

Project Report on
Build an Employee Travel Approval Application For Corporate
(Developer) – (Long Term)

Milestone – 01 : Create Sales force Org

Go to developer.salesforce.com/Signup

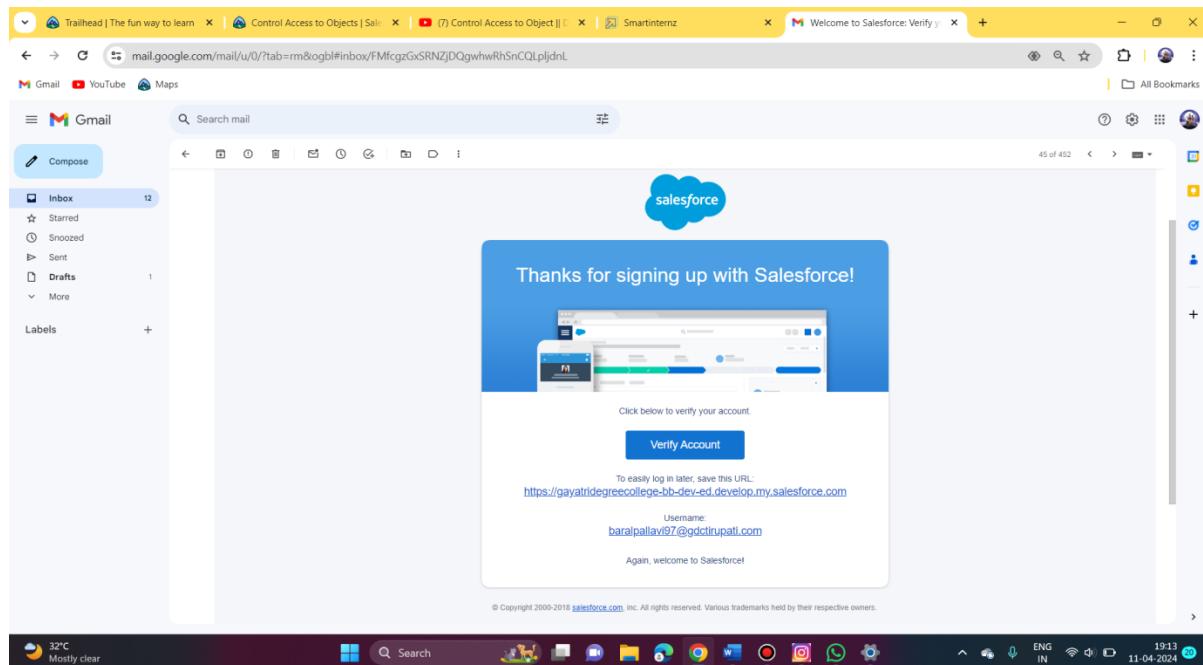
Click on Sign up.

On the sign-up form, enter the following details:

1. First Name & Last Name – B.Pallavi
2. Email – baralpallavi97@gmail.com
3. Role – Developer
4. Company – GAYATRI DEGREE COLLEGE – TIRUPATI
5. Country – India
6. Postal Code – 517501
7. Username – baralpallavi97@gdccollege.com

