

# **INTRODUCTION**

## **1.1 OVERVIEW**

The project aim is to provide real-time knowledge for all the students who have basic knowledge of Salesforce 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 Salesforce with the help of this project they will gain knowledge and can include into their resume as well.

Every travel organization requires a Travel Approval Application. This department deals with the approval of travel requests. It also allows for prime levels of control and oversight over travel bookings, policy and budget. The approval process is usually often lengthy and requires a lots of paperwork. To eradicate human errors and achieve perfect data and procedures, the use of software is considered a smart choice. Therefore, with the help of Customer Relation Management (CRM) software services provided by Salesforce, we are making a travel approval application. Salesforce has proven to be revolutionary and advantageous in developing Cloud Computing supported a good range of applications. This application will help them in keeping track of the complete travel approval process

## **1.2 PURPOSE**

Travel Approval Request App will help users quickly send a "Travel Request" through mobile using Power Apps. Level 1 Managers and Level 2 Managers can review the request and take actions from the same Power Apps through mobile. It helps in minimizing efforts and time for the travel request management process. This will also help executives to monitor the expected travel cost. This application can be used by the browser and available to the Mobile Power Apps application.

Keeping business finances safe from unwanted travel expenses will not be difficult anymore, and an essential task of approval will be done under senior management's monitoring with such a multi-hierarchy automated approval process.

By adopting our Travel Approval Request App, here are instant benefits you get Advanced Digital System, Fund management system, Request generating system, Priority alert, Multi-level approvals & notifications, Multilingual knowledge management, Automation, Email Integration, and so on.

## PROBLEM DEFINITION & DESIGN THINKING

## 2.1 Empathy map

Template

## 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.

[Share template feedback](#)

### 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 either a domestic or international travel

• Get confirmed approval request.

• Check the activity viva online

• Better security measures

• Need minimum human interaction

TRAVELLER

• Verify the reports manually

• Quickly send a "Travel Request" through mobile using Power Apps.

• Expected reliable software solution for travel Approval

• Final approval will be done only by a human being (manager)

#### Does

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

#### Feels

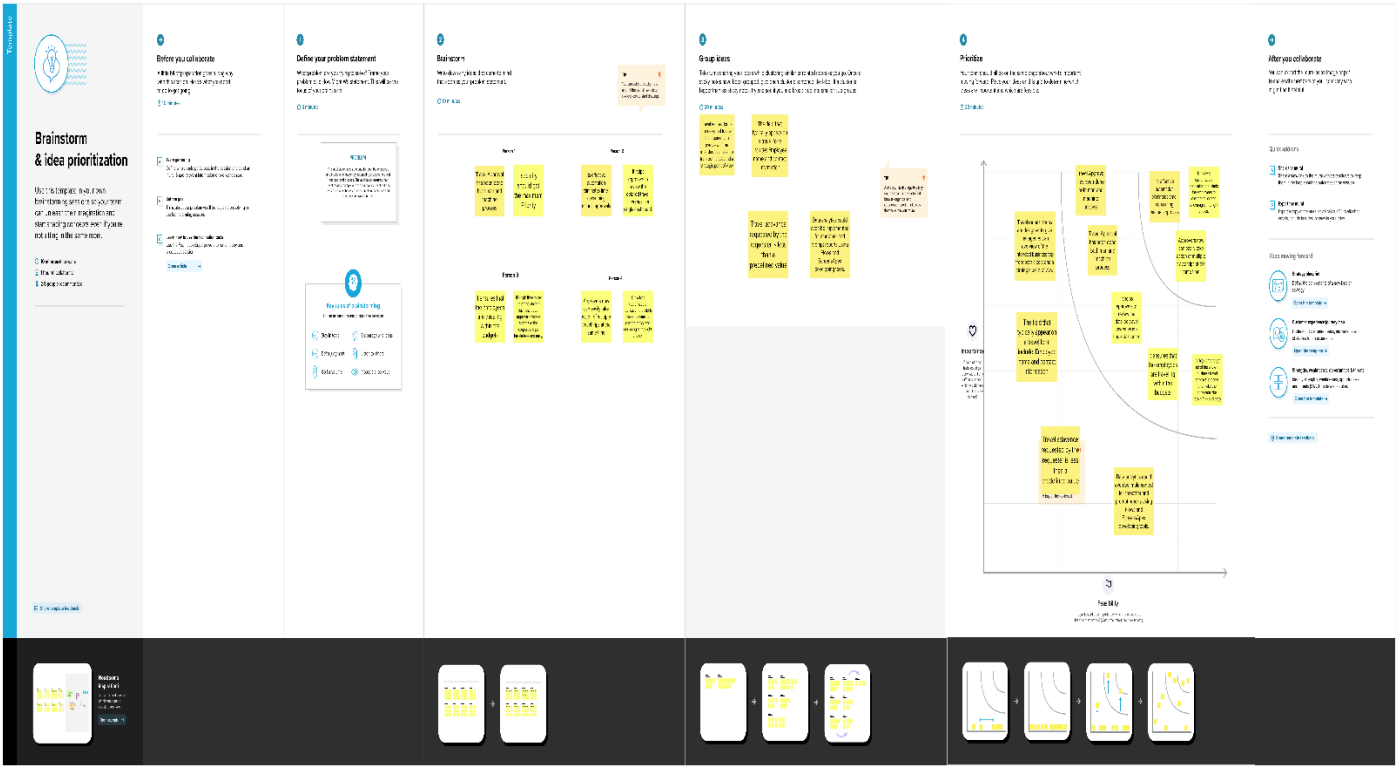
What are their fears, frustrations, and anxieties? What other feelings might influence their behavior?

#### Need some inspiration?

See a finished version of this template to kickstart your work.

[Open example](#)

