



RETAIL MANAGEMENT APPLICATION USING SAALESFORCE

Project Based Experiential Learning Program

Retail Management Application Using Salesforce

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.

Milestone-1 :

Introduction

Are you new to Salesforce? Not sure exactly what it is, or how to use it? Don't know where you should start on your learning journey? If you've answered yes to any of these questions, then you're in the right place. This module is for you.

Welcome to Salesforce! Salesforce is game-changing technology, with a host of productivity-boosting features, that will help you sell smarter and faster. As you work toward your badge for this module, we'll take you through these features and answer the question, "What is Salesforce, anyway?"

What Is Salesforce?

Salesforce is your customer success platform, designed to help you sell, service, market, analyze, and connect with your customers.

Salesforce has everything you need to run your business from anywhere. Using standard products and features, you can manage relationships with prospects and customers, collaborate and engage with employees and partners, and store your data securely in the cloud.

So what does that really mean? Well, before Salesforce, your contacts, emails, follow-up tasks, and prospective deals might have been organized something like this:

<https://youtu.be/r9EX3lGde5k>

Activity-1

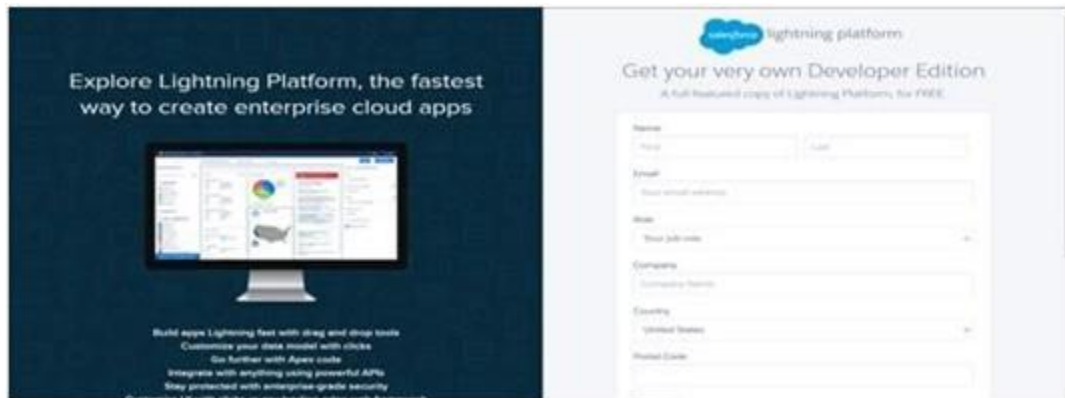
Creating Developer Account

Creating a developer org in salesforce.

1. Go to developers.salesforce.com/
2. Click on sign up.
3. On the sign up form, enter the following details :
 - 1.First name & Last name
 - 2.Email
 3. Role : Developer
 4. Company : College Name
 5. County : India
 6. Postal Code : pin code
 7. Username : should be a combination of your name and company
This need not be an actual email id, you can give anything in the format :

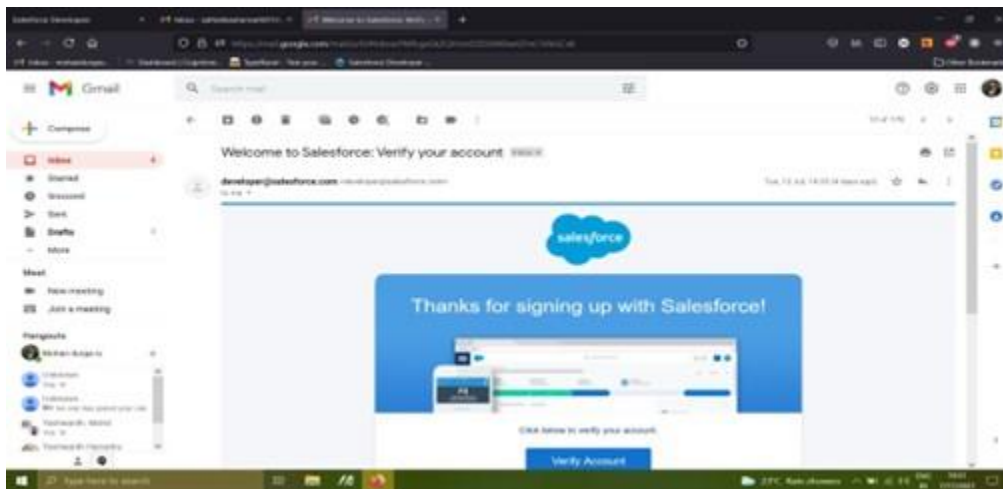
username@organization.com

Click on sign up after filling these.



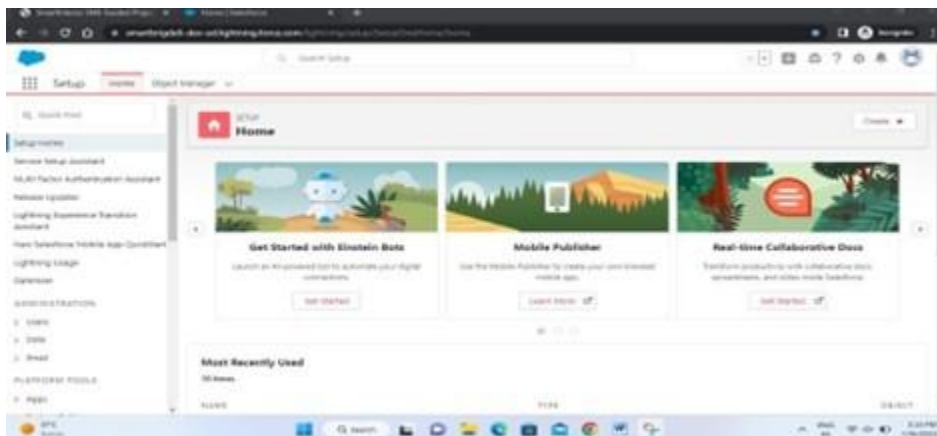
Account Activation

Go to the inbox of the email that you used while signing up. Click on the verify account to activate your account. The email may take 5-10mins, as



Login To Your Salesforce Account

1. Go to salesforce.com and click on login.
2. Enter the username and password that you just created.
3. After login this is the home page which you will see.



Salesforce Login

<https://login.salesforce.com>

Milestone-2 Objects:

Objects are database tables that permit you to store data that is specific to an organization. Salesforce objects are of two types: 1) Standard objects, 2) Custom objects

Objects involved in retail management are

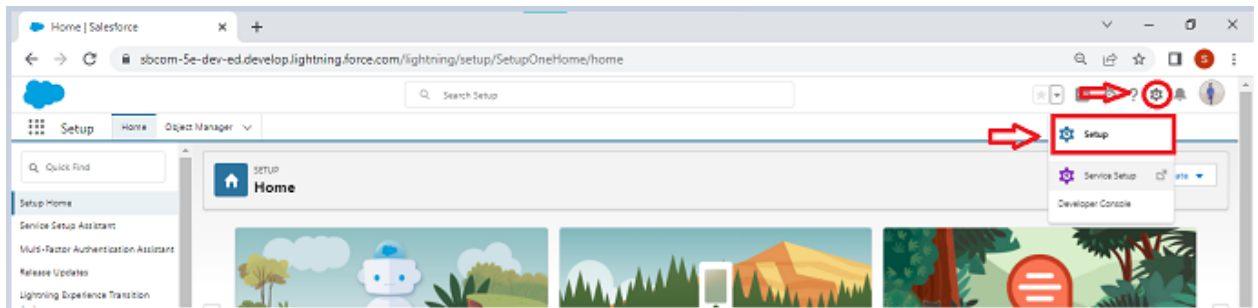
Application	Object	Description
Sales app	Campaign	We do promotions by using this object
	Leads	We capture leads here
	Accounts	We capture customers data
	contacts	Employees data of customer
	opportunities	SMB sales orders data
	products	Here we store product details i.e electronic types
	Warehouse	We capture stocks data
	Sales order	This is an actual order which has invoice details
	Dispatch/Tracking	Orders dispatch related info will be stored here

Application	Object	Description
Service app	Cases	Historical problems of customers will be stored here
	Accounts	We captures customers data