Account Activation

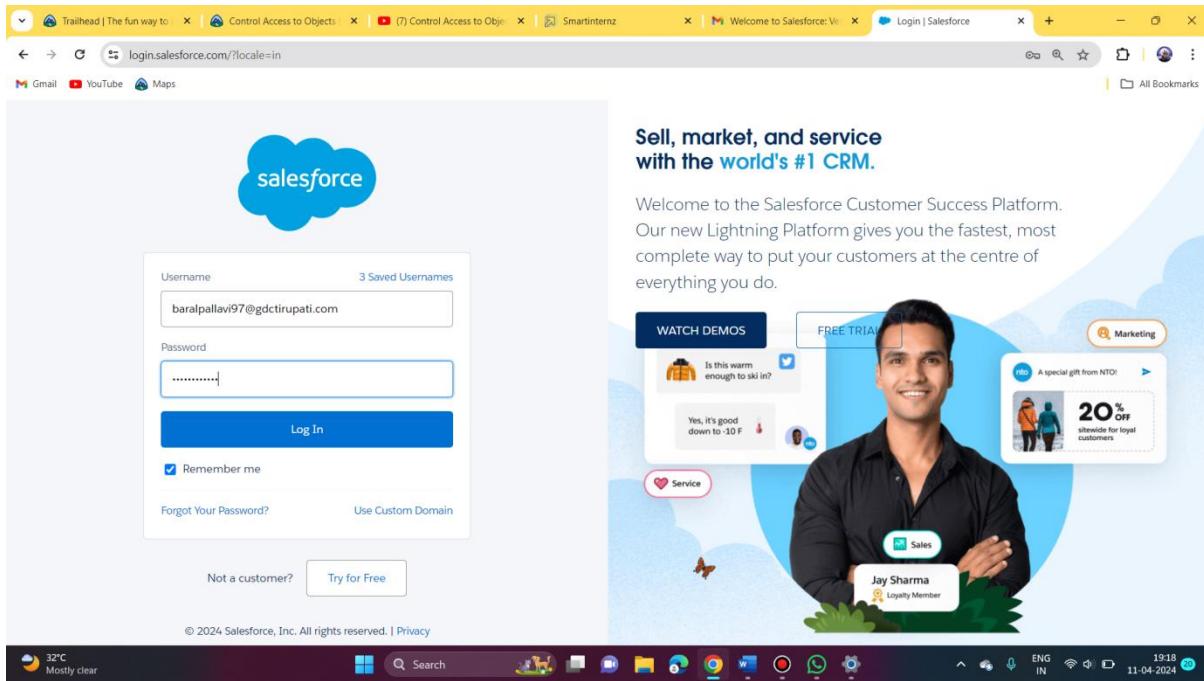
Go to the inbox of the email that you used while signing up. Click on the verify account to activate your account. The email may take 5-10 min, as



Log in to your Salesforce Account

1. Go to salesforce.com and click on login.
2. Enter the username and password that you just created.

3. After login this is the home page which you will see.



Mildstone – 02 : Objects 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.

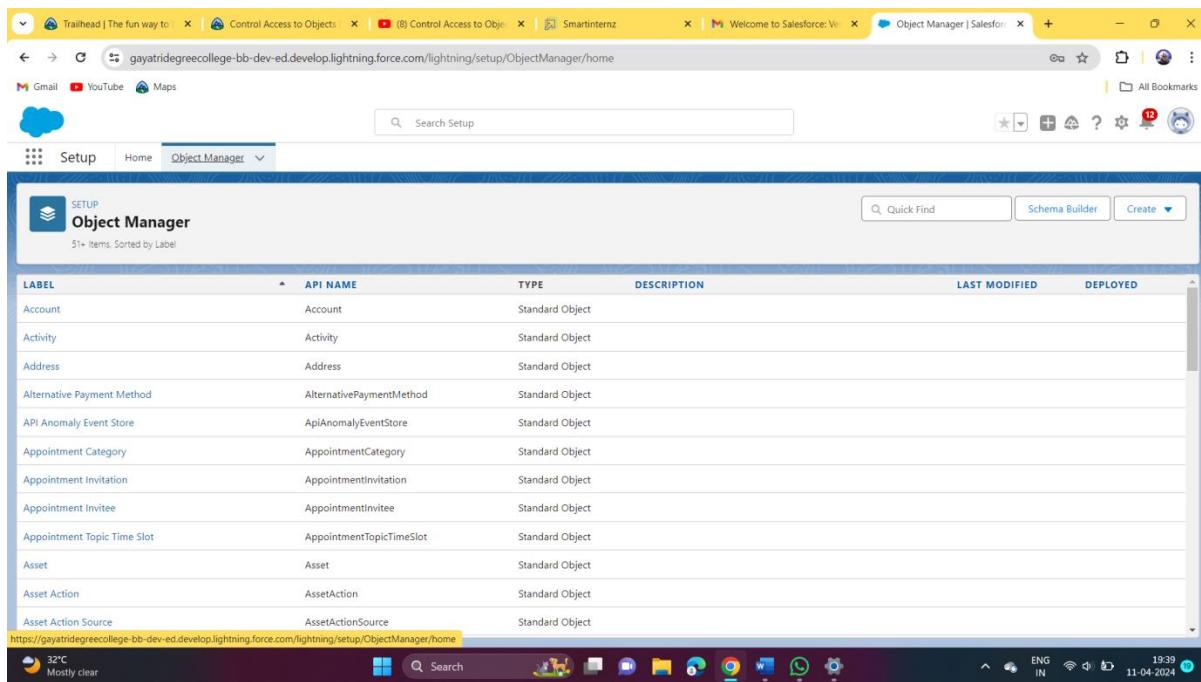
Creation Of Department Object For Travel Approval App