2.2 Ideation & brainstorming map



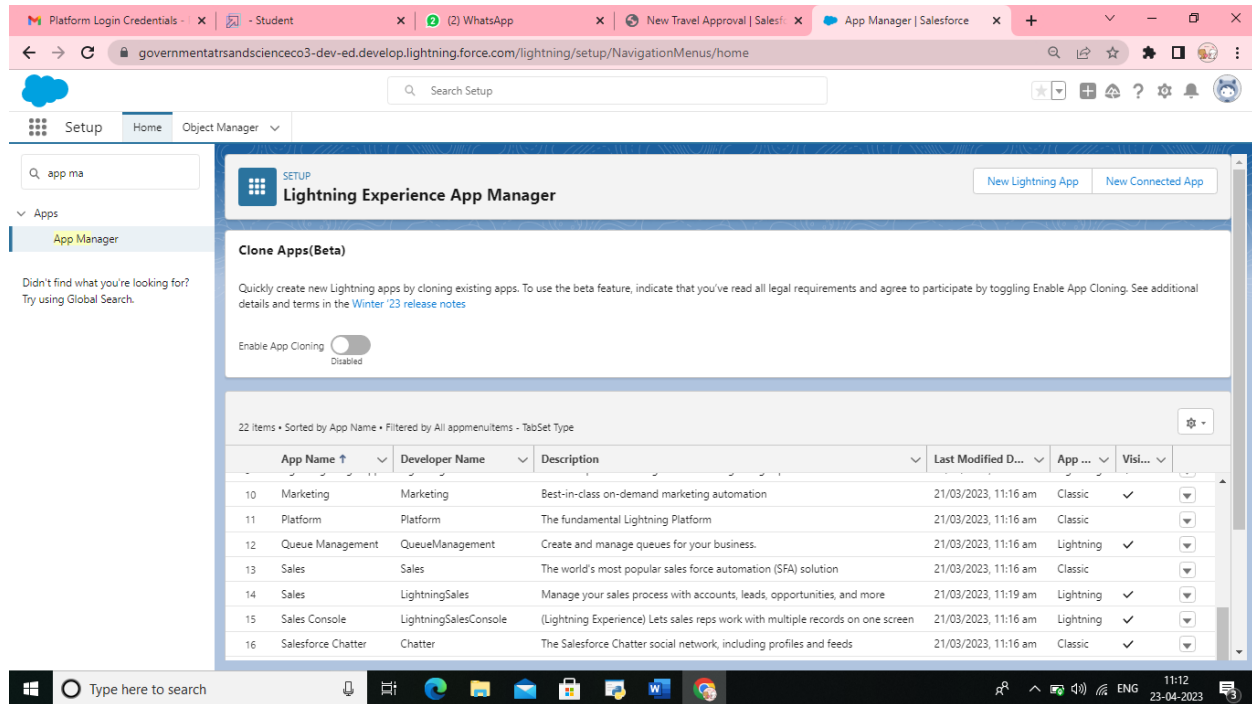
RESULT

3.1 DATA MODEL

Object Name	Fields in the object	
Travel Approval	Field label	Data type
	Travel Approval field	Master-Detail Relationship
	Enter Amount	Currency
Expense Item	Field label	Data type
	Expense type field	Picklist