Activity-1

Creation of object Dispatch/Tracking

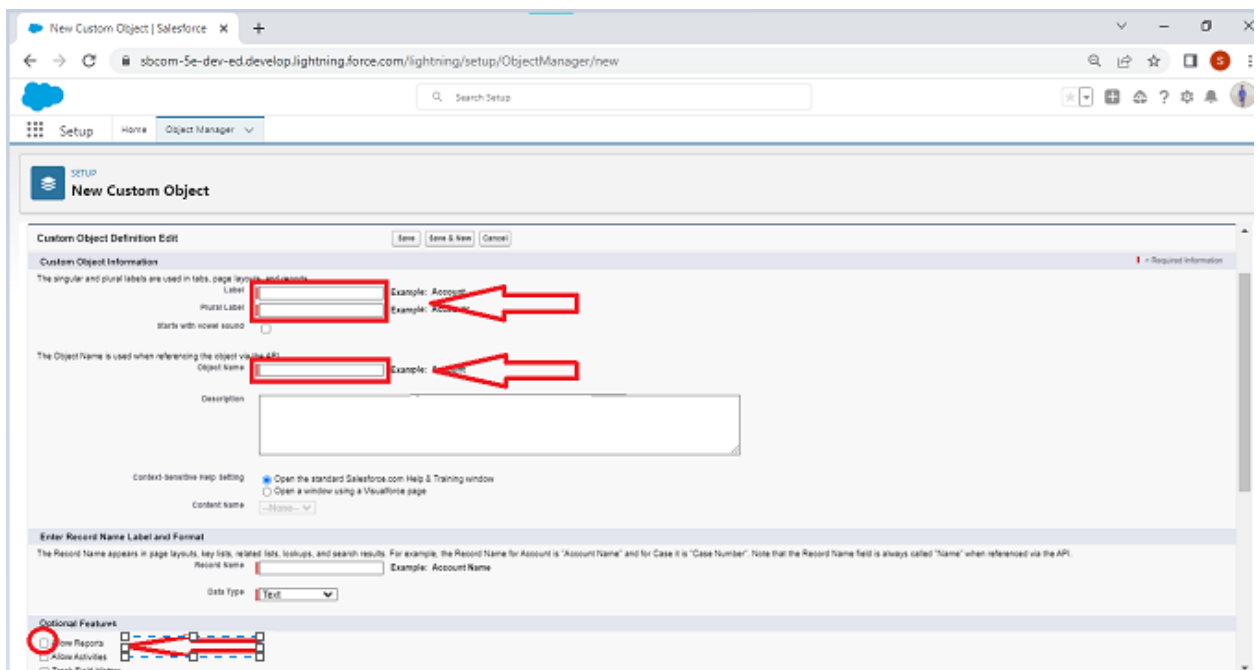
- 1) Navigate to setup and select object manager.



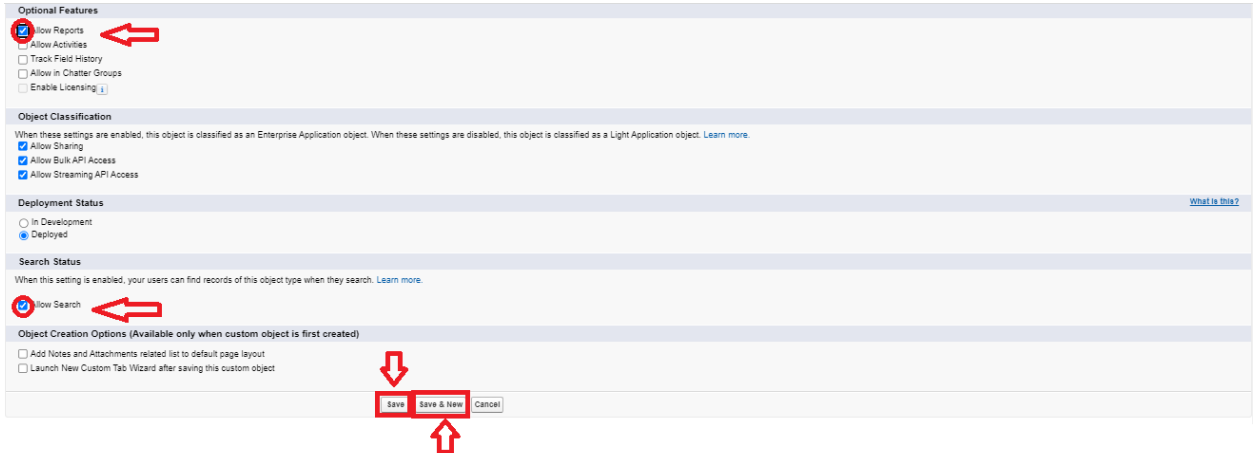
- 2) At the top of the right side there you can find create custom object.



- 3) You will navigate to custom object definition edit where you have to give the object name.



- 4) The label name has Display/tracking and Plural label has Display/trackings.
- 5) In enter record name label and format enter name record name has Tracking ID.
- 6) And the data type has text.
- 7) In deployment status select deployed option.



Optional Features

- ☒ Allow Reports
- ☐ Allow Activities
- ☐ Track Field History
- ☐ Allow in Chatter Groups
- ☐ Enable Licensing

Object Classification

When these settings are enabled, this object is classified as an Enterprise Application object. When these settings are disabled, this object is classified as a Light Application object. [Learn more.](#)

- ☒ Allow Sharing
- ☒ Allow Bulk API Access
- ☒ Allow Streaming API Access

Deployment Status

☐ In Development

☒ Deployed

Search Status

When this setting is enabled, your users can find records of this object type when they search. [Learn more.](#)

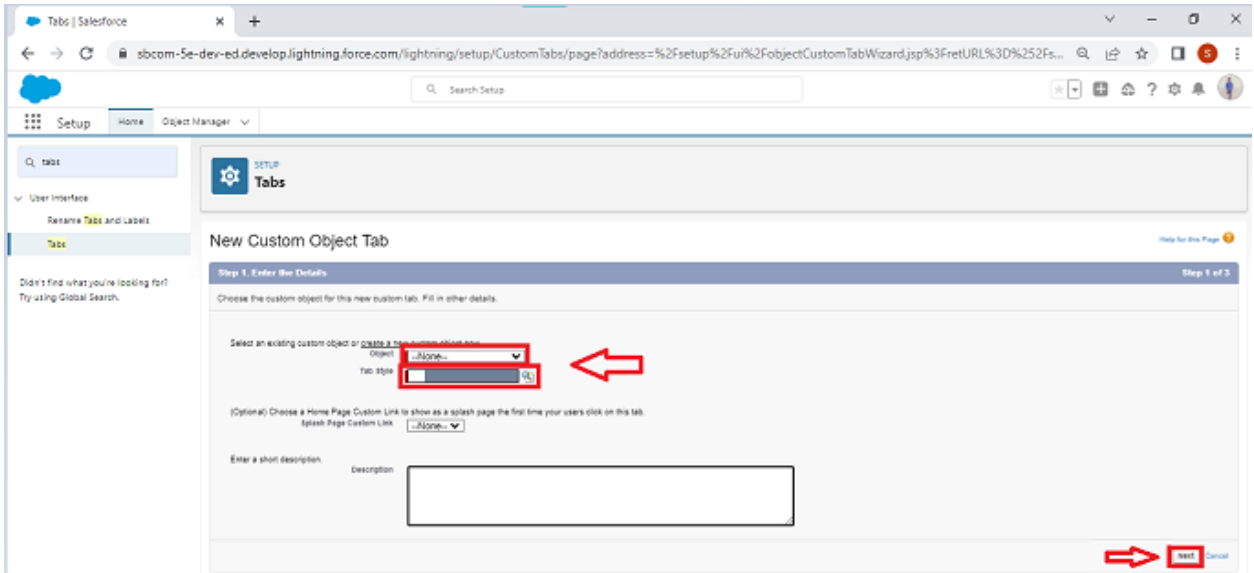
☒ Allow Search

Object Creation Options (Available only when custom object is first created)

- ☐ Add Notes and Attachments related list to default page layout
- ☐ Launch New Custom Tab Wizard after saving this custom object

Buttons: Save, Save & New, Cancel

- 8) Ensure that you have to select at least one option in the object creation option; it is available only once when a custom object is created.
- 9) Then click on next you will navigate to the new custom object tab where you have to select tab style and click on next.



Setup | Tabs

New Custom Object Tab

Step 1: Enter the Details

Choose the custom object for this new custom tab. Fill in other details.

Select an existing custom object or create a new custom object.

Object:

Tab Style:

(Optional) Choose a Home Page Custom Link to show as a splash page the first time your users click on this tab.

Splash Page Custom Link:

Enter a short description.

Description:

Buttons: Next, Cancel

- 10) After tab selection you will be navigated to add to profiles select default on click on next.
- 11) Thereafter you have to select a custom app select include tab so that object will be available in all objects and select save option.

