

BUILD AN EMPLOYEE TRAVEL APPROVAL APPLICATION FOR CORPORATES

PROJECT REPORT

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INTRODUCTION

1.1 Overview

A travel request approval process is a series of actions that an employee or traveller follows to acquire management consent to implement a trip. This process typically begins with the employee filling out a travel request form outlining the trip's details, including the destination, purpose, dates, and estimated expenses.

The employee then forwards the request to the assigned administrative authorities and stakeholders through outdated methods of communication. Such as email, for review. The review process involves managers and admins checking compliance with travel policies, estimating trip feasibility. Verifying budget availability, and obtaining approvals from the other relevant organizational stakeholders. Based on such considerations, the request is either sanctioned or denied. Once approved, the employee can purchase flight tickets, reserve accommodations, and perform other necessary tasks to carry out the trip.

1.1 Purpose

Travel approval forms are designed to give management an overview of the intended business trip from both a cost and a strategic point of view. The fields that typically appear on a travel request form include employee home and contact information. There are three main reasons for travel. These are Leisure tourism and visiting friends and relatives and Business tourism, Travelling will improve your mental health. Travelling helps you in understanding yourself , reduce your stress and anxiety. Travel can boost your creativity make memories.

2. PROBLEM DEFINITION & DESIGN THINKING

2.1 Empathy Map



Empathy map

Use this framework to develop a deep, shared understanding and empathy for other people. An empathy map helps describe the aspects of a user's experience, needs and pain points, to quickly understand your users' experience and mindset.



Build empathy

The information you add here should be representative of the observations and research you've done about your users.

Says

What have we heard them say?
What can we imagine them saying?

Travel within the company is feasible and organized

It's aim to ensure safeguard, comfort of employees

Offers a centralised online booking tool

To control the costs of sending employees on work trips



Time efficiency worth to visit

I am not sure what to do next



Reviews and feedback

Verification

Thinks

What are their wants, needs, hopes, and dreams? What other thoughts might influence their behavior?

BUILD AN EMPLOYEE TRAVEL APPROVAL APPLICATION FOR CORPORATES

searching feedbacks and comments

Translate understandable language



Looking for a travel website for easy access without download any software

Refreshed the page to make it load



It's useful

Inadequate

It's amazing

Anxious

Does

What behavior have we observed?
What can we imagine them doing?

Feels

What are their fears, frustrations, and anxieties? What other feelings might influence their behavior?


2.2 Ideation & Brainstorming Map



Brainstorm & idea prioritization

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

 **10 minutes** to prepare

 **1 hour** to collaborate

 **2-8 people** recommended



Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

 **10 minutes**

A

Team gathering

Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

B

Set the goal

Think about the problem you'll be focusing on solving in the brainstorming session.

C

Learn how to use the facilitation tools

Use the Facilitation Superpowers to run a happy and productive session.

[Open article](#)



1

Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

 **5 minutes**

1. What inspire you to become a travel agent?
2. What is your biggest motivation to succeed as a travel agent?
3. How flexible is your schedule?
4. Where is your favorite place to travel?
5. What do you consider most important in the travel business price, product or communication?

PROBLEM

**How might we [your
problem statement]?**



Key rules of brainstorming

To run a smooth and productive session



Stay in topic.



Encourage wild ideas.



Defer judgment.



Listen to others.



Go for volume.



If possible, be visual.

2

Brainstorm

Write down any ideas that come to mind that address your problem statement.

 10 minutes

TIP


You can select a sticky note and hit the pencil [switch to sketch] icon to start drawing!

Person 1

| | | |
|--|--|--|
| Knowing I get to help families create once in a life time memories | I get to tell about beautiful unique destination | How to Plan work week/ holiday schedule allows employees to vary the time day begin and their work day |
| Ladakh | All three are important for travel agents | |
| | | |

Person 2

| | | |
|--------|--------------------|---|
| Myself | Learning Potential | A Positive work attitude drives employees to work autonomously to create their own schedules and find ways to be satisfied that works for them. |
| Mysore | Product | |
| | | |

Person 3

| | | |
|--------------------------|--|--|
| You can be your own boss | To help families create once in a life time memories | If your timetable allows you enough time to complete the project |
| Kerala | Communication | |
| | | |

Person 4

| | | |
|---|--|--|
| When I got older, I found exciting places with my passion | Nothing makes me happier than a customer's feel pleasure | Making the trip approval process as smooth as possible start with creating a travel policy |
| Jog Falls, Karnataka | All the three were important for the satisfied travel | |
| | | |



3

Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

🕒 20 minutes

I will Budget
my time and
energy to
solve this
project

As loyal to
people i must
include defect
of the financial
system also

TIP

Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas and themes within your mural.

I think it will
encourage
growth in the
financial
sector

The project
will be very
useful for both
manager and
employees

Me and my team
members like to
give our best to
make this project
an amazing one

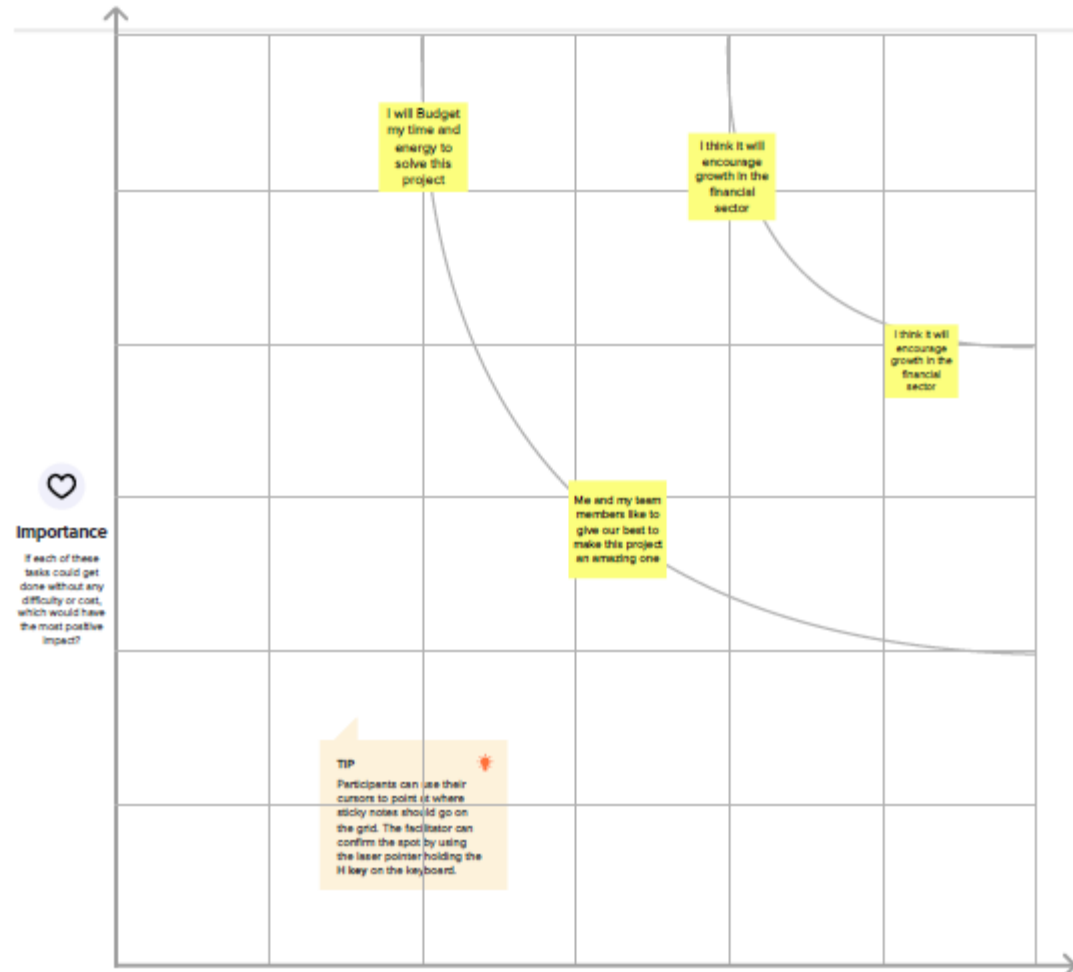


4

Prioritize

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

⌚ 20 minutes



3.RESULT

3.1 Data Model

| Object Name | Fields in object | |
|-----------------|-------------------|------------------------------|
| Travel Approval | Expense Type | Picklist |
| | Travel Approval | Master – Detail Relationship |
| | Status Indicator | Formula (text) |
| | Total Expense | Roll-up Summary |
| | Purpose of Trip | Text |
| | Status | Picklist |
| | Trip End Date | Date |
| | Destination State | Text |
| | Trip Start Date | Text |
| | Out-Of-State | Text |
| | Department | Text |
| | Amount | Currency |
| | Expense Items | Text |

3.2 Activity and screenshot

This Project helps in sending your travel approval requests to your manager in place of emails.

Project Description

The project aim is to provide real-time knowledge for all the students who have basic knowledge of Sales force and Looking for a real-time project. This project will also help to those professionals who are in cross-technology and wanted to switch to Sales force with the help of this project they will gain knowledge and can include into their resume as well.