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:

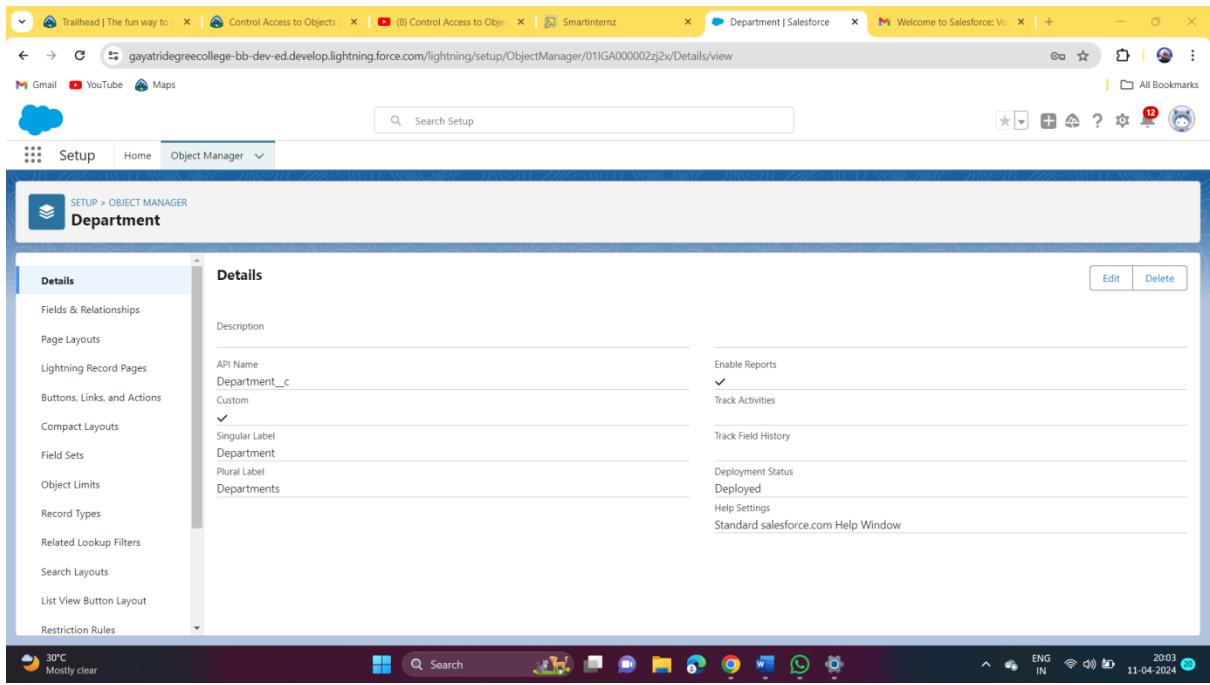
1. Click on the gear icon and then select Setup.
2. Click on the object manager tab just beside the home tab.