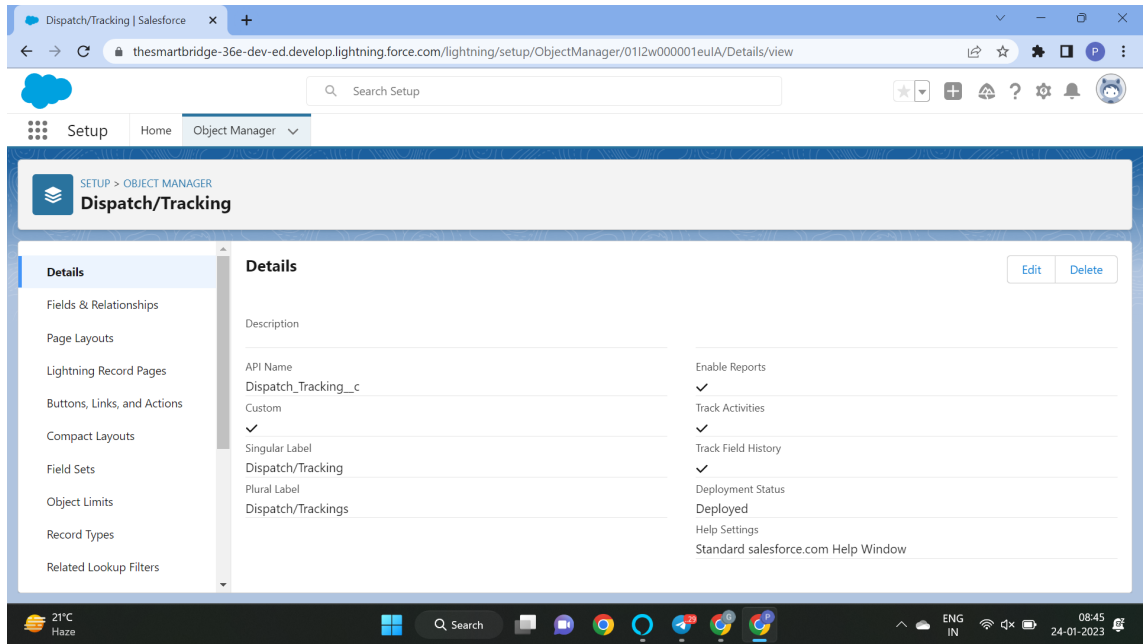
Activity-2 Fields available on Dispatch/tracking

- 1) Dispatched

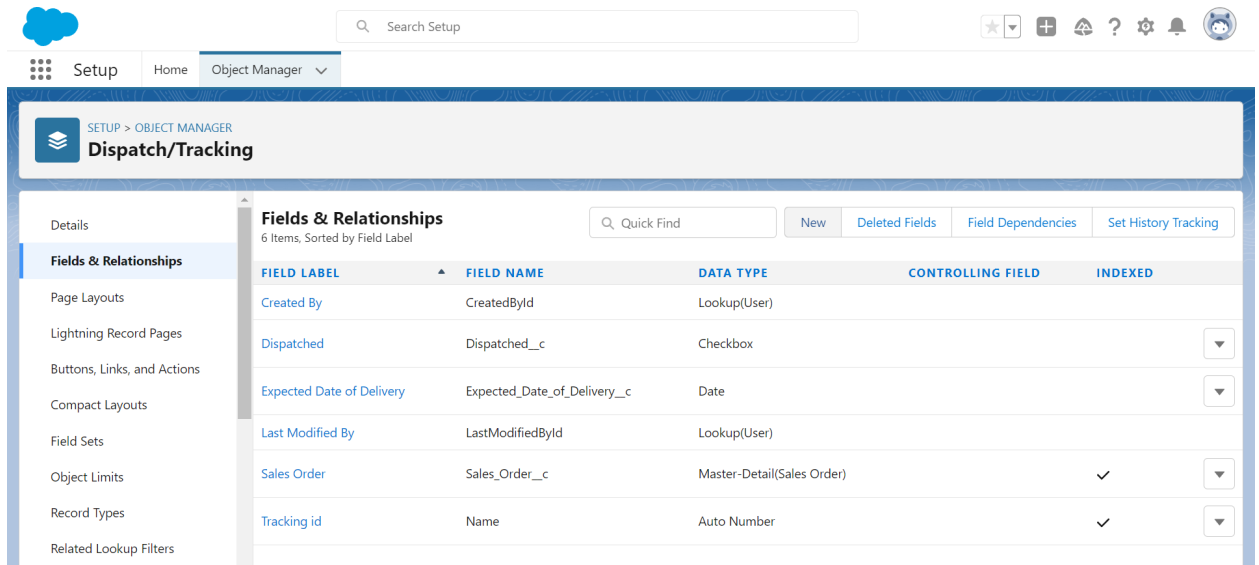
- 2) Expected date of delivery
- 3) Tracking Id
- 4) Sales order

Creation of fields on Dispatch/tracking

- 1) Select your object from object selection has Dispatch/Tracking.



- 2) And select the option fields and relationships.
- 3) At the top right side you can find a new select that option



- 4) Now you have to select data type, Checkbox Has data type.

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

The relationship field allows users to click on a lookup icon to select a value from a popup list. The master object is the source of the values in the list.

☐ External Lookup Relationship

Creates a relationship that links this object to an external object whose data is stored outside the Salesforce org.

☐ Checkbox

Allows users to select a True (checked) or False (unchecked) value.

☐ Currency

Allows users to enter a dollar or other currency amount and automatically formats the field as a currency amount. This can be useful if you export data to Excel or another spreadsheet.

5) And you will navigate to enter the details page where you give the field label.

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Step 2. Enter the details

Step 2 of 4

Field Label

Default Value ☐ Checked ☒ Unchecked

Field Name

Description

Help Text

Auto add to custom report type ☒ Add this field to existing custom report types that contain this entity

Previous Next Cancel

- 6) And give the label name has Dispatched
- 7) At the bottom of the object you can find options like required, unique, external id select required option so that always require a value in this field in order to save.
- 8) Click next you will navigate to field level security click on visible checkbox so that it is visible to all profiles.
- 9) Select the next option, select the page layout and save it.

Milestone-3 Relationship b/w objects:

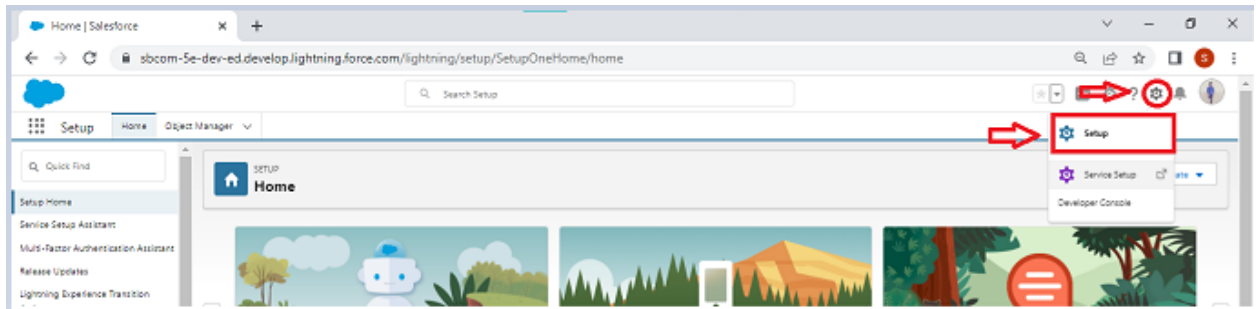
It's time to take things to the next level with object relationships. Object relationships are special field types that connect two objects. As a crm product owner create relationships to link objects with each other, so that when users view records, they can also see related data.

