Milestone 1- Create Salesforce Org

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

Object In Salesforce

Salesforce objects are database tables that permit you to store data that is specific to an organization.
Salesforce objects are of two types: Standard Objects: Standard objects are the kind of objects that are provided by salesforce.com such as users, contracts, reports, dashboards, etc.
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.

Creation Of Department Object For Travel Approval App

For this Travel Approval we need to create 5 objects **Department, Employee Detail, Expense, Expense Items,** and **Travel Approval**. The below steps will assist you in creating those objects.

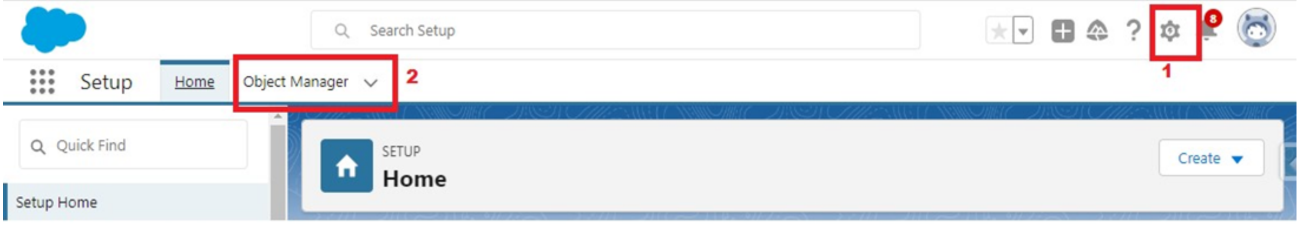
Create Department Object:

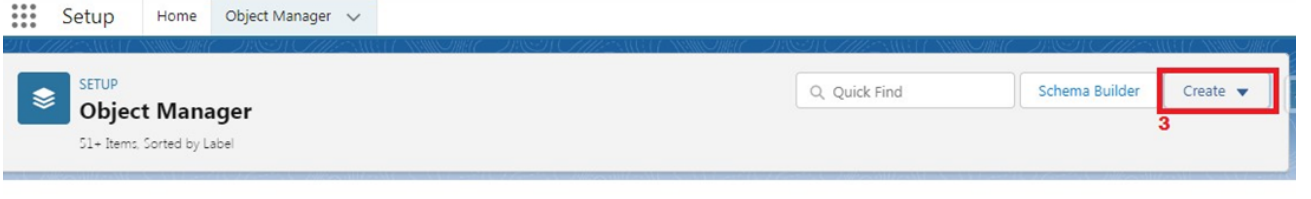
1. Click on the gear icon and then select Setup.
2. Click on the object manager tab just beside the home tab.
3. After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object.
4. On the Custom Object Definition page, create the object as follows:
5. Label: Department
6. Plural Label: *Departments*
7. Record Name: *Department Name*
8. Check the Allow Reports checkbox
9. Check the Allow Search checkbox
10. Click Save.

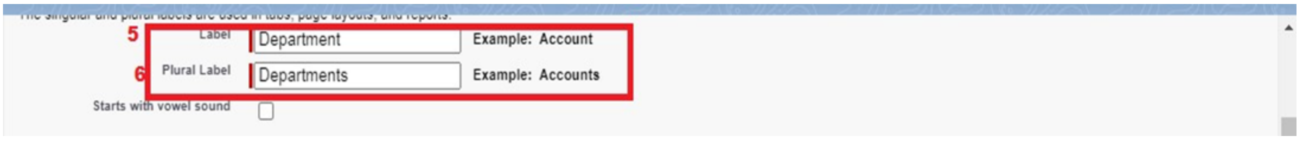
In the same way create 4 more objects **Employee Detail, Expense, Expense Items**, and **Travel Approval**

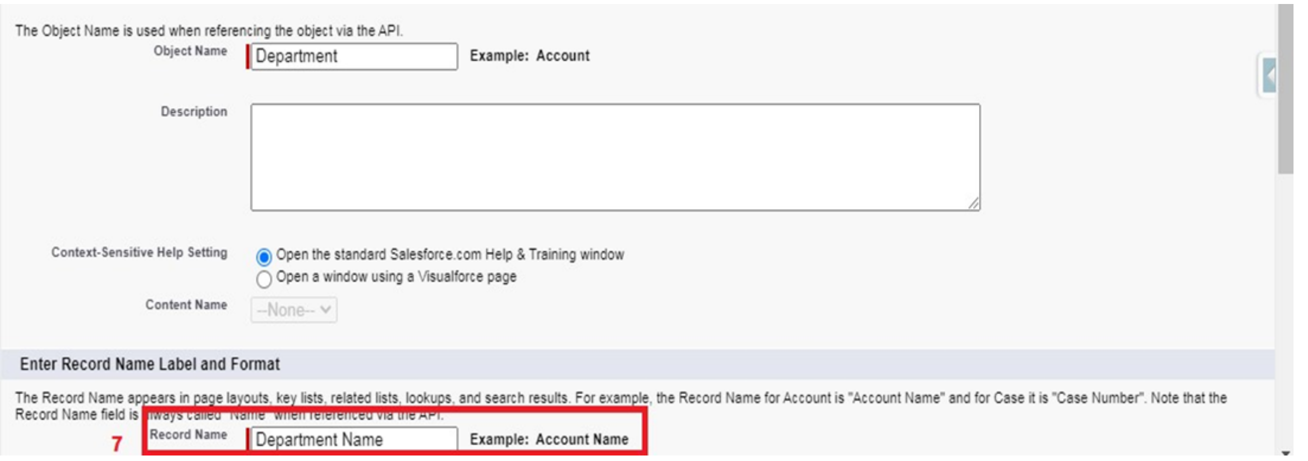
Note –

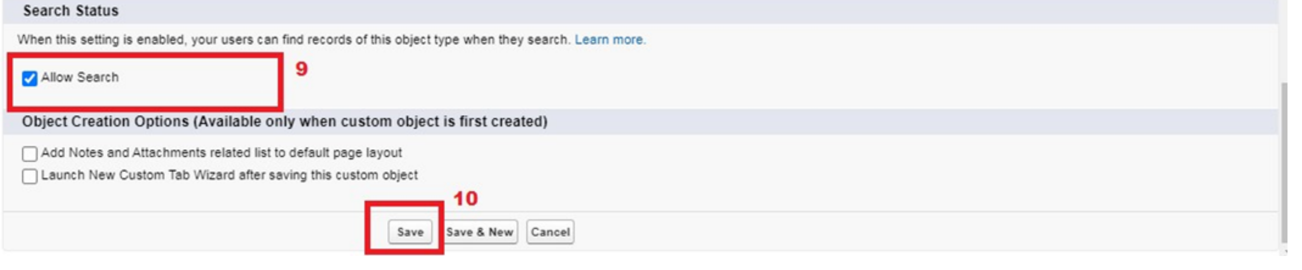
1. While making Expense Object select data type “Auto Number” in “Enter Record Name Label and Format” section.
2. While making Employee Detail Object put “Employee Name” in “Enter Record Name Label and Format” section.











What Is A Tab?

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:

(A) Standard Object Tabs: Standard object tabs display data related to standard objects

(B) Custom Object Tabs: Custom object tabs displays data related to custom objects.

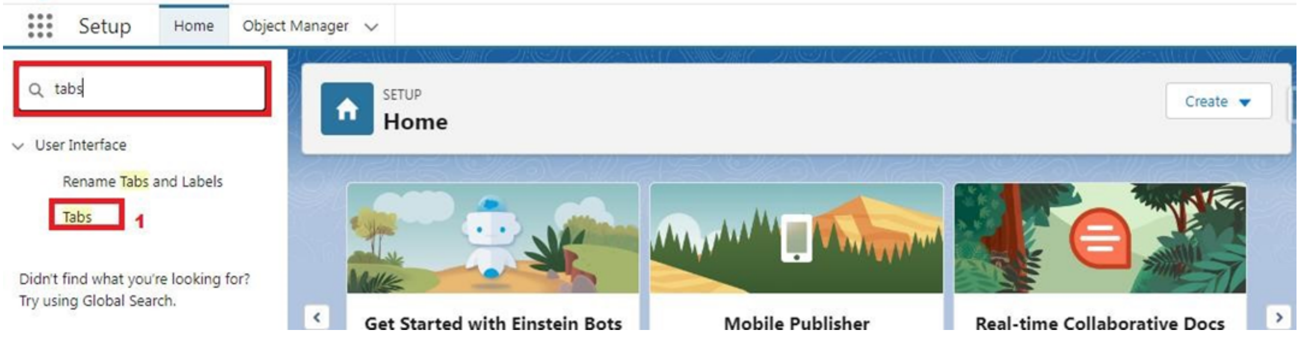
(C) Web Tabs: Web Tabs display any external Web-based application or Web page in Salesforce tabs.

(D) Visualforce Tabs: Visualforce Tabs display data from a Visualforce Page.

Custom Tab Creation

Now create a custom tab. Click the Home tab.

1. Enter Tabs in Quick Find and select Tabs.
2. Under Custom Object Tabs, click New.
3. For Object, select Department.
4. For Tab Style, select any icon.
5. Leave all defaults as is. Click Next, Next, and Save
6. In the same way create Tabs for all Custom Objects - Employee Detail, Expense, Expense Items, Travel Approval.



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 two types of apps -

1. Standard App: Standard apps come with every occurrence of Salesforce as default. Many features like Sales, Marketing, Community, call center, content, Salesforce Chatter, App Launcher, etc are present in it.
Note: The description, Logo, and Label of the standard app cannot be altered.

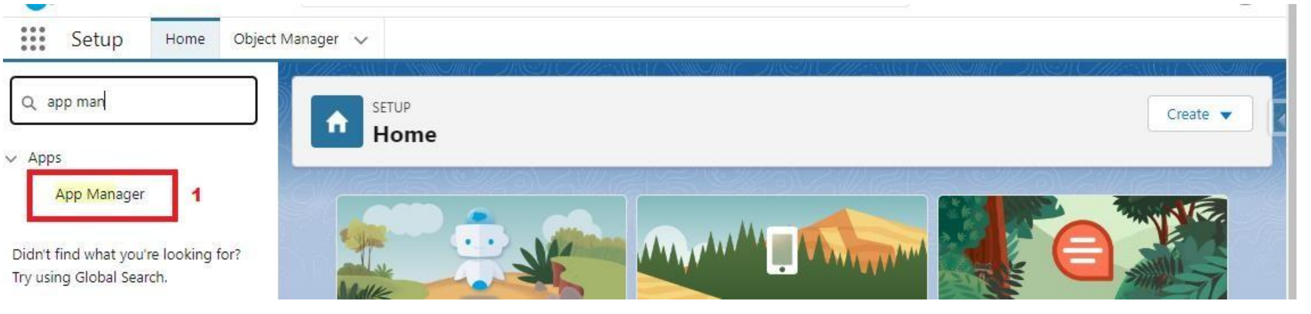
2. Custom Apps: Custom apps are created according to the needs of the user. Custom Apps are made by using standard and custom tabs together.

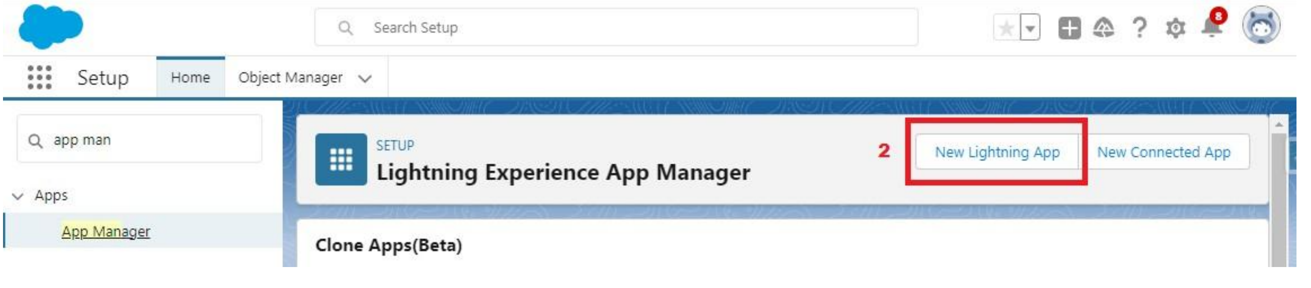
Note: Logos for Custom Apps can be changed.

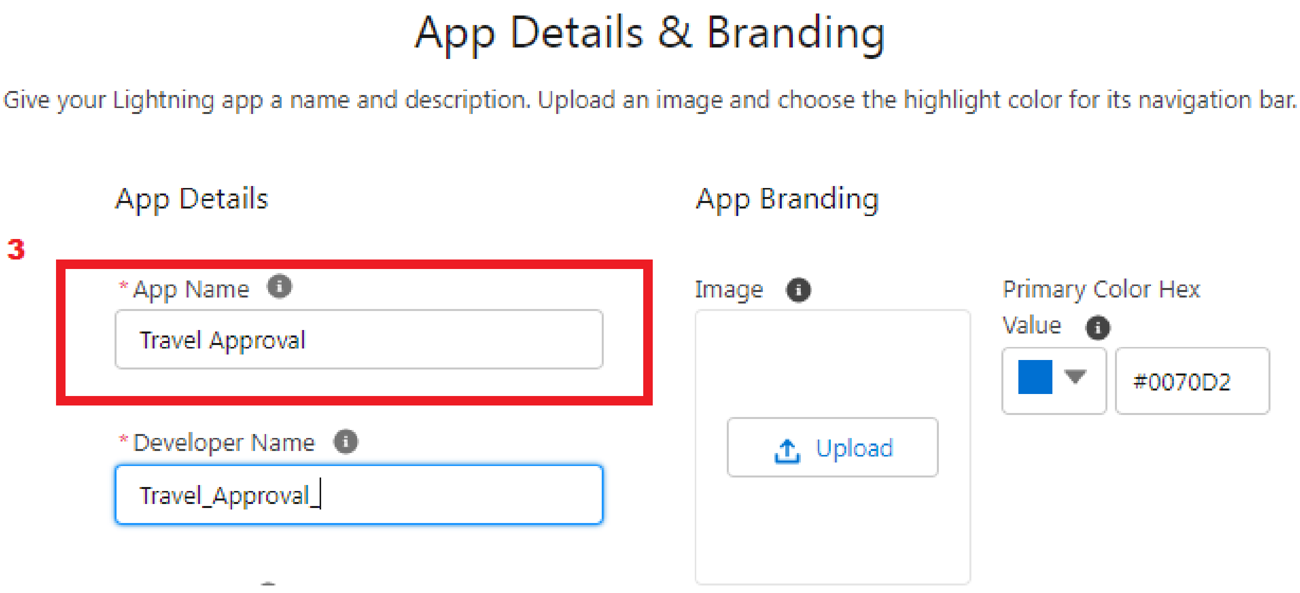
Create Travel Approval App

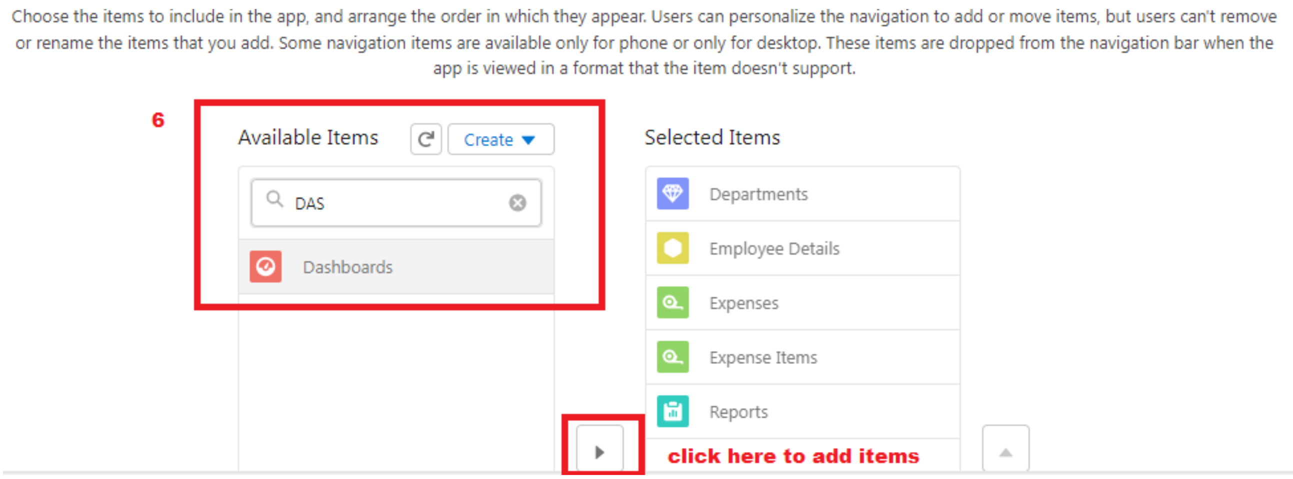
Create the Travel Approval app

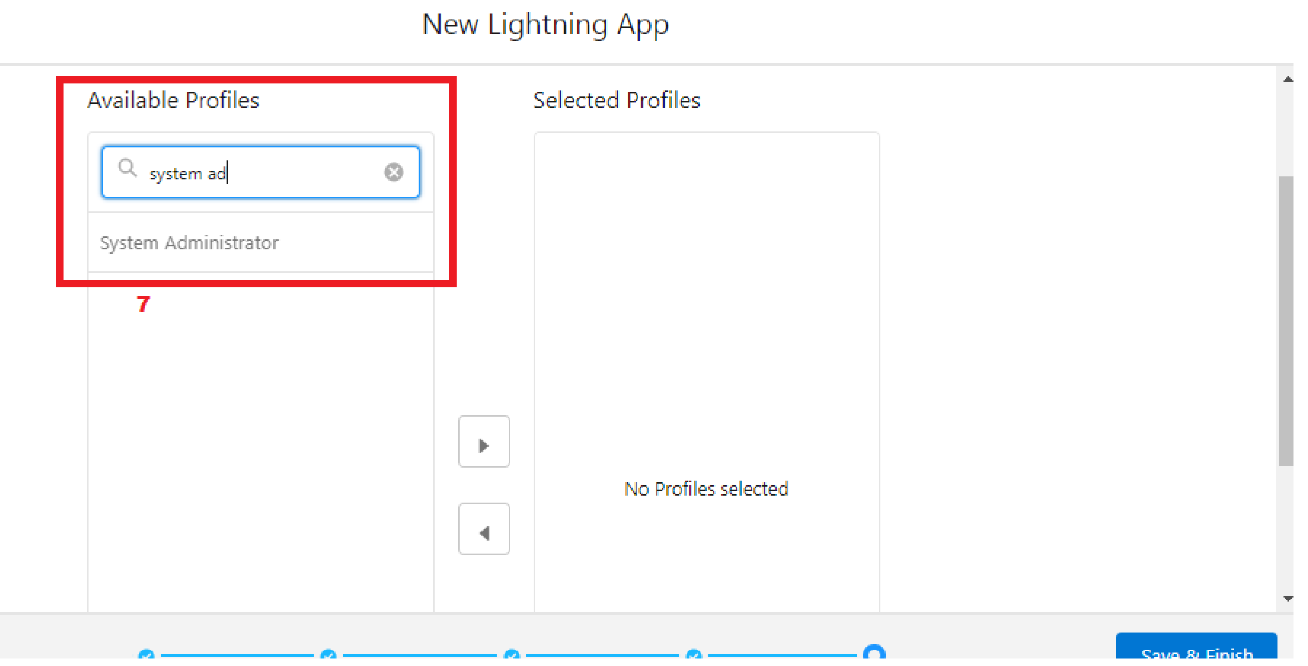
1. From Setup, enter App Manager in the Quick Find and select App Manager.
2. Click New Lightning App.
3. Enter **Travel Approval** as the App Name, then click Next
4. Under App Options, leave the default selections and click Next.
5. Under Utility Items, leave as is and click Next.
6. From Available Items, select **Department, Employee Detail, Expense, Expense Items, Travel Approval, 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.






App Details & Branding
Give your Lightning app a name and description. Upload an image and choose the highlight color for its navigation bar.
App Details
App Branding
3
* App Name
Travel Approval
* Developer Name
Travel_Approval_
Image
Upload
Primary Color Hex Value
#0070D2


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.
6
Available Items
Create
DAS
Dashboards
Selected Items
Departments
Employee Details
Expenses
Expense Items
Reports
click here to add items



To verify your changes, click the App Launcher, type **Travel Approval** and select the **Travel Approval** app.

Note:
App Launcher-Displays available apps.
App Name-Displays the current selected app.