What you'll learn

1. Real Time Sales force Project
2. Object & Relationship in Sales force

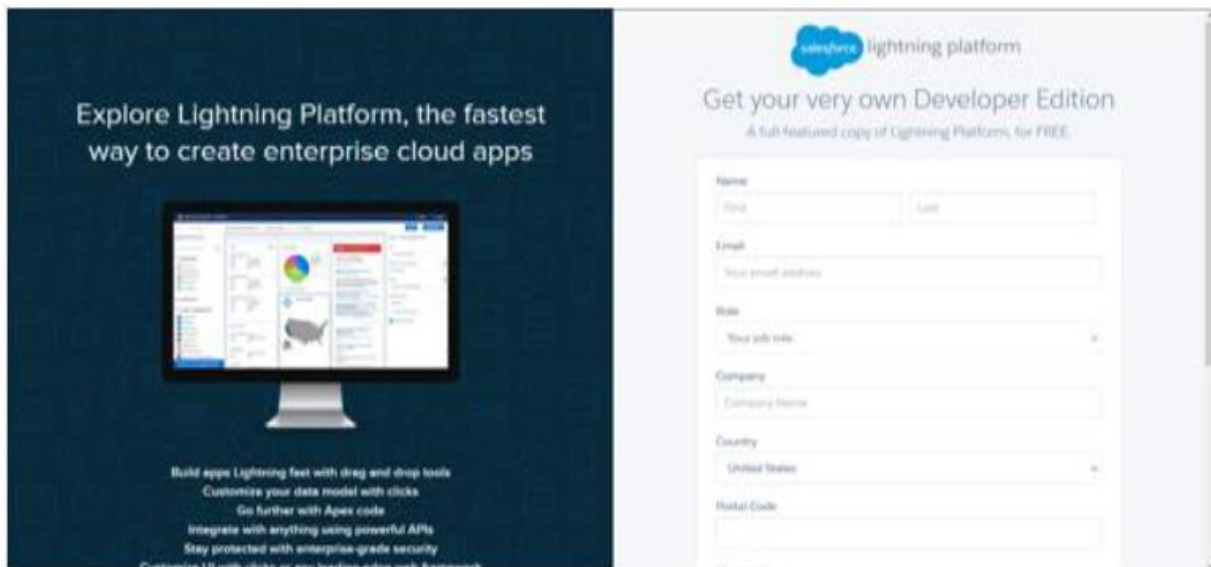
Milestone 1- Create Sales force Org:

Creating Developer Account

Creating a developer org in sales force.

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. Country: 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.



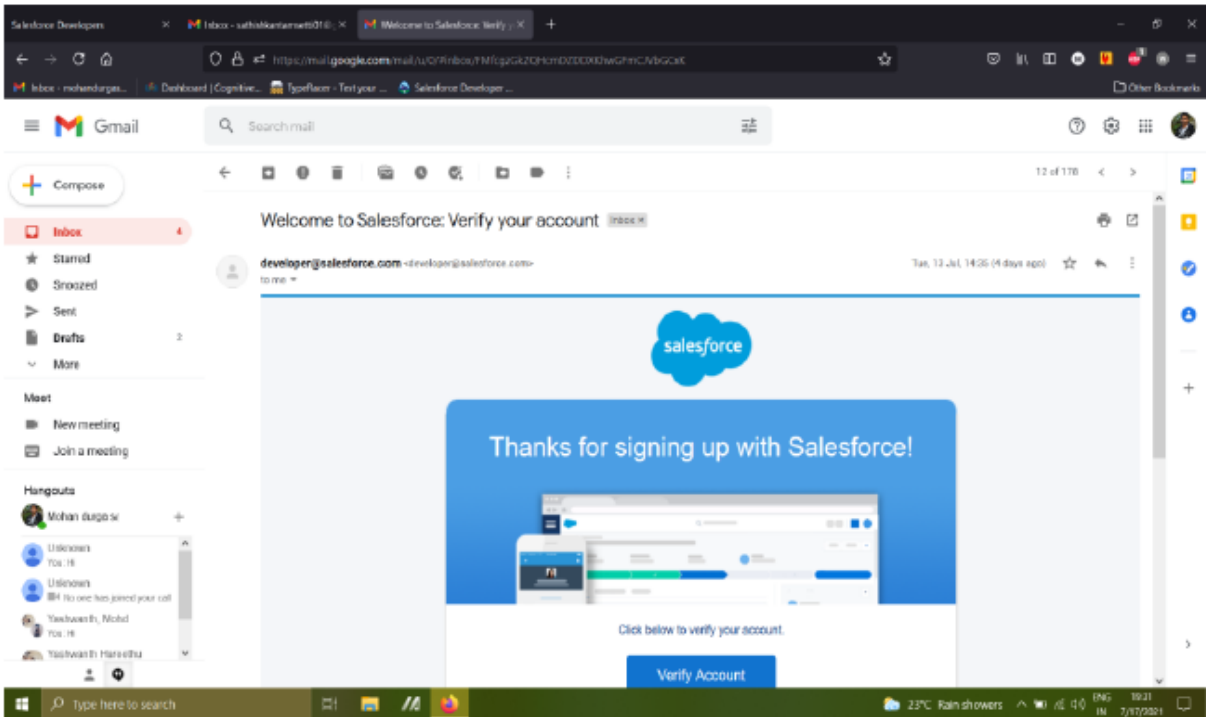
Activity-2:

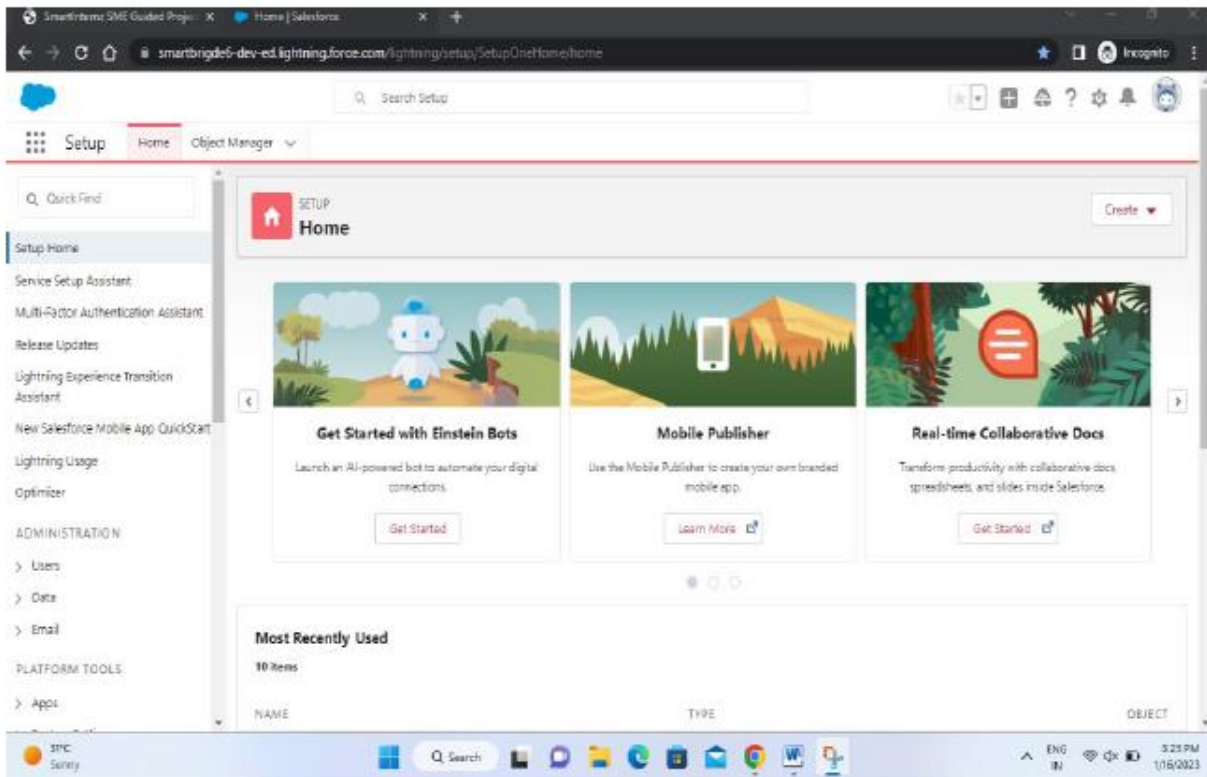
Account Activation

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

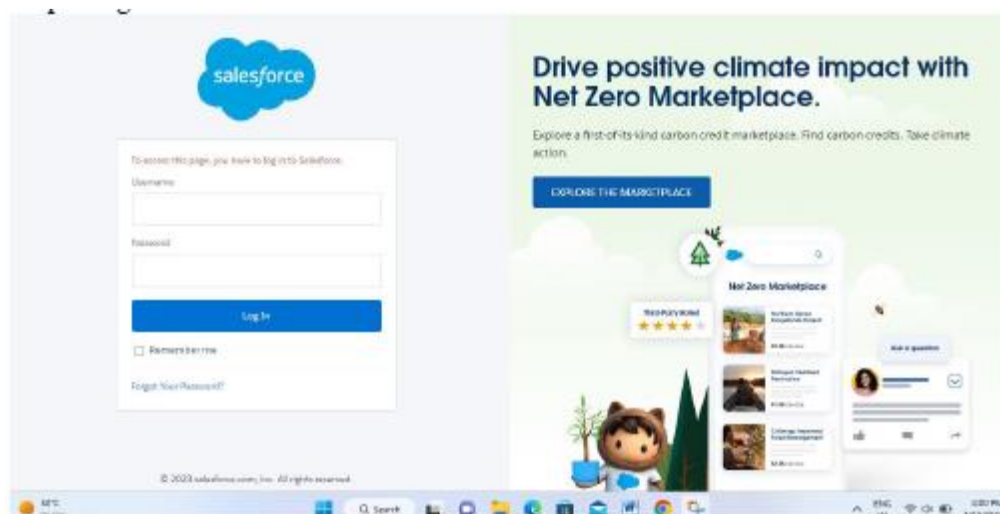
Login To Your Sales force Account

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- Creating the Application:



The App Manager is your go to place for managing apps for lightning experience. It shows all your connected apps and sales force apps. Use the lightning experience app manager to view all your sales force apps

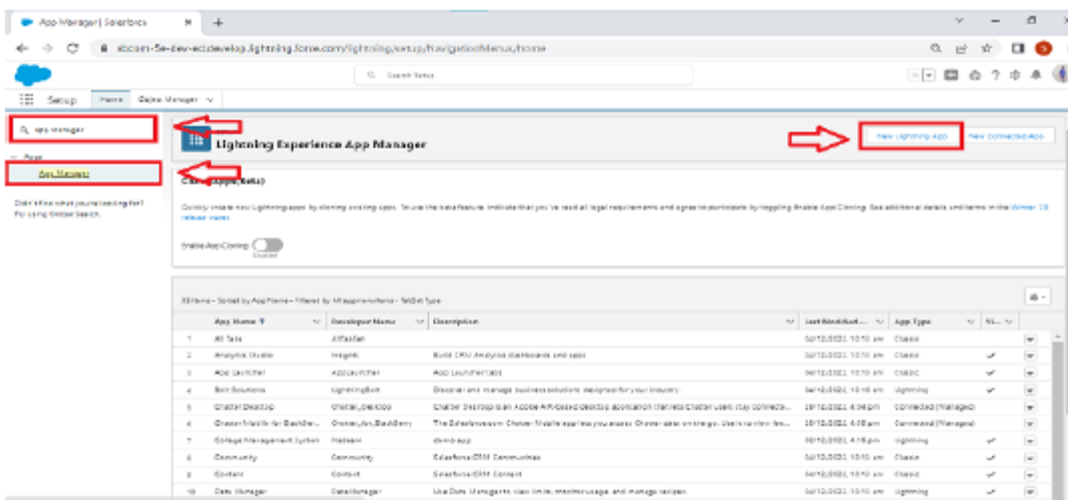
Activity -1: Create the Travel Application

Search App Manager in quick find box, click on new lightning app. Before creating the application download this zip file and extract

it.<https://developer.salesforce.com/files/TravelAppWorkshopFiles.zip>

Steps

- From Setup, enter App Manager in the Quick Find and select App Manager.



- Click New Lightning App. Enter Travel Approval as the App Name, then click Next

New Lightning App

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 Name ⓘ
Name your app...

* Developer Name ⓘ
Enter a developer name...

Description ⓘ
Enter a description...

App Branding

Image ⓘ
Upload

Primary Color Hex Value ⓘ
#0070D2

Org Theme Options
☐ Use the app's image and color instead of the org's custom theme

App Launcher Preview

Next

- Under App Options, leave the default selections and click Next.
- Under Utility Items, leave as is and click Next.
- From Available Items, select Department, Travel Approval, Expense Item, Reports, and Dashboards and move them to Selected Items. Click 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. Those items are dropped from the navigation bar when the app is viewed in a format that the item doesn't support.

Available Items

Create

Type to filter list...

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

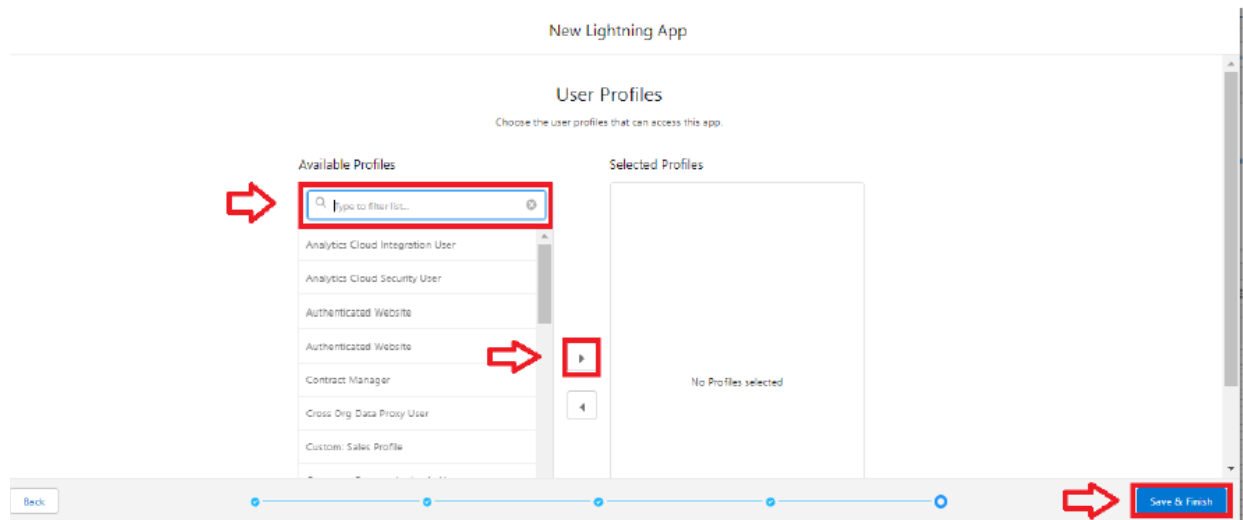
Selected Items

No items selected

Back

Next

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



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

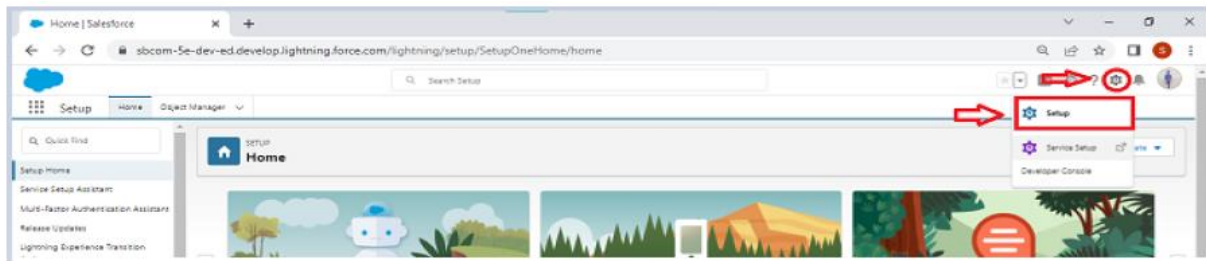
Milestone 3 - object

In this Travel Approval application we will be creating 3 objects:

- Department
- Travel approval and
- Expense Item

Activity-1: Custom Object Creation

1 .After you Login to your org, click create on the right side of the page and select custom object.



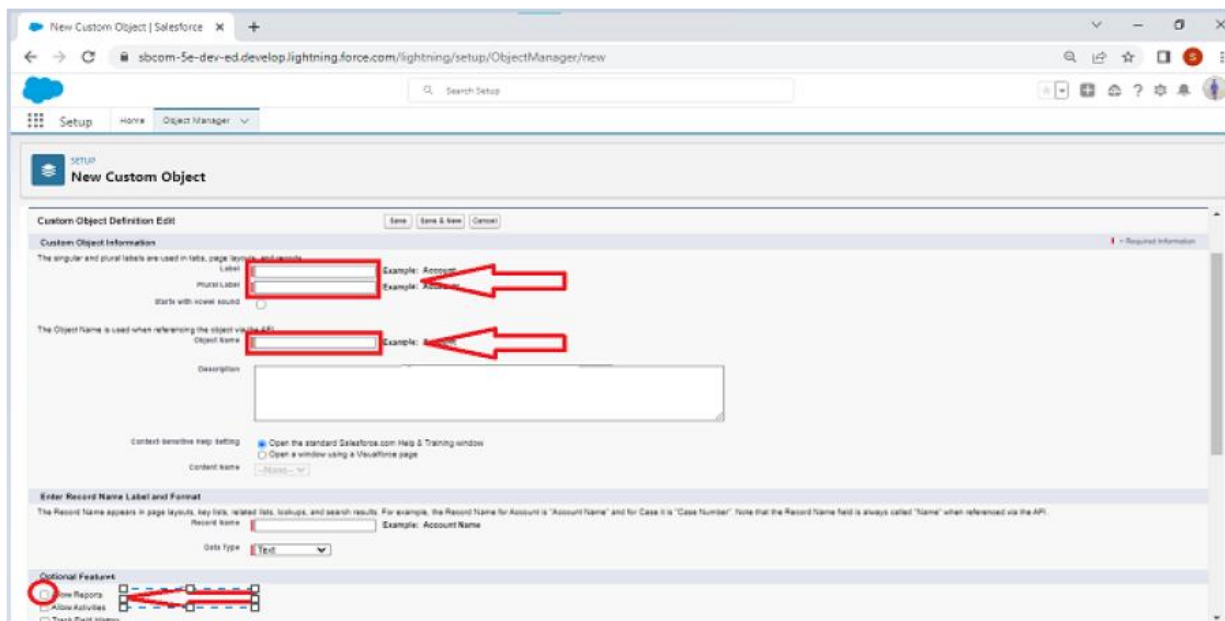
To create an object:

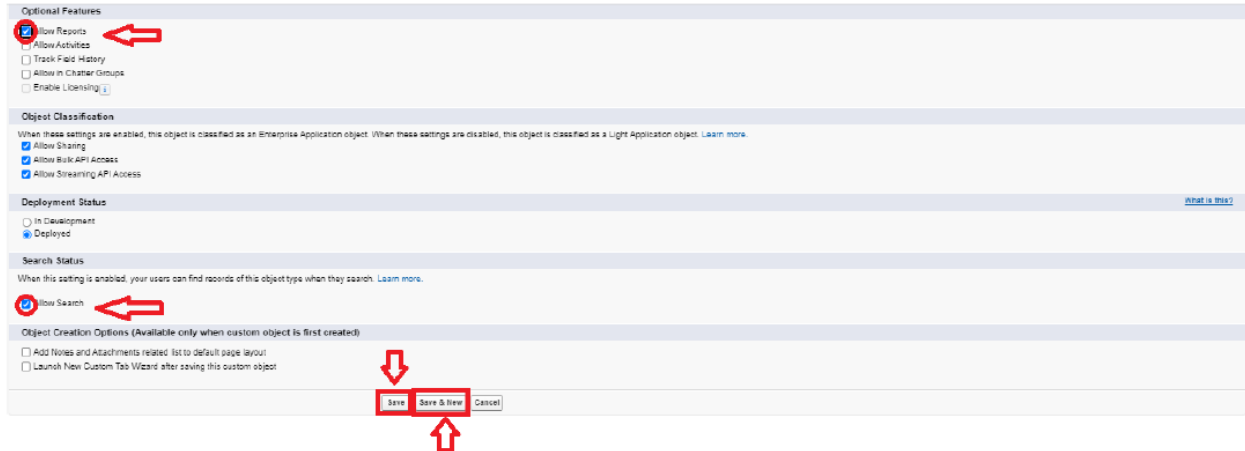
From the setup page → Click on Object Manager → Click on Create → Click on Custom Object.



On Custom object defining page:

Enter the label name, plural label name, click on Allow reports, Allow search → Save.





Activity-2: Create 3 custom objects and tabs

- a) Department
- b) Travel Approval
- c) Expense Item

Create Department Object

1. From Setup, click Object Manager.
2. Click Create, then select Custom Object.
3. Give the name as Department

To Navigate to Setup page:

Click on gear icon → click setup.

To create an object:

From the setup page → Click on Object Manager → Click on Create → Click on Custom Object.

On Custom object defining page:

Enter the label name, plural label name, click on Allow reports, Allow search → Save.

4. Now the tabs section opens, add this tab to the travel app.

Create Travel Approval Object

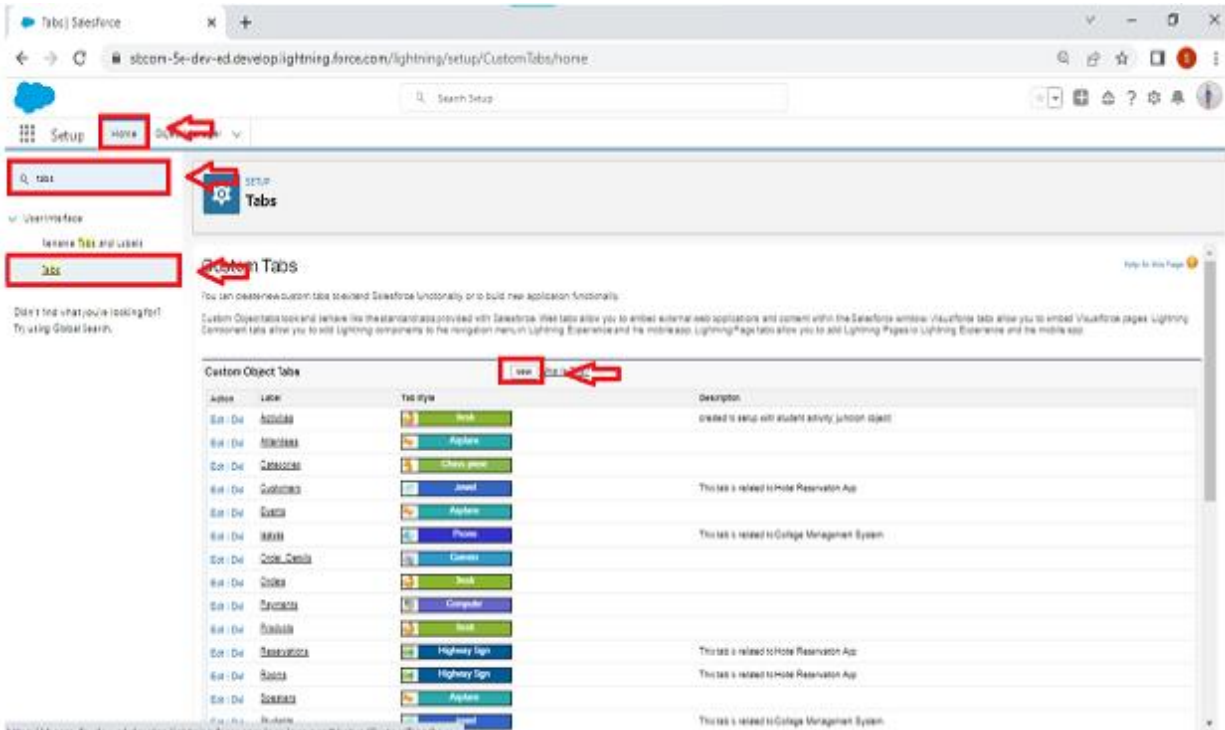
1. Navigate back to Object Manager
2. Click Create then select Custom Object.
3. Enter these details
Parameter & values

| | |
|-----------------|---|
| Label | TravelApproval |
| Plural Label | TravelApprovas |
| Object Name | Travel_Approal (this field auto-populates) |
| Record Name | TravelApprovl# |
| Datatype | Auto Number |
| DisplayFormat | TA-{00000} |
| Starting Number | 1 |

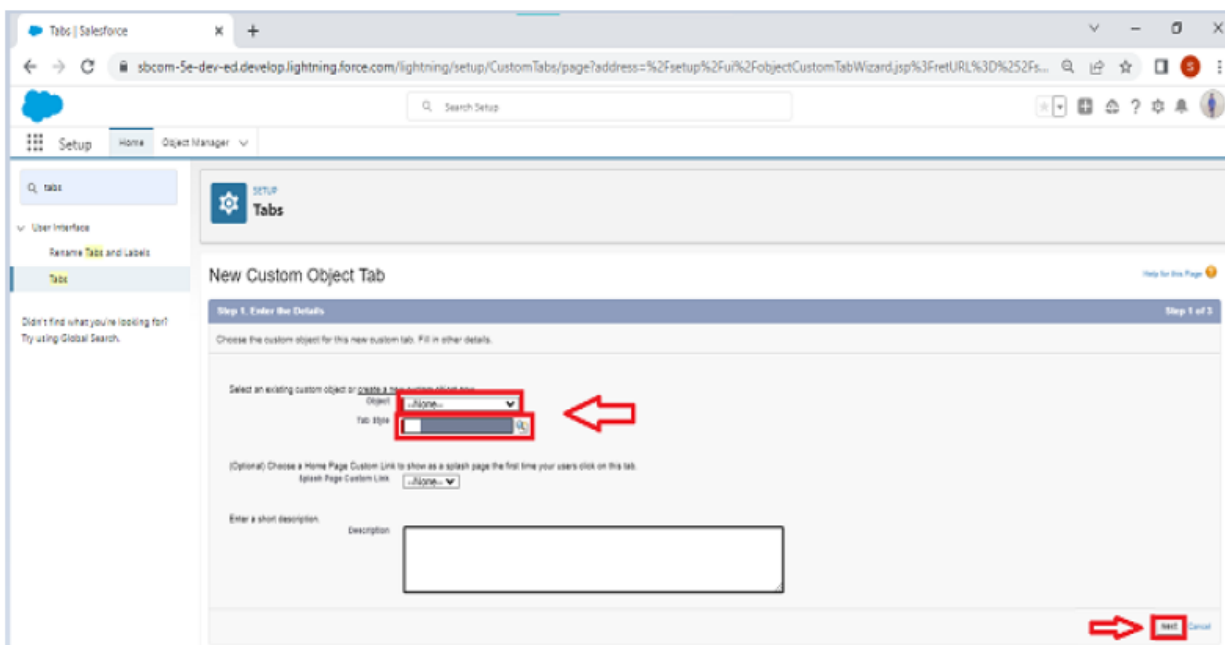
Milestone 4- Tab creation

Activity-1:

Now create a custom tab. Click the Home tab, enter Tabs in Quick Find and select Tabs. Under Custom Object Tabs, click New.