## 3.2 ACTIVITY AND SCREENSHOT

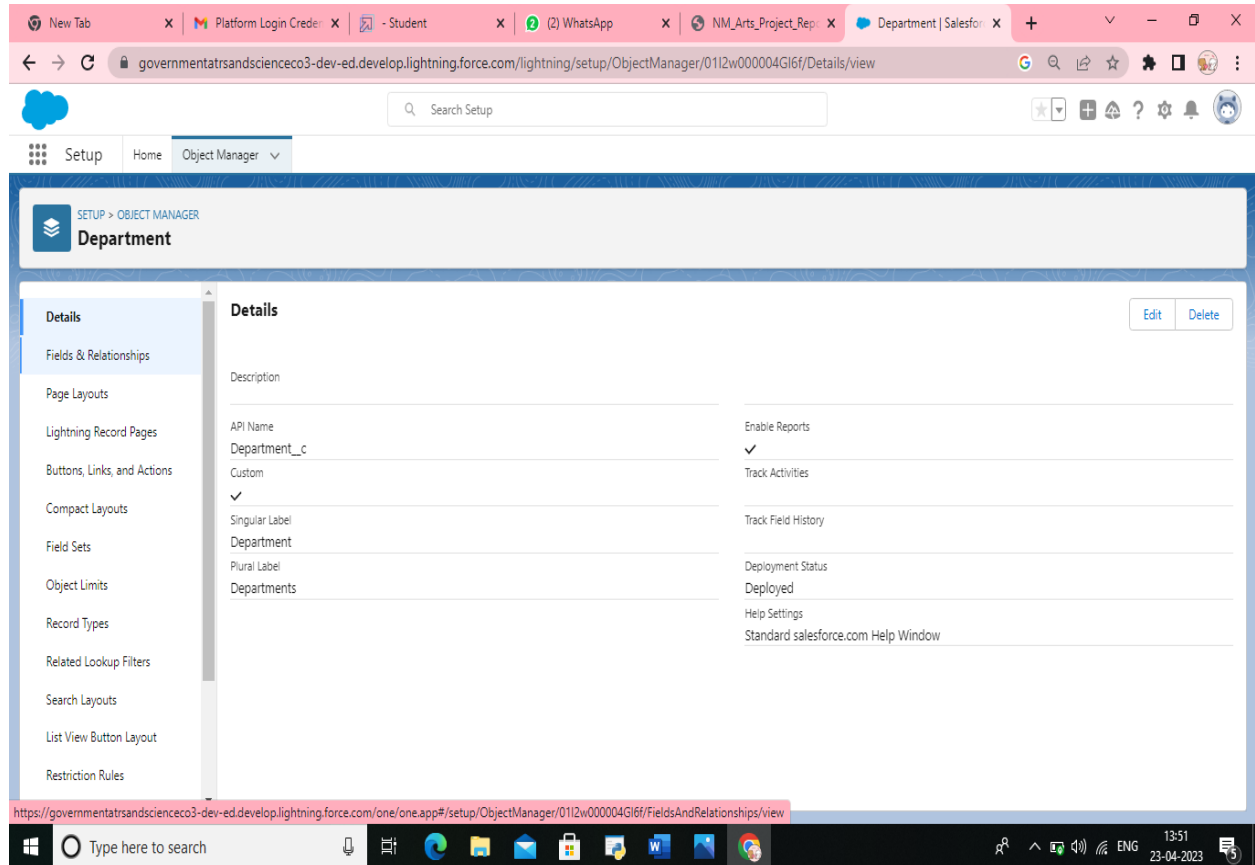
### Creating the application



### Description:

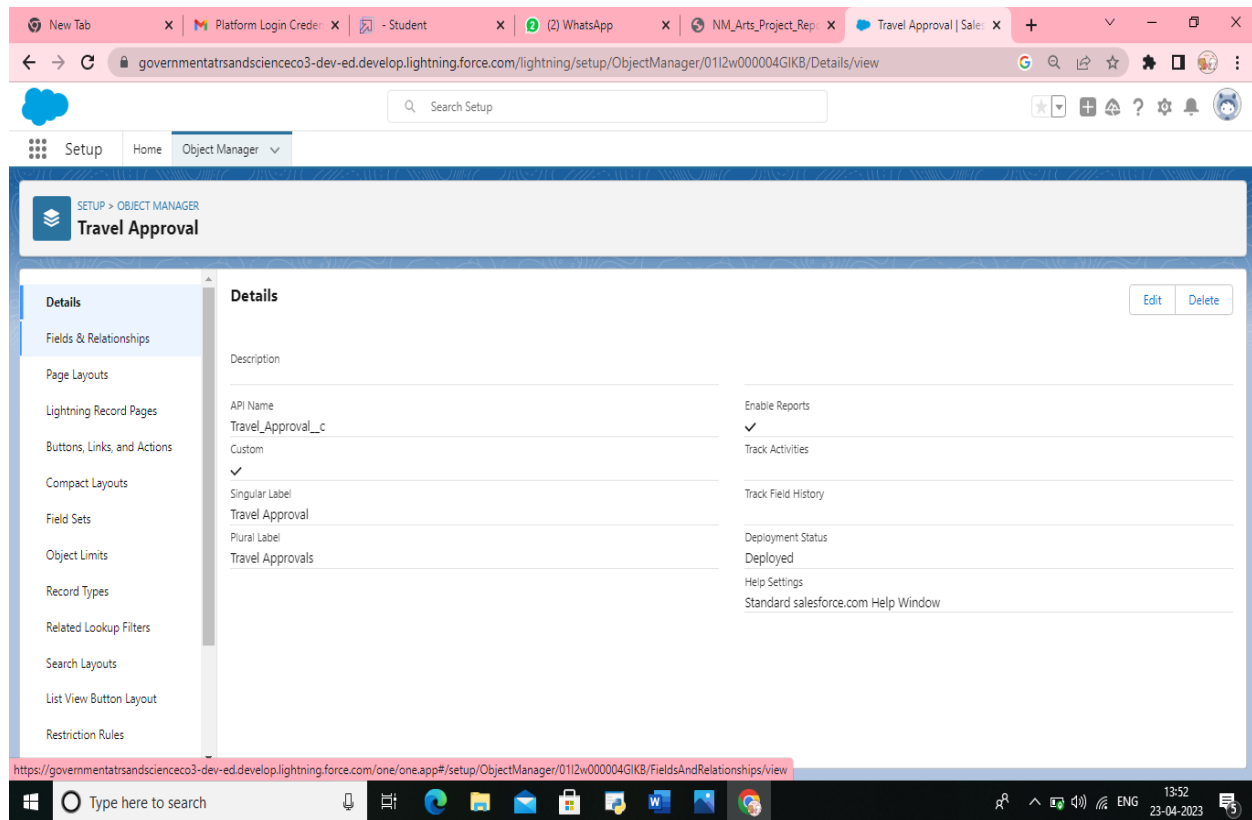
1. From Setup, enter App Manager in the Quick Find and select App Manager.
2. Click New Lightning App. Enter Travel Approval as the App Name, then click Next
3. Under App Options, leave the default selections and click Next.
4. Under Utility Items, leave as is and click Next.
5. From Available Items, select Department, Travel Approval, Expense Item, Reports, and Dashboards and move them to Selected Items. Click Next.
6. From Available Profiles, select System Administrator and move it to Selected Profiles. Click Save & Finish.
7. To verify your changes, click the App Launcher, type Travel Approval and select the Travel Application app.

## Custom Object creation



## Description

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



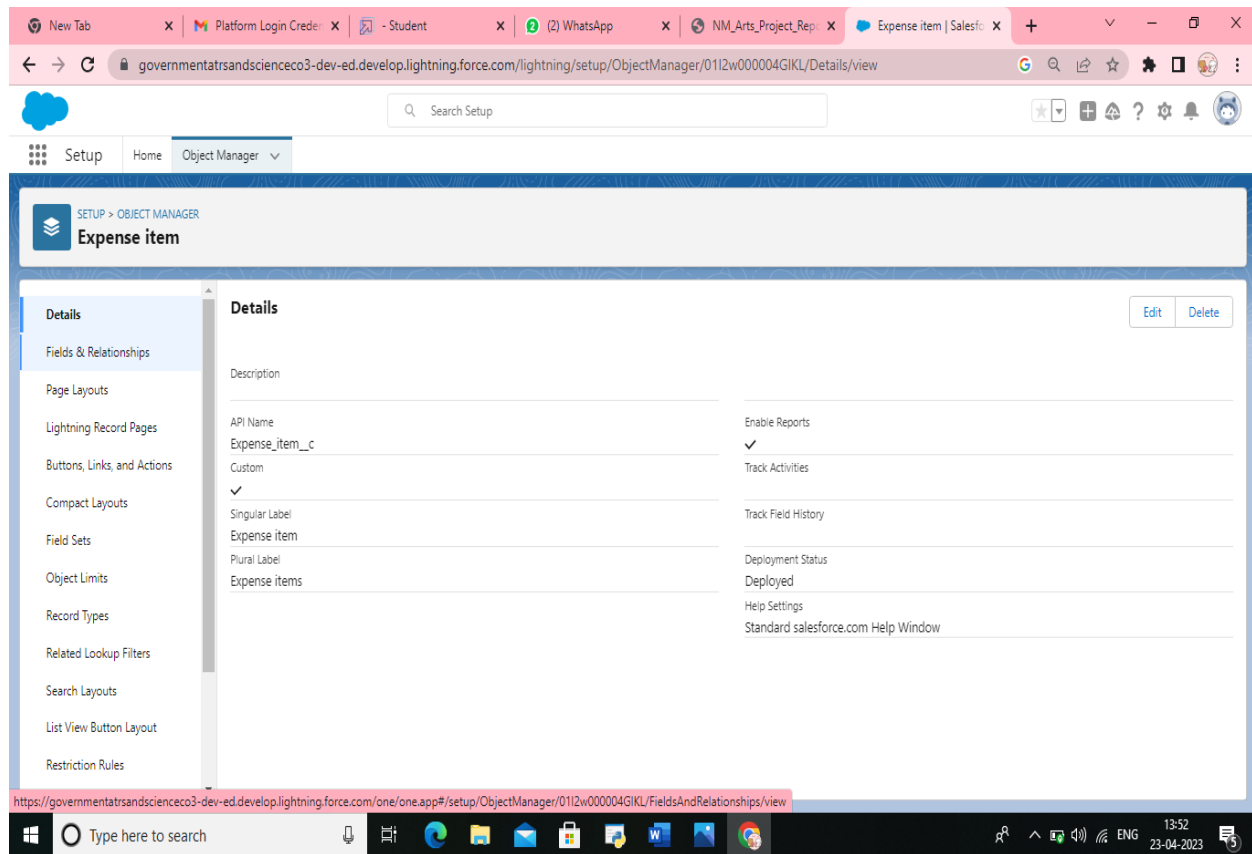
## Description

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

**Note- Please refer Pg No. 11**

<https://smartinternz.s3.amazonaws.com/Build a Employee Travel Approval Application for corporates.pdf>