Fields And Relationships

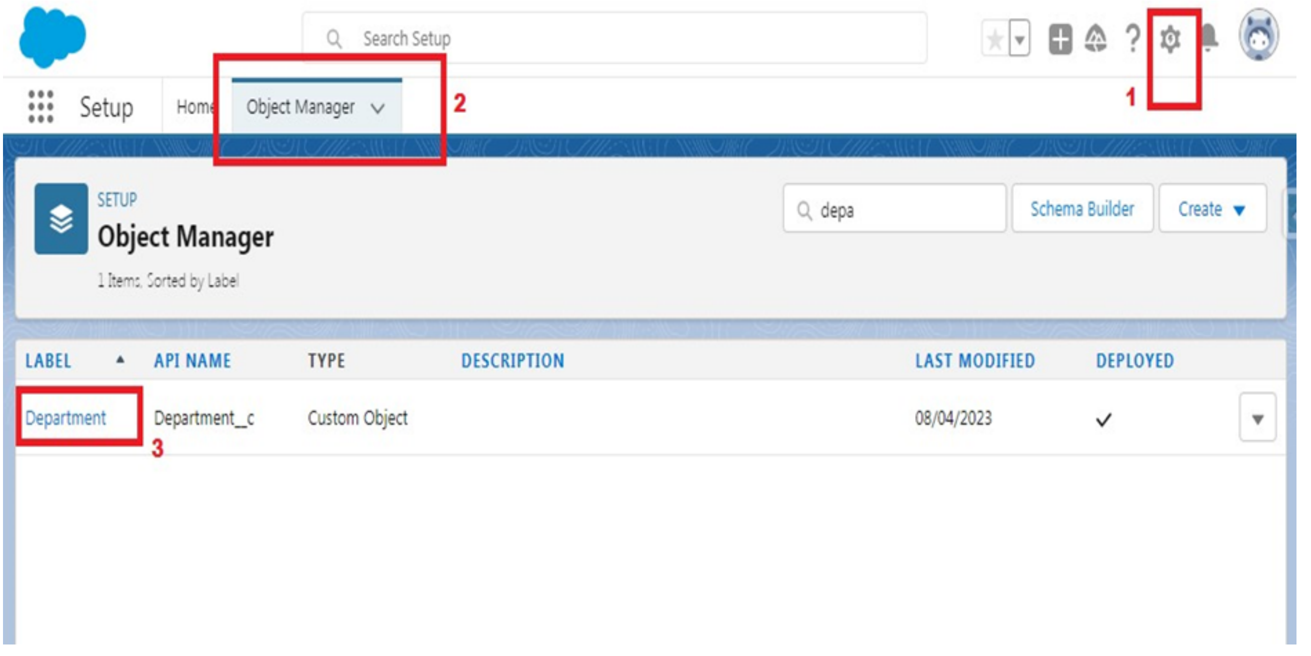
Fields - Fields store data values that are required for a particular object in a record.

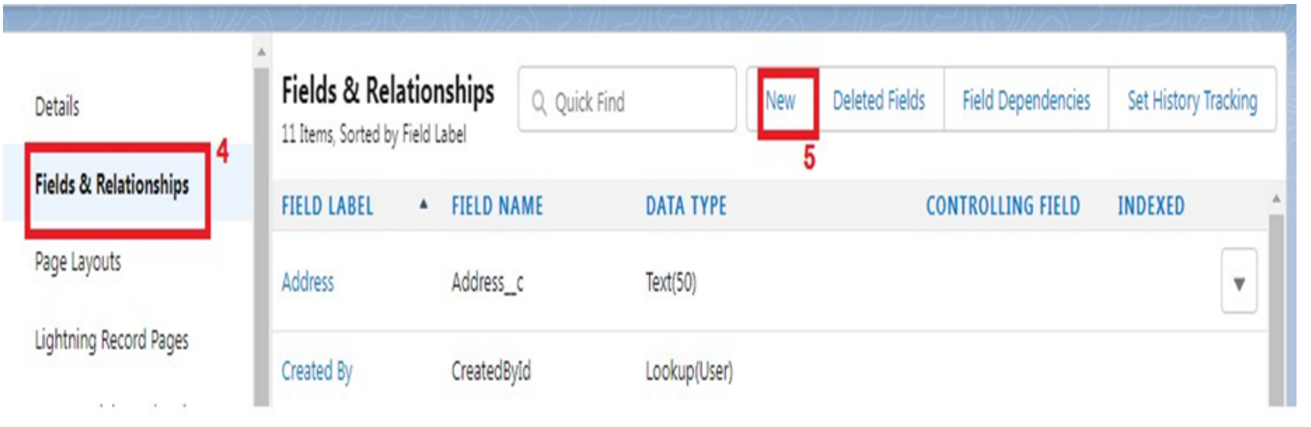
An object relationship in Salesforce is a two-way association between two objects. Relationships are created by creating custom relationship fields on an object. This is done so that when users view records, they can also see and access related data.

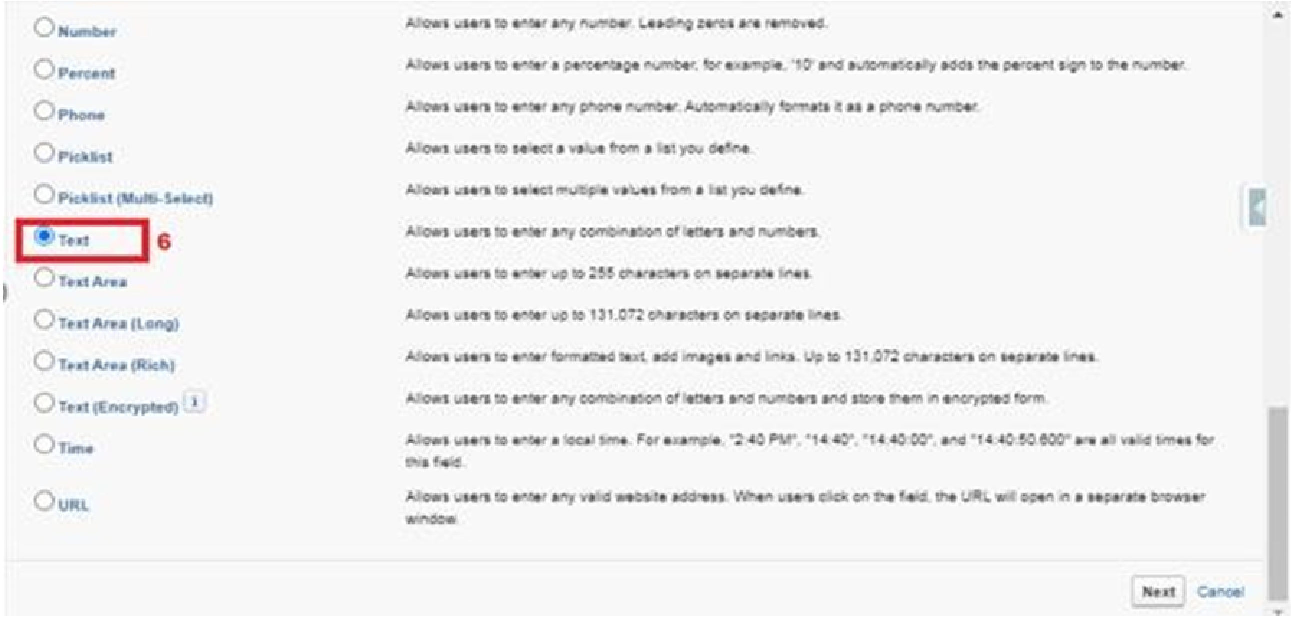
Creation Of Fields For The Department Object:

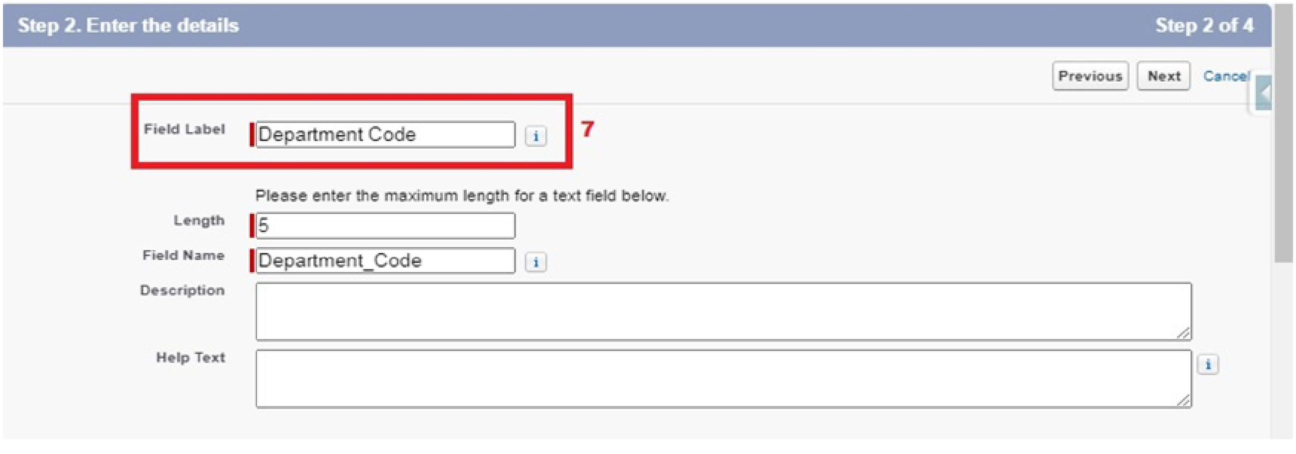
1.Click the gear icon and select Setup. This launches Setup in a new tab.
2.Click the Object Manager tab next to Home.
3.Select Department

4.Select Fields & Relationships from the left navigation
5.Click New
6.Select the Text as the Data Type, click Next.
7.For Field Label, enter Department Code and enter 5 in Length.
8.Click Next, Next, then Save & New.
9.Follow above steps and create two more Text type field - District & State.
10.Also, Provide Length 40 for both District and State field.
11.Create URL type field & give “School website” as the field label.









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.

These are fields and their data types we need to create and make one by one –

NOTE- See activity 2, 3, 4 below to create a lookup field, Roll-up summary field & Picklist field

Object Name	Field Name	Data Type
1. Employee Detail-	Date of Birth	Date
	Gender	Picklist (Male, Female)
	Department	Lookup (Department)(See activity 2 to create lookup)

Employee Id Text (Length - 12)

2. Expense- Employee Lookup (Employee Detail)
Total Item Rollup summary (Expense Item)

3. Expense Item - Expense Master Detail (Expense)
Expense Type Pick List (Values are- Transport, Hotel, Meal, Others)
Amount Currency

4. Travel Approval- Employee Name Lookup (Employee Detail)
Department Lookup (Department)
Destination state Text (Length – 40)
Purpose of trip Text (Length – 256)
Trip start date Date
Trip End date Date
Status Picklist (Values are- Approved, Rejected)

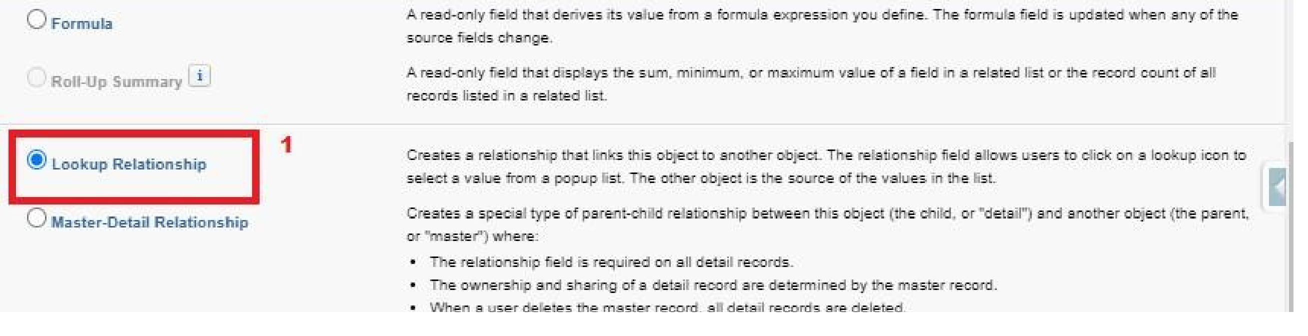
NOTE- Make Trip Start Date and Trip End Date field required when making these field

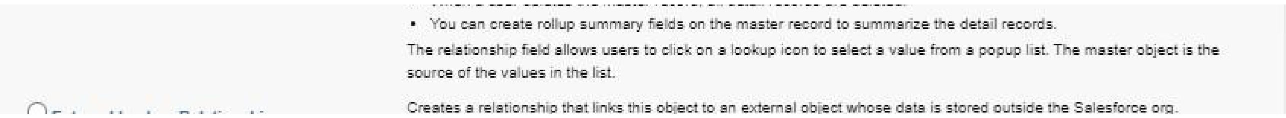
Lookup Relationship With Department

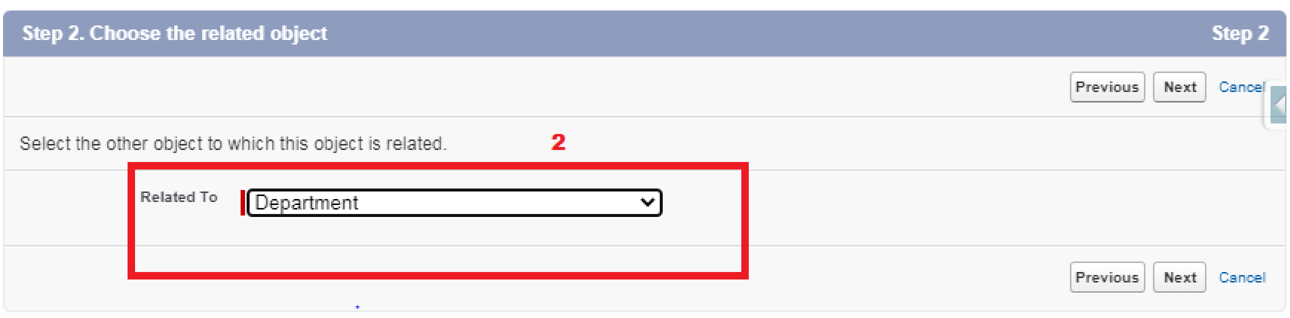
Let's create a Lookup relationship with Department object on Employee Detail object Follow steps 1 to 5 of field creation then follow below steps.
Select look up Relationship as the Data Type and click Next.

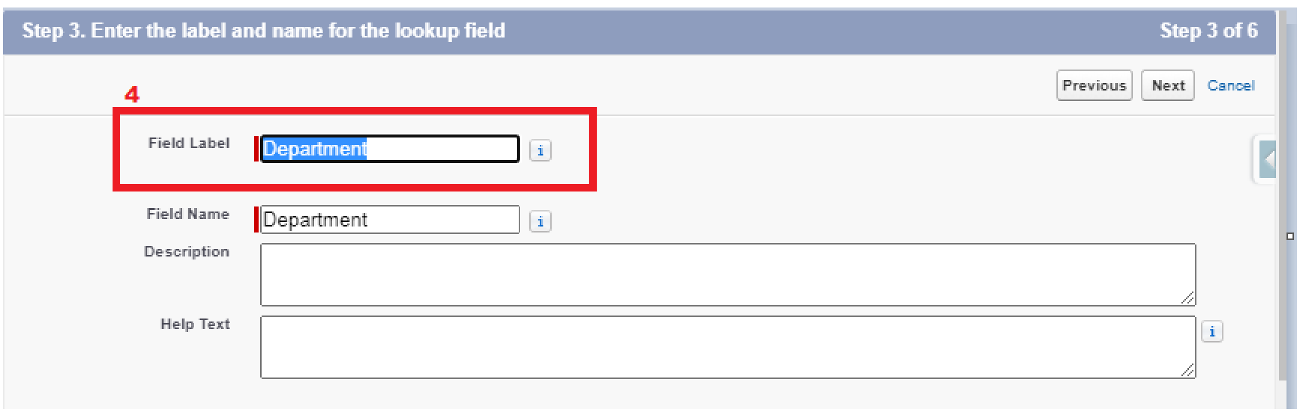
For Related to, enter Department.
Click Next.

For Field Label, enter Department.
Click Next, Next, Next and Save.



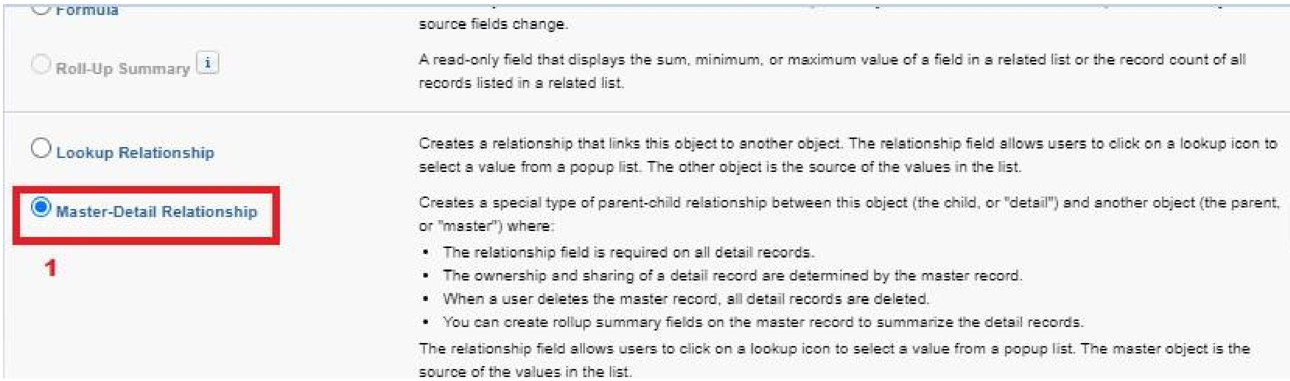


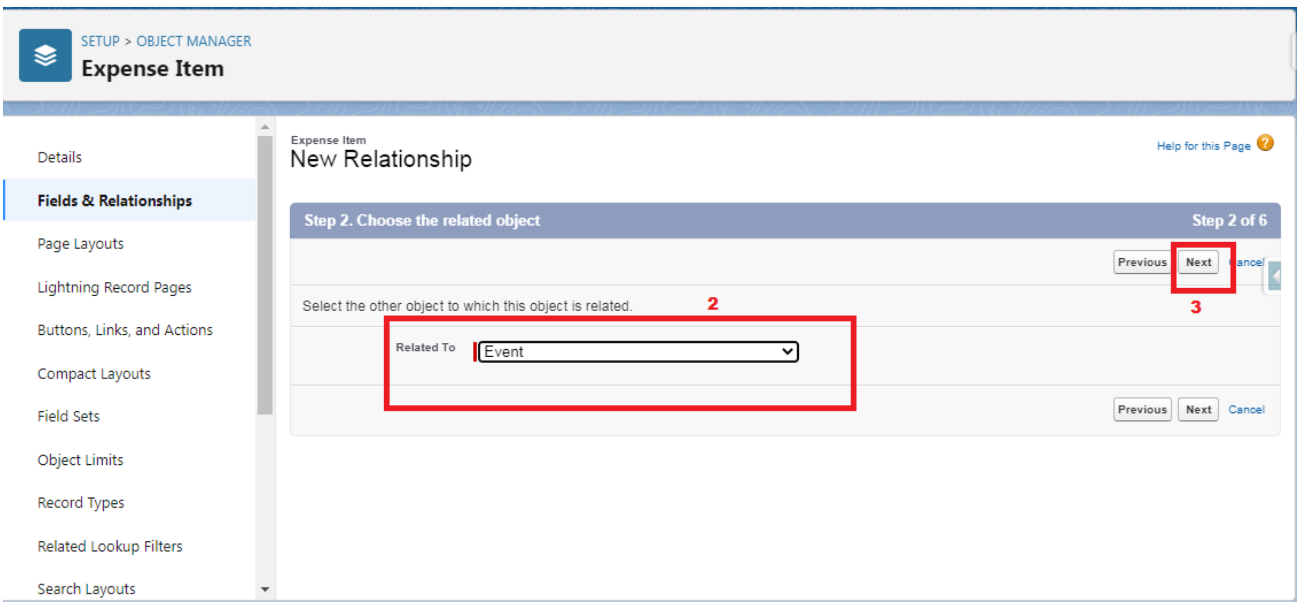


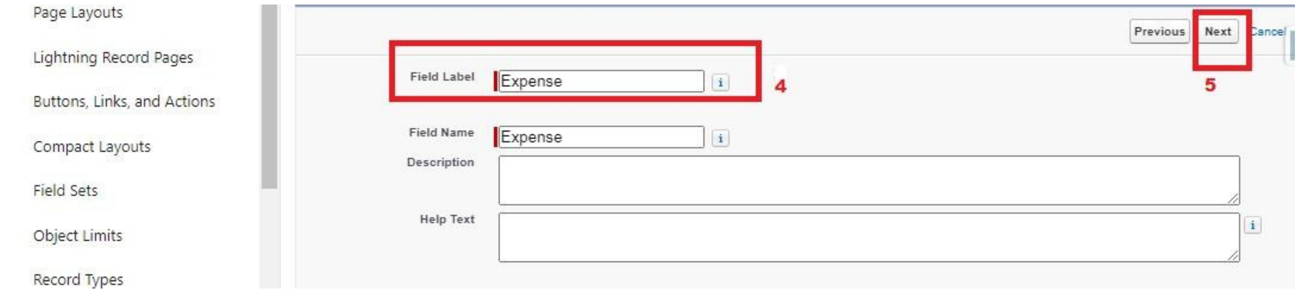


Let's create a master-detail relationship on Expense Item object Follow steps 1 to 5 of field creation then

follow below steps.
Select Master-Detail Relationship as the Data Type and click Next.
For Related to, enter Expense.
Click Next.
For Field Label, enter Expense.
Click Next, Next, Next and Save.