Activity-1:

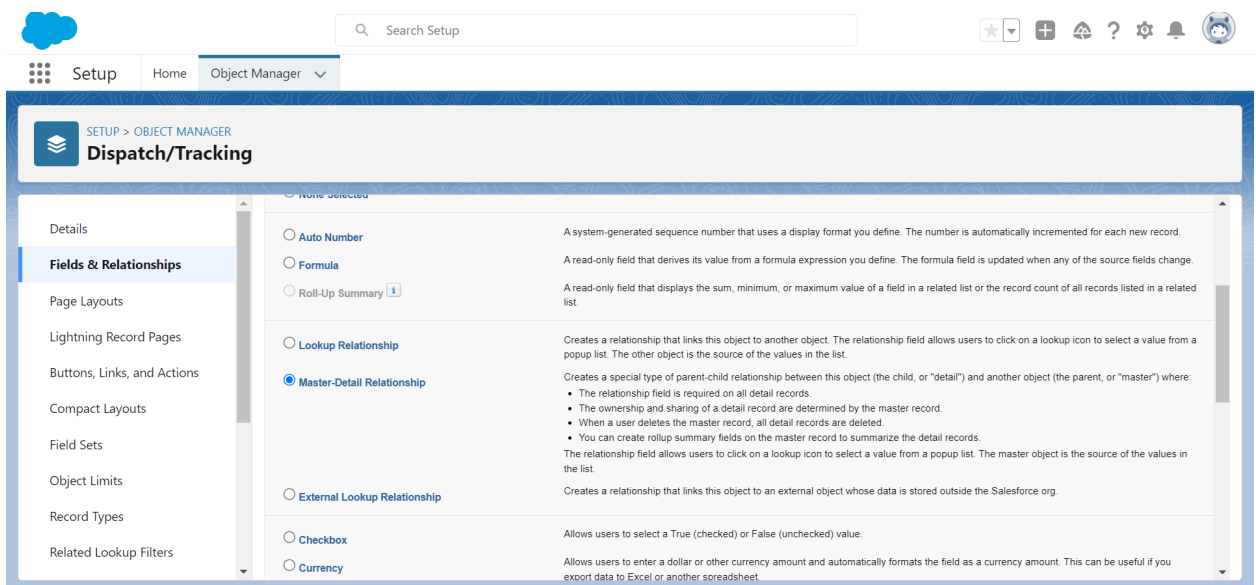
Creation of relationships between objects

To create a Master Detail relationship between Dispatch/tracking and sales order.


- 1) Go to the Set Up option from the Home Page and click on it.












- 2) Go to the object manager and select 'Dispatch/tracking' object from the list
- 3) And select fields and relationships and click on new.
- 4) Select the data type has Master detail relationship




- 5) And select related to the object has sales order, and click on next.
- 6) You will navigate to the label name page where you give the label name for the field, give it has sales order and click next.





Setup

Home

Object Manager 



SETUP > OBJECT MANAGER

Dispatch/Tracking

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

GDPR

PCI

Master-Detail Options

Related To

Sales_Order

Child Relationship Name

Dispatch_Trackings

Related List Label

Dispatch/Trackings

Sharing Setting

Select the minimum access level required on the Master record to create, edit, or delete related Detail records.


☐ Read Only: Allows users with at least Read access to the Master record to create, edit, or delete related Detail records.
 ☒ Read/Write: Allows users with at least Read/Write access to the Master record to create, edit, or delete related Detail records.

Allow reparenting

☐ Child records can be reparented to other parent records after they are created

Lookup Filter

Optionally, create a filter to limit the records available to users in the lookup field. [Tell me more!](#)

 [Show Filter Settings](#)

Change Field Type

Save

Cancel

7) Select visible for all profiles in field level security and select page layout in next page and save it.

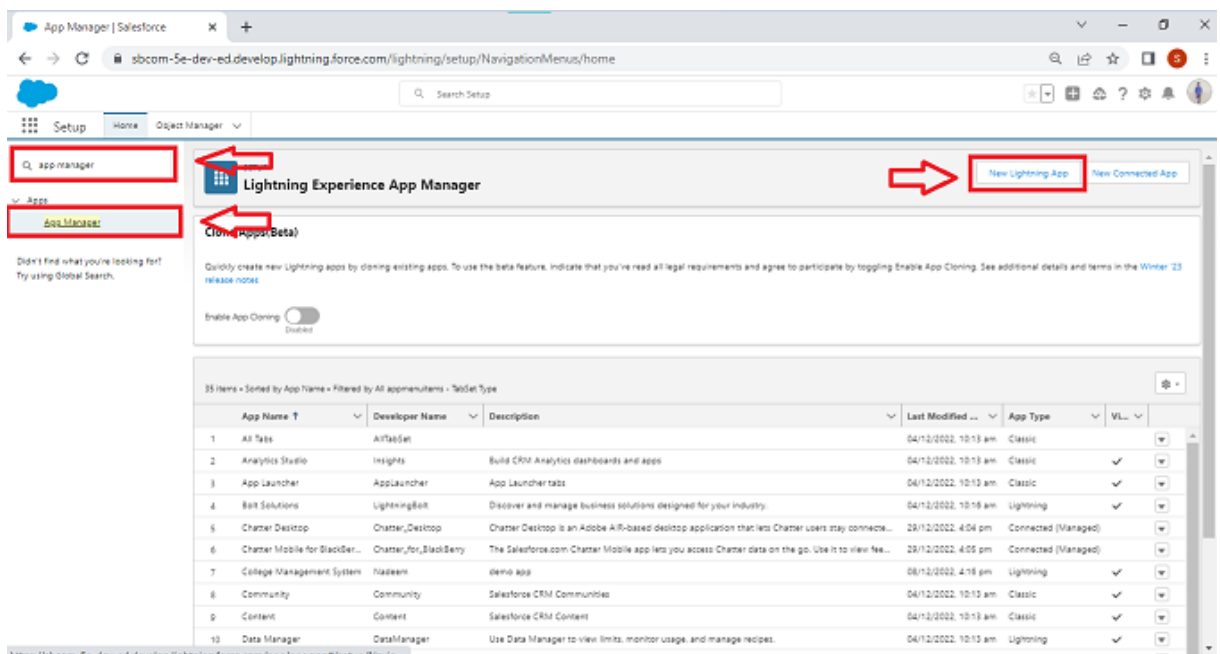
Milestone-4 Application:

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 An app is a collection of items that work together to serve a particular function. Salesforce apps come in two flavors: Classic and Lightning.

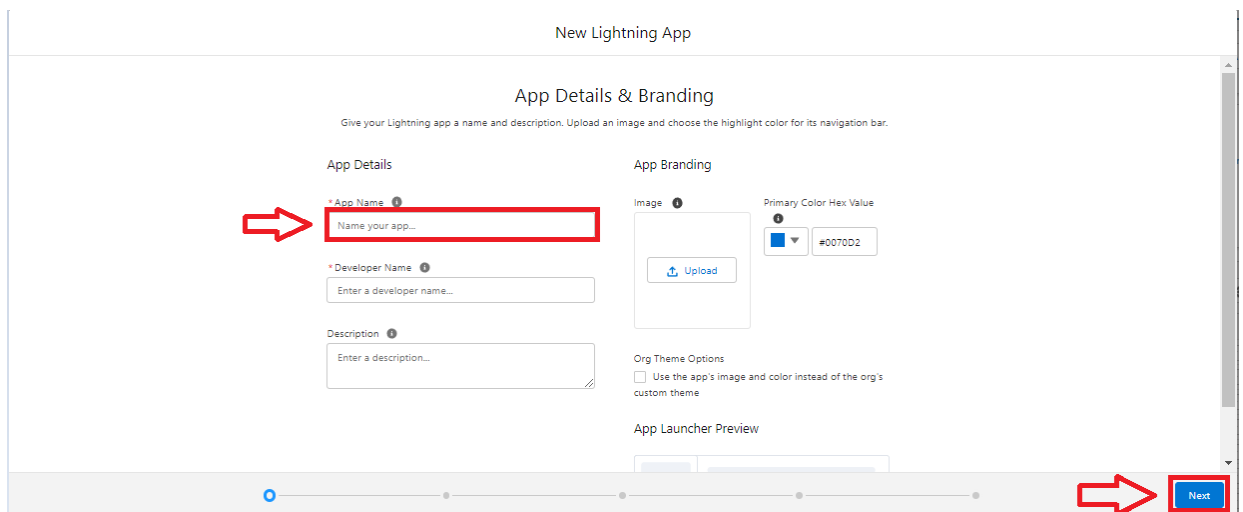
Activity-1

Creation of Application

- 1) Navigate to setup and search for app manager



- 2) And select an option for a new lightning app.



- 3) Give the app name has sales app.

- 4) Upload the picture and click next.
- 5) Choose the app option as navigation style- standard navigation, support from factors-desktop & mobile and select next.

New Lightning App

Navigation Items

Choose the items to include in the app, and arrange the order in which they appear. Users can personalize the navigation to add or move items, but users can't remove or rename the items that you add. Some navigation items are available only for phone or only for desktop. These items are dropped from the navigation bar when the app is viewed in a format that the item doesn't support.

Available Items

- Accounts
- Activities
- Alert Settings
- All Sites
- Alternative Payment Methods
- App Launcher
- Appointment Invitations

Selected Items

No items selected

Back
Next

- 6) And move the objects from available items to selected items.
- 7) Accounts,contacts,opportunities,Leads,warehouse,dispatch/tracking,campaign to selected items.
- 8) And system admin profile to available items to selected items.

New Lightning App

User Profiles

Choose the user profiles that can access this app.