1. For Object, select Event.
2. For Tab Style, select any icon.
3. Leave all defaults as is. Click Next, Next, and Save.

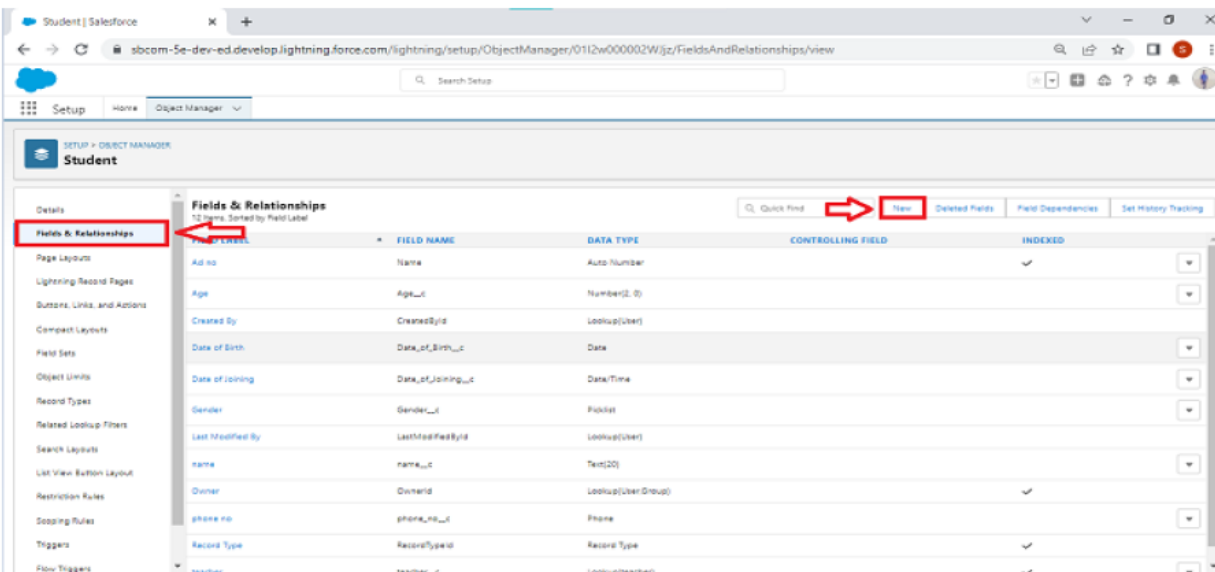
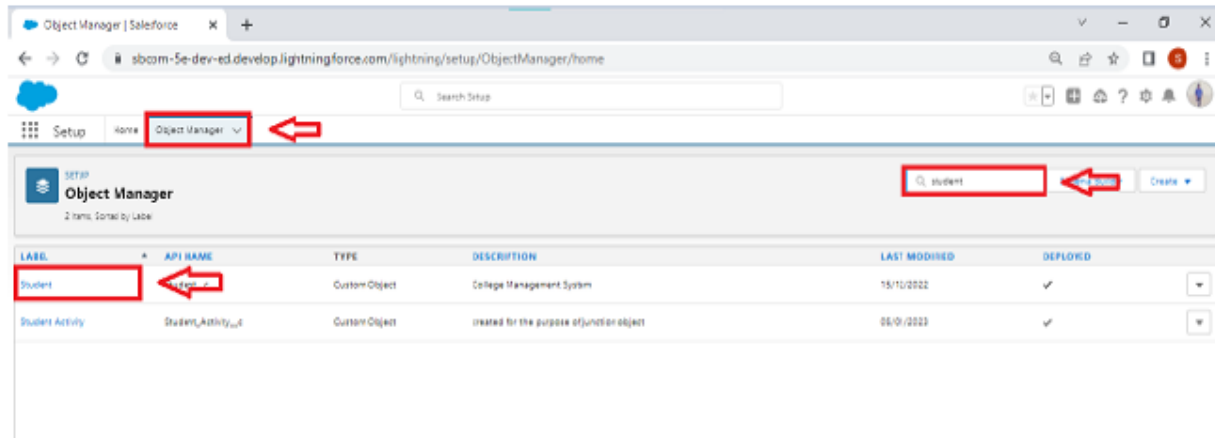


In the same way create other objects such as Attendees, Speaker and Vendor.

Milestone 4 Create- Field s& Relationships :

Activity-1:

1. Click Fields & Relationships, and click New.

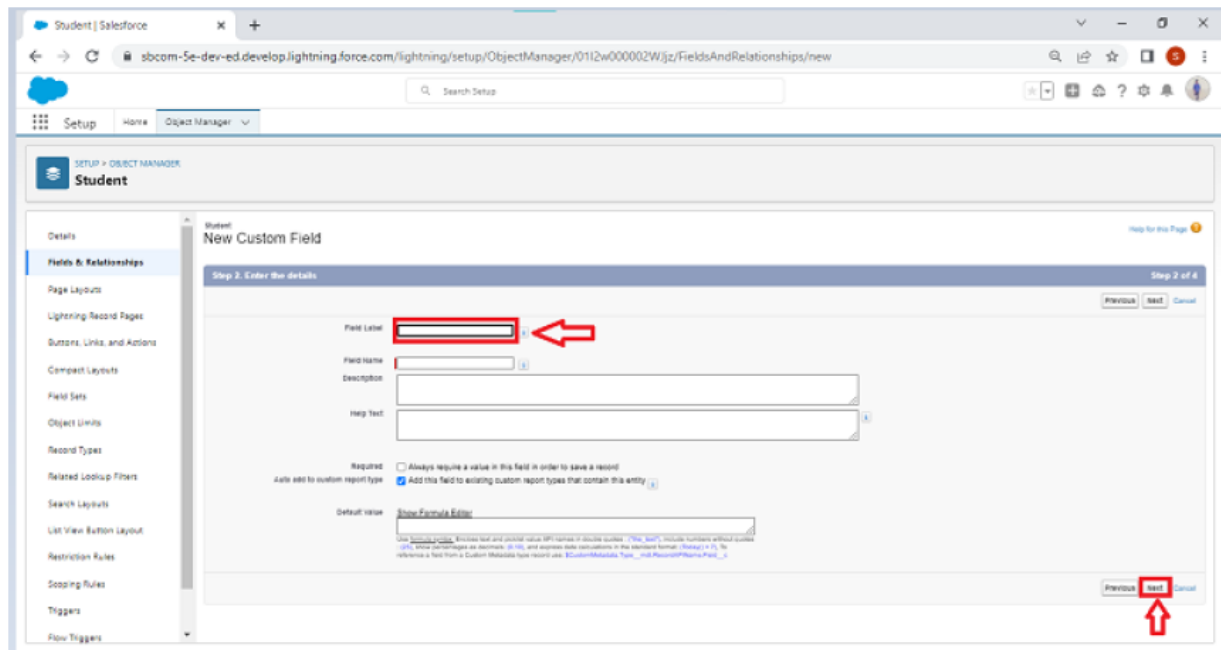


2. For data type, select Currency.

3. Enter these details.

- For Field Label, enter Amount
- For Length, enter 16
- For Decimal places, enter 2

d. Select Required



4. Click Next, Next, then Save & New.

Activit-2: Create the Expense Type field.

- Select Pick list as the data type.
- Select Enter values, with each value separated by a new line.
- Add these values :(Airfare, Hotel, Rental Cars, Meals, Others)
- Select Required.
- Click Next, Next, then Save & New.

Activit-3: Create the Travel Approval field.

- Select Master-Detail Relationship data type, click Next.
- Select Travel Approval from the Related To menu.
- Click Next four times, then click Save.

Milestone 5-Import Departments

In order to complete this milestone, you need to download the reference file

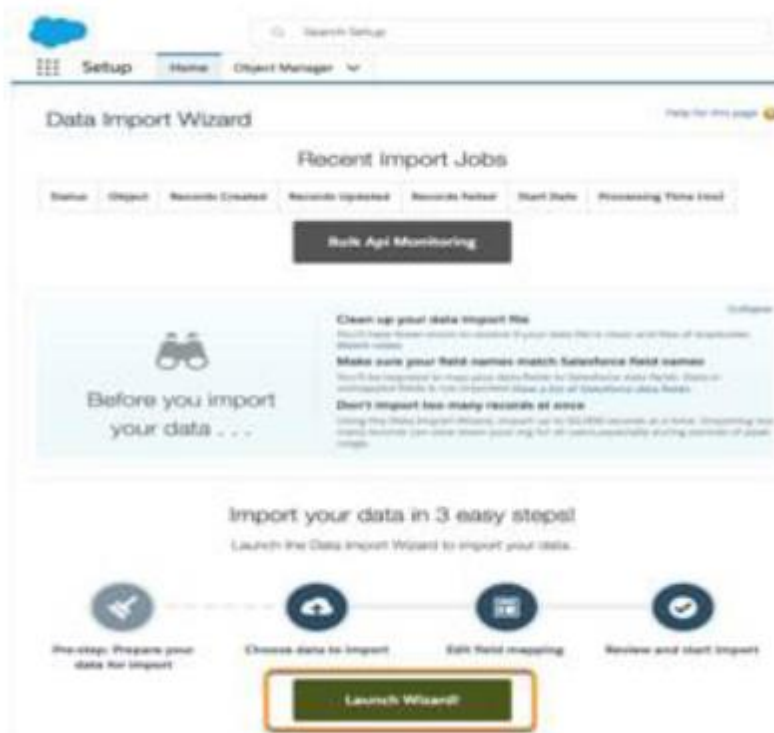
https://developer.salesforce.com/files/TravelAppWorkshopFile.s.zip?_ga=2.108173638.597564088.1674441525-733189446.1673935386

Activity-1:

From Setup, click the Home tab.