Roll Up Summary Fields On Expense Object

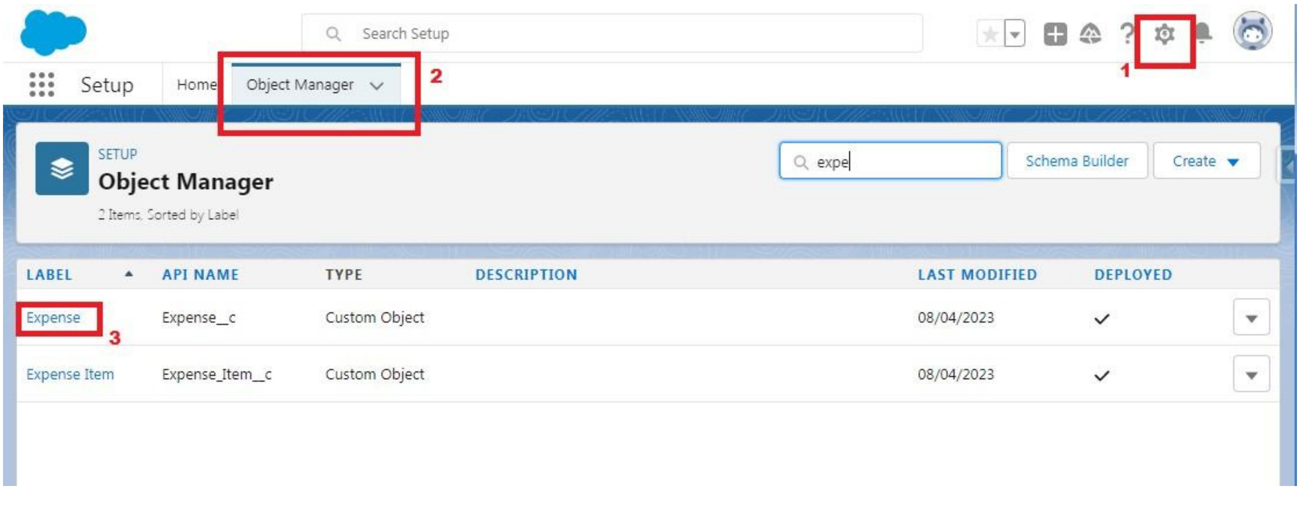
Let's create Roll-up summary fields on Expense Object to calculate the expense

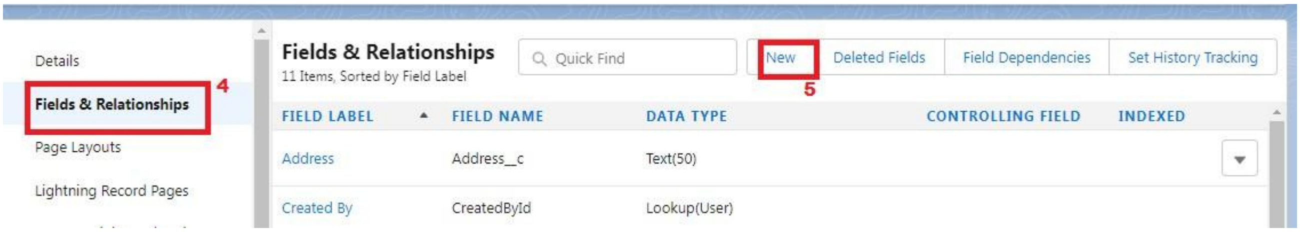
1. Click the gear icon Select Setup, This launches Setup in a new tab.
2. click Object Manager
3. Select Expense.
4. Click Fields & Relationships
5. Click New.

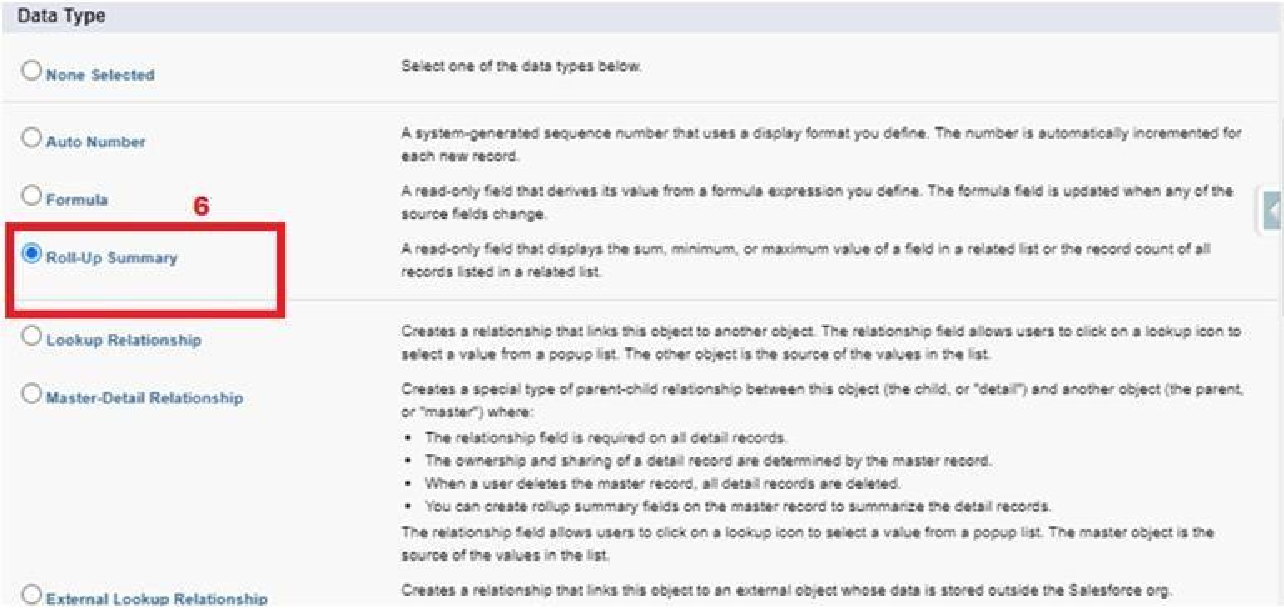
Select the Roll-up summary field as the data type
Enter the field label as Total Expense

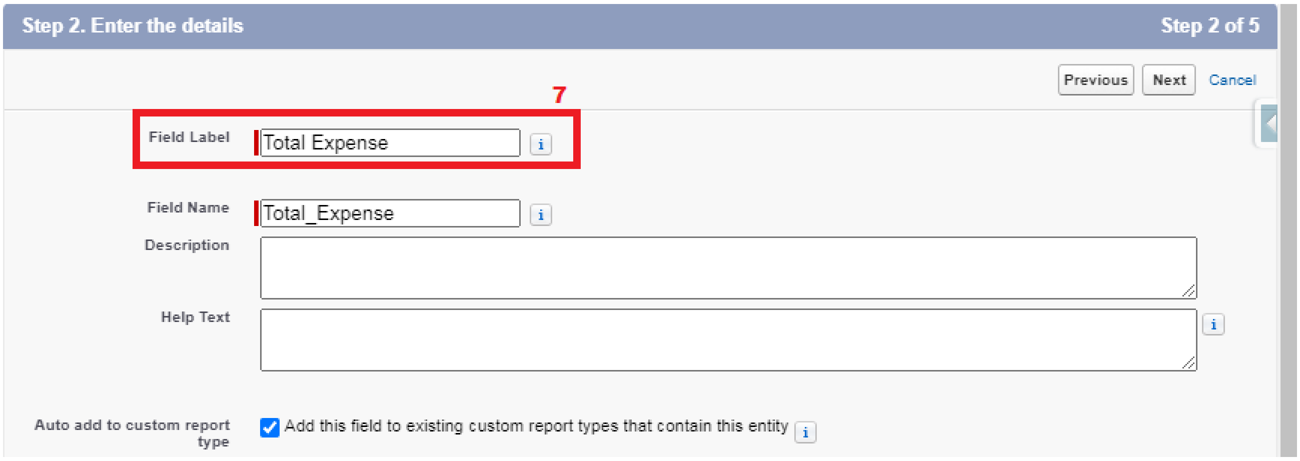
Click Next
Then select the master object summarized as Expense items

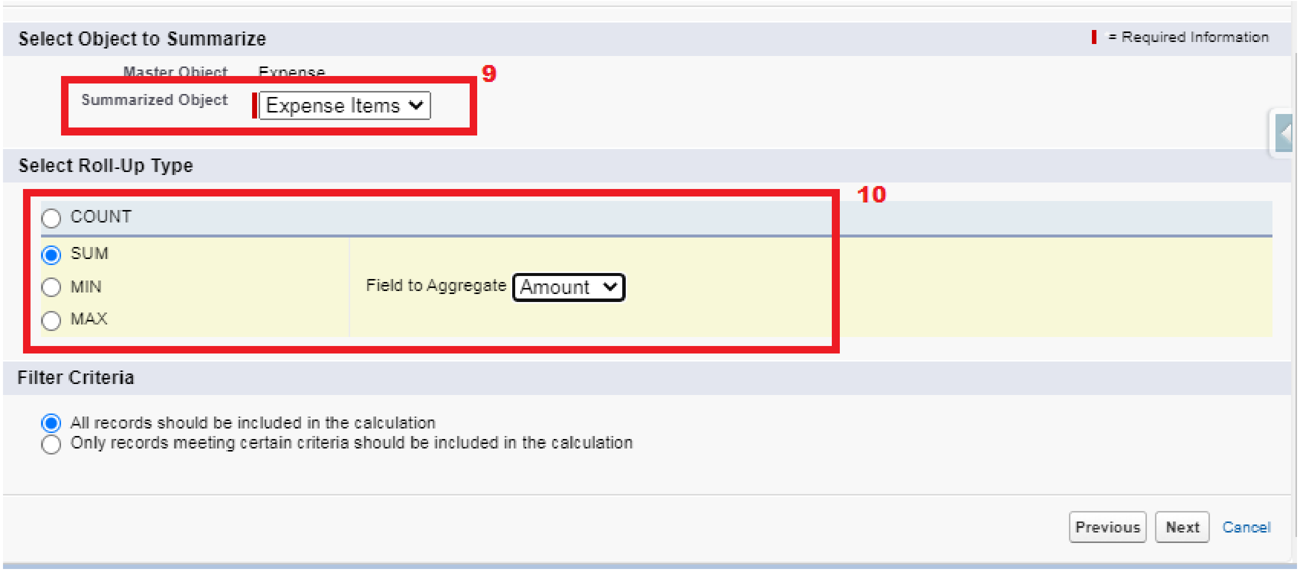
Select Sum as roll-up and Field to aggregate Amount then click Next, Next and save.




Details
Fields & Relationships
4
Page Layouts
Lightning Record Pages
Fields & Relationships
11 Items, Sorted by Field Label
Quick Find
New
5
Deleted Fields
Field Dependencies
Set History Tracking
FIELD LABEL
FIELD NAME
DATA TYPE
CONTROLLING FIELD
INDEXED
Address
Address__c
Text(50)
Created By
CreatedById
Lookup(User)


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
6
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.
Lookup Relationship
Creates a relationship that links this object to another object. The relationship field allows users to click on a lookup icon to select a value from a popup list. The other object is the source of the values in the list.
Master-Detail Relationship
Creates a special type of parent-child relationship between this object (the child, or "detail") and another object (the parent, or "master") where:
The relationship field is required on all detail records.
The ownership and sharing of a detail record are determined by the master record.
When a user deletes the master record, all detail records are deleted.
You can create rollup summary fields on the master record to summarize the detail records.
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.


Step 2. Enter the details
Step 2 of 5
Previous
Next
Cancel
7
Field Label
Total Expense
Field Name
Total_Expense
Description
Help Text
Auto add to custom report type
Add this field to existing custom report types that contain this entity



Pick List Field

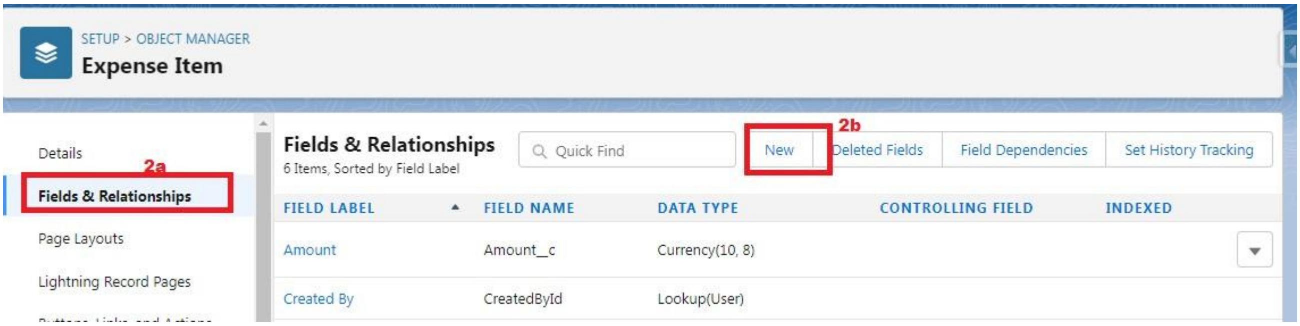
Let's create a Pick-List field:

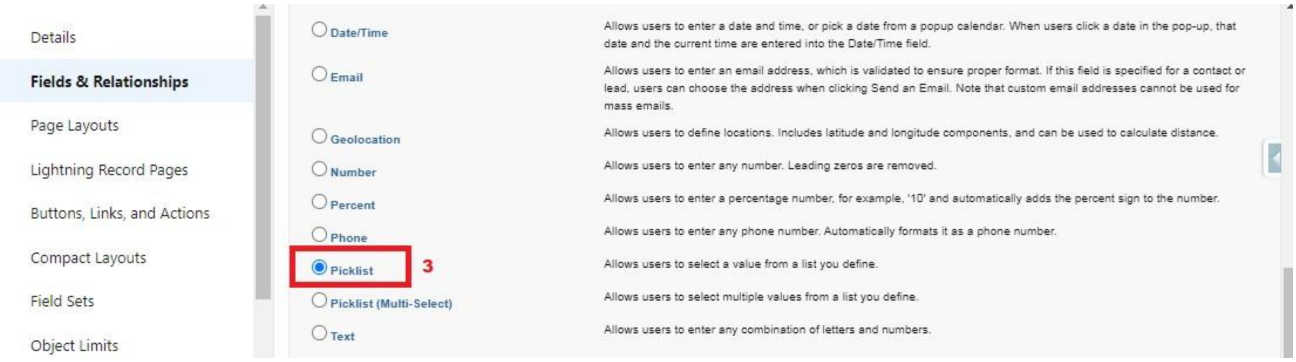
1) From Setup, click Object Manager and select Expense Item.
2)Click Fields & Relationships, then New.
3)Select Picklist as the Data Type and click Next.
4)For Field Label enter Expense Type
5)Select Enter values, with each value separated by a new line, and enter these values:

- Transport
- Hotel
- Meal
- others

Click Next, Next, then Save & New


2 Items, Sorted by Label
LABEL
API NAME
TYPE
DESCRIPTION
LAST MODIFIED
DEPLOYED
Expense
Expense__c
Custom Object
08/04/2023
1c
Expense Item
Expense_Item__c
Custom Object
08/04/2023


SETUP > OBJECT MANAGER
Expense Item
Details
2a
Fields & Relationships
Page Layouts
Lightning Record Pages
Fields & Relationships
6 Items, Sorted by Field Label
Quick Find
2b
New
Deleted Fields
Field Dependencies
Set History Tracking
FIELD LABEL
FIELD NAME
DATA TYPE
CONTROLLING FIELD
INDEXED
Amount
Amount__c
Currency(10, 8)
Created By
CreatedById
Lookup(User)


Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Date/Time
Allows users to enter a date and time, or pick a date from a popup calendar. When users click a date in the pop-up, that date and the current time are entered into the Date/Time field.
Email
Allows users to enter an email address, which is validated to ensure proper format. If this field is specified for a contact or lead, users can choose the address when clicking Send an Email. Note that custom email addresses cannot be used for mass emails.
Geolocation
Allows users to define locations. Includes latitude and longitude components, and can be used to calculate distance.
Number
Allows users to enter any number. Leading zeros are removed.
Percent
Allows users to enter a percentage number, for example, '10' and automatically adds the percent sign to the number.
Phone
Allows users to enter any phone number. Automatically formats it as a phone number.
Picklist
3
Allows users to select a value from a list you define.
Picklist (Multi-Select)
Allows users to select multiple values from a list you define.
Text
Allows users to enter any combination of letters and numbers.


SETUP > OBJECT MANAGER
Expense Item
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
4
Previous
Next
Cancel
10
Field Label
Expense Type
Values
Use global picklist value set
5
Enter values, with each value separated by a new line
6,7,8,9
Transport
Hotel
Meal
others
Display values alphabetically, not in the order entered
Use first value as default value
Restrict picklist to the values defined in the value set
Field Name
ex

Import Departments

NOTE- Before creating the application download this zip file from URL given below

https://developer.salesforce.com/files/TravelAppWorkshopFiles.zip

Data Import lets you upload data from external sources and combine it with data you collect via Analytics. You can then use Analytics to organize and analyze all of your data in ways that better reflect your business.

The Data Import Wizard is a Tool that makes it easy to import data for many standard Salesforce objects, including accounts, contacts, leads, solutions, campaign members, and person accounts. You can also import data for custom objects.

In order to complete this milestone, you need to create a CSV file and give them the data given in the picture below. After that from these CSV files we will import data for Department & Travel Approval (Custom Object)

1.CSV file Name- Department_CSV

	A	B
1	Department Name	Department code
2	Office of Communications and Media	O001
3	Disability Determination Bureau	D001
4	Division of Disability and Rehabilitative Services	D002
5	Technology	T001

Data Import

From Setup, click the Home tab.

1)In the Quick Find box, enter Data Import and select Data Import Wizard.

2)Click Launch Wizard!

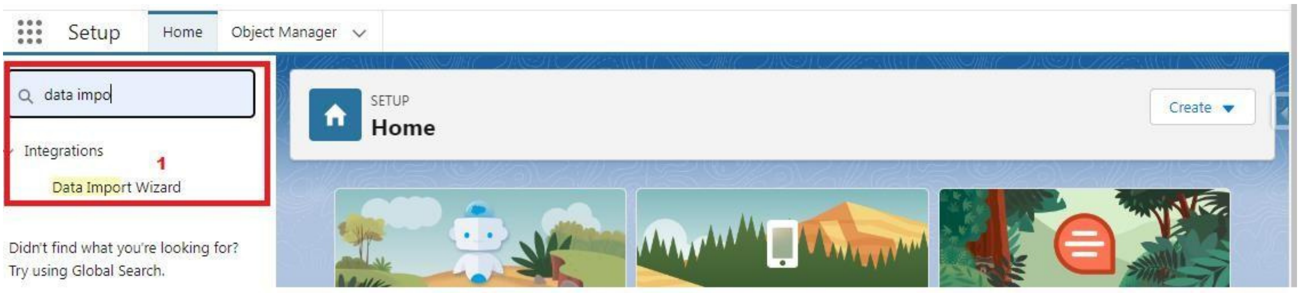
3)Click the Custom Objects tab and select the Departments object.

