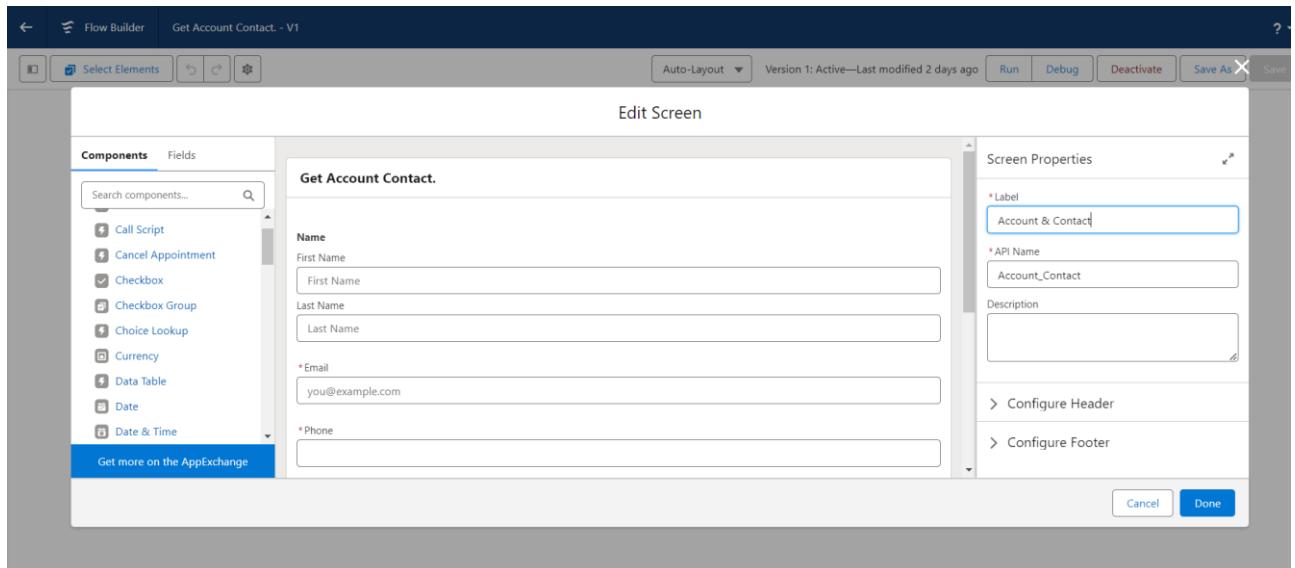
How to Store Record Data
 Automatically store all fields
 Choose fields and let Salesforce do the rest
 Choose fields and assign variables (advanced)

14.Now again add the element below the Get account record and select Screen as your element

15.Give the label name as Get Account & Contact.

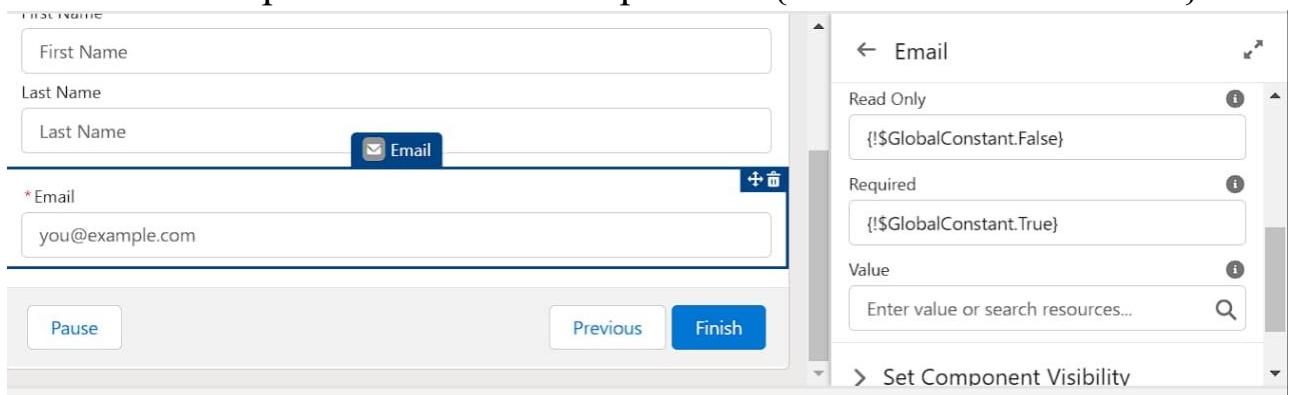
16.Left side in the component section search for Name and drag it to the screen