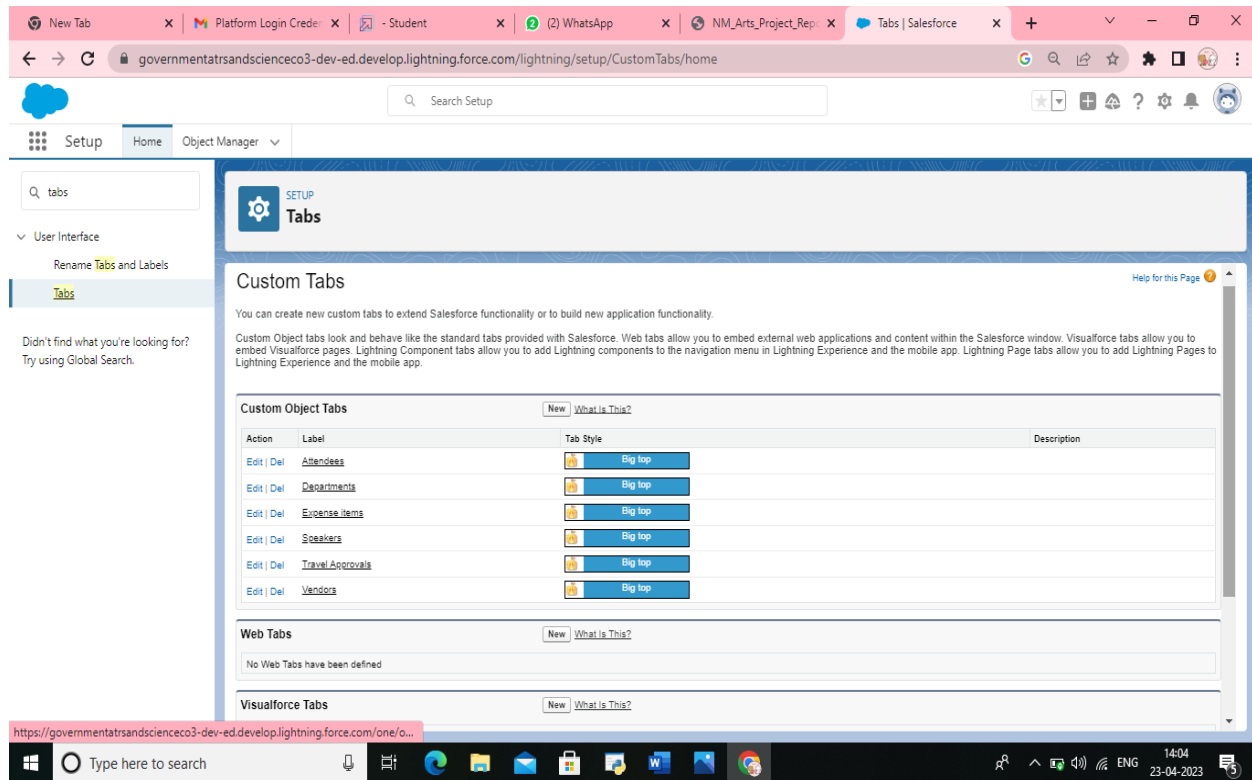
4. Allow Reports, search, and launch a new tab and add this tab to the travel app.



## Description

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

## Custom tab creation



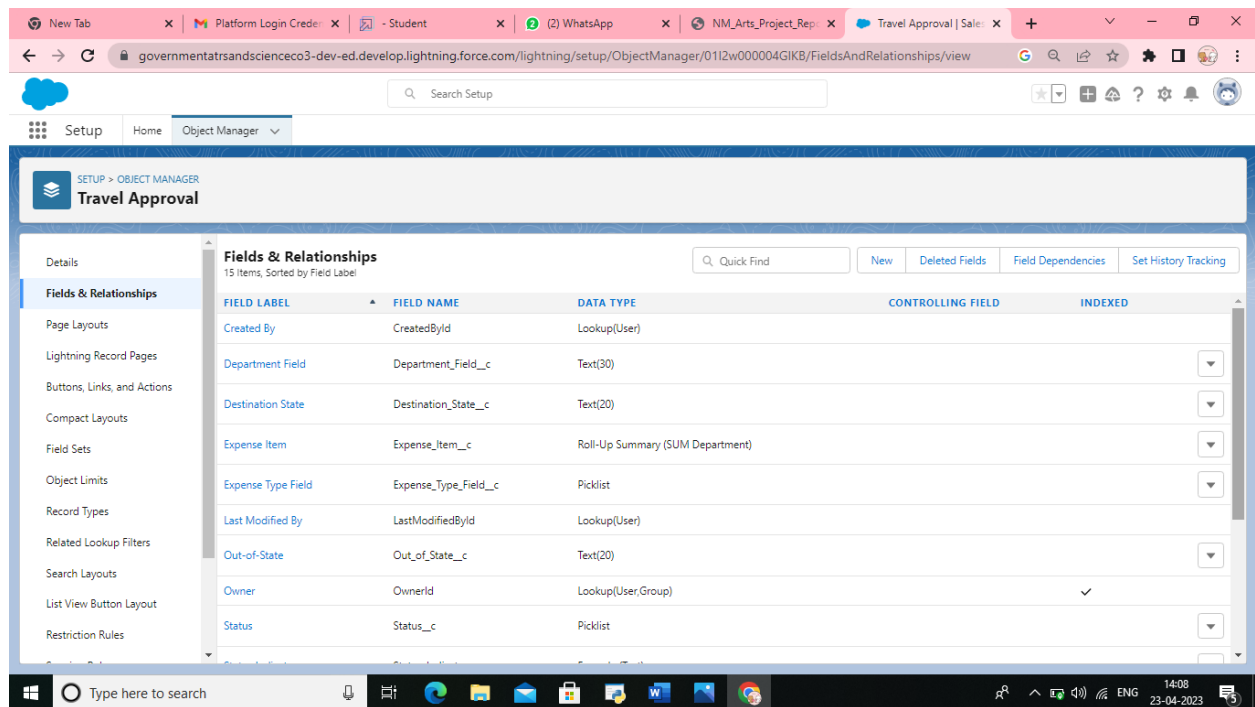
## Description

create other objects such as Attendees, Speaker and Vendor. 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.



## Create Fields & Relationship



## Description

1. Create Fields & Relationships, and click New.
2. For data type, select Currency.
3. Enter these details.
  - a. For Field Label, enter Amount
  - b. For Length, enter 16
  - c. For Decimal places, enter 2
  - d. Select Required
4. Click Next, Next, then Save & New.

## Create The Expense Type Field

1. Select Picklist as the data type.
2. Select Enter values, with each value separated by a new line.
3. Add these values:(Airfare, Hotel, RentalCars, Meals,Others)
4. Select Required.
5. Click Next, Next, then Save & New.

## Create The Travel Approval Field.

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

## Import Departments

The screenshot displays the Salesforce Bulk Data Load Jobs interface. The left sidebar shows the navigation menu with 'Bulk Data Load Jobs' selected. The main content area shows the 'Bulk Data Load Job Detail' for Job ID 7502w00000Px5iF. The job is in a 'Closed' status. The 'Submitted By' is 'Harinidya D'. The 'Start Time' is '23/04/2023, 2:34 pm IST' and the 'End Time' is '23/04/2023, 2:34 pm IST'. The 'Time to Complete' is '00:00'. The 'Object' is 'Department'. The 'External ID Field' is 'Content Type'. The 'Content Type' is 'CSV'. The 'Concurrency Mode' is 'Parallel'. The 'API Version' is '57.0'. The 'Job Type' is 'Bulk V1'. The 'Operation' is 'Insert'. The 'Status' is 'Closed'. The 'Total Processing Time (ms)' is '60'. The 'API Active Processing Time (ms)' is '6'. The 'Apex Processing Time (ms)' is '0'. The 'Records Processed' is '16'. The 'Records Failed' is '16'. The 'Retries' is '0'. The 'Progress' is '100%'. The 'Completed Batches' is '1'. The 'Failed Batches' is '0'. The 'Queued Batches' is '0'. The 'In Progress Batches' is '0'. The 'View Request' and 'View Result' buttons are visible. Below the job details, there is a table of batches.