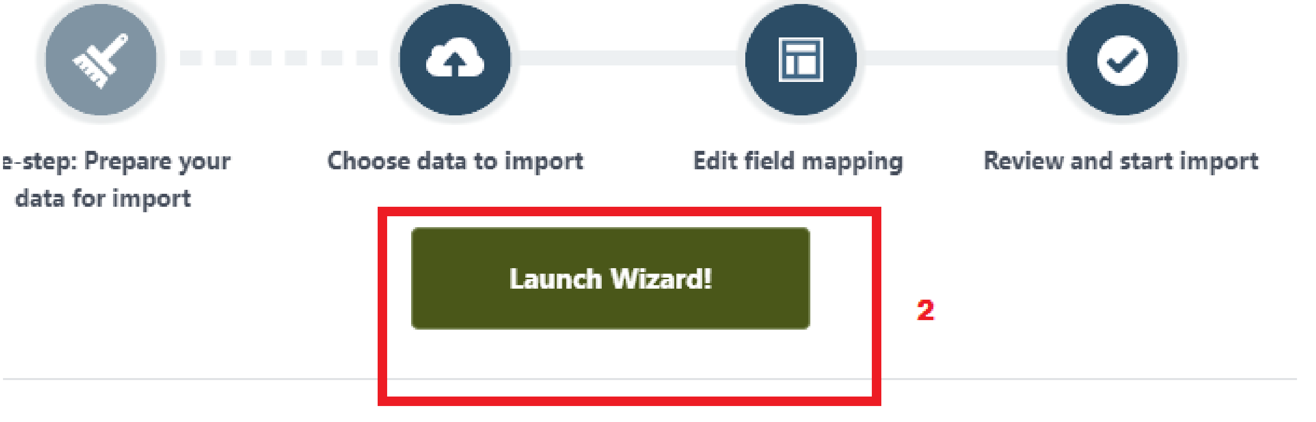
4)Select Add new records.

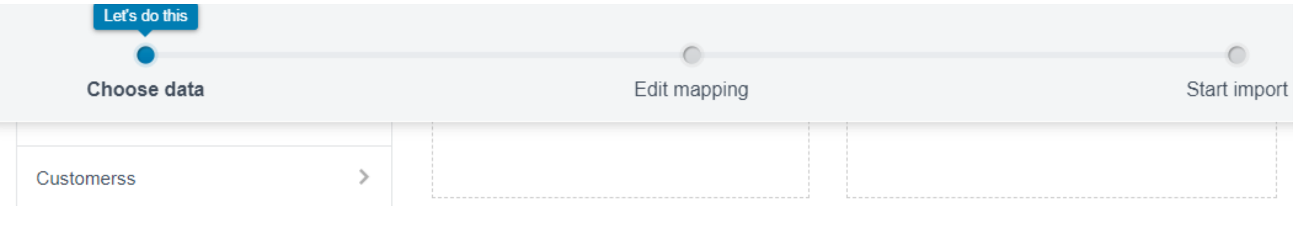
5)Click CSV and choose file Department_CSV which we made earlier. Click Next.

6)Since the field names in the CSV file (CSV Header) are the same as the field names in your object (Mapped Salesforce Object), the fields are automatically mapped. Click Next.

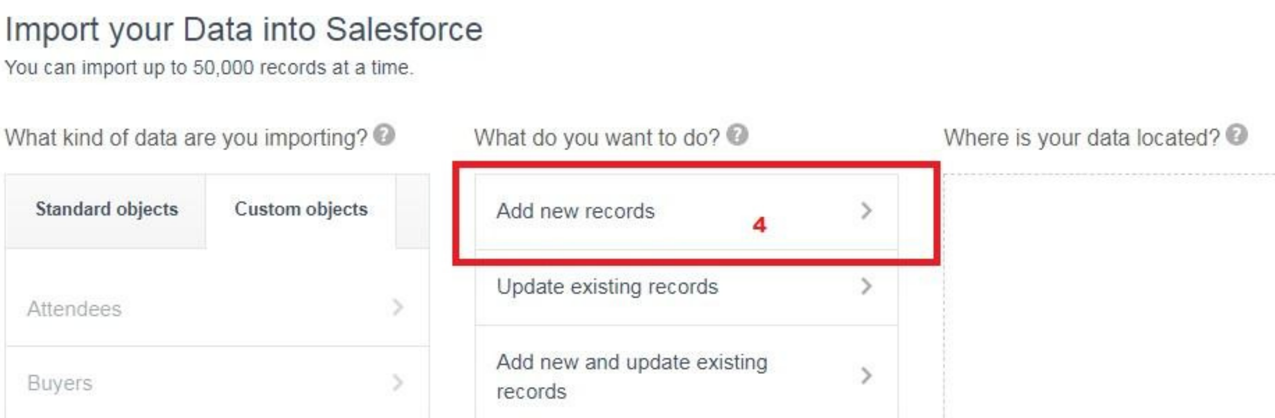
The next screen gives you a summary of your data import. Click Start Import.
Click OK on the popup.

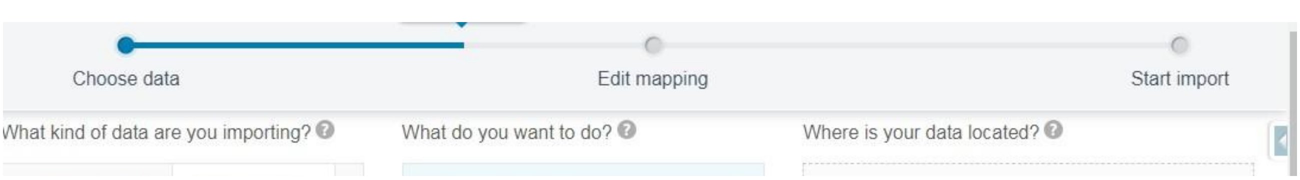


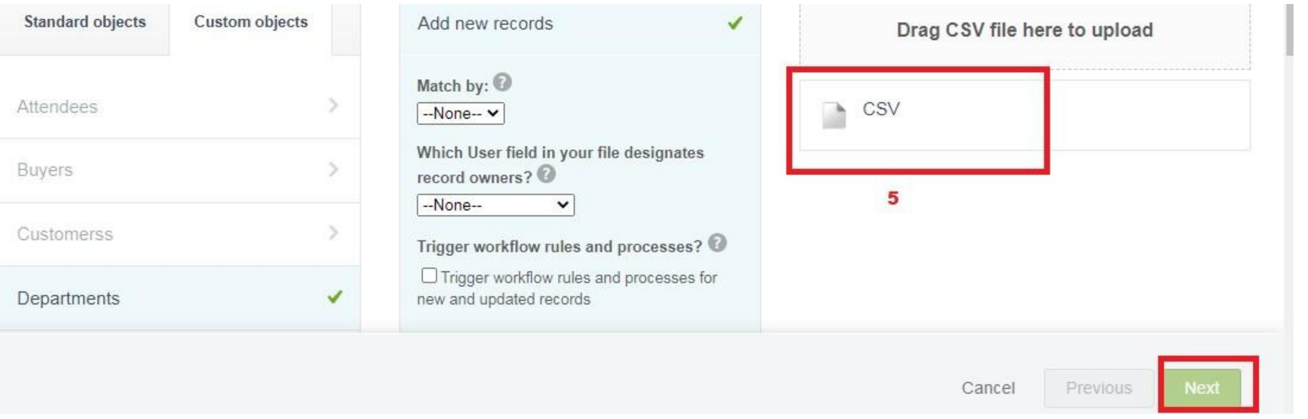


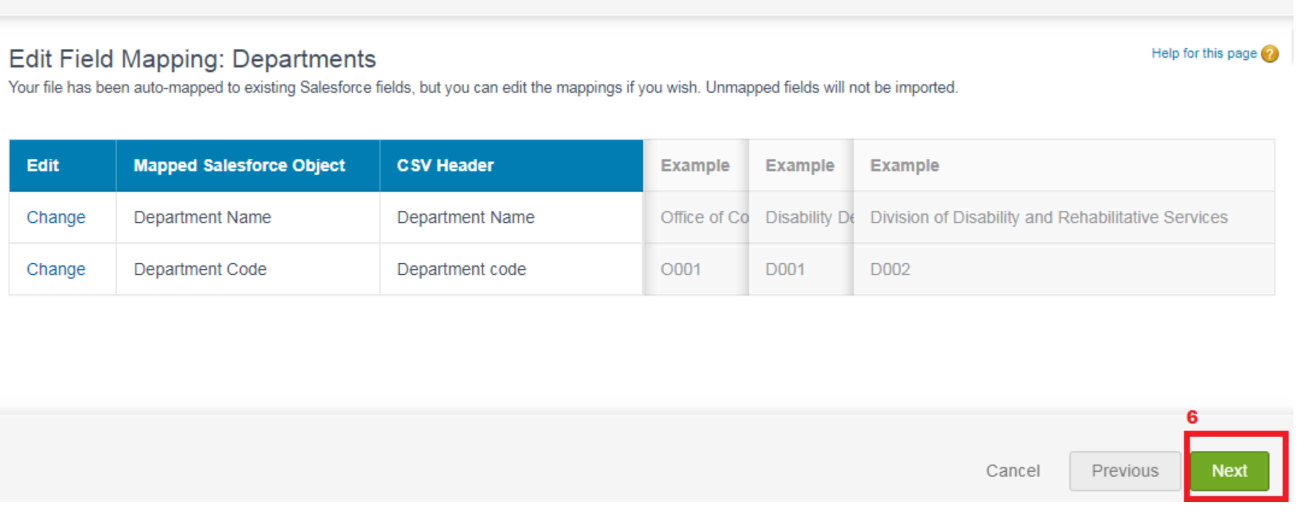


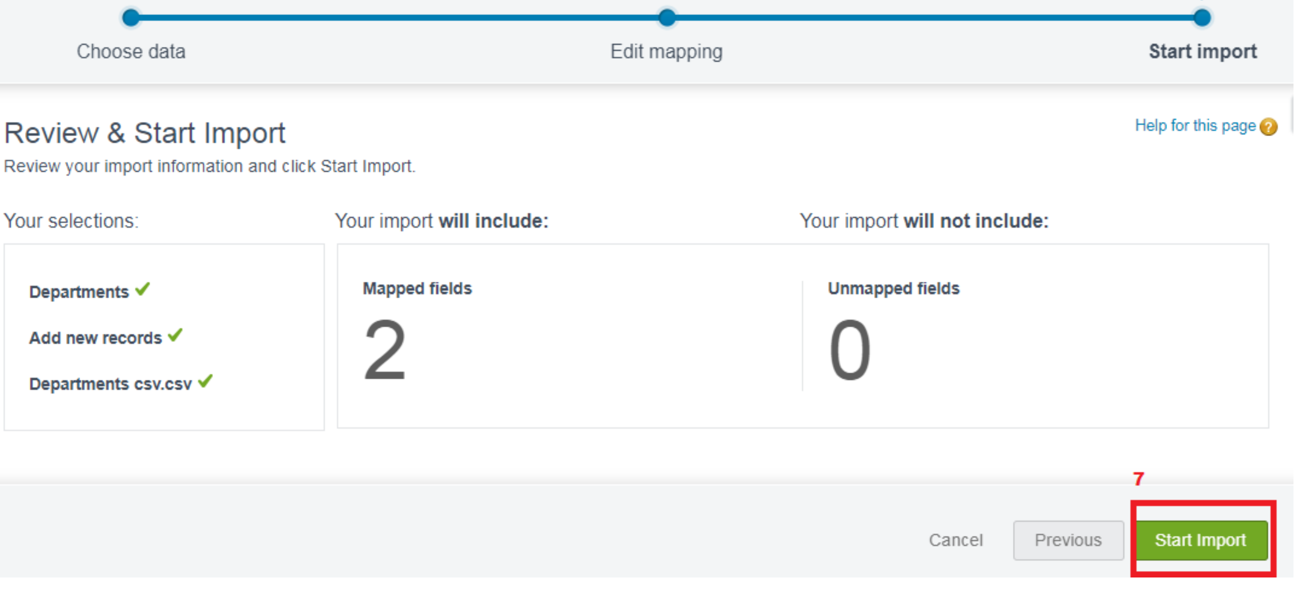

Departments
3
Drivers

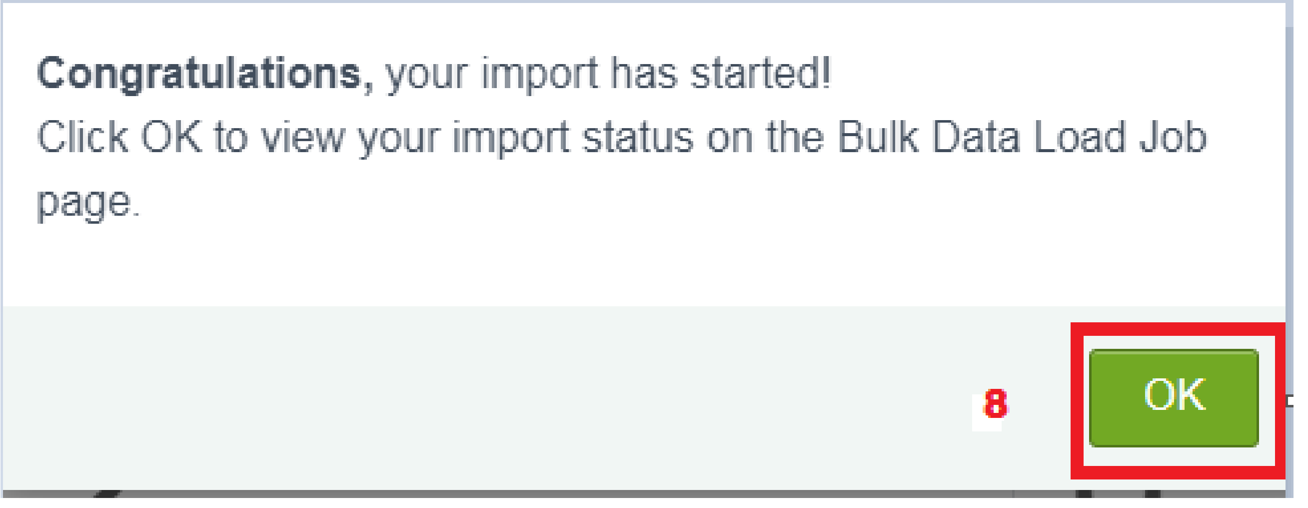

Import your Data into Salesforce
You can import up to 50,000 records at a time.
What kind of data are you importing?
What do you want to do?
Where is your data located?
Standard objects
Custom objects
Attendees
Buyers
Add new records
4
Update existing records
Add new and update existing records


Choose data
Edit mapping
Start import
What kind of data are you importing?
What do you want to do?
Where is your data located?


Standard objects
Custom objects
Attendees
Buyers
Customerss
Departments
Add new records
Match by:
--None--
Which User field in your file designates record owners?
--None--
Trigger workflow rules and processes?
Trigger workflow rules and processes for new and updated records
Drag CSV file here to upload
CSV
5
Cancel
Previous
Next


Edit Field Mapping: Departments
Help for this page
Your file has been auto-mapped to existing Salesforce fields, but you can edit the mappings if you wish. Unmapped fields will not be imported.
Edit
Mapped Salesforce Object
CSV Header
Example
Example
Example
Change
Department Name
Department Name
Office of Co
Disability De
Division of Disability and Rehabilitative Services
Change
Department Code
Department code
O001
D001
D002
6
Cancel
Previous
Next


Choose data
Edit mapping
Start import
Review & Start Import
Help for this page
Review your import information and click Start Import.
Your selections:
Your import will include:
Your import will not include:
Departments
Add new records
Departments csv.csv
Mapped fields
2
Unmapped fields
0
7
Cancel
Previous
Start Import



Note- Do Field mapping carefully.

..

..

https://developer.salesforce.com/files/TravelAppWorkshopFiles.zip

Users

A user is anyone who logs into 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.

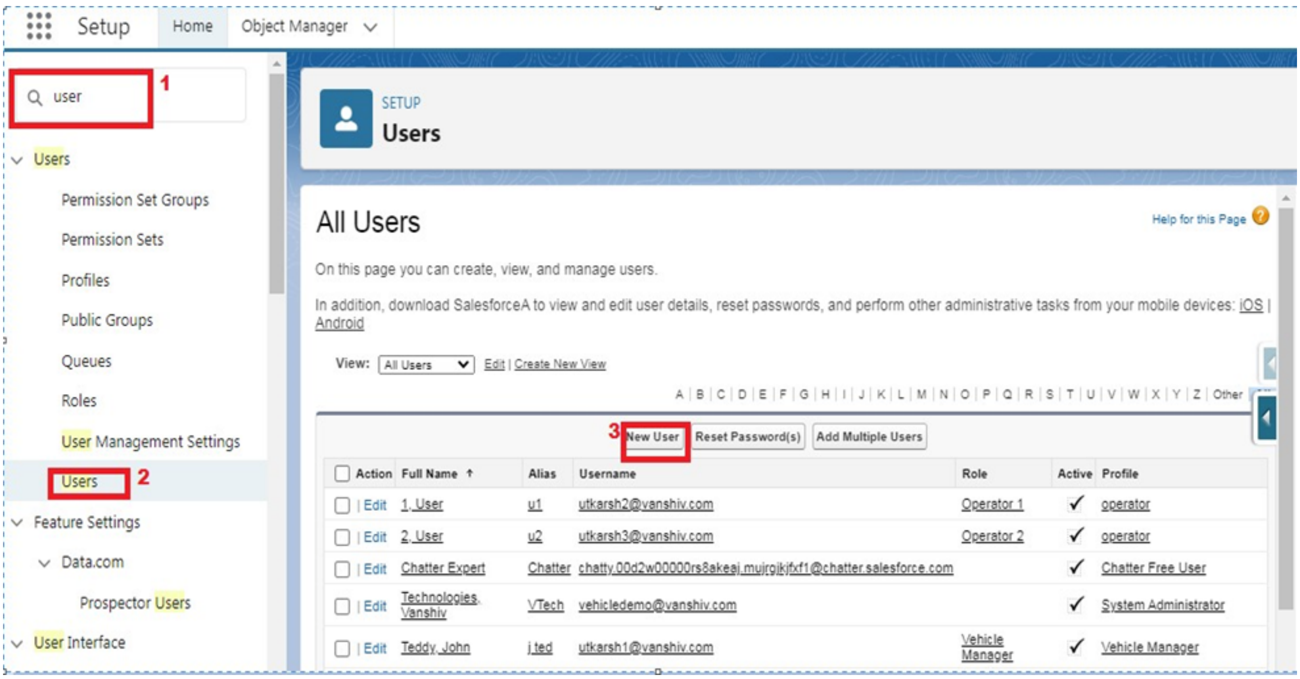
Creating A User In Salesforce

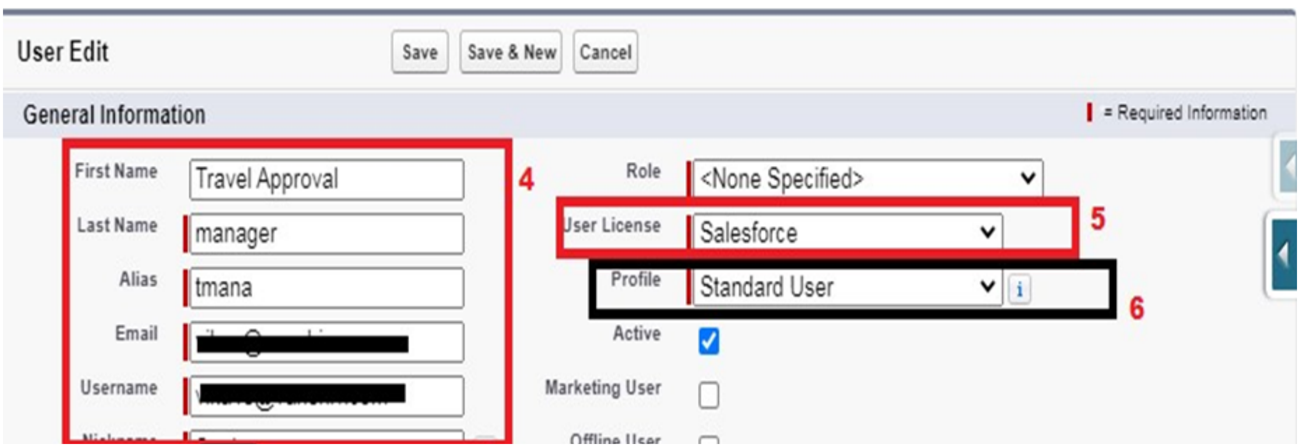
1.From Setup, in the Quick Find box, enter Users.
2.Select Users.
3.Click New User.
4.Enter the First Name Travel Approval and Last Name manager and (Your) email address and a unique username in the

form of an email address. By default, the username is the same as the email address.
5.Select a User License as Salesforce.