17. Give the api name as Name



18.Now drag Email from component section and move it to the screen.

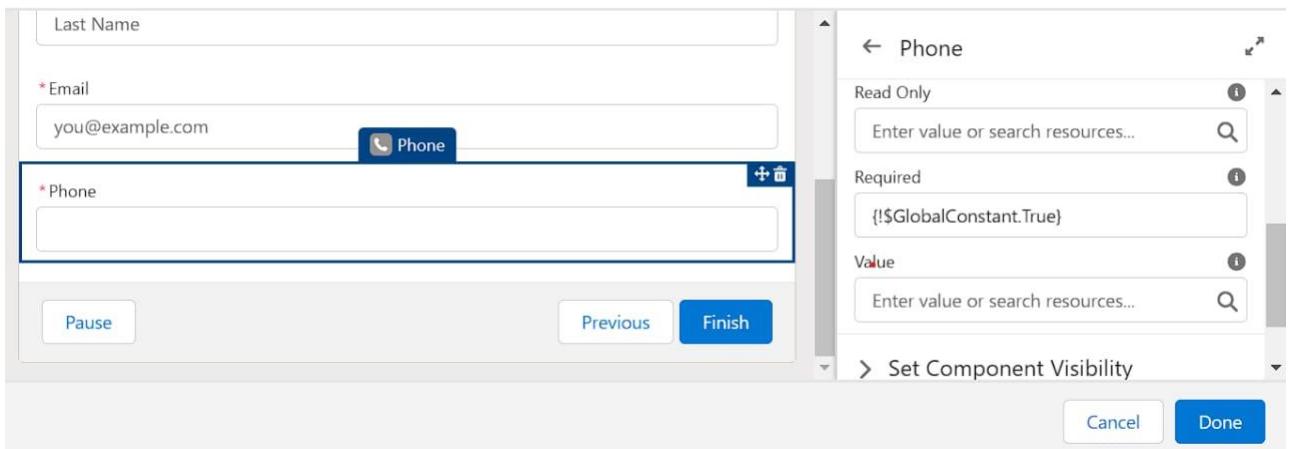
19.Give the Api name- Email Required - `{!$GlobalConstant.True}`



20.Now drag the Phone from component to screen below the email

21.Give the Api name as – Phone Required- `{!$GlobalConstant.True}`

New Screen



22.Now Drag Address from component section to screen .

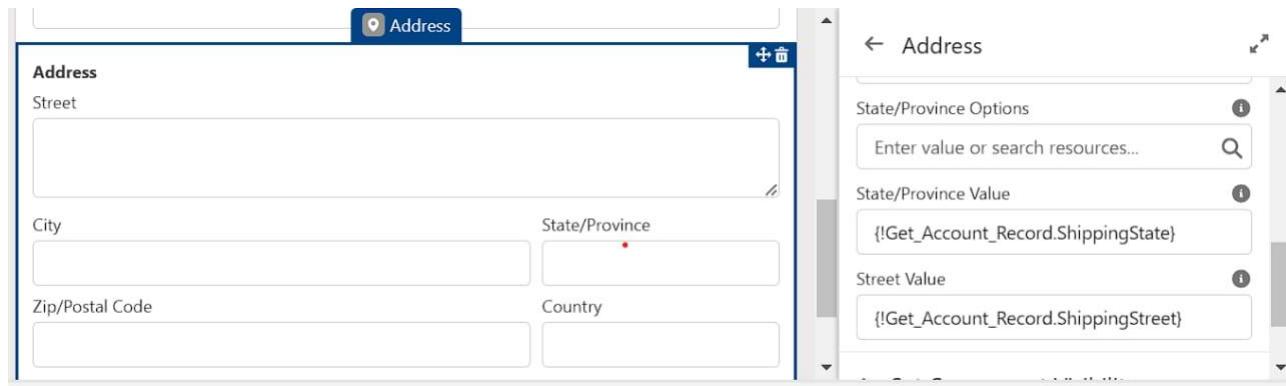
23.Give the Api name as -Address City Value-
{!Get_Account_Record.ShippingCity}