View Request	View Result	Batch ID	Start Time	End Time	Total Processing Time (ms)	API Active Processing Time (ms)	Apex Processing Time (ms)	Records Processed	Records Failed	Retry Count	State Message	Status
<a href="#">View Request</a>	<a href="#">View Result</a>	7512w00000W7zOz	23/04/2023, 2:34 pm	23/04/2023, 2:34 pm	60	6	0	16	16	0		Completed

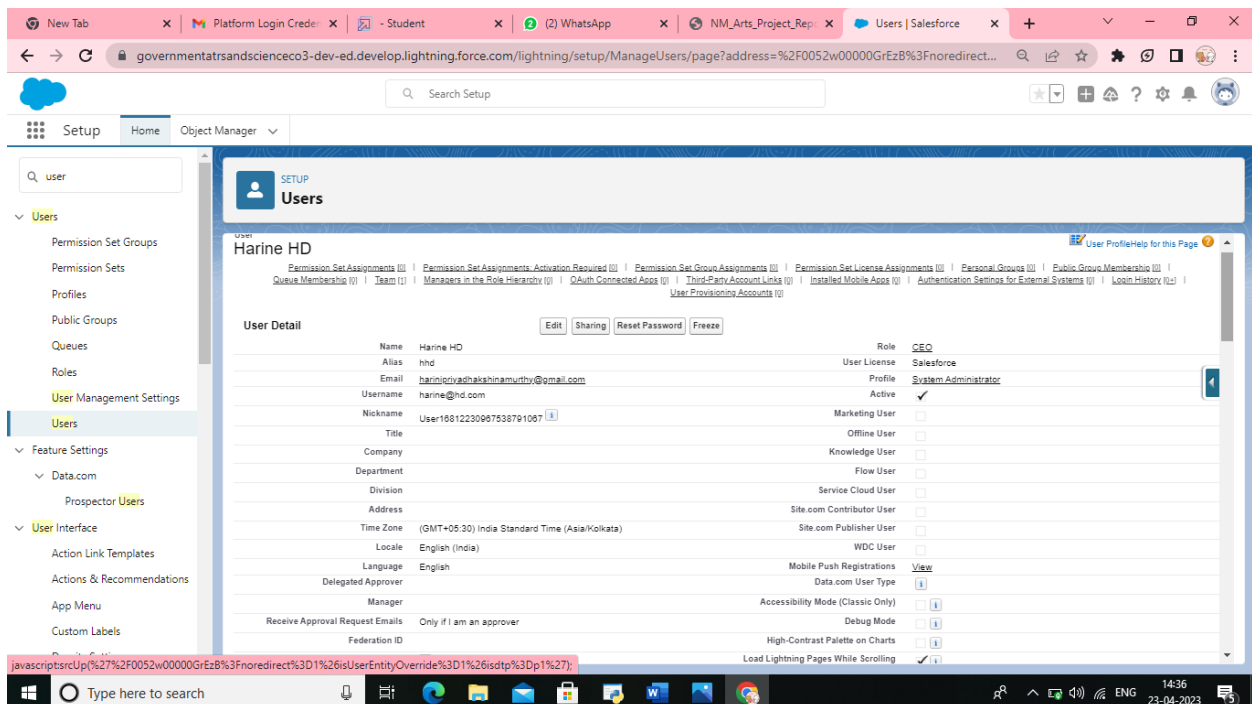
From Setup, click the Home tab.

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.
5. 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.
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.

## Customize User Interface



## Description

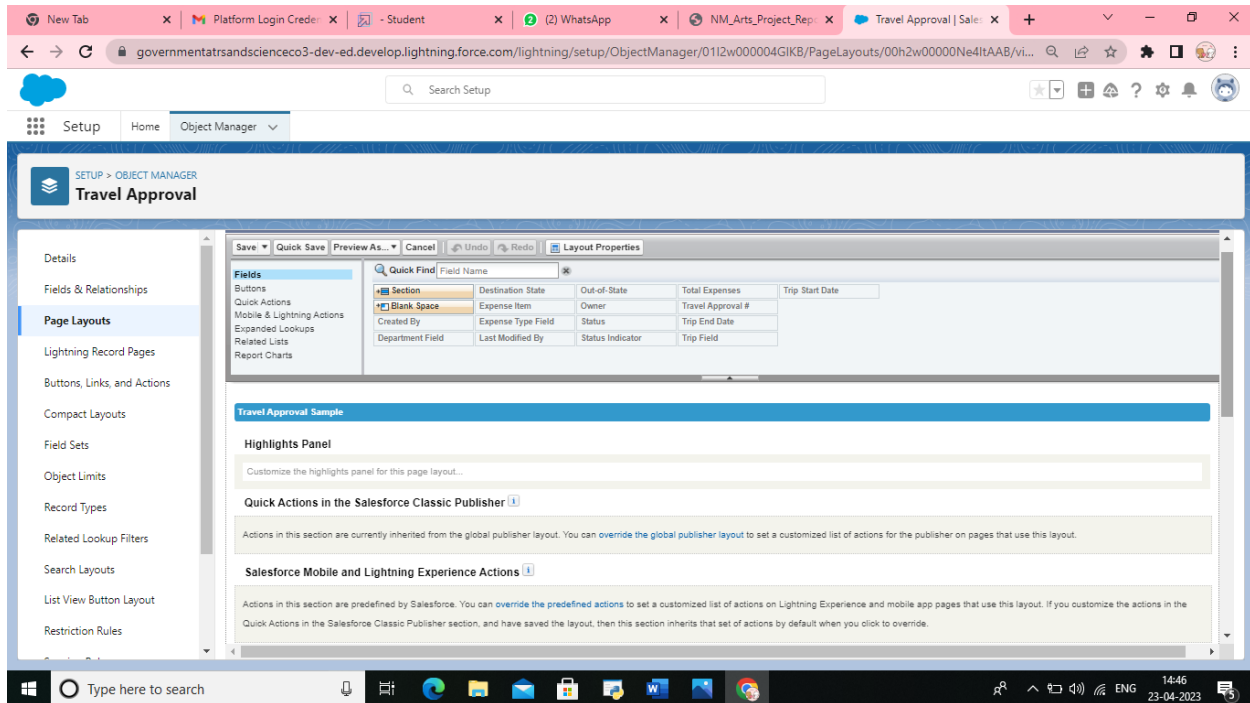
1. Enter users in the quickfind box and select users.
2. Click new user.
3. Now give the name as you wish but the email must be real email address.
4. For username field follow the instructions
  - a. Firstname.<yourlastname>@<yourcompany>.com
  - b. ...or create a username of your choice that should be unique
5. Give the role as CEO, Profile as System Administrator and license as Salesforce.
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