NOTE- *In the Developer edition Salesforce license can only be used by 2 Users at a time in Dev Org, If you don't find Salesforce license then deactivate a user who has Salesforce license Or change the license type from Salesforce to any other.*

6.Select a profile as Standard user.
7.Check Generate new password and notify the user immediately to have the user's login name and a temporary password emailed to your email.



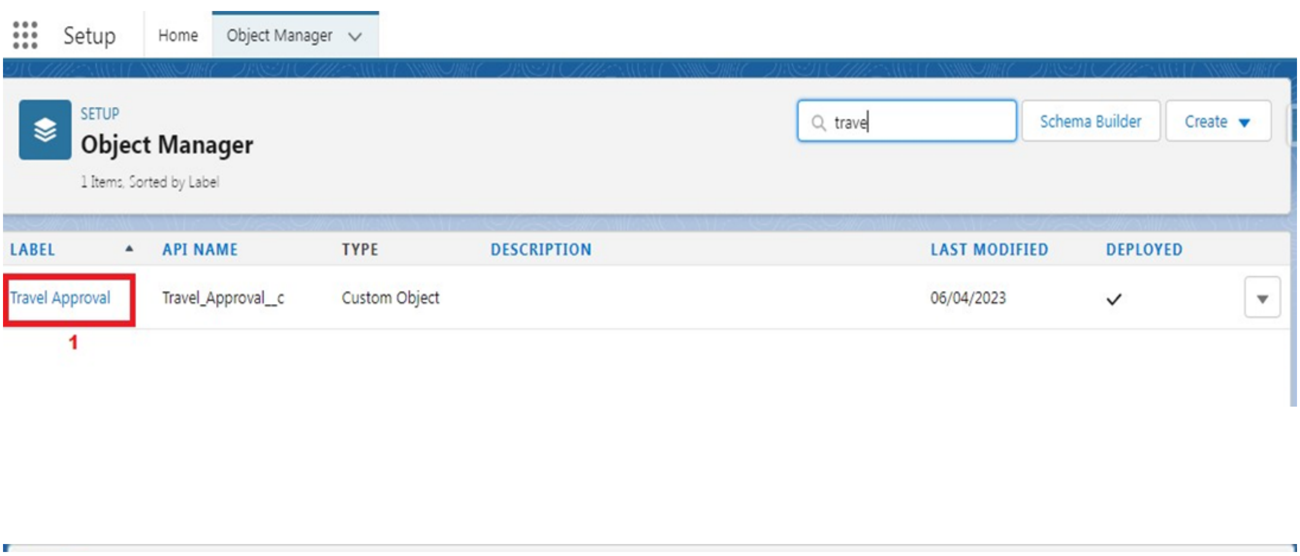


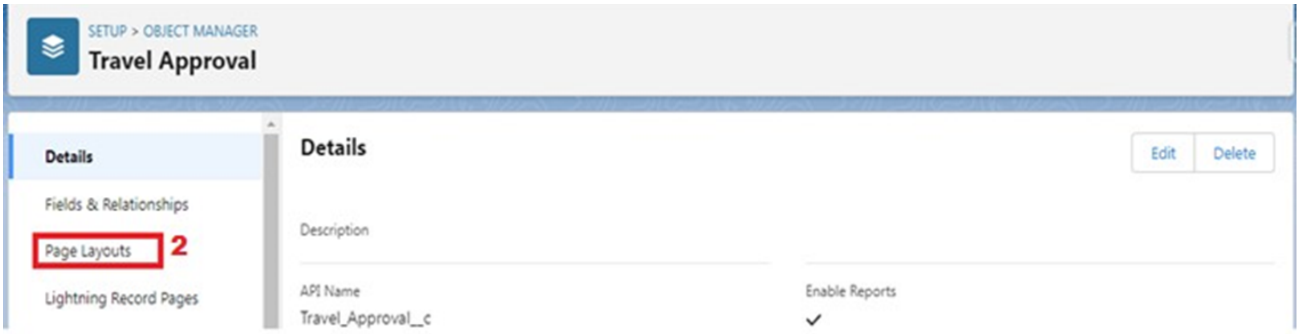
Use Customization

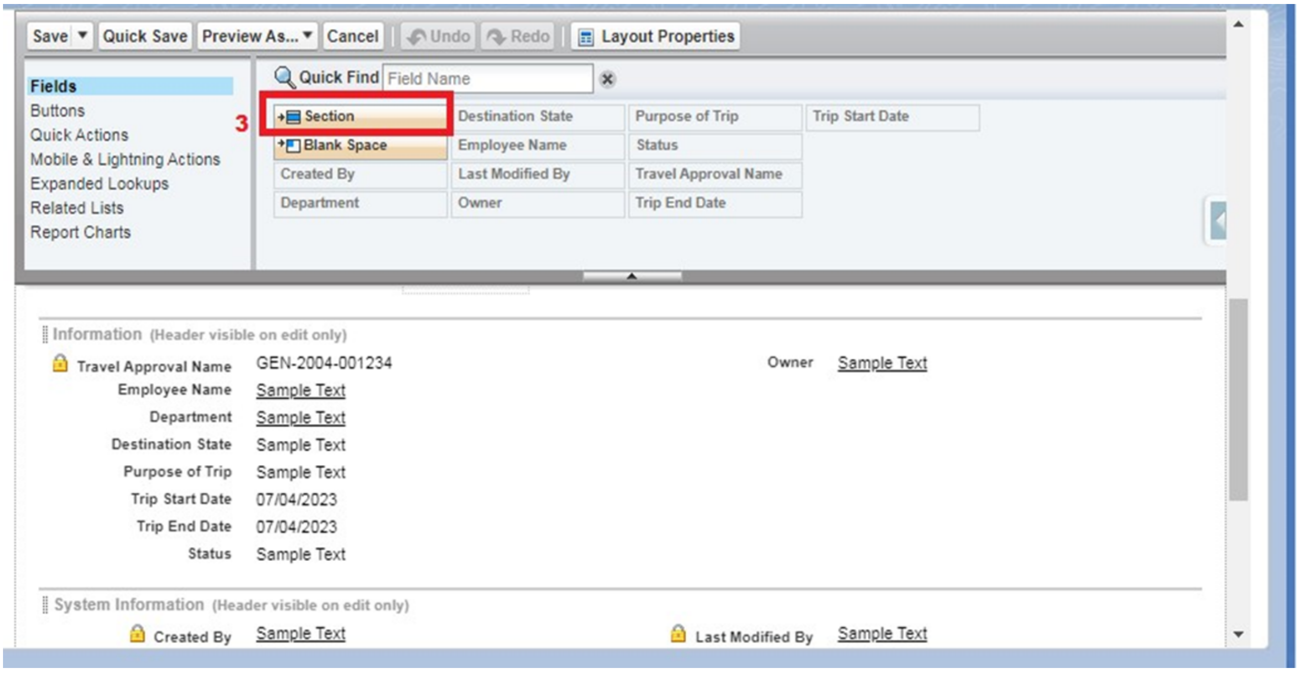
Customization refers to custom software development and coding to add robust features to your CRM platform. These features can be integrated with your business to have a scalable impact.

Customize Travel Approval Object Page Layout

1. From the Object Manager, search for the Travel approval object
2. click on page layouts and click Travel Approval Layout
3. Drag the Section from the top pane to the lower pane directly below the Information section. When dragging over the
 page, you get a visual indicator of where you can drop the new section.
4. Name the section Trip Info, leave the rest of the settings at their default values, and
5. Then click on OK.
6. Drag Trip Start Date and Trip End Date, Status from the top pane into the left-hand column of the Trip Info
 section.
7. Drag the Destination State and Purpose of a trip from, department the top pane into the right-hand column of the Trip
 Info section.
8. Click Save.







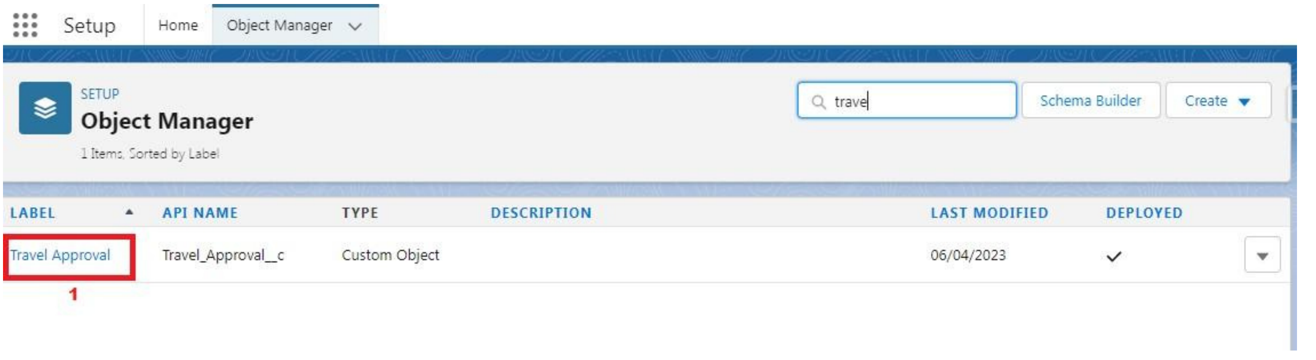
Add Business Logic To Travel App

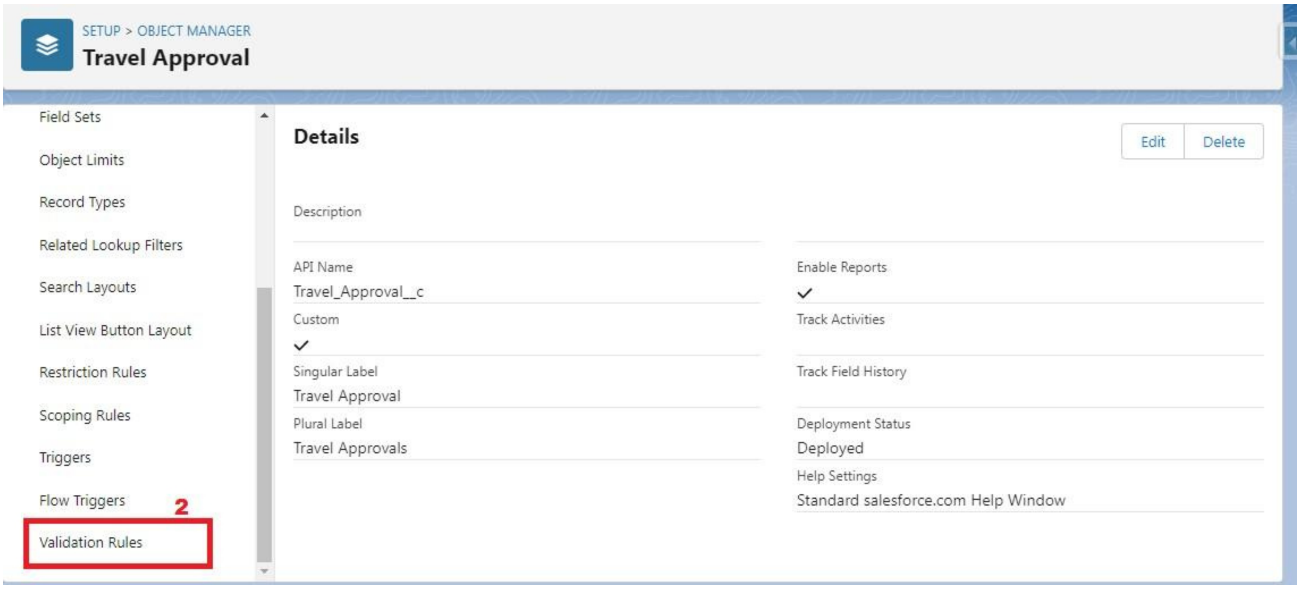
Validation Rule - It can contain a formula or expression that evaluates the data in one or more fields & returns a value of true or false. Validation Rules also include an error message to display to the user when the rule returns a value true due to an invalid value/data.

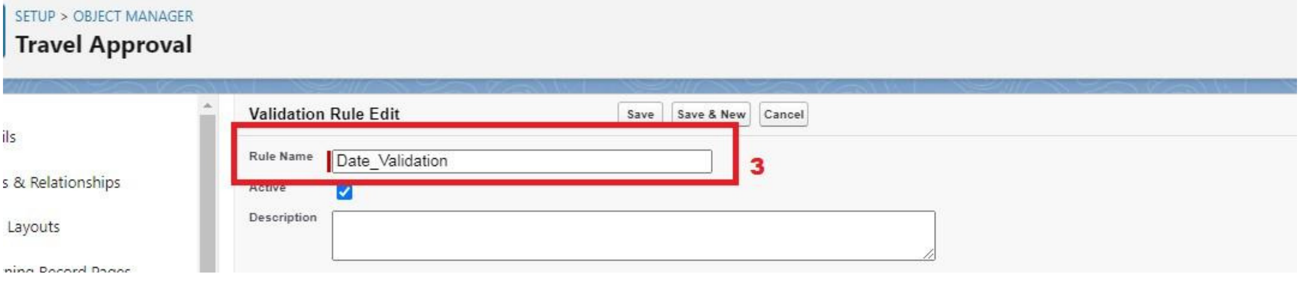
Create Validation Rule

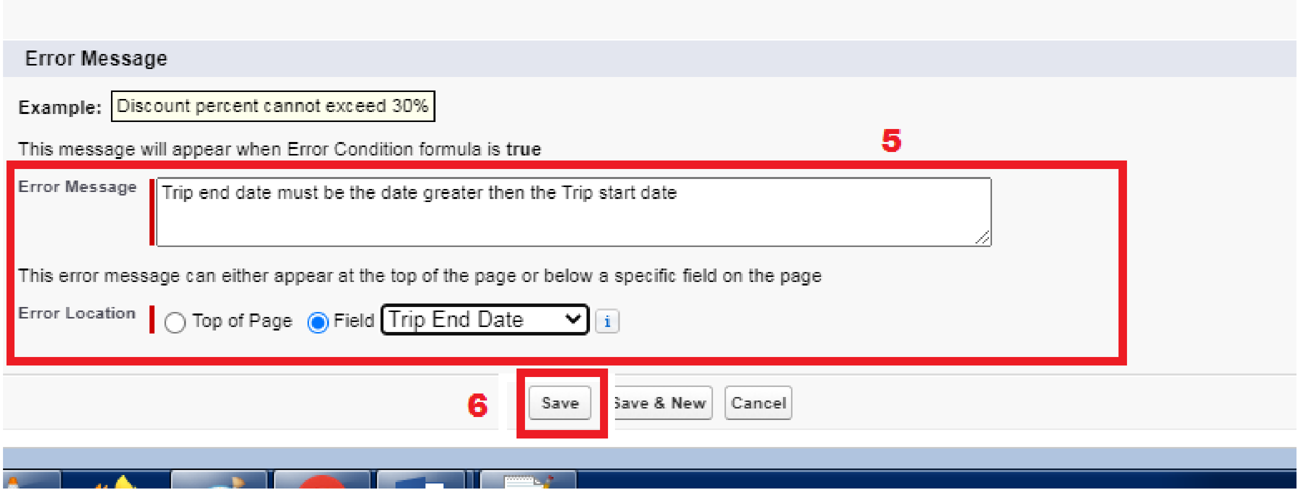
Search for the travel approval object from the object manager and open the object.
1)Click on validation rules and click new on the left corner
2)Give your rule name Date _Validation and make sure that the rule is set to active.
3)In the error condition formula enter Trip_End_Date c < Trip_Start_Date c
NOTE- Make sure that there is no syntax error after you input this error condition

Give the Error message – “Trip end date must be the date greater than the Trip start date” &
For error location select the field and pick the Trip end date as the location for error.
Click save







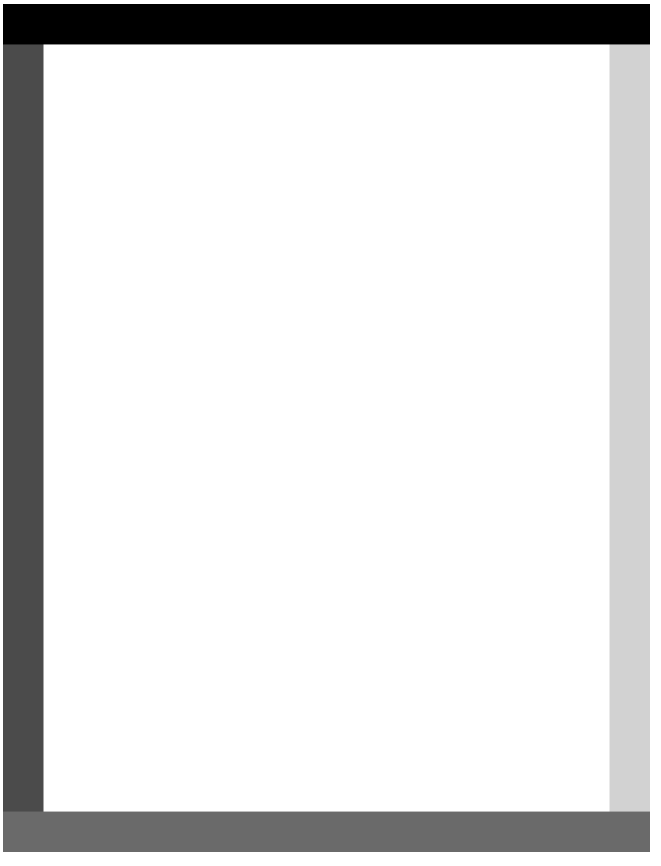


Create Formulae Fields

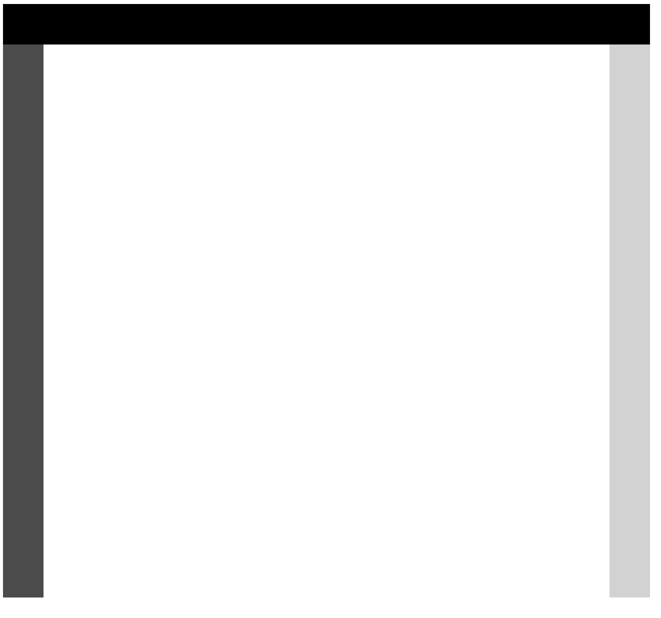
Create Formula Fields
1)First, we need to upload a zip file to your Salesforce environment that contains all the images we use. You should have 2)a file titled StatusImages.zip.
3)Click the setup
4)Click Static Resources in Quick Find & Click New.
5)Enter the following values for your static resource

Parameter	Value
Name	StatusImages
File	StatusImages.zip
Cache-Control	Private

Now select the travel approval object.
Select Fields & Relationships, Click New
Select Formula data type, and Click Next.
Enter the following values:
Field Label: Status Indicator



Field Name: Status_Indicator (This automatically gets sent when you tab out of the Field Label field)

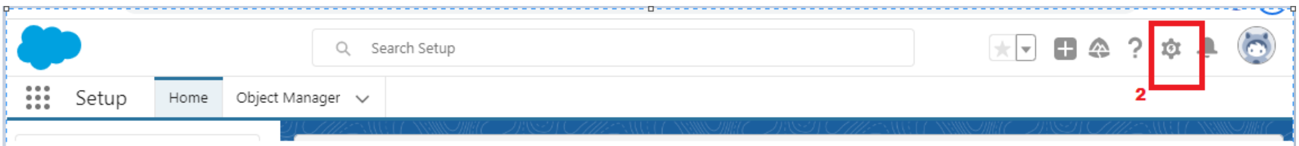


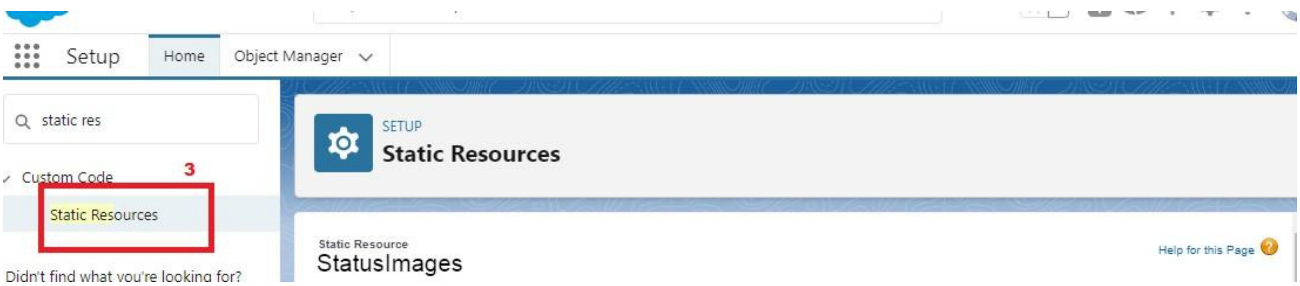
Formula Return Type: Tex

Click next & Copy and paste the following formula into the formula editor.