Country Value- {!Get_Account_Record.BillingCountry}

Postalcode- {!Get_Account_Record.ShippingPostalcode}

State/province value-

{!Get_Account_Record.ShippingStreet}



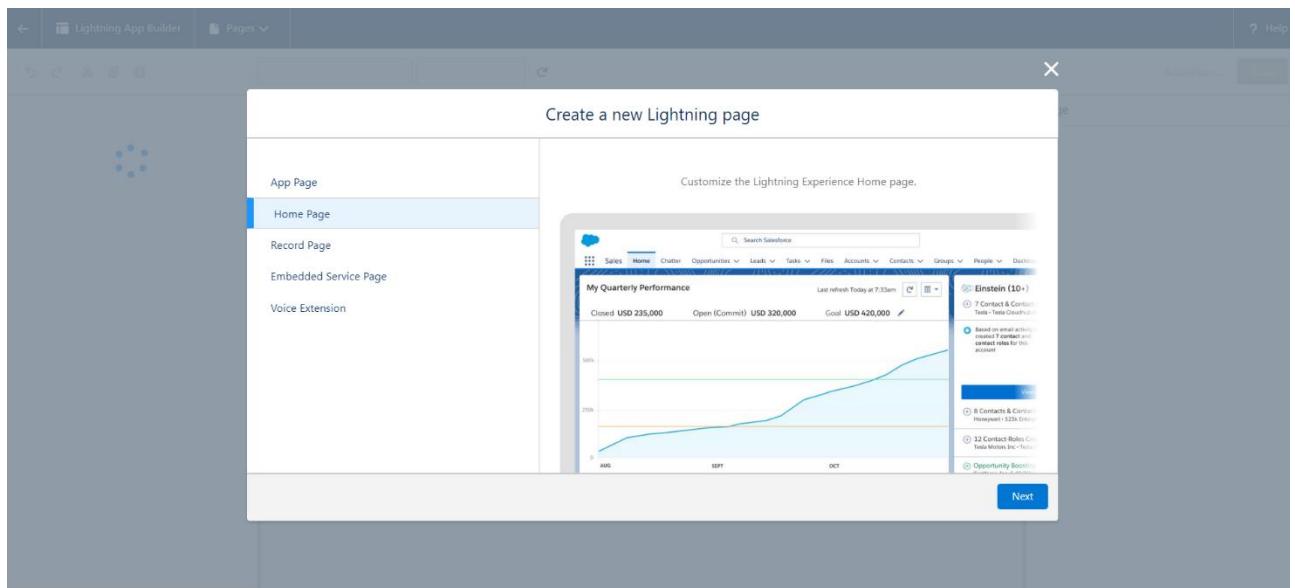
24.Click on done and save it. Give the label name as Get Account & Contact.

To Create Lightning Home Page

1. Click on setup gear.

2.Now search for lightning App builder.