Available Profiles

- Analytics Cloud Integration User
- Analytics Cloud Security User
- Authenticated Website
- Authenticated Website
- Contract Manager
- Cross Org Data Proxy User
- Custom: Sales Profile

Selected Profiles

No Profiles selected

Back
Save & Finish

Milestone-5 Layouts:

Page layouts control the layout of an object, As a crm product owner create custom page layouts which defines which fields the user can view and edit while entering data in objects. And must contain different sets of fields and related lists.

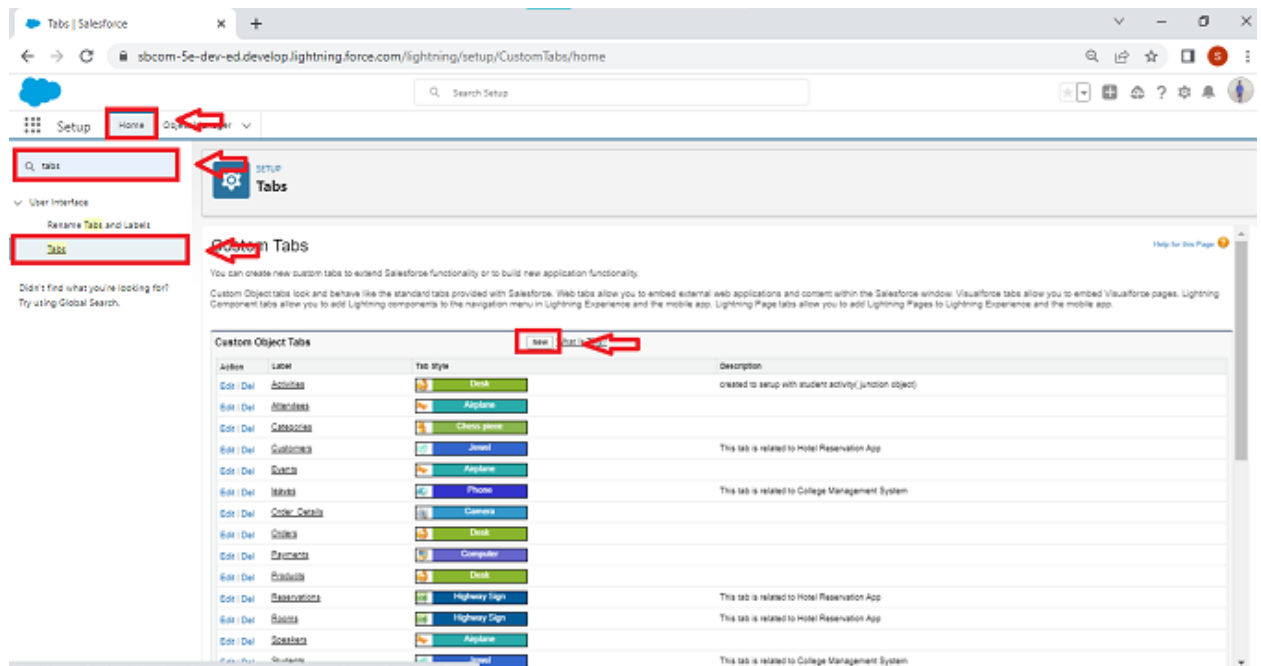
Custom Page layouts

- 1) Warehouse page layout
- 2) Sales order layout
- 3) Dispatch/Tracking layout

Activity-1:

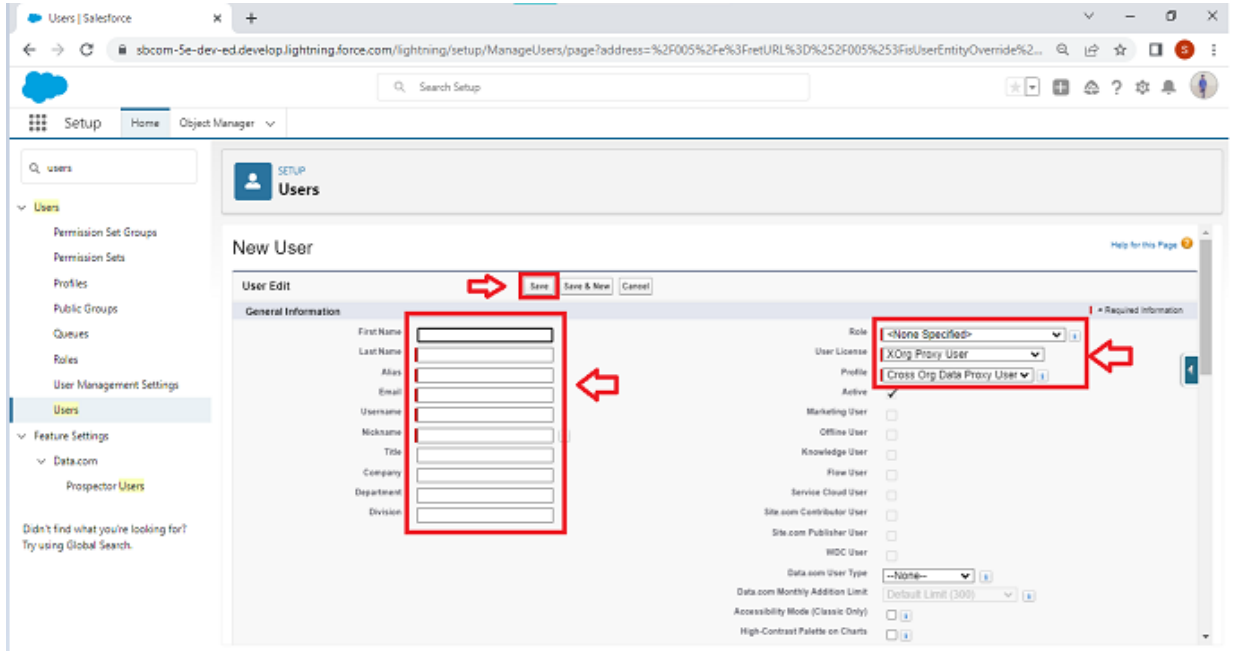
Creation of custom Tabs

- 1) Now create a custom tab. Click the Home tab, enter Tabs in Quick Find and select Tabs.
- 2) 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.
- 6) In the same way create other objects such as students and parents.

- 3) Give the first name and last name.
- 4) Enter your email in the email field.
- 5) Enter username; it must be unique.
- 6) Select the user license of salesforce.
- 7) In the profile field select standard platform profile.



- 8) At the bottom of the page check the box to generate a new password and notify the user immediately.

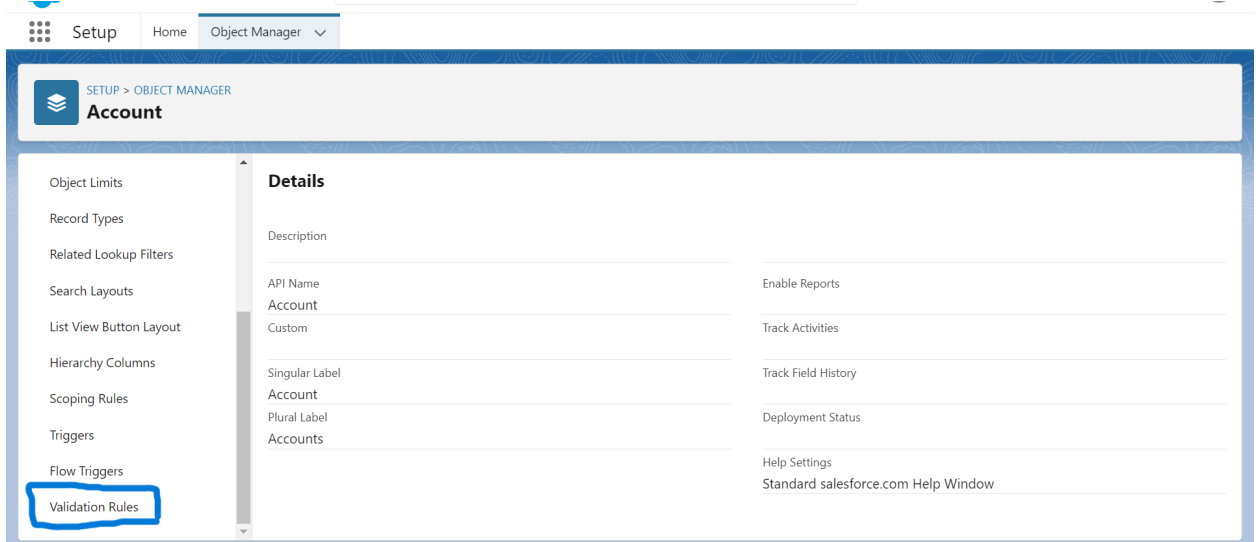
Milestone-7 Validation Rules:

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.

Activity-1:

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.