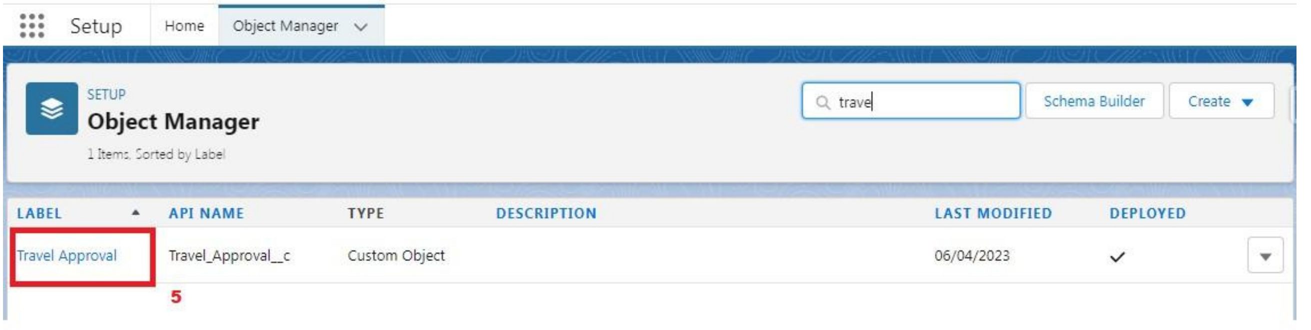
IF(ISPICKVAL(Status c c, 'Approved'), IMAGE("/resource/StatusImages/thumbs-up.png", "Accepted", 20, 20),
IF (ISPICKVAL(Status c c, 'Rejected'), IMAGE("/resource/StatusImages/thumbs-down.png", "Rejected", 20, 20), IMAGE("/resource/StatusImages/draft.png", "In-Process", 20, 20)))

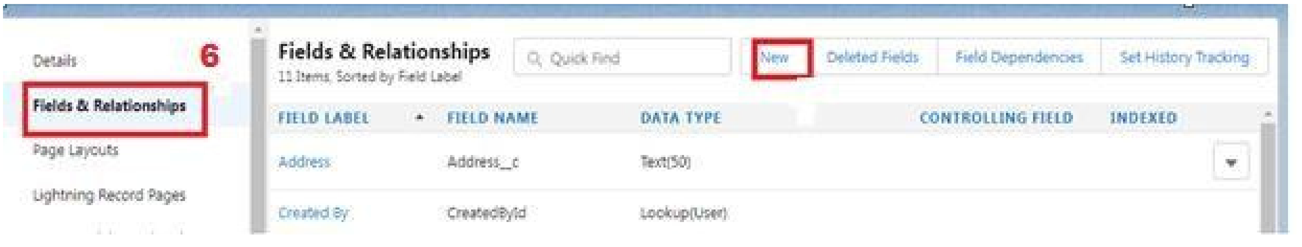
Click Next, Next, Save.

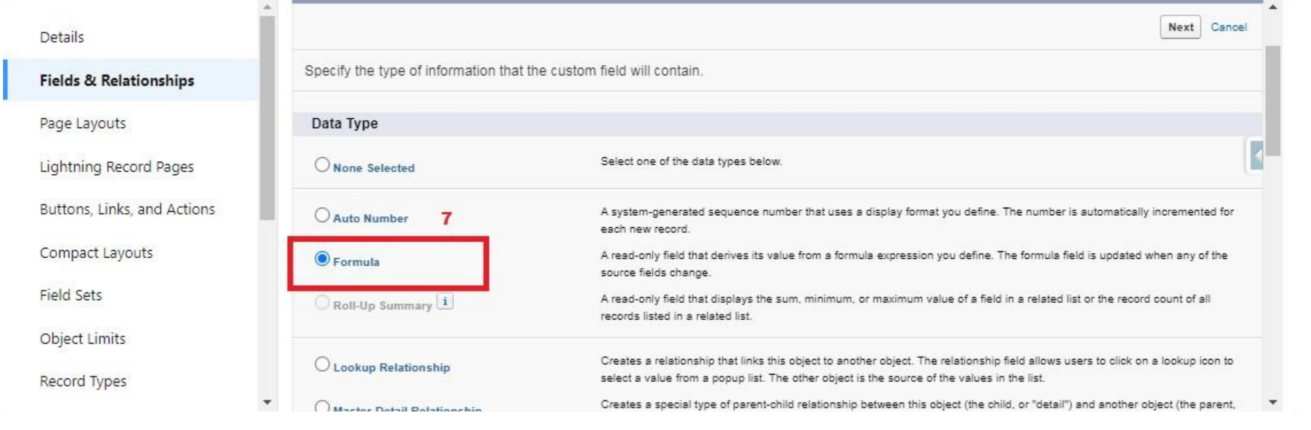




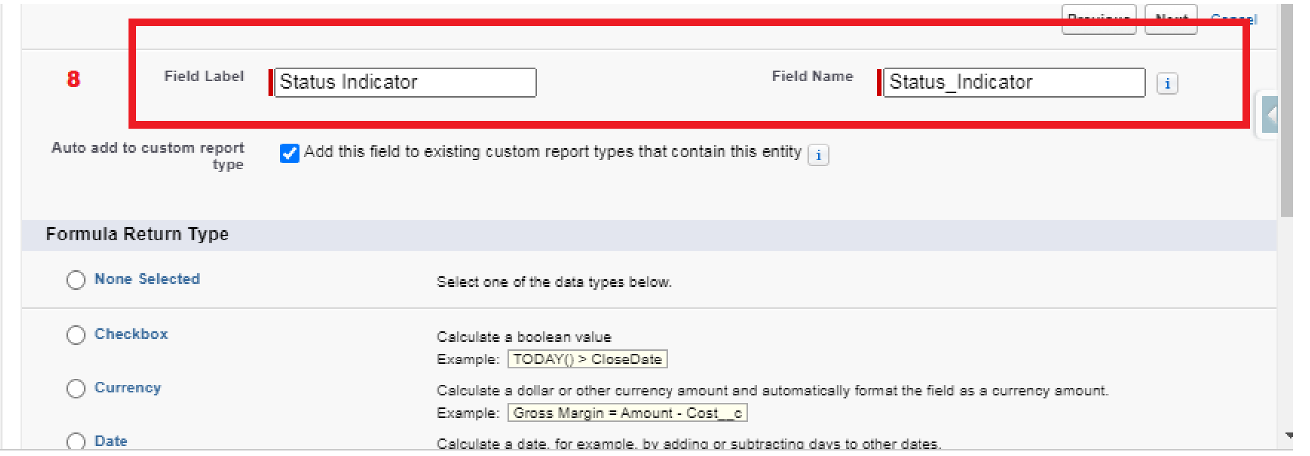

Name
StatusImages
4
Description
File
Choose File
No file chosen
Cache Control
Private
Save
Cancel


Setup
Home
Object Manager
SETUP
Object Manager
1 Items, Sorted by Label
trave
Schema Builder
Create
LABEL
API NAME
TYPE
DESCRIPTION
LAST MODIFIED
DEPLOYED
Travel Approval
Travel_Approval__c
Custom Object
06/04/2023
5


Details
6
Fields & Relationships
Page Layouts
Lightning Record Pages
Fields & Relationships
11 Items, Sorted by Field Label
Quick Find
New
Deleted Fields
Field Dependencies
Set History Tracking
FIELD LABEL
FIELD NAME
DATA TYPE
CONTROLLING FIELD
INDEXED
Address
Address__c
Text(50)
Created By
CreatedById
Lookup(User)


Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Next
Cancel
Specify the type of information that the custom field will contain.
Data Type
None Selected
Select one of the data types below.
Auto Number
7
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.
Lookup Relationship
Creates a relationship that links this object to another object. The relationship field allows users to click on a lookup icon to select a value from a popup list. The other object is the source of the values in the list.


Step 2. Choose output type
Step 2 of 5

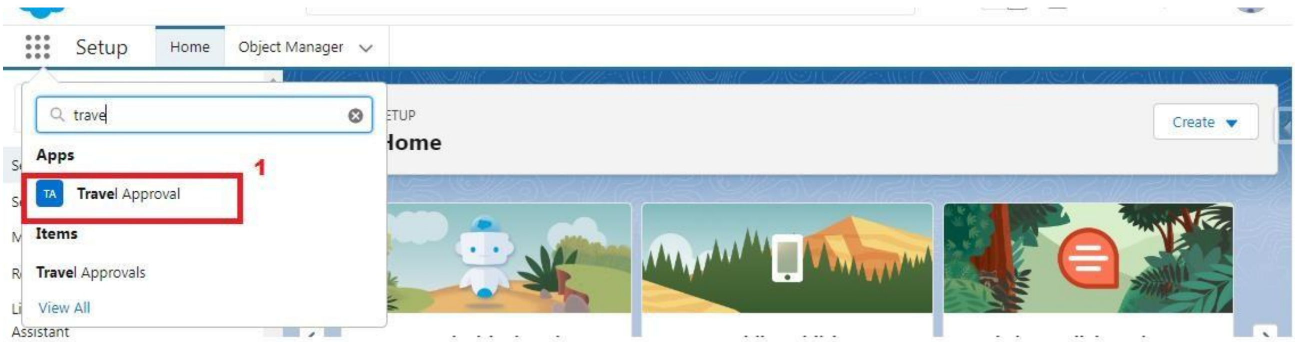


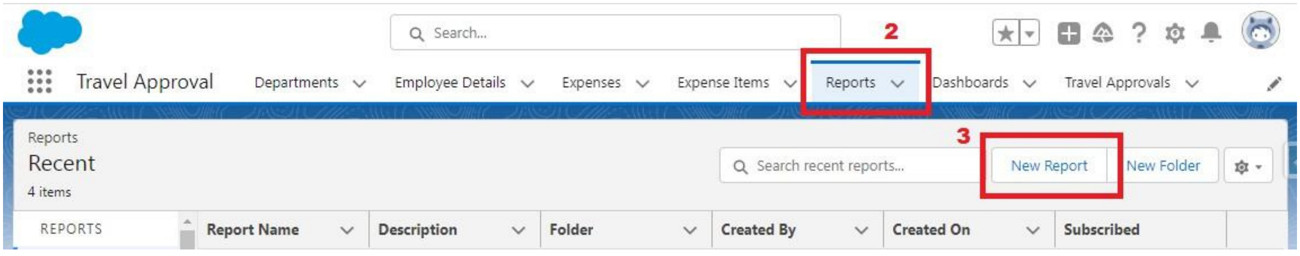
User Adoption - Create Record

Create Record

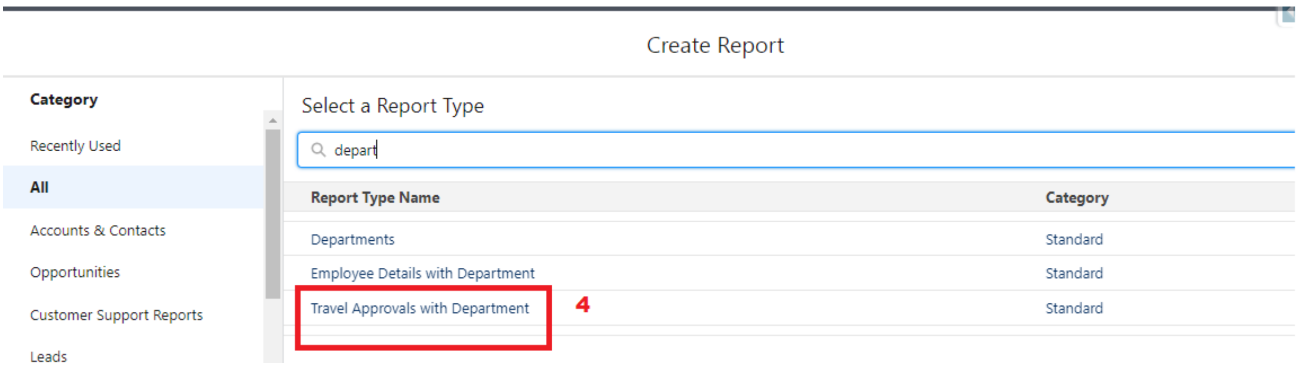
Click App Launcher and select Travel Approval App

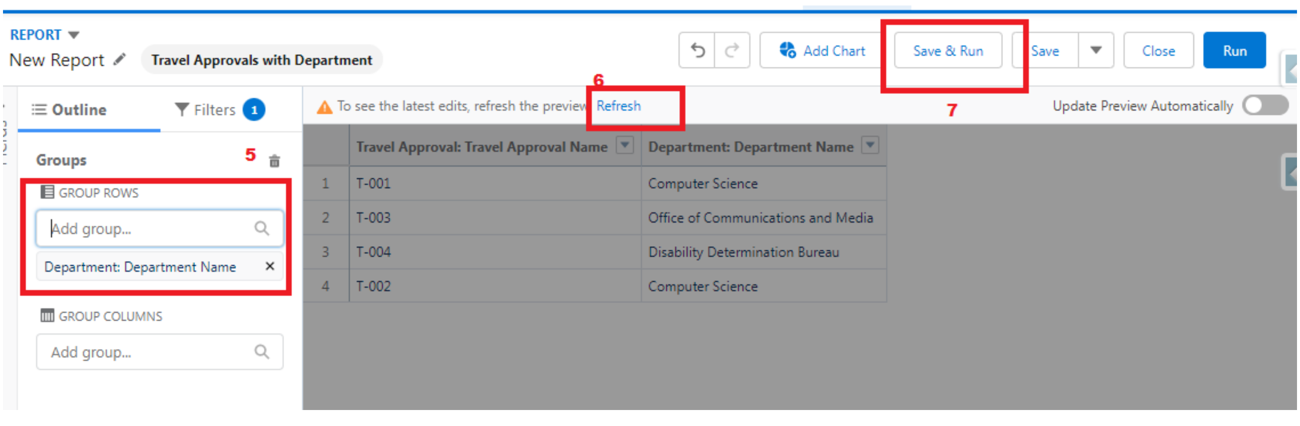
1)Click reports tab
2)Click New Report.
3)Click the report type as Travel approval with Departments Click Start report.
4)Customize your report, in group rows select - Department Name
5)Click refresh
6)Click save and run
7)Give report name – Travel Approval Report
8)Click Save

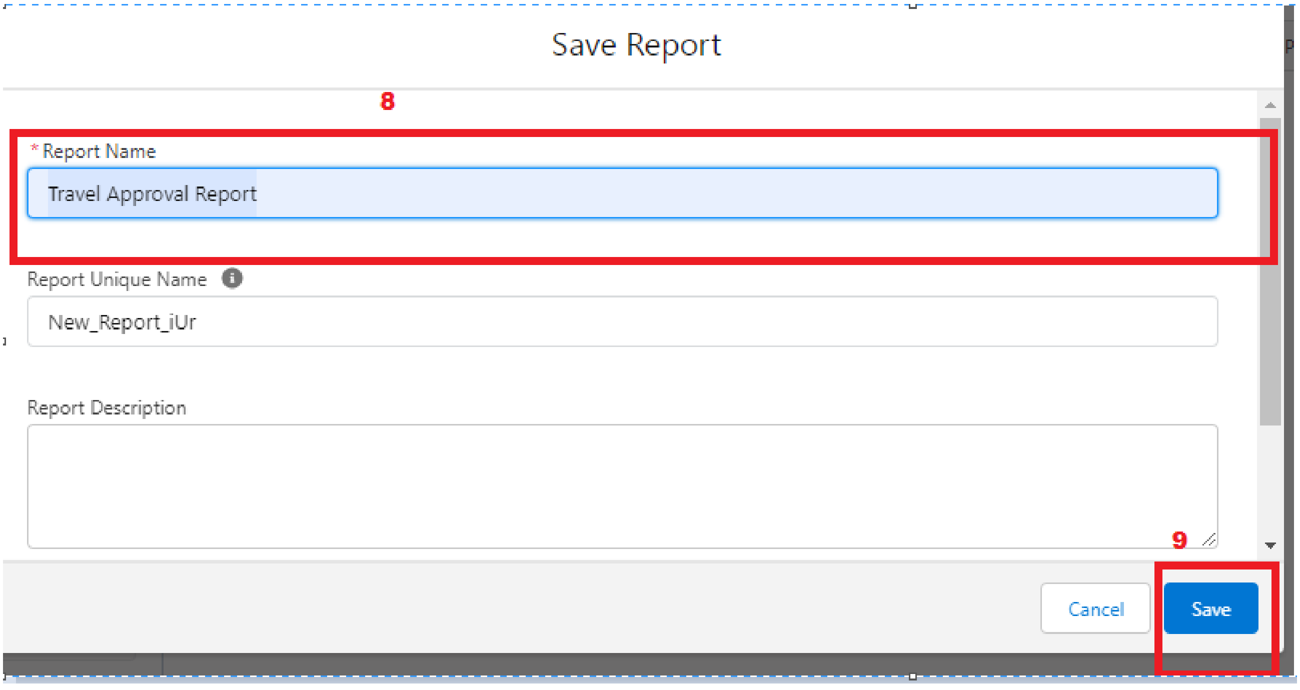

Setup
Home
Object Manager
travel
Apps
1
Travel Approval
Items
Travel Approvals
View All
Assistant
Home
Create


Search...
2
Travel Approval
Departments
Employee Details
Expenses
Expense Items
Reports
Dashboards
Travel Approvals
Reports
Recent
4 items
3
Search recent reports...
New Report
New Folder
REPORTS
Report Name
Description
Folder
Created By
Created On
Subscribed

\

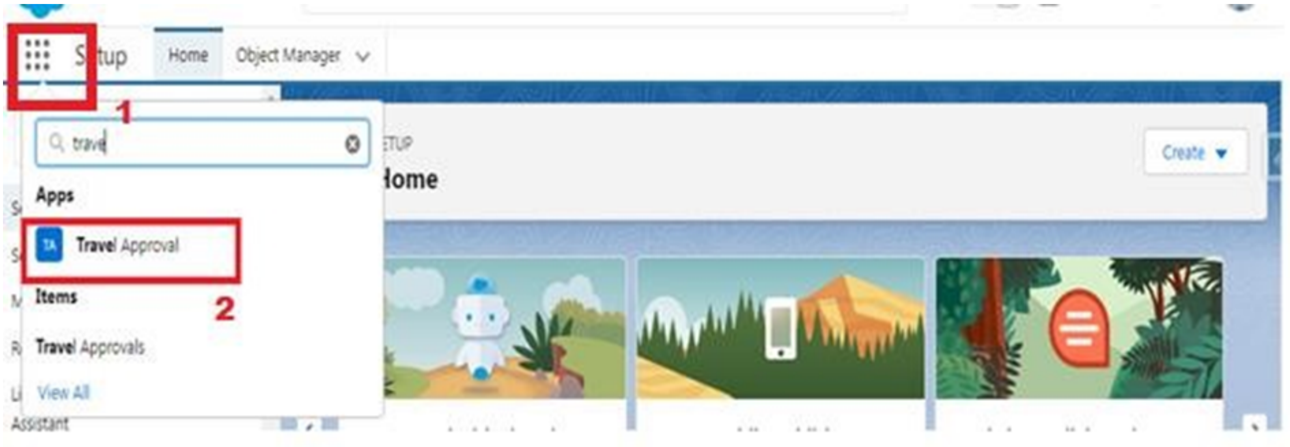

Create Report
Category
Recently Used
All
Accounts & Contacts
Opportunities
Customer Support Reports
Leads
Select a Report Type
depart
Report Type Name
Category
Departments
Standard
Employee Details with Department
Standard
Travel Approvals with Department
4
Standard