## Use Cutomization

The screenshot shows the Salesforce Setup interface for 'Travel Approval'. The left sidebar contains a navigation menu with options: Details, Fields & Relationships, Page Layouts (selected), Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, and Restriction Rules. The main content area is titled 'Page Layouts' and shows '1 Items, Sorted by Page Layout Name'. A table lists the page layouts:

PAGE LAYOUT NAME	CREATED BY	MODIFIED BY
Travel Approval Layout	Harinipriya D, 10/04/2023, 8:11 pm	Harinipriya D, 12/04/2023, 7:19 am

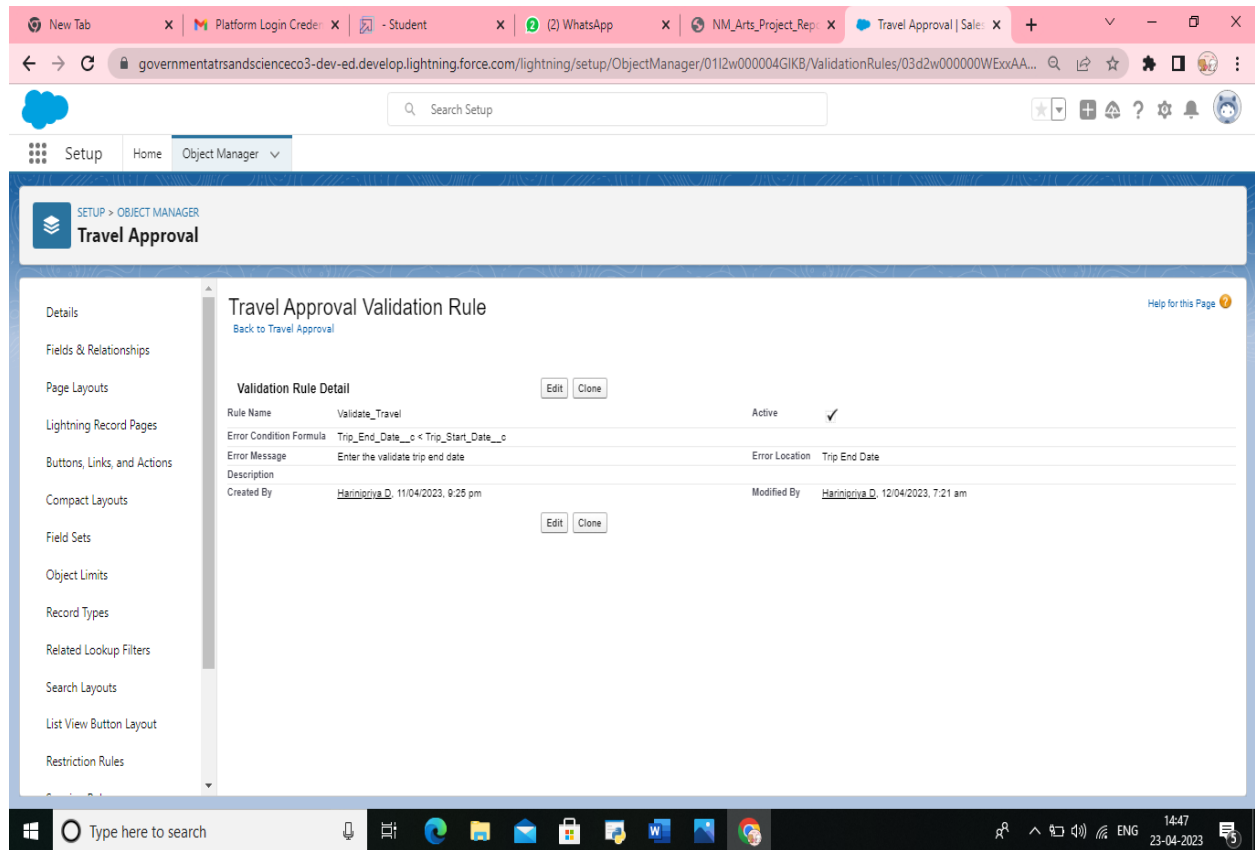
The browser's address bar shows the URL: <https://governmentatrsandscienceco3-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/0112w000004GIKB/PageLayouts/view>. The Windows taskbar at the bottom shows the search bar and various application icons.



## Description

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

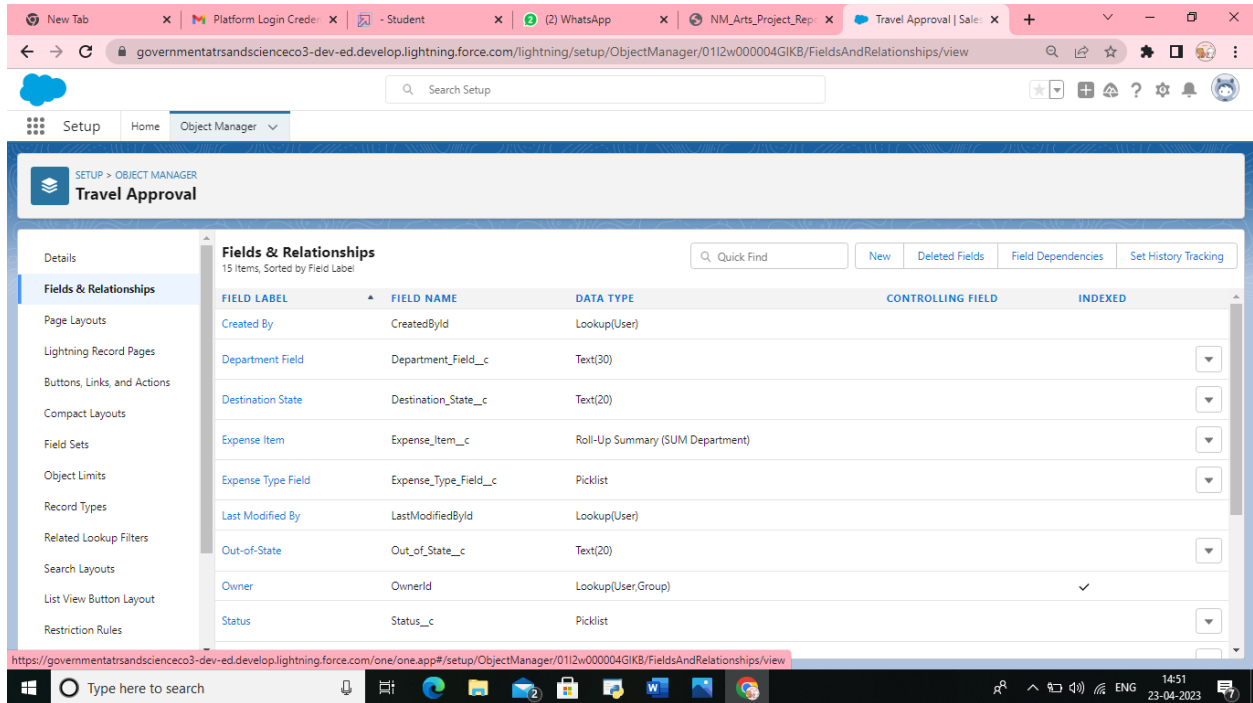
## Create Validation Rule



## Description

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.