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

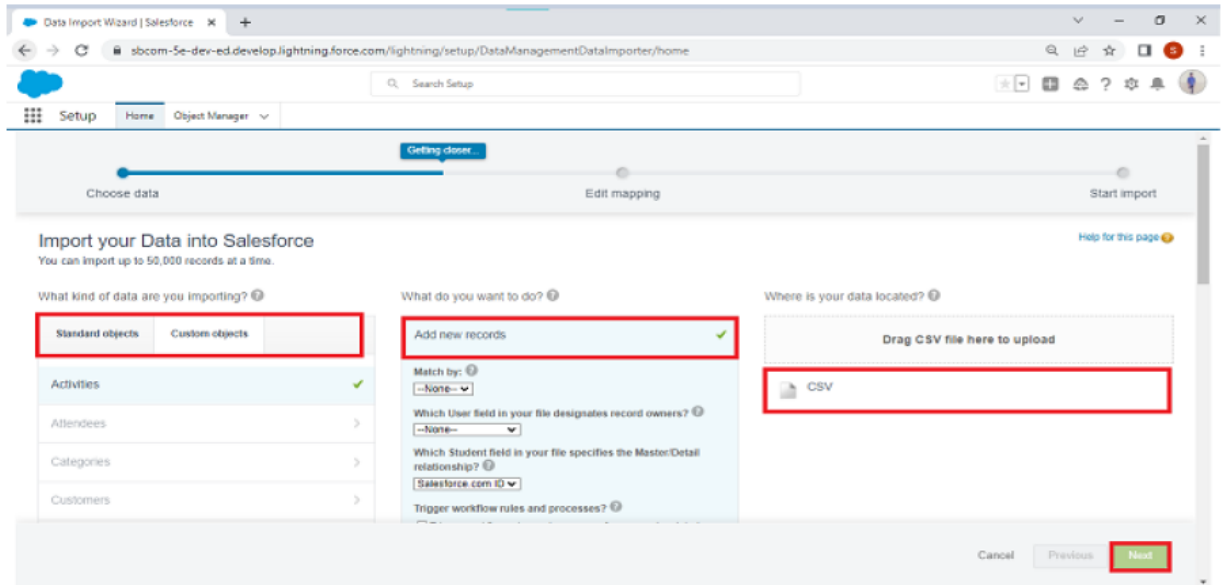
2. Click Launch Wizard!



Click the Custom Objects tab and select the Departments object.

3. Next, select Add new records.

4. Drag and drop the Departments.csv file you downloaded using zip file or click the CSV icon and browse to select your file. Select Next.



Import your Data into Salesforce
You can import up to 50,000 records at a time.

What kind of data are you importing? **Standard objects** Custom objects

Activities ☒ Attendees > Categories > Customers >

What do you want to do? **Add new records** ✓

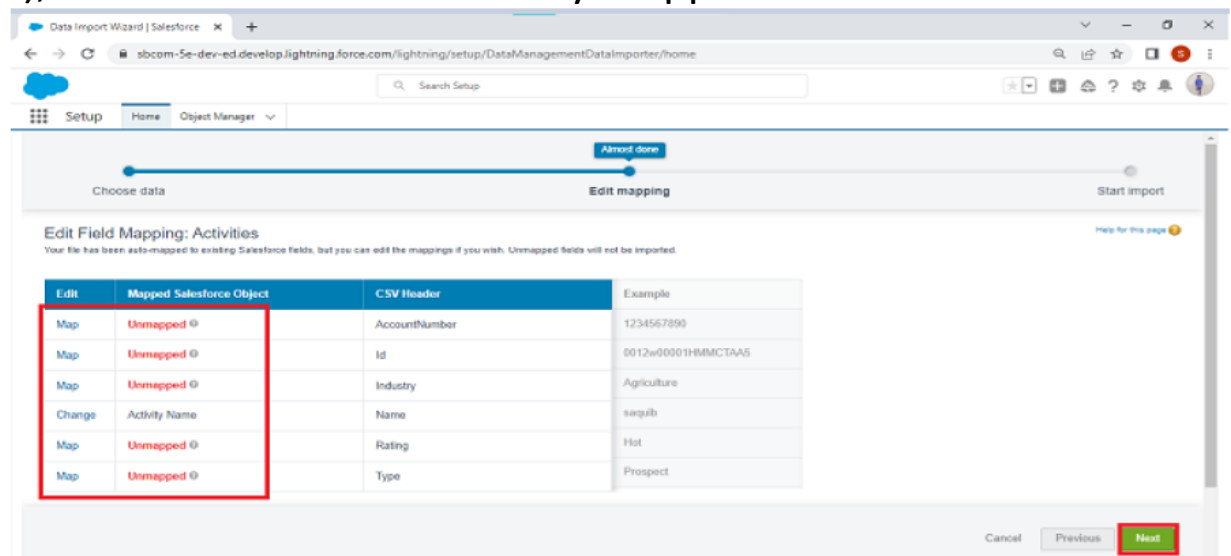
Match by: **--None--**
Which User field in your file designates record owners? **--None--**
Which Student field in your file specifies the Master/Detail relationship? **Salesforce.com ID**
Trigger workflow rules and processes? ☐

Where is your data located? **Drag CSV file here to upload**

CSV

Cancel Previous **Next**

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



Edit Field Mapping: Activities
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 |
|--------|--------------------------|---------------|--------------------|
| Map | Unmapped | AccountNumber | 1234567890 |
| Map | Unmapped | Id | 0012w00001HMMCTAAS |
| Map | Unmapped | Industry | Agriculture |
| Change | Activity Name | Name | seagull |
| Map | Unmapped | Rating | Hot |
| Map | Unmapped | Type | Prospect |

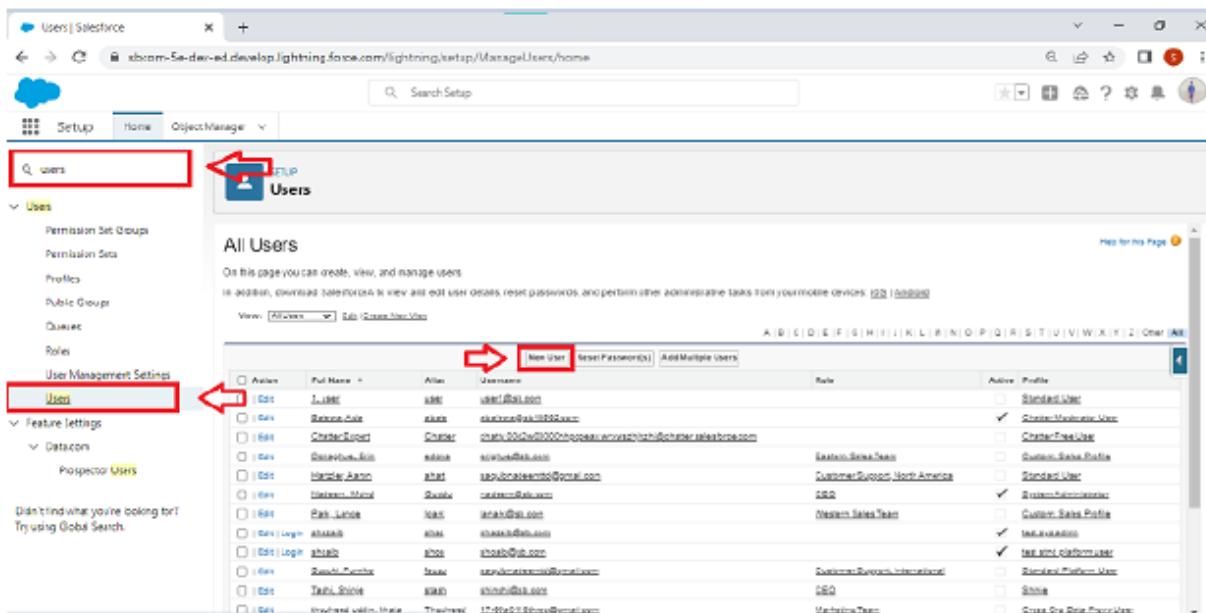
Cancel Previous **Next**

6. The next screen gives you a summary of your data import. Click Start Import.

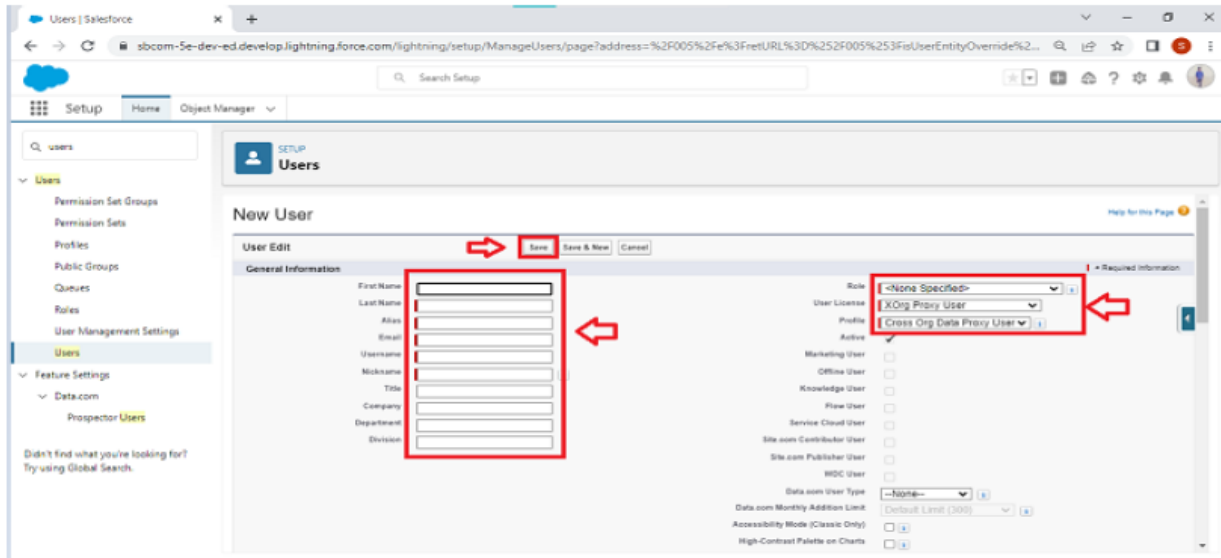
7. Click OK on the popup.
8. This takes you to the bulk import summary window that shows that the process has completed and 16 records have been successfully imported or processed. You'll also get an email notification confirming the import

Milestone 6-Customize User Interface

Activity-1: Create User and Setup Approvals



The screenshot shows the Salesforce Setup interface for the 'Users' section. The left sidebar contains a search bar with 'users' entered, and a list of navigation items including 'Users', 'Permission Set Groups', 'Permission Sets', 'Profiles', 'Public Groups', 'Queues', 'Roles', 'User Management Settings', 'Feature Settings', and 'Data.com'. The 'Users' item is highlighted. The main content area is titled 'All Users' and includes a 'New User' button. A table of users is displayed with columns for 'Active', 'Full Name', 'Alias', 'Username', 'Role', and 'Profile'. The table lists 16 users, including 'J. Smith', 'Renee Cole', 'Chetan Sood', 'Srinivas Reddy', 'Hector Soto', 'Hector Soto', 'Paul Lopez', 'Amanda', 'John', 'Renee Cole', 'Chetan Sood', 'Srinivas Reddy', 'Hector Soto', 'Hector Soto', 'Paul Lopez', 'Amanda', and 'John'. The 'New User' button is highlighted with a red arrow, and the 'Users' item in the sidebar is also highlighted with a red arrow.