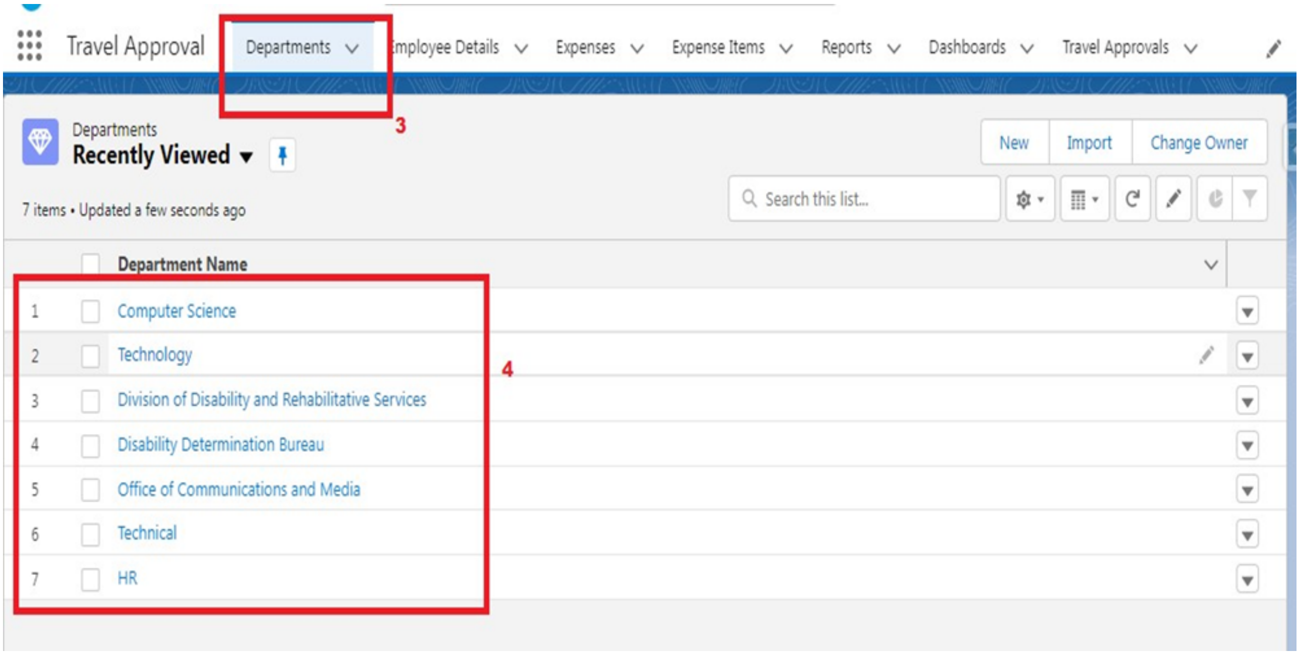

REPORT
New Report
Travel Approvals with Department
Add Chart
Save & Run
Save
Close
Run
Outline
Filters 1
6
To see the latest edits, refresh the preview
Refresh
7
Update Preview Automatically
Groups
5
GROUP ROWS
Add group...
Department: Department Name
GROUP COLUMNS
Add group...
Travel Approval: Travel Approval Name
Department: Department Name
1 T-001 Computer Science
2 T-003 Office of Communications and Media
3 T-004 Disability Determination Bureau
4 T-002 Computer Science



View Record

View Record (Department):
1.Click on App Launcher on left side of screen.
2.Search Travel Approval & click on it.
3.Click on Department Tab.
4.Click on any record name. you can see the details of the Department

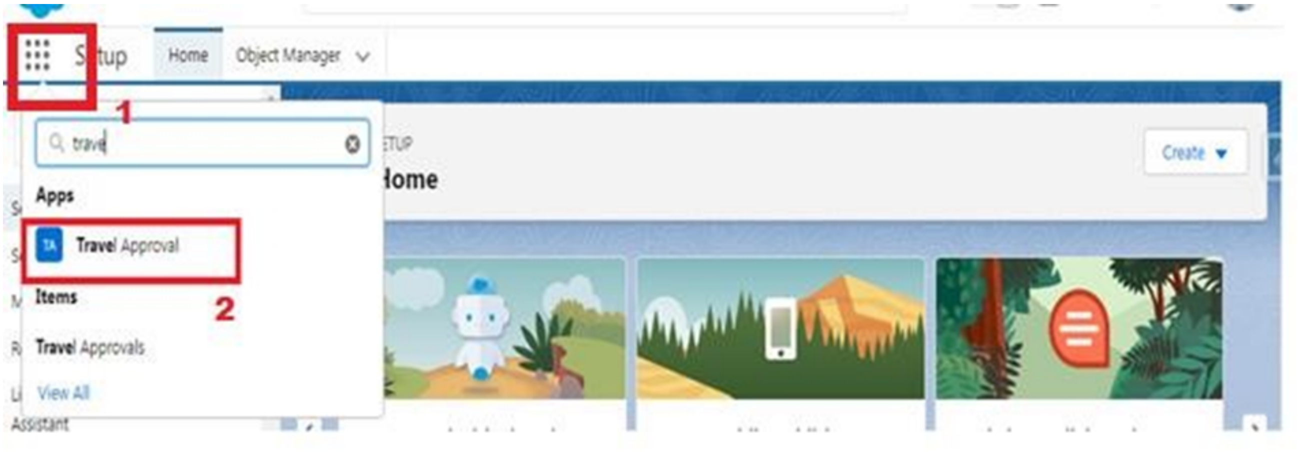


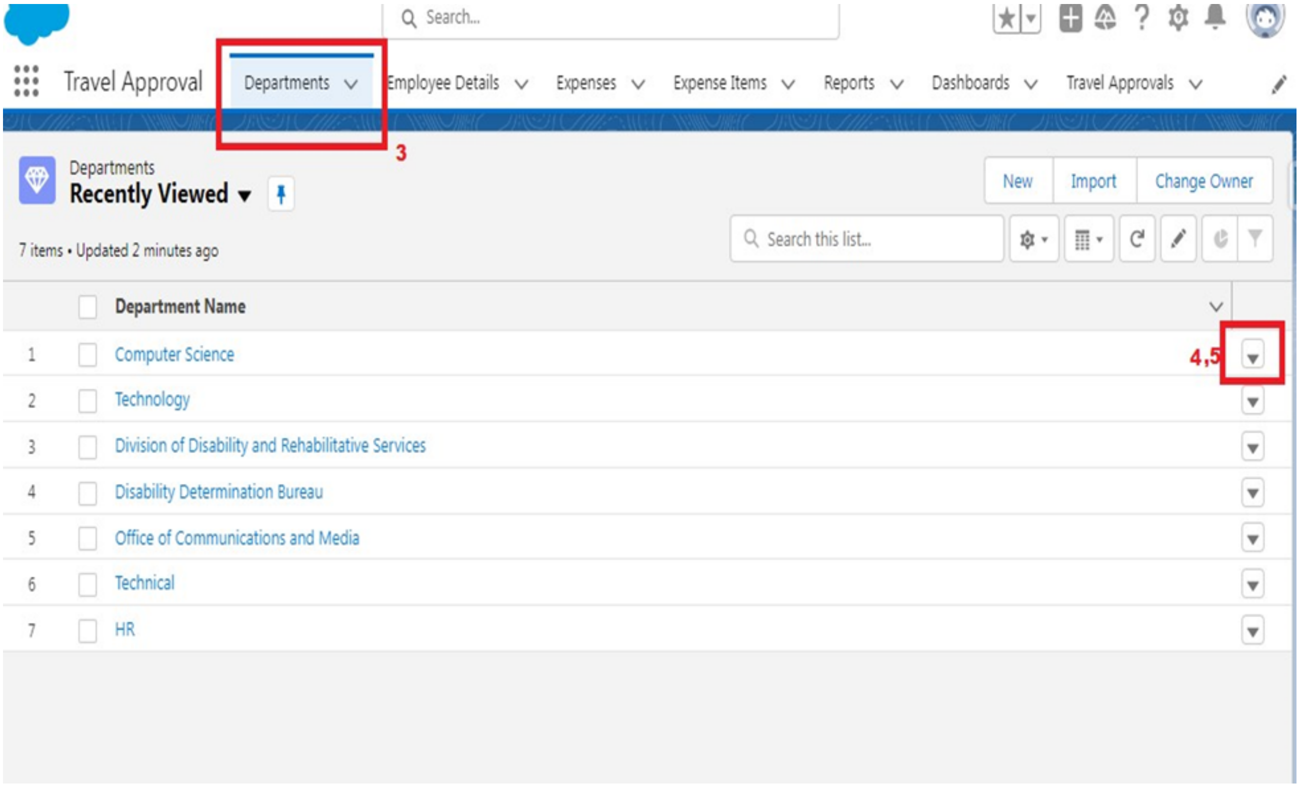


Delete Record

Delete Record (Department):

1. Click on App Launcher on the left side of the screen.
2. Search Travel Approval & click on it.
3. Click on Department Tab.
4. Click on Arrow at the right-hand side on that particular record.
5. Click delete and delete again.





What Are Reports?

Reports in Salesforce is a list of records that meet a particular criterion which gives an answer to a particular question. These records are displayed as a table that can be filtered or grouped based on any field.

There are 4 types of report formats in Salesforce:

1.Tabular Reports:
This is the most basic report format. It just displays the row of records in a table with a grand total. While easy to set up they can't be used to create groups of data or charts and also cannot be used in Dashboards. They are mainly used to generate a simple list or a list with a grand total.
2.Summary Reports:
It is the most commonly used type of report. It allows grouping of rows of data, view subtotal, and create charts.
3.Matrix Report:
It is the most complex report format. Matrix report summarizes information in a grid format. It allows records to be grouped by both columns and rows. It can also be used to generate dashboards. Charts can be added to this type of report.
4.Joined Reports:
These types of reports let us create different views of data from multiple report types. The data is joined reports are organized in blocks. Each block acts as a subreport with its own fields, columns, sorting, and

filtering. They are used to group and show data from multiple report types in different views.

Report types:

Report type determines which set of records will be available in a report. Every report is based on a particular report type. The report type is selected first when we create a report. Every report type has a primary object and one or more related objects. All these objects must be linked together either directly or indirectly.

- A report type cannot include more than 4 objects.
- Once a report is created its report type cannot be changed.

There are 2 types of report types:

1.Standard Report Types:
Standard Report Types are automatically included with standard objects and also with custom objects where "Allow Reports" is checked.

Standard report types cannot be customized and automatically include standard and custom fields for each object within the report type. Standard report types get created when an object is created, also when a relationship is created.

Note: Standard report types always have inner joins.

2.Custom Report Types:
Custom report types are reporting templates created to streamline the reporting process. Custom Reports are created by an administrator or User with "Manage Custom Report Types" permission. Custom report types are created when standard report types cannot specify which records will be available on reports.

In custom report types we can specify objects which will be available in a particular report. The primary object must have a relationship with other objects present in a report type either directly or indirectly.

There are 3 types of access levels of folders:

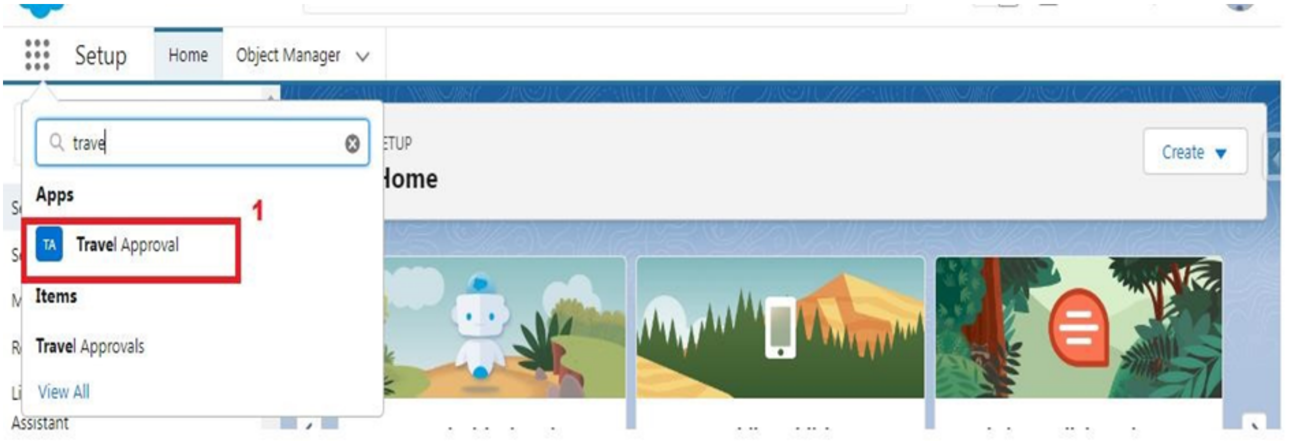
1.Viewer:
With this access level, users can see the data in a report but cannot make any changes except cloning it into a new report.

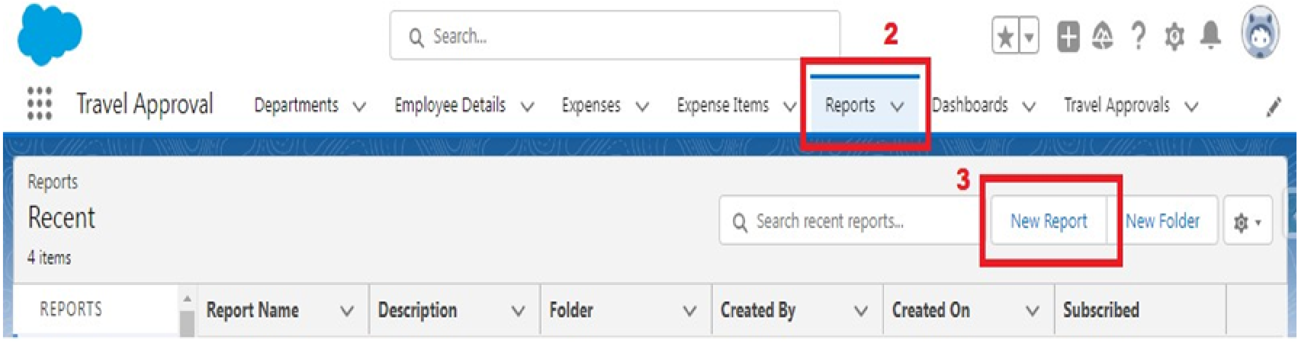
2.Editor:
With this access level, users can view and modify the reports it contains and can also move them to/from any other folders they have access level as Editor or Manager.
3.Manager:
With this access level, users can do everything Viewers & Editors can do, plus they can also control other user's access levels to this folder. Also, users with Manager Access levels can delete the report.
From this milestone we are going to import the data and create the reports and dashboards for data

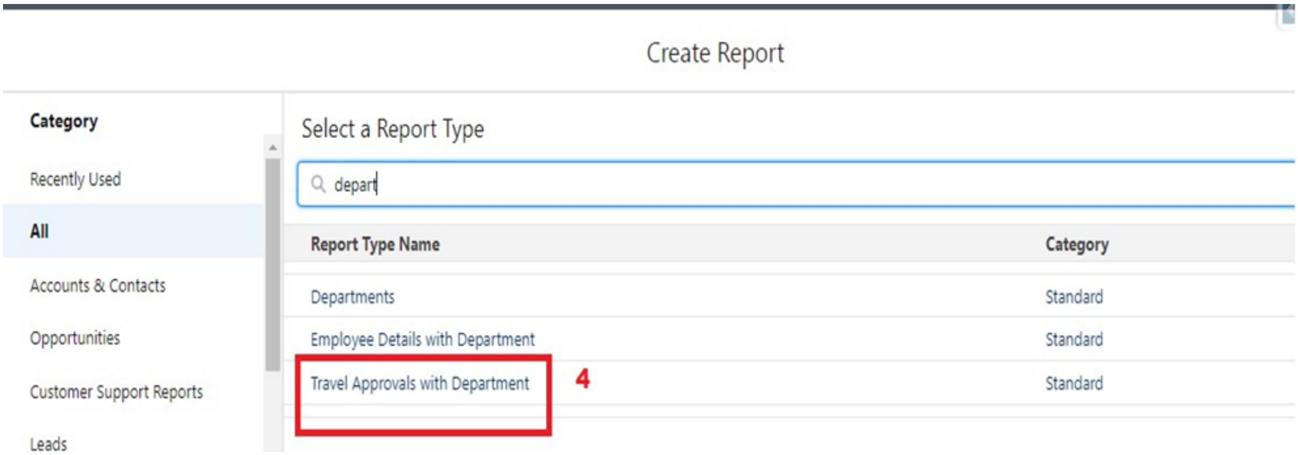
visualization in the application

Create Report

1. Click App Launcher and select Travel Approval App
2. Click reports tab
3. Click New Report.
4. Click the report type as Travel Approval with Departments Click Start Report.
5. Customize your report, in group rows select - Department Name
6. Click Refresh
7. Click save and run
8. Give report name – Travel Approval Report
9. Click Save

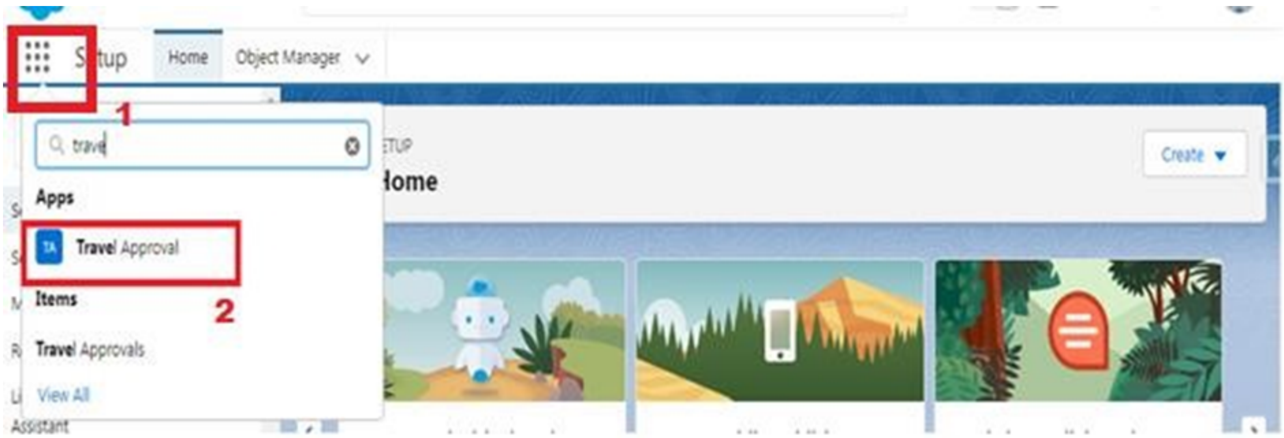


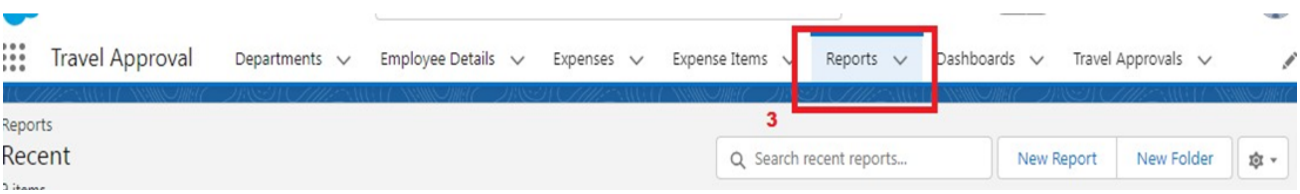


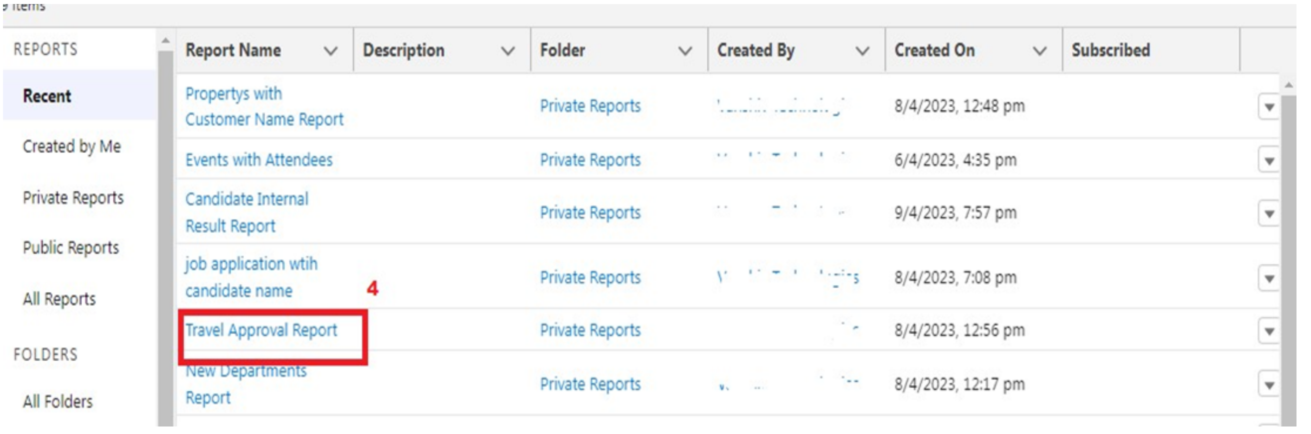


View Report

1.Click on App Launcher on left side of screen.
2.Search Travel Approval App & click on it.
3.Click on Reports Tab.
4.Click on Travel Approval Report and see records.