3.And select New option



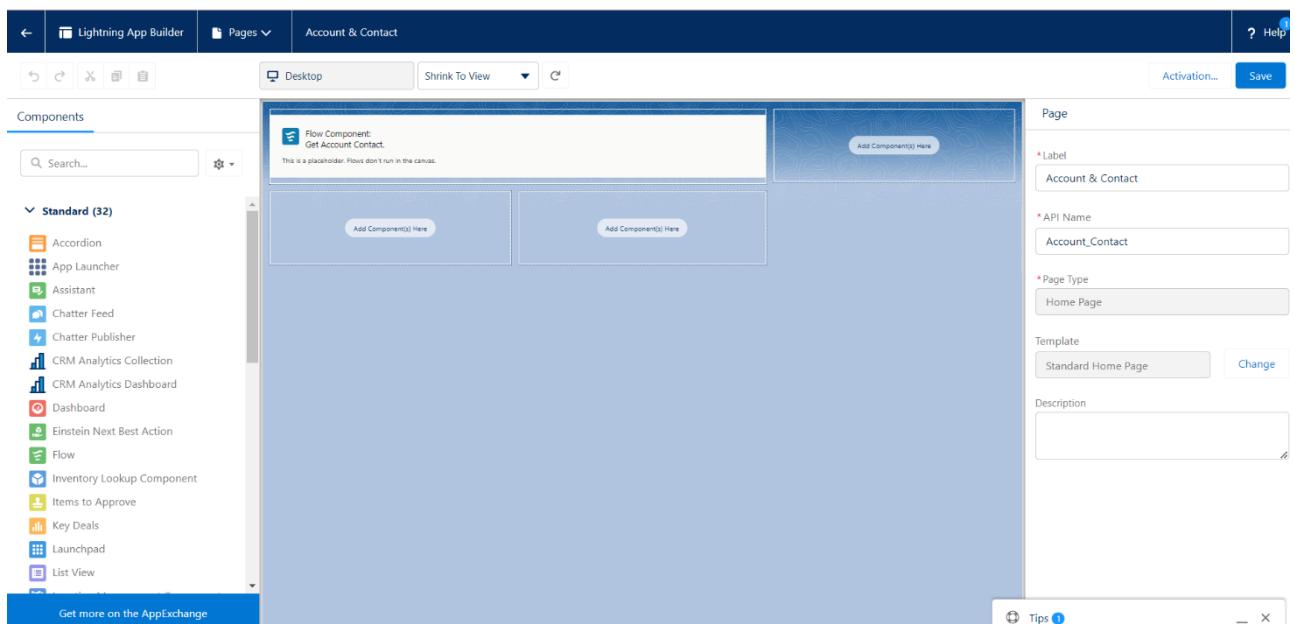
4.In create a new lightning page select Home page.

5.Select Next

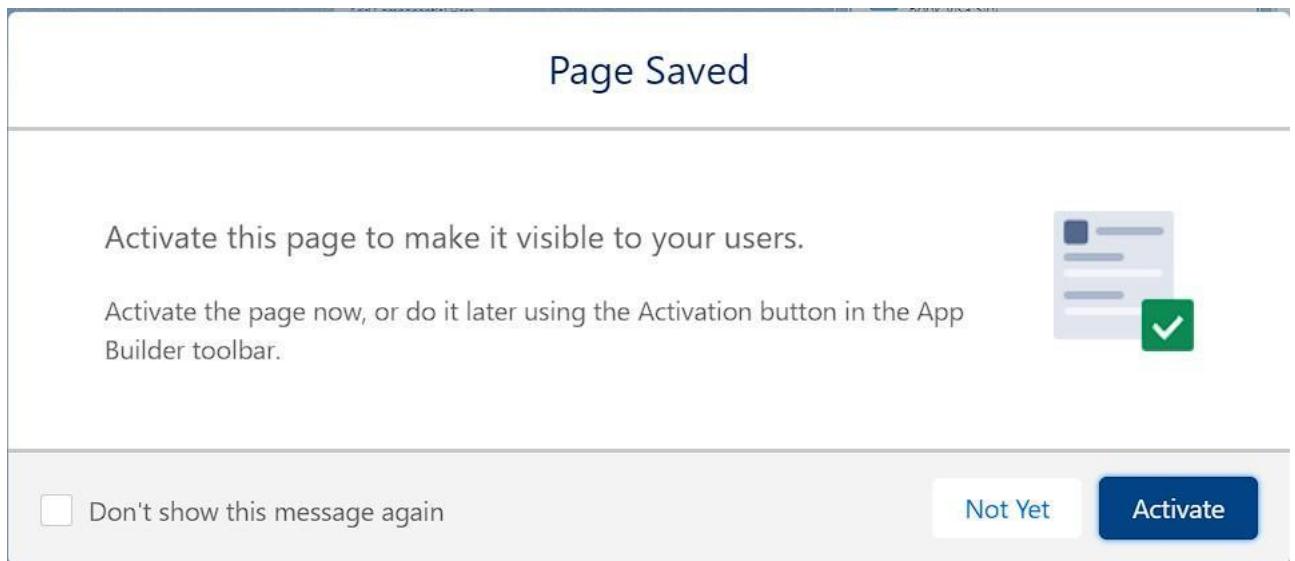
6.Give the label name - Account & Contact