3. After the above steps, have a look in 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.



The screenshot shows the Salesforce Object Manager page. The URL in the browser is <https://gayatridegreecollege-bb-dev-ed.lightning.force.com/lightning/setup/ObjectManager/home>. The page displays a table of standard objects with columns: LABEL, API NAME, TYPE, DESCRIPTION, LAST MODIFIED, and DEPLOYED. The objects listed are: Account, Activity, Address, Alternative Payment Method, API Anomaly Event Store, Appointment Category, Appointment Invitation, Appointment Invitee, Appointment Topic Time Slot, Asset, Asset Action, and Asset Action Source. The 'LABEL' column is sorted by label. The 'API NAME' column lists the standard names for each object. The 'TYPE' column indicates they are all Standard Objects. The 'DESCRIPTION' column is empty. The 'LAST MODIFIED' and 'DEPLOYED' columns show the last modification date and time, respectively. The bottom status bar shows the weather as 32°C Mostly clear, the date as 11-04-2024, and the time as 19:39.

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Account	Account	Standard Object		2024-04-11 19:39:23	2024-04-11 19:39:23
Activity	Activity	Standard Object		2024-04-11 19:39:23	2024-04-11 19:39:23
Address	Address	Standard Object		2024-04-11 19:39:23	2024-04-11 19:39:23
Alternative Payment Method	AlternativePaymentMethod	Standard Object		2024-04-11 19:39:23	2024-04-11 19:39:23
API Anomaly Event Store	ApiAnomalyEventStore	Standard Object		2024-04-11 19:39:23	2024-04-11 19:39:23
Appointment Category	AppointmentCategory	Standard Object		2024-04-11 19:39:23	2024-04-11 19:39:23
Appointment Invitation	AppointmentInvitation	Standard Object		2024-04-11 19:39:23	2024-04-11 19:39:23
Appointment Invitee	AppointmentInvitee	Standard Object		2024-04-11 19:39:23	2024-04-11 19:39:23
Appointment Topic Time Slot	AppointmentTopicTimeSlot	Standard Object		2024-04-11 19:39:23	2024-04-11 19:39:23
Asset	Asset	Standard Object		2024-04-11 19:39:23	2024-04-11 19:39:23
Asset Action	AssetAction	Standard Object		2024-04-11 19:39:23	2024-04-11 19:39:23
Asset Action Source	AssetActionSource	Standard Object		2024-04-11 19:39:23	2024-04-11 19:39:23