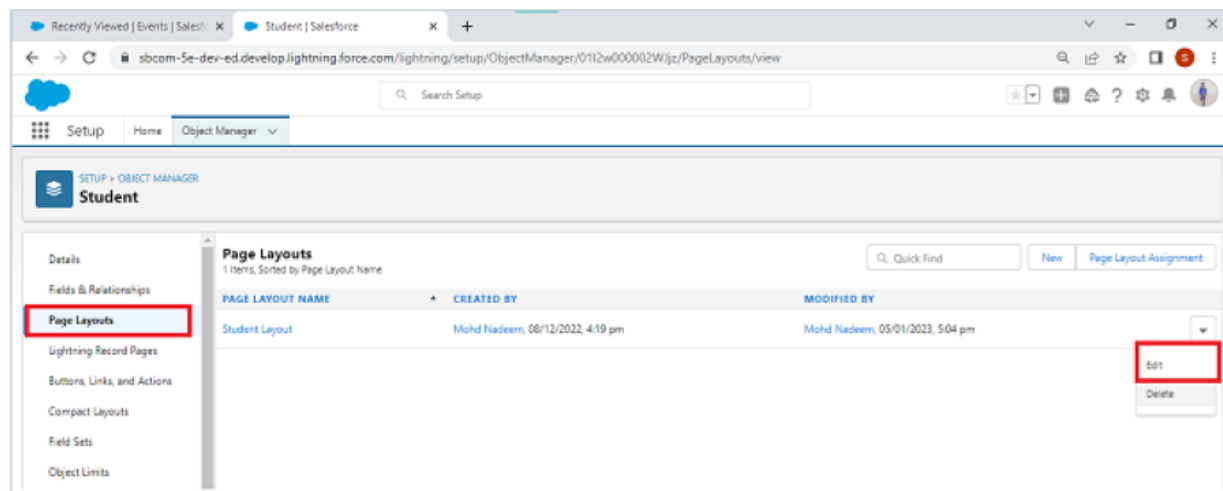


1. Enter users in the quick find box and select users.
2. Click new user..
3. Now give the name as you wish but the email must be real email address.
4. For username field follow the instructions
 - Firstname.<yourlastname>@<yourcompany>.com
 - ...or create a username of your choice that should be unique
5. Give the role as CEO, Profile as System Administrator and license as Sales force.
6. From Setup, enter Users in the Quick Find box and select Users.
7. Select your user account in the list provided. (Click on your name in the All Users list.)
8. Click Edit.
9. Scroll down to Approver Settings. Set your manager as the user you have created recently.
10. Click Save

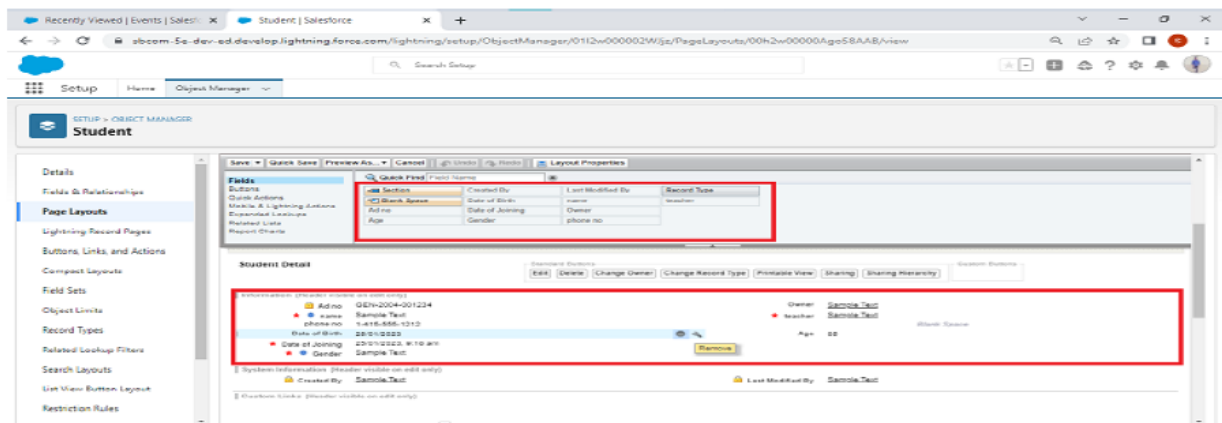
Milestone 7- Customization

Activity -1: Customize Travel Approval Object Page layout

1. From the Object Manager, search for the travel approval object and click on page layouts and click edit.



2. Drag 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.



3. Name the section Trip Info, leave the rest of the settings at their default values, then click OK.
4. Drag the Purpose of Trip field from the Information section to the Trip Info section.

5. Drag Trip Start Date and Trip End Date from the top pane into the left-hand column of the Trip Info section.
6. Drag Out-of-State and Destination State from the top pane into the right-hand column of the Trip Info section.
7. Drag the Department field from the left-hand column of the Trip Info section to the right-hand column.
8. Click Save

Note: You may need to refresh your browser screen for the changes to show up.

Milestone 8-Add Business Logic to Travel App

Activity-1: Create Validation Rule

- 1 .Search for the travel approval object from the object manager and open the object.
2. Click on validation rules and give your rule a name 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`.
- 4 .For error location select field and pick trip end date as the location for error

Activity-2: Create Roll-Up Summary Fields

1. From the Travel Approval object, select Fields & Relationships.
2. Click New.
3. Select the Roll-Up Summary data type.
4. Click Next.
5. Enter the following values for the field details

- Field Label: Total Expenses
- Field Name: Total_Expenses (this automatically gets set when you tab out of the Field Label field)

6. Click Next.

7. Configure the roll-up calculation.

- Summarized Object: Expense Items
- Roll-Up Type: SUM
- Field to Aggregate: Amount
- Filter Criteria: All records should be included in the calculation



The screenshot shows the 'New Custom Field' setup page in Salesforce, specifically Step 3: Define the summary calculation. The page has a header 'Travel Approval New Custom Field' and a 'Help for this Page' link. The main content area is divided into sections: 'Select Object to Summarize' (with 'Master Object' as 'Travel Approval' and 'Summarized Object' as 'Expense Items'), 'Select Roll-Up Type' (with 'SUM' selected), 'Field to Aggregate' (set to 'Amount'), and 'Filter Criteria' (with 'All records should be included in the calculation' selected). Navigation buttons 'Previous', 'Next', and 'Cancel' are visible at the top right and bottom right.

3. Click Next, Next, Save

Activity-3: Create Formula Fields

1. First, we need to upload a zip file to your Sales force environment that contains all the images we use. You should have a file titled Status Images.zip .
2. Click the Home tab to navigate back to the main setup page.
3. Click Custom Code | Static Resources (or enter Static in the Quick Find to filter down the options).
4. Click New.
5. Enter the values for your static

resource

Parameter&values

| | |
|---------------|------------------|
| Name | Status Images |
| File | StatusImages.zip |
| Cache Control | Private |