Setup > Object Manager

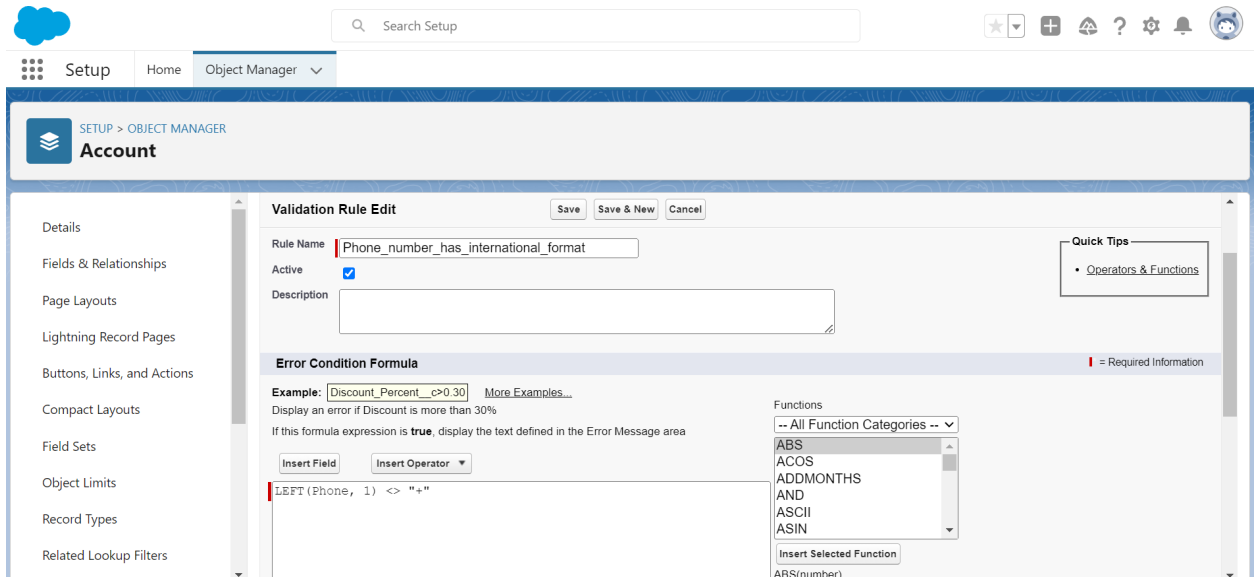
Account

- Object Limits
- Record Types
- Related Lookup Filters
- Search Layouts
- List View Button Layout
- Hierarchy Columns
- Scoping Rules
- Triggers
- Flow Triggers
- Validation Rules**

Details

Description	
API Name	Account
Account	Custom
Singular Label	Account
Plural Label	Accounts
Enable Reports	
Track Activities	
Track Field History	
Deployment Status	
Help Settings	Standard salesforce.com Help Window

- 3) Click new, give the label name and in edit error conditional formula give the formula `hasLEFT(Phone, 1) <> "+"`.



Setup > Object Manager

Account

Validation Rule Edit

Save Save & New Cancel

Rule Name:

Active: ☒

Description:

Error Condition Formula

Example: `Discount_Percent__c > 0.30` More Examples...

Display an error if Discount is more than 30%

If this formula expression is **true**, display the text defined in the Error Message area

Insert Field Insert Operator

`LEFT(Phone, 1) <> "+"`

Functions

- All Function Categories --
- ABS
- ACOS
- ADDMONTHS
- AND
- ASCII
- ASIN

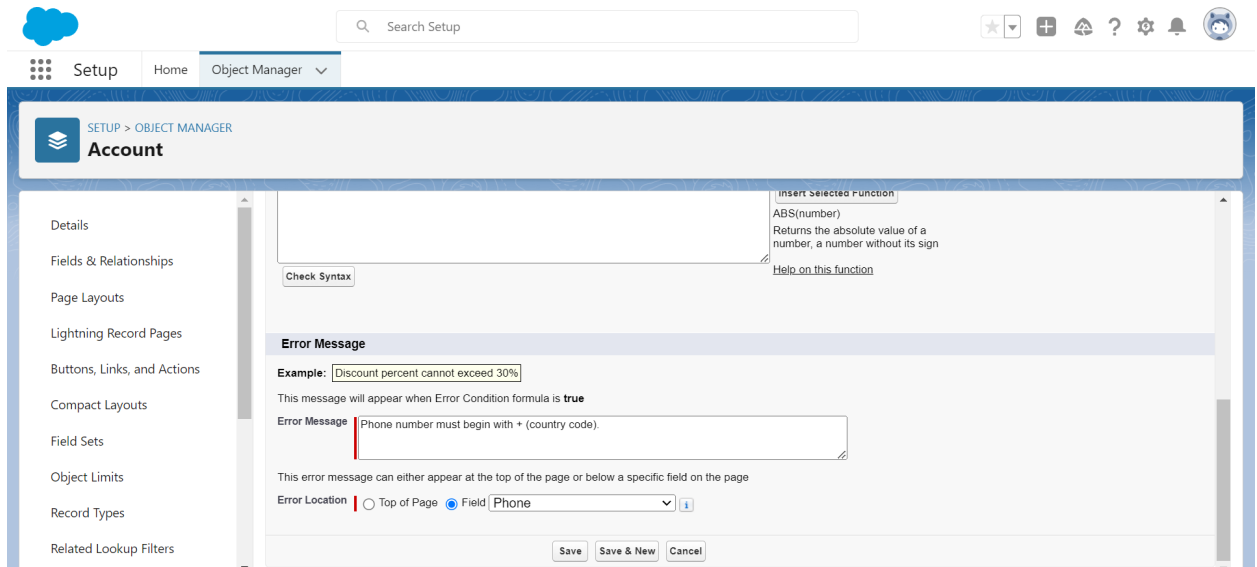
Insert Selected Function

ABS(number)

Quick Tips

- Operators & Functions

- 4) And in error message give the description has Phone number must begin with + (country code).
- 5) In error location select top of the field.



Setup > Object Manager > Account

Error Message

Example: Discount percent cannot exceed 30%

This message will appear when Error Condition formula is **true**

Error Message Phone number must begin with + (country code).

This error message can either appear at the top of the page or below a specific field on the page

Error Location ☐ Top of Page ☒ Field Phone

Save Save & New Cancel

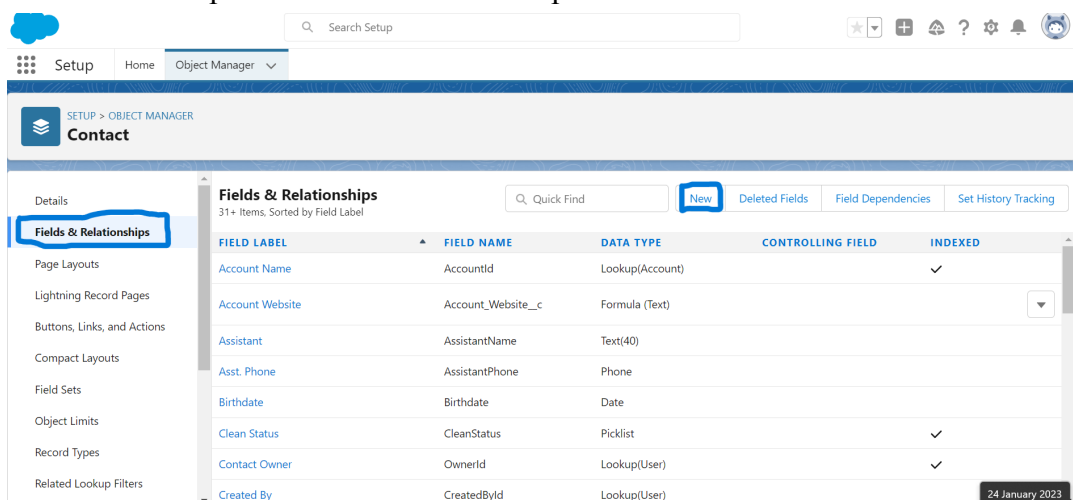
Activity-2 :

Cross Object Formula

Using an object formula lets you reference merge fields on a master object from a master detail relationship on the detail object. As a crm product owner they wants to save user's clicks and displays contacts' parent accounts website value on the contact record so users do not have to click on the account to find the website.

Creation of cross object

- 1) Select your object from object selection has Contact.
- 2) And select the option fields and relationships.