7.Choose a standard home page.

8.Now in the component section select flow and drag down it to Corner of the page



9. At the right side select the flow Get Account & Contact.
10. At the right side top of the page click on Save.
11. You will get the populate notification and click on activate.



12. you will get an activation pop up select App and profile.
13. Select Sales app in lightning app selection.
14. In profiles select System administrator, Standard user, Standard platform user.
15. Save it.

Profile	Description	Selected
<input type="checkbox"/> Smartbridge Help center Profile		
<input type="checkbox"/> Solution Manager		
<input checked="" type="checkbox"/> Standard Platform User		
<input checked="" type="checkbox"/> Standard User		
<input checked="" type="checkbox"/> System Administrator		
<input type="checkbox"/> Work.com Only User		

16. Now click on app launcher and search for Sales App

17. At the right side corner you can find a Pencil icon to personalize navigation click on that.

18. Click on add more items and in available items click on all and search for home.

19. Move the home page to top and click on save.

The screenshot shows the 'NAVIGATION ITEMS' configuration screen. At the top, a message says 'Personalize your nav bar for this app. Reorder items, and rename or remove items you've added.' with a 'Learn More' link. A yellow banner at the top indicates '1 item added to your list. Save your updates.' Below this, the 'NAVIGATION ITEMS (24)' section lists items: Home (selected), Accounts, Campaigns, Contacts, and others. An 'Add More Items' button is in the top right. At the bottom, there are 'Cancel' and 'Save' buttons.

Apex Trigger

Apex triggers-Apex can be invoked by using triggers. Apex triggers enable you to perform custom actions before or after changes to Salesforce records, such as insertions, updates, or deletions.

A trigger is Apex code that executes before or after the following types of operations:

- 1.insert
- 2.update
- 3.delete
- 4.merge

5.upsert

6.undelete

Create An Apex Trigger

Use Case- when we try to create the account with the same name i.e.
Preventing the users to create Duplicate Accounts.

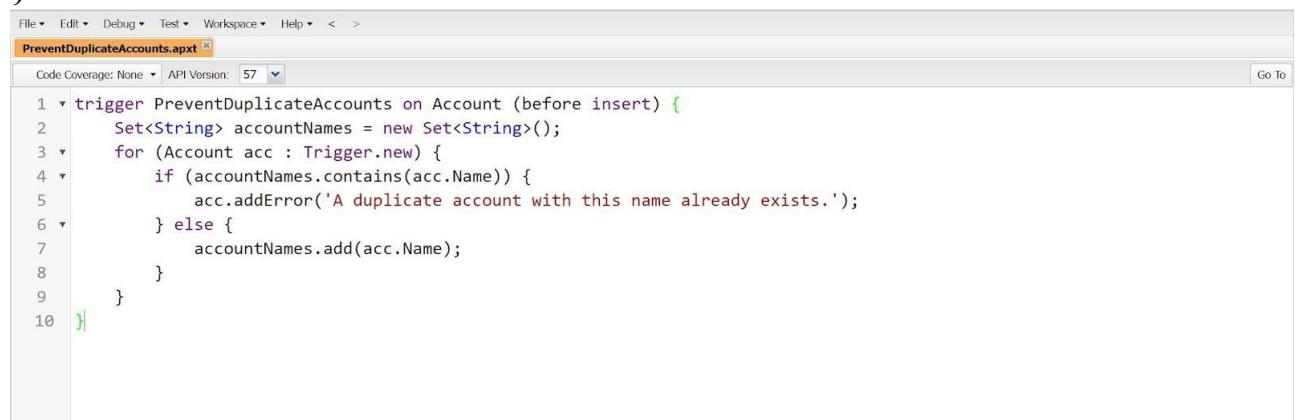
1.Click on setup gear

2.Below the setup gear you can find developer console click on that

3.click on file and select new and select Apex trigger.