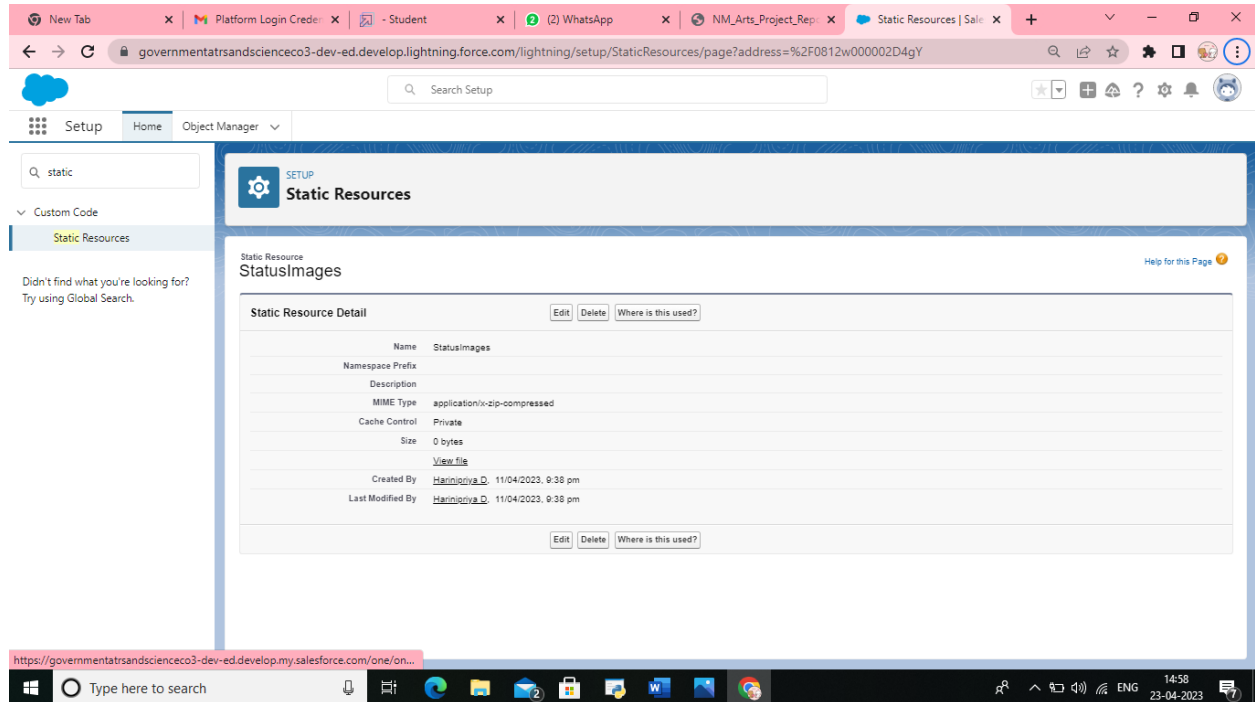
## Create Roll-up summary



## Description

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
  - a. Field Label: Total Expenses
  - b. 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.
  - a. Summarized Object: Expense Items
  - b. Roll-Up Type: SUM
  - c. Field to Aggregate: Amount
  - d. Filter Criteria: All records should be included in the calculation
8. Click Next, Next, Save

## Create Formula field



## Description

1. First, we need to upload a zip file to your Salesforce environment that contains all the images we use. You should have a file titled StatusImages.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 following values for your static resource

**Note - Please refer Pg no. - 22**

<https://smartinternz.s3.amazonaws.com/Build a Employee Travel Approval Application for corporates.pdf>

6. Now select the travel approval object.
7. Select Fields & Relationships.
8. Click New
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.

## Create the Reports

Report: Travel Approvals  
**New Travel Approvals Report**

Total Records: 3

Department Field	Destination State	Trip End Date	Travel Approval: Travel Approval #	Travel Approval: ID	Status
Office trip (1)	TN (1)	22/04/2023 (1)	TA-00004	a012w00001DQLY2	Rejected
Subtotal					
Subtotal					
Office trip (1)	Rajasthan (1)	22/06/2023 (1)	TA-00005	a012w00001DQLY7	Approved
Subtotal					
Subtotal					
Technology (1)	kerala (1)	25/05/2023 (1)	TA-00003	a012w00001DQLXs	Approved
Subtotal					
Subtotal					
Total (3)					

Row Counts: ☒ Detail Rows: ☒ Subtotals: ☒ Grand Total: ☒

## Description

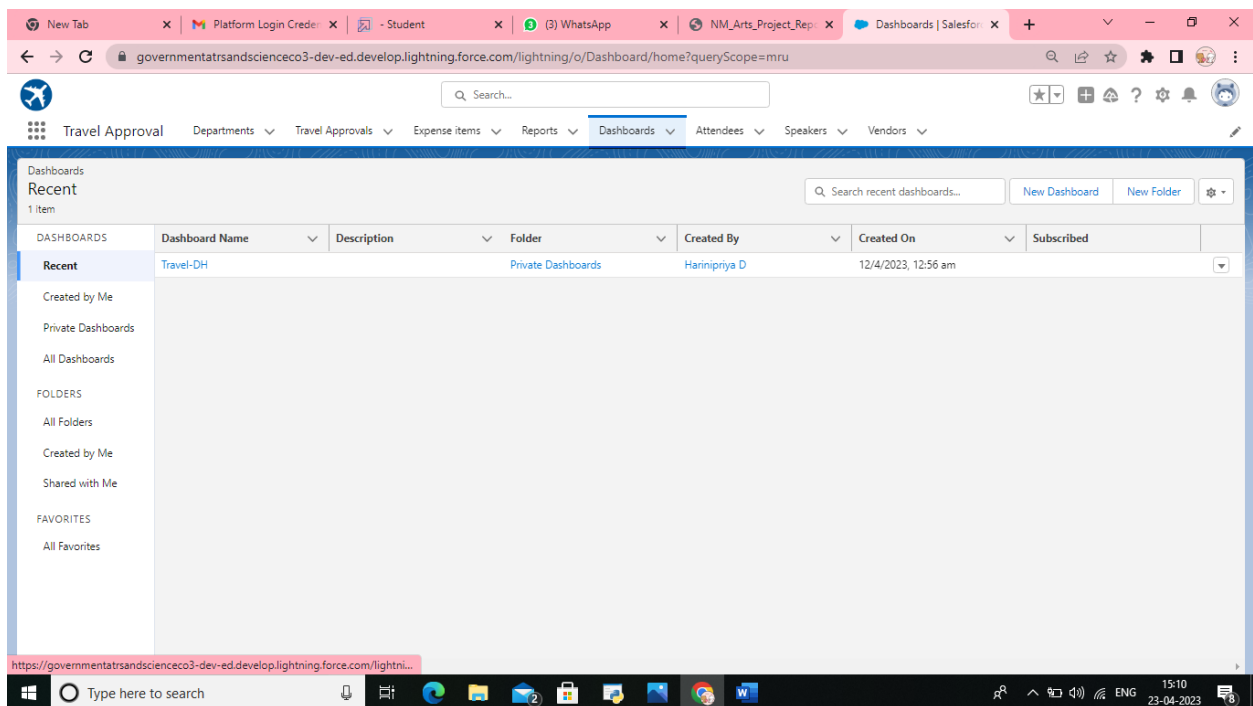
Go to the app then click on the reports tab