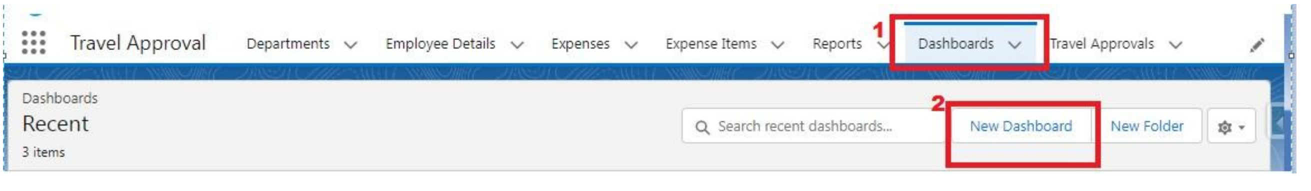


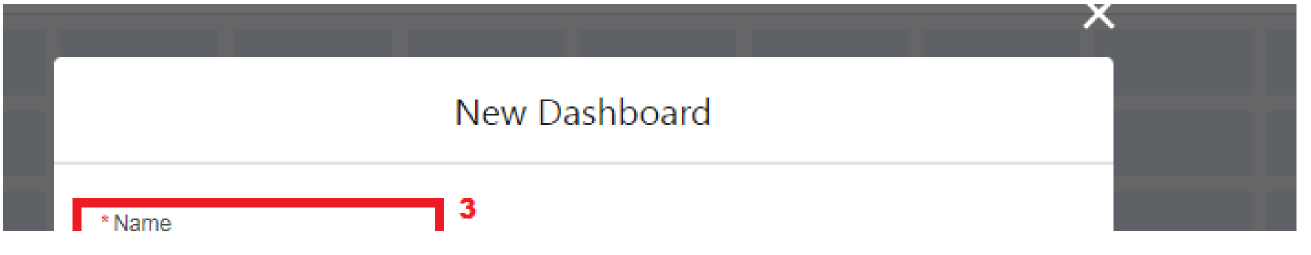
Dashboards

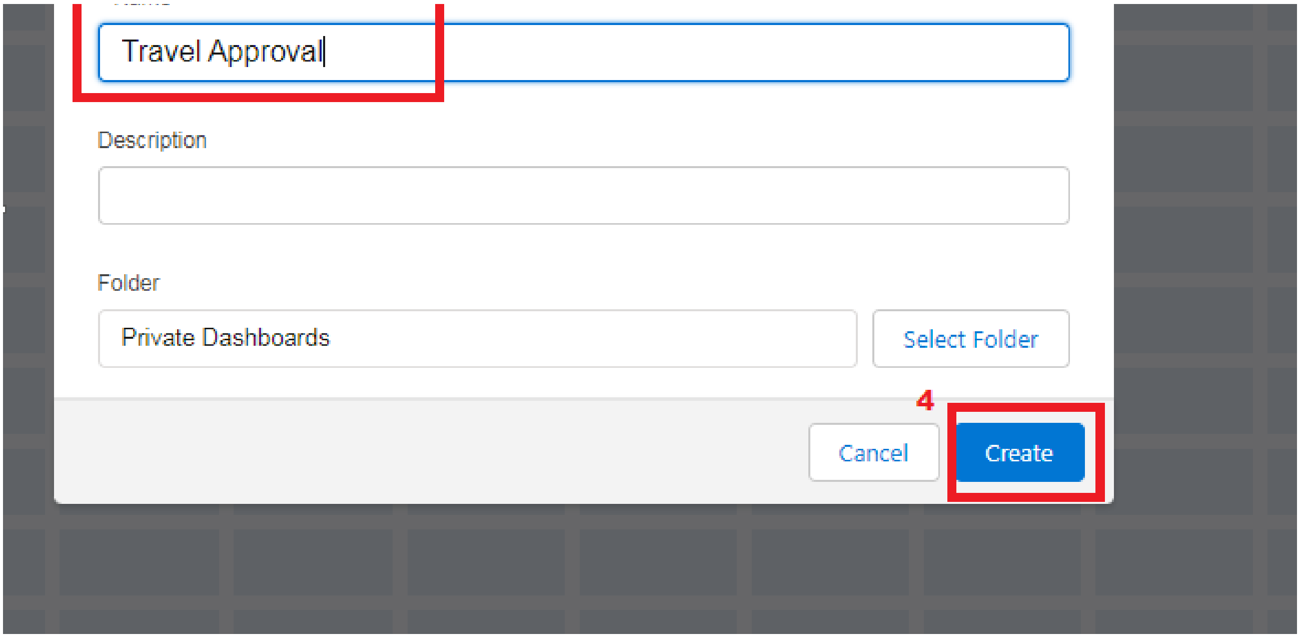
Dashboards let you curate data from reports using charts, tables, and metrics. If your colleagues need more information, then they're able to view your dashboard's data-supplying reports. Dashboard filters make it easy for users to apply different data perspectives to a single dashboard.

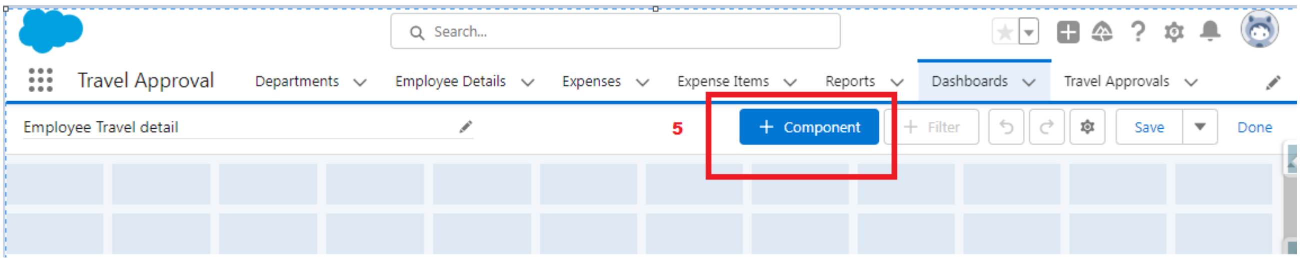
Create Dashboard

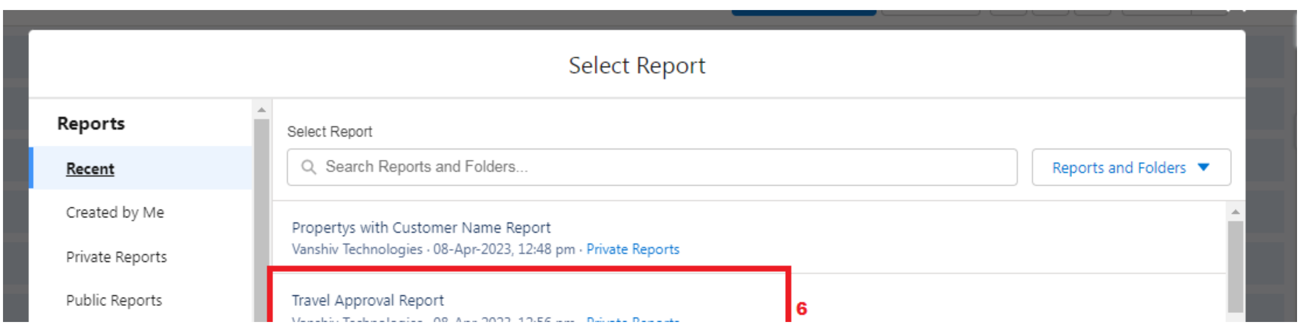
Click on the Dashboards tab from the travel approval application,
Click on a new dashboard
Give name- Travel Approval
Click Create
Give your dashboard a name and click on +component,
select the Travel Approval Report that you created.
For the data visualization select any of the chart, table etc as your wish.
Click add
Click save.

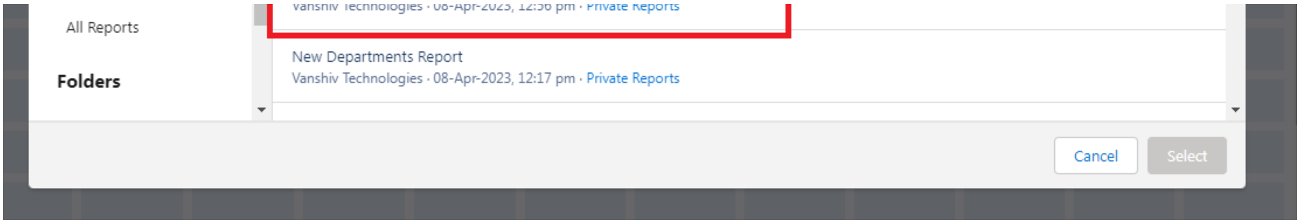


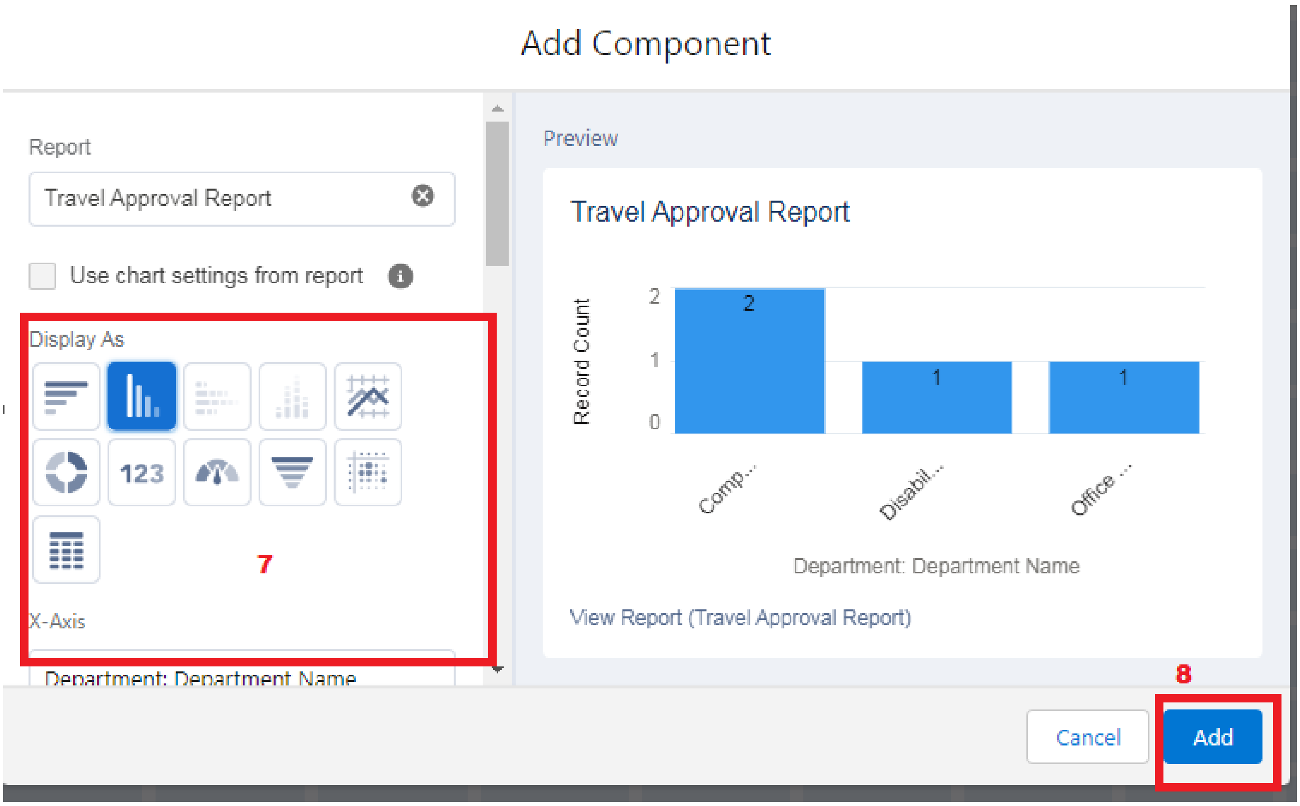


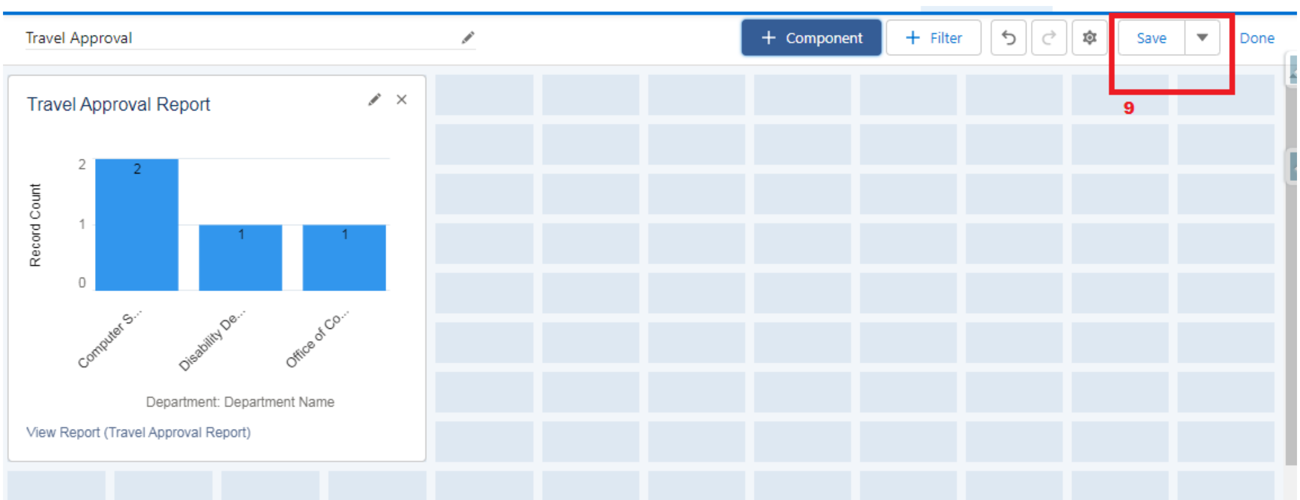

Travel Approval
Description
Folder
Private Dashboards
Select Folder
4
Cancel
Create


Search...
Travel Approval
Departments
Employee Details
Expenses
Expense Items
Reports
Dashboards
Travel Approvals
Employee Travel detail
5
+ Component
+ Filter
Save
Done


Select Report
Reports
Recent
Created by Me
Private Reports
Public Reports
Select Report
Search Reports and Folders...
Reports and Folders
Propertys with Customer Name Report
Vanshiv Technologies · 08-Apr-2023, 12:48 pm · Private Reports
Travel Approval Report
6

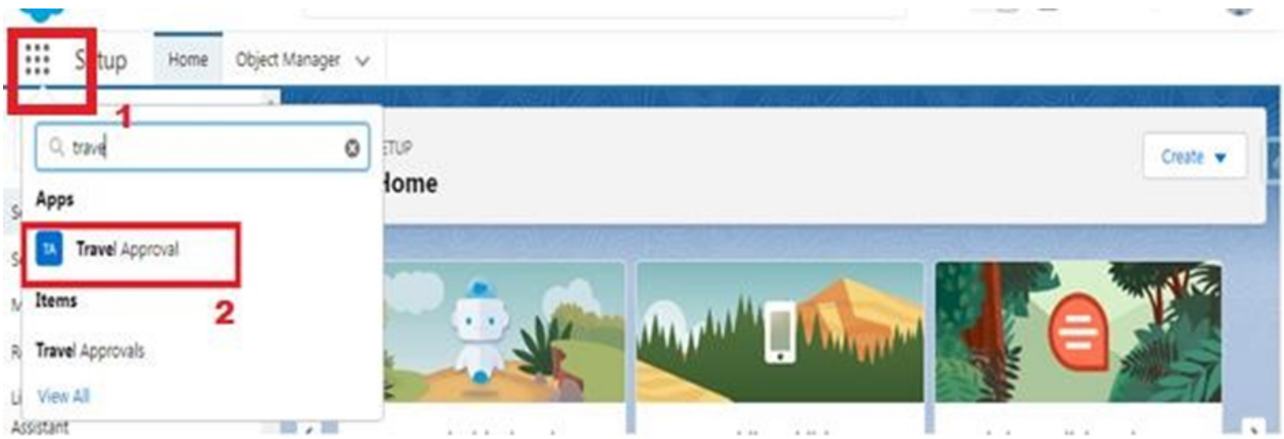

All Reports
Folders
New Departments Report
Vanshiv Technologies · 08-Apr-2023, 12:17 pm · Private Reports
Cancel
Select

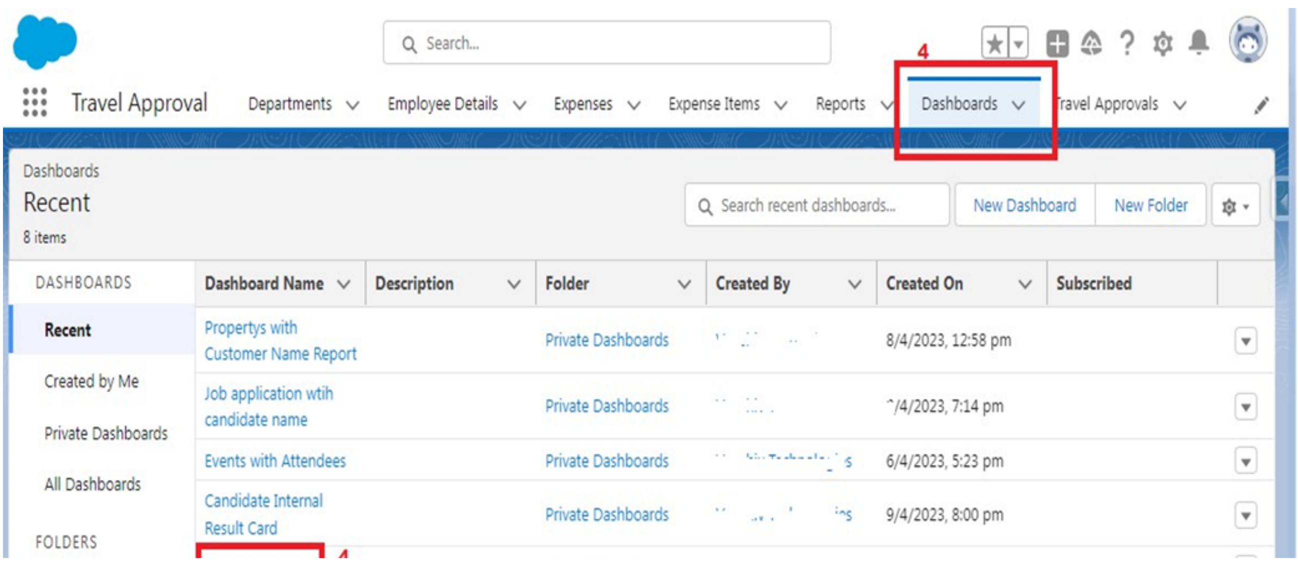

Add Component
Report
Travel Approval Report
Use chart settings from report
Display As
123
7
X-Axis
Department: Department Name
Preview
Travel Approval Report
Record Count
Comp...
Disabil...
Office ...
Department: Department Name
View Report (Travel Approval Report)
8
Cancel
Add


Travel Approval
Component
Filter
Save
Done
9
Travel Approval Report
Record Count
Computer S...
Disability De...
Office of Co...
Department: Department Name
View Report (Travel Approval Report)

View Dashboard

1.Click on App Launcher on left side of screen.
2.Search Travel Approval App & click on it.
3.Click on Dashboard Tab.
4.Click on Travel Approval and see graph view of records





All Folders

Created by Me

Shared with Me

Travel Approval	Private Dashboards	[illegible]	8/4/2023, 12:58 pm
Employee Travel detail	Private Dashboards	[illegible]	8/4/2023, 12:22 pm
Opportunity And Dashboard	Private Dashboards	[illegible]	4/4/2023, 1:55 am