6. Now select the travel approval object.

7. Select Fields & Relationship.

8. Click Next

9. Select formula data type

10. Click Next

11. 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: Text

12. Click Next.

13. Copy and paste the following formula into the formula editor.

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

14. Click Next, Next, Save.

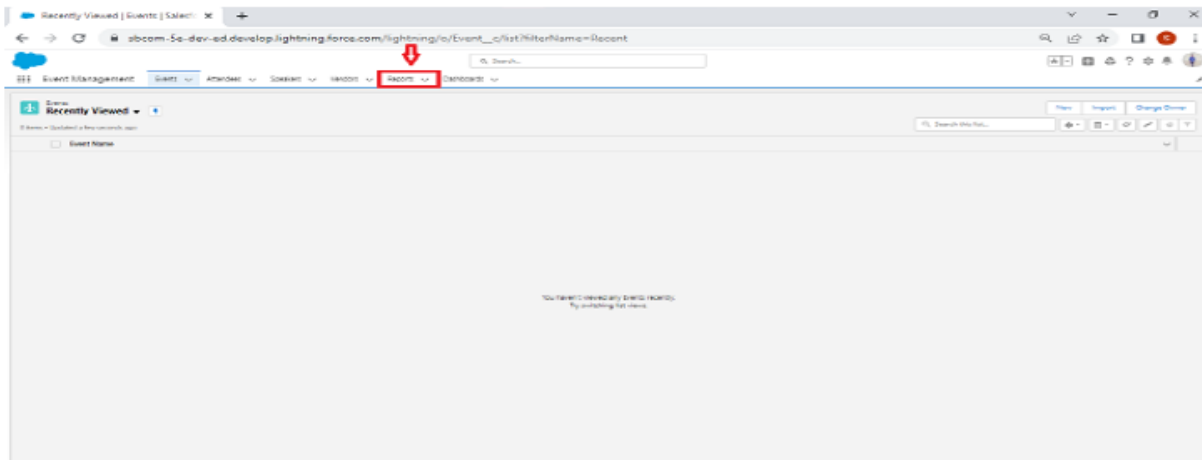


Milestone -10 Reports

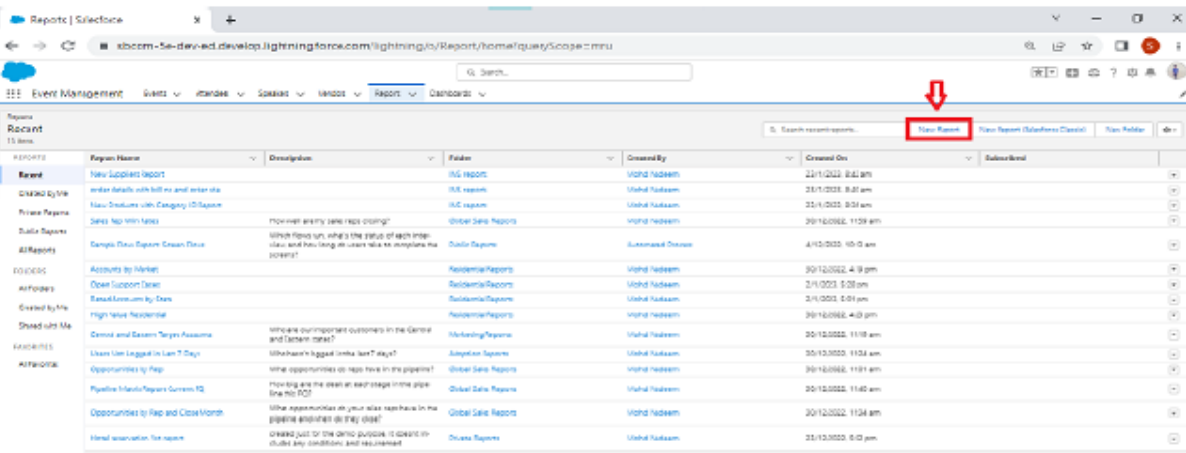
Activity :Add Report

To create a report:

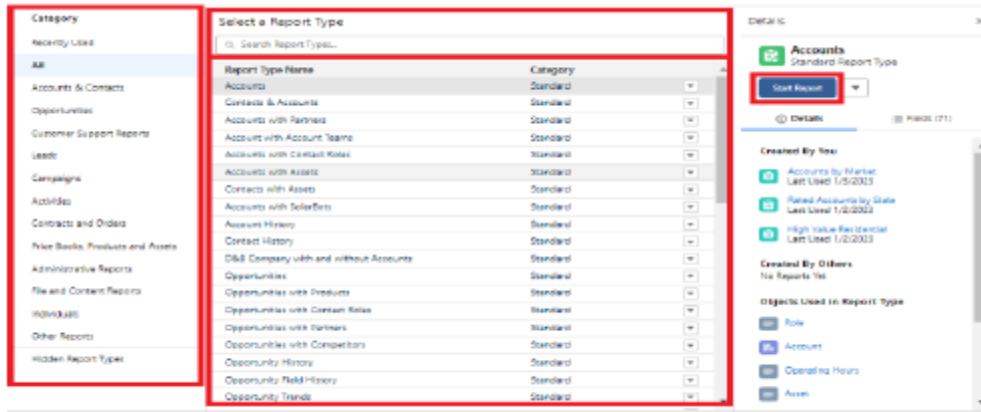
Go to the app → click on the reports tab



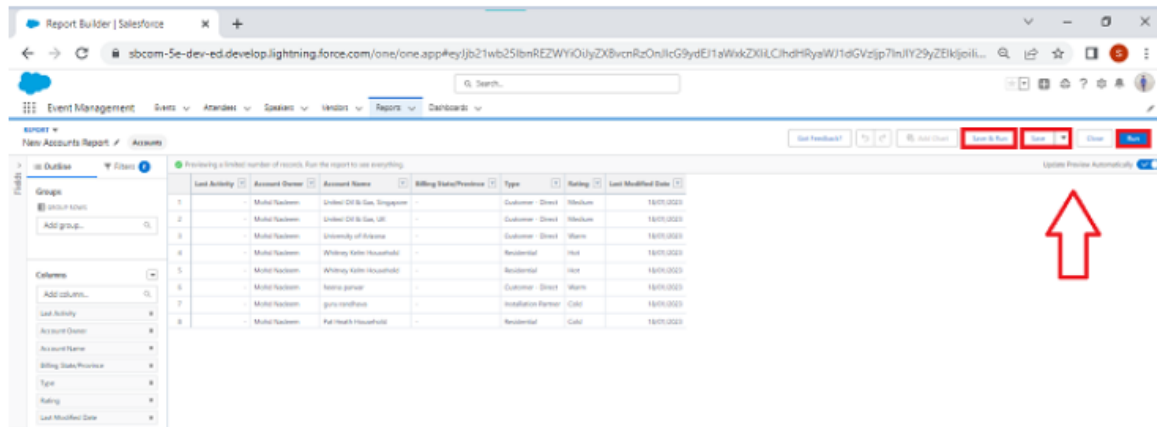
Click new report



Select report type from category or from report type panel or from search panel → click on start report.



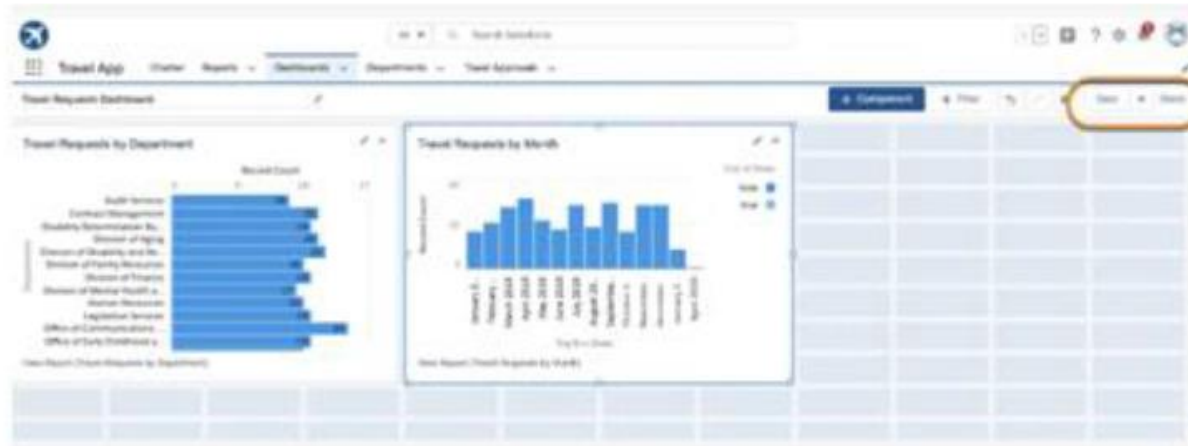
Customize your report, then save or run it.



Milestone 11- Dashboards:

Activity: Create Travel Approvals Dashboard

1. Click on Dashboards tab from the travel approval application , click on new dashboard
2. Give your dashboard a name and click on + component , select the report which you created .
3. For the data visualization select any of the chart, table etc as your wish.



4. TRAILHEAD PROFILE PUBLIC URL

Team lead-<https://trailblazer.me/id/kavikasri46>

Team Member 1- <https://trailblazer.me/id/madhs51>

Team Member 2-<https://trailblazer.me/id/nsundaravadivelu>

Team Member 3-<https://traiblazer.me/id/nbose28>

5. ADVANTAGES & DISADVANTAGE

5.1 Advantages

- The process is tedious and time-consuming task
- Easiest way
- Saves time for both employees and managers
- Reduces the workload
- The entire process is digitized and streamlines
- Increased transparency
- Provides greater control and security over employee travel

5.2 Disadvantages

- The process includes too many levels of approval that make tedious and confusing
- Regular Maintenance
- Internet connection problem is there
- It can be costly sometimes
- Poor communication

6.APPLICATIONS

The application ensures that travel requests comply with the company's travel policies which reduces the risk of non-complaint expenses and unnecessary travel.

The application helps reduce travel costs by allowing the company to track expenses and stay within budget. This also helps the company negotiate better deals with travel vendors.

The application saves time for both the employee and the travel manager by automating the travel request and approval process. This allows the HR department and travel managers to focus on more strategic tasks.

7.CONCLUSION

Travel within the company is feasible authorized, organized and properly managed. This will make the travel program more operationally efficient and also

Ensure that approver's are checking the travel requests sent to them by their reports. Its aim to ensure safeguard, comfort of employees.

8.FUTURE SCOPE

- In future it will be really a useful one in the application of travel

Approval.

- It is trusted to be in future everyone will utilize this.
- The customer will set good service and make it trustworthy.
- Hope it would fulfil all the needs of the users.