Click New Report

Select report type from category or from report type panel or from search panel ? click on start report

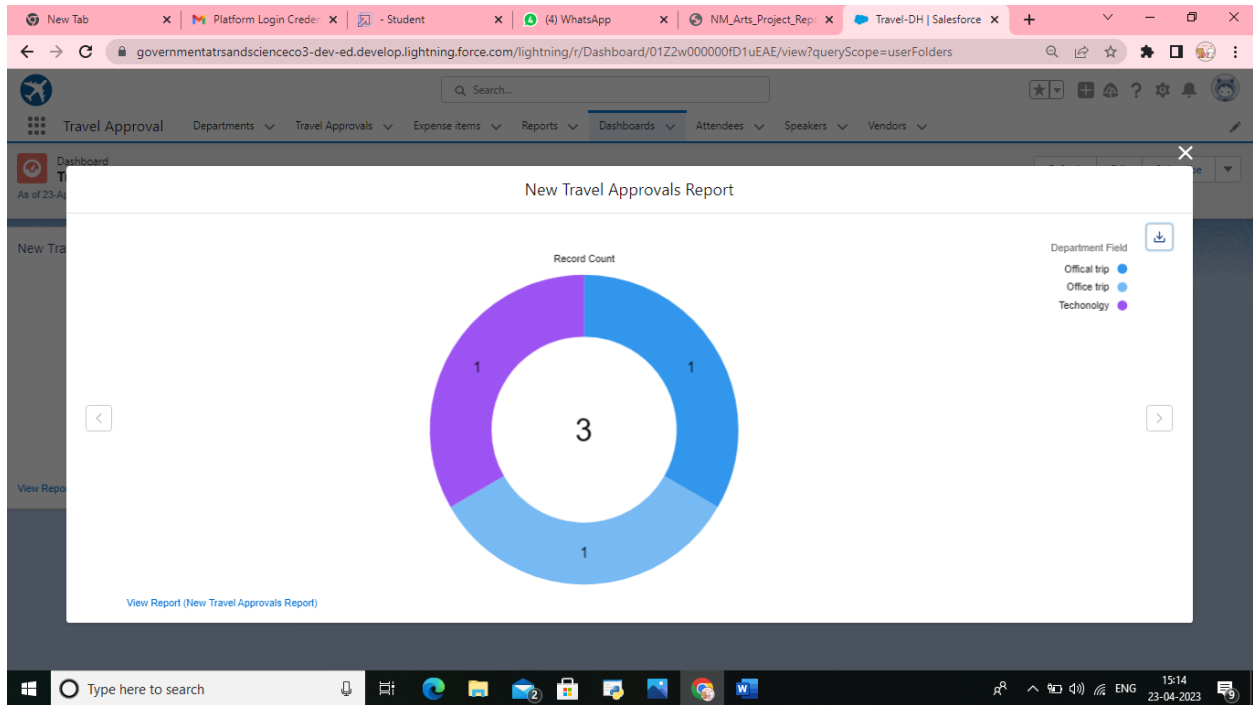
Customize your report, then save or run it

## Create Dashboards



The screenshot displays the Salesforce Dashboards interface. The top navigation bar includes tabs for 'Travel Approval', 'Departments', 'Travel Approvals', 'Expense items', 'Reports', 'Dashboards', 'Attendees', 'Speakers', and 'Vendors'. The 'Dashboards' tab is currently selected. Below the navigation bar, there is a search bar and a 'Search recent dashboards...' input field. The main content area shows a table of recent dashboards. The table has columns for 'Dashboard Name', 'Description', 'Folder', 'Created By', 'Created On', and 'Subscribed'. A single dashboard is listed: 'Travel-DH' in the 'Private Dashboards' folder, created by 'Harinipriya D' on '12/4/2023, 12:56 am'. The left sidebar contains a 'Recent' section with a list of dashboards and folders, including 'Created by Me', 'Private Dashboards', 'All Dashboards', 'FOLDERS', 'All Folders', 'Created by Me', 'Shared with Me', 'FAVORITES', and 'All Favorites'.

DASHBOARDS	Dashboard Name	Description	Folder	Created By	Created On	Subscribed
Recent	Travel-DH		Private Dashboards	Harinipriya D	12/4/2023, 12:56 am	



## Description

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.

## Trailhead Profile Public URL

- **TEAM LEAD** -- <https://trailblazer.me/id/gowtn10>
- **TEAM MEMBER 1** -- <https://trailblazer.me/id/bschm137>
- **TEAM MEMBER 2** -- <https://trailblazer.me/id/harid66>
- **TEAM MEMBER 3** -- <https://trailblazer.me/id/karthika13>

## **ADVANTAGES & DISADVANTAGES**

### **ADVANTAGES**

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

### **DISADVANTAGES**

- The process includes too many levels of approval that makes tedious and confusing
- Regular Maintenance
- Internet connection problem is there
- Poor connection leads to trouble and anxiety
- Lack of leadership
- It can be costly sometimes
- Poor communication

## **APPLICATIONS**

- The application ensures that travel request comply with the company's travel policies which reduce the risk of non-complaint expenses and unnecessary travel.
- The application help reduces travel costs by allowing the company to track expense and stay within budget. This also help the company negotiate better deals with travel vendors.
- The application saves the time for both the employee and the travel manager by automating the travel request and the approval process. This allows the HR department and travel manager to departmet and travel manager to focus on more strategic tasks

## **CONCLUSION**

- An employee travel approval application is a valuable tool for corporate travel management.
- It streamlines the travel request and approval process ensures policy compliances, and provides transparency to all parties involved.
- A well-designed application can save time and money, making it an essential tool for corporate that frequently travel for business.

## **FUTURE SCOPE**

- In future it will be really a useful one in the application of travel approval.
- It is trusted to be an in future everyone will utilize this.
- The customer will set good service and make it trustworthy.
- Hope it would fulfill all the needs of the users.