Copy this code

```
trigger PreventDuplicateAccounts on Account (before insert) {  
  
    Set<String> accountNames = new Set<String>();  
  
    for (Account acc : Trigger.new) {  
  
        if (accountNames.contains(acc.Name)) {  
  
            acc.addError('A duplicate account with this name already  
exists.');//  
        } else {  
  
            accountNames.add(acc.Name);  
        }  
    }  
}
```



The screenshot shows the Salesforce Developer Console interface. The title bar says "PreventDuplicateAccounts.apxt". The code editor window displays the Apex trigger code provided above. The code is syntax-highlighted, with "trigger" in blue, "PreventDuplicateAccounts" in green, "on Account" in red, and "before insert" in blue. Brackets and braces are also color-coded. The status bar at the bottom shows "File Coverage: None API Version: 57".

6.REPORTS & DASHBOARD

Reports

A report is a list of records that meet the criteria you define. It's displayed in rows and columns, and can be filtered, grouped, or displayed in a graphical chart. Every report is stored in a folder. Folders can be public, hidden, or shared, and can be set to read-only or read/write.

1)Create A Report

- 1.Create a report that displays rating of the account and which has type and account name.
- 2.Click on app launcher search for reports.
3. Click the report type as Sales order with customer Click Start report.
- 4.Customize your report, in group rows select - Customer Account Name
- 5.Click refresh
- 6.Click save and run
- 7.Give report name – New Sales orders with Customer Report
- 8.Click Save

The screenshot shows the Microsoft Dynamics 365 Sales App interface. At the top, there's a navigation bar with links for Home, Campaigns, Leads, Accounts, Contacts, Opportunities, Products, Warehouses, Sales orders, Dispatches\Trackings, Reports, and Dashboards. Below the navigation is a search bar and a toolbar with various icons. The main area is titled "REPORT" and shows a preview of a report titled "Sales orders with Customer". The report configuration panel on the left includes sections for "Fields", "Groups", and "Columns", each with dropdown menus and "Add group..." or "Add column..." buttons. The "Filters" section at the top right contains a dropdown for "Customer: Account Name" and another for "Sales order: Sales order Number". A note says "No records returned. Try editing report filters." with options to "Show All sales orders." or "Edit other filters in the filter panel." On the far right, there's a toggle switch for "Update Preview Automatically".

Dashboard

Dashboards provide more insights than reports as they combine the data from many reports and show a summarized result. Looking at many reports at a time gives the flexibility of combining the results from them quickly. Also, summaries in dashboards help us decide on action plans quicker. The dashboards can contain charts, graphs and Tabular data.

1)Create A Dashboard

- 1.Click on Dashboards tab from the “Sales App” application.
- 2.Click on new dashboard
- 3.Give name- Sales App Dashboard
- 4.Click create
- 5.Give your dashboard a name and click on +component.
- 6.Select the New Sales orders with Customer Report which you created.
- 7.For the data visualization select any of the chart, table etc as your wish.

8.Click add

9.Click save

Sales App Dashboard

New Sales orders with Customer Report

We can't draw this chart because there is no data.

View Report (New Sales orders with Customer Report)

Sales App

Home Campaigns Leads Accounts Contacts Opportunities Products Warehouses Sales orders Dispatches\Trackings Reports Dashboards

+ Component + Filter Save Done

GitHub & Project Video Demo Link:

GitHub Link: [Click here for GitHub link](#)

Project Video Link: [Click here for Video Link](#)