Setup > Object Manager > Contact

Fields & Relationships

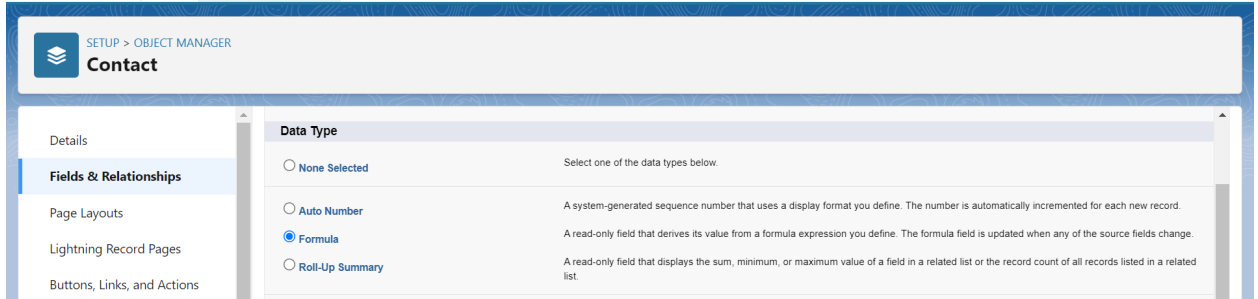
31+ Items. Sorted by Field Label

Quick Find New Deleted Fields Field Dependencies Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Account Name	AccountId	Lookup(Account)		✓
Account Website	Account_Website__c	Formula (Text)		
Assistant	AssistantName	Text(40)		
Asst. Phone	AssistantPhone	Phone		
Birthdate	Birthdate	Date		
Clean Status	CleanStatus	Picklist		✓
Contact Owner	OwnerId	Lookup(User)		✓
Created By	CreatedBy	Lookup(User)		

24 January 2023

- 3) At the top right side you can find a new select that option.
- 4) Now you have to select data type, formula Has data type.



SETUP > OBJECT MANAGER
Contact

Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions

Data Type

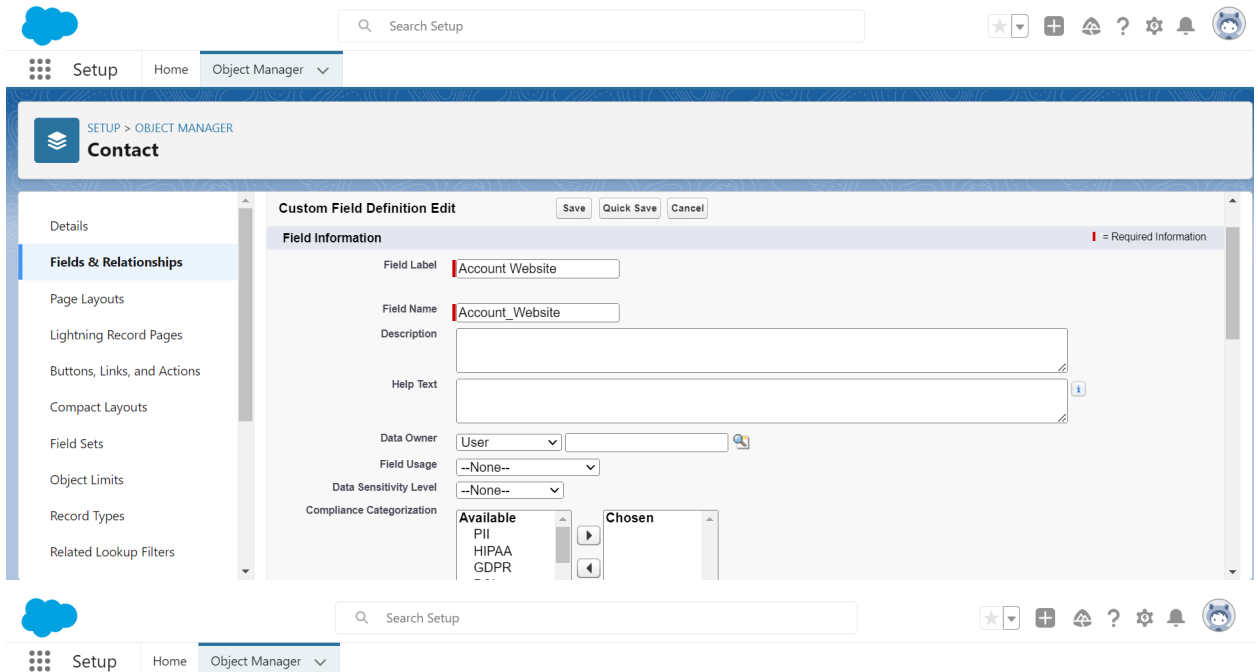
☐ None Selected Select one of the data types below.

☐ Auto Number A system-generated sequence number that uses a display format you define. The number is automatically incremented for each new record.

☒ **Formula** A read-only field that derives its value from a formula expression you define. The formula field is updated when any of the source fields change.

☐ Roll-Up Summary A read-only field that displays the sum, minimum, or maximum value of a field in a related list or the record count of all records listed in a related list.

- 5) And you will navigate to enter the details page where you give the field label.
- 6) And give the label name has Account Website
- 7) In the formula field enter this formula Account.Website.



SETUP > OBJECT MANAGER
Contact

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Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters

Custom Field Definition Edit Save Quick Save Cancel

Field Information ⓘ Required Information

Field Label

Field Name

Description

Help Text

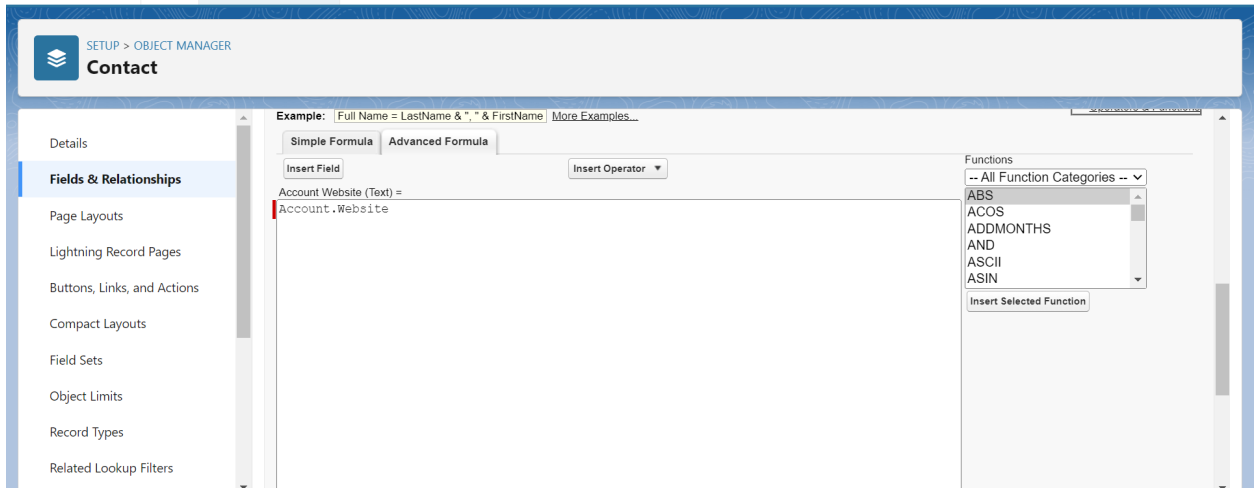
Data Owner User

Field Usage --None--

Data Sensitivity Level --None--

Compliance Categorization Available Chosen

PII
HIPAA
GDPR



SETUP > OBJECT MANAGER
Contact

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Related Lookup Filters

Example: Full Name = LastName & ", " & FirstName More Examples...

Simple Formula Advanced Formula

Insert Field Insert Operator

Account Website (Text) =
Account.Website

Functions
-- All Function Categories --
ABS
ACOS
ADDMONTHS
AND
ASCII
ASIN
Insert Selected Function

- 8) At the bottom of the object you can find options like required, unique, external id select required option so that always require a value in this field in order to save.
- 9) Click next you will navigate to field level security click on visible checkbox so that it is visible to all profiles.
- 10) Select the next option, select the page layout and save it.

Milestone-7 Reports :

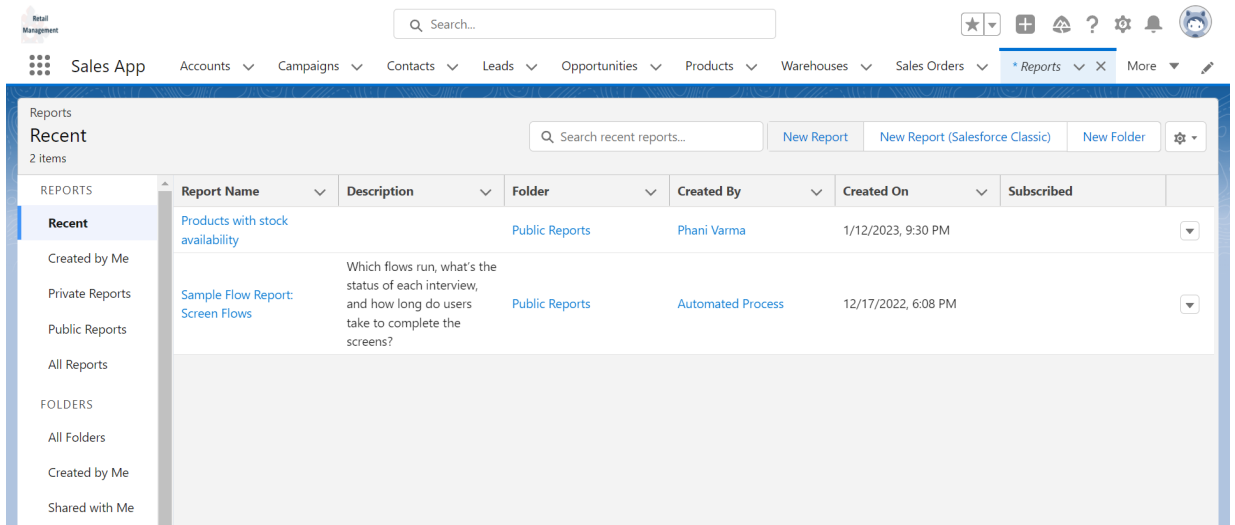
A report is a list of records that meet the criteria you define. It's displayed in Salesforce in rows and columns, and can be filtered, grouped, or displayed in a graphical chart. Every report is stored in a folder. Folders can be public, hidden, or shared, and can be set to read-only or read/write.

Activity:

Creation of report

Note- While creation of report ensure that update preview automatically is selected which is available at the right side of the report page.

- 1) Click on the app launcher and search for reports.
- 2) And select a new report, for the record type category select other reports.



REPORTS	Report Name	Description	Folder	Created By	Created On	Subscribed
Recent	Products with stock availability		Public Reports	Phani Varma	1/12/2023, 9:30 PM	
Created by Me	Sample Flow Report: Screen Flows	Which flows run, what's the status of each interview, and how long do users take to complete the screens?	Public Reports	Automated Process	12/17/2022, 6:08 PM	

- 3) Select Warehouses for the report type name.

Create Report

Category

Recently Used

All

Accounts & Contacts

Opportunities

Customer Support Reports

Leads

Campaigns

Activities

Contracts and Orders

Price Books, Products and Assets

Administrative Reports

File and Content Reports

Individuals

Other Reports

Hidden Report Types

Select a Report Type

Q Search Report Types...

Report Type Name	Category
Accounts	Standard
Contacts & Accounts	Standard
Accounts with Partners	Standard
Account with Account Teams	Standard
Accounts with Contact Roles	Standard
Accounts with Assets	Standard
Contacts with Assets	Standard
Accounts with SolarBots	Standard
Account History	Standard
Contact History	Standard
D&B Company with and without Accounts	Standard
Opportunities	Standard
Opportunities with Products	Standard
Opportunities with Contact Roles	Standard
Opportunities with Partners	Standard
Opportunities with Competitors	Standard
Opportunity History	Standard
Opportunity Field History	Standard
Opportunity Trends	Standard

Details

Accounts
Standard Report Type

Start Report

Details Fields (71)

Created By You

- Accounts by Market
Last Used 1/3/2023
- Rated Accounts by State
Last Used 1/2/2023
- High Value Residential
Last Used 1/2/2023

Created By Others
No Reports Yet

Objects Used in Report Type

- Role
- Account
- Operating Hours
- Asset

4) Select the start button to create a new report.

Retail Management

Q Search...

Sales App Accounts Campaigns Contacts Leads Opportunities Products Warehouses Report Builder X More

REPORT Products with stock availability Warehouses

Got Feedback? Add Chart Save & Run Save Close Run

Previewing a limited number of records. Run the report to see everything. Update Preview Automatically

Outline Filters 1

Groups

GROUP ROWS

Add group...

Product Name

GROUP COLUMNS

Add group...

Columns

Add column...

Warehouse: Warehouse Name

Stock Available

Product Name	Warehouse: Warehouse Name	Stock Available
- (2)	Passbook1	<input type="checkbox"/>
	Test Case-2	<input checked="" type="checkbox"/>
Subtotal		1
Air conditioner (1)	Hyderabad	<input checked="" type="checkbox"/>
Subtotal		1
Fan (1)	Kolkata	<input checked="" type="checkbox"/>
Subtotal		1
Refrigrator (1)	Chennai	<input checked="" type="checkbox"/>
Subtotal		1
Washing Machine (1)	Mumbai	<input checked="" type="checkbox"/>
Subtotal		1
Total (6)		5

Row Counts ☒ Detail Rows ☒ Subtotals ☒ Grand Total ☒ Conditional Formatting

5) At the left side of the report you can find an outline pane.

6) In the group rows select Product name.

7) And in columns warehouse:warehouse name and stock available.

8) Now navigate to the filter pane available next to the outline pane and ensure in the show me section all my warehouses is selected.

9) And in the warehouse created date select all time.

Report Builder interface showing a report titled "Products with stock availability" filtered by "Warehouses". The report displays a table with columns: Product Name, Warehouse: Warehouse Name, and Stock Available. The table shows data for various products across different warehouses, including subtotals and a grand total.

Product Name	Warehouse: Warehouse Name	Stock Available
- (2)	Passbook1	<input type="checkbox"/>
	Test Case-2	<input checked="" type="checkbox"/>
Subtotal		1
Air conditioner (1)	Hyderabad	<input checked="" type="checkbox"/>
Subtotal		1
Fan (1)	Kolkata	<input checked="" type="checkbox"/>
Subtotal		1
Refrigrator (1)	Chennai	<input checked="" type="checkbox"/>
Subtotal		1
Washing Machine (1)	Mumbai	<input checked="" type="checkbox"/>
Subtotal		1
Total (6)		5

Report Builder controls: Outline, Filters (1), Add filter..., Show Me My warehouses, Warehouse: Created Date, All Time, Update Preview Automatically (checked), Conditional Formatting.

10) And give the label name products with stock availability.

11) Click on save and run for saving the report.

Milestone-8 Dashboards:

Dashboards in Salesforce are a graphical representation of Reports. It shows data from source reports as visual components.

Activity

Creation of Dashboard

- 1) Click on the app launcher and search for dashboards.
- 2) Select the new dashboard option.

Smart Management

Search...

Sales App Accounts Campaigns Contacts Leads Opportunities Products Warehouses Dashboards More

Dashboards

Recent

1 item

Search recent dashboards... New Dashboard New Folder

DASHBOARDS	Dashboard Name	Description	Folder	Created By	Created On	Subscribed
Recent	Products with stock availability		Private Dashboards	Phani Varma	1/12/2023, 9:32 PM	

Created by Me

Private Dashboards

All Dashboards

FOLDERS

All Folders

Created by Me

Shared with Me

FAVORITES

All Favorites

- 3) Name the dashboard has a products with stock availability.
- 4) And select create option.
- 5) Now click on Add component and for report select passport with locations.
- 6) Select the donut chart in display as section.

Edit Component

Report

Products with stock availability

☐ Use chart settings from report

Display As

123

Value

Preview

Products with stock availability

Sum of Stock Available

Product Name

-
- Air conditioner
- Fan
- Refrigrator
- Washing Machine

5

View Report (Products with stock availability)

Cancel Update

Edit Component

Value

Sliced By

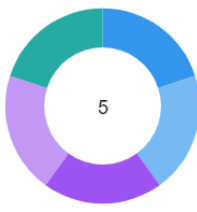
Display Units

☐ Show Values
☐ Show Percentages
☒ Combine Small Groups into "Others"
☒ Show Total

Preview

Products with stock availability

Sum of Stock Available



5

Product Name

- ●
- Air conditioner ●
- Fan ●
- Refrigrator ●
- Washing Machine ●

View Report (Products with stock availability)

Cancel
Update

7) Ensure that value is record count and sliced by product name.

Edit Component

Max Values Displayed

Title

Subtitle

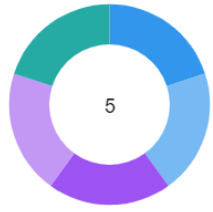
Footer

Legend Position

Preview

Products with stock availability

Sum of Stock Available



5

Product Name

- ●
- Air conditioner ●
- Fan ●
- Refrigrator ●
- Washing Machine ●

View Report (Products with stock availability)

Cancel
Update

8) Leave the default values.

9) Click on add.

10) And save the dashboard.