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

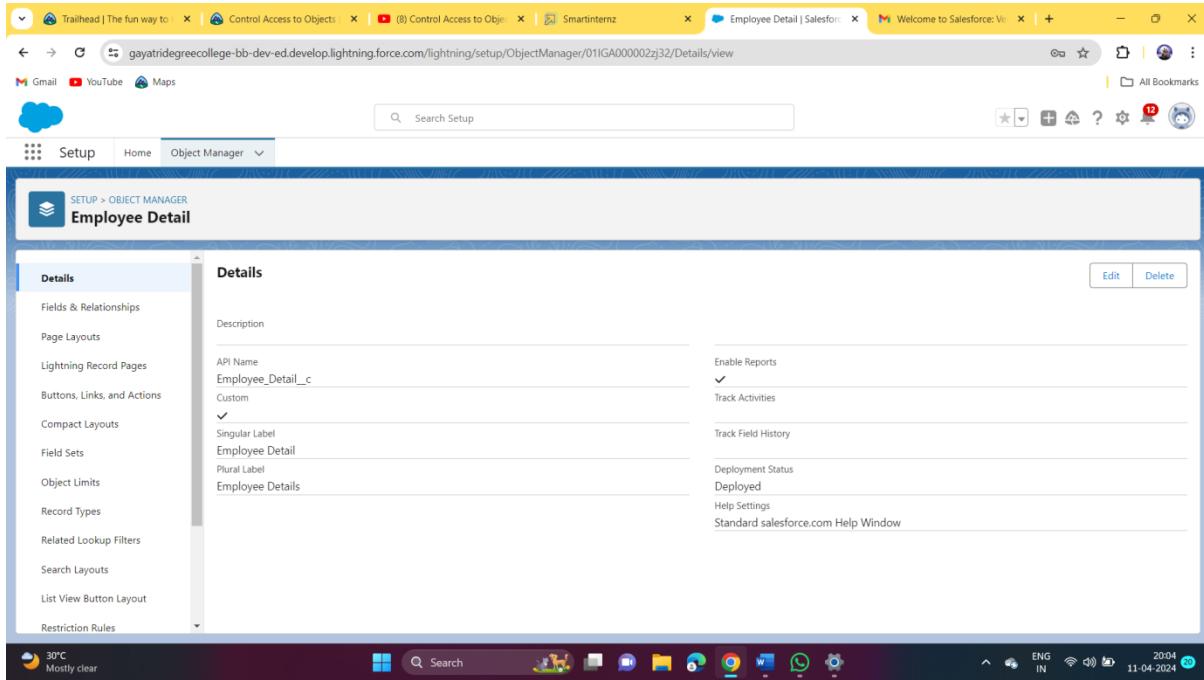
Note -

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.

Object – Employee Detail

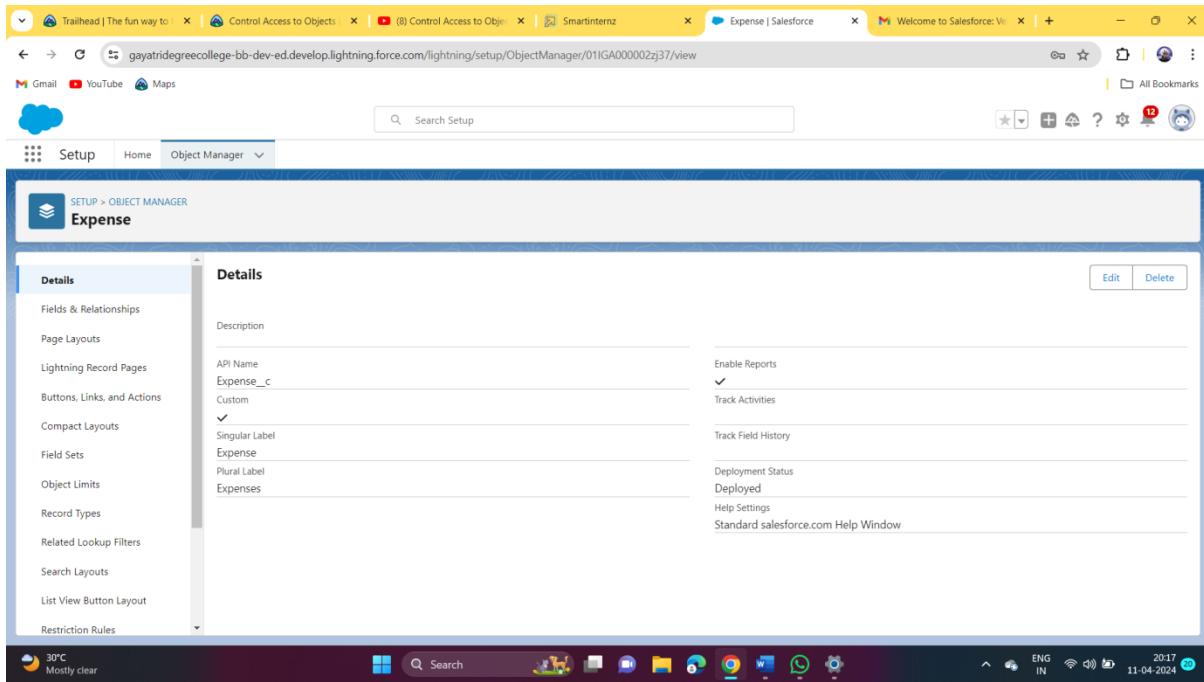
1. Click on the gear icon and then select Setup.
2. Click in the object manager tab just beside the home tab.
3. After the above steps, have a look in the extreme right you will find a Create Dropdown Click on that and selecet Custom Object.
4. On the Custom Object Definition page, create the object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

10. Click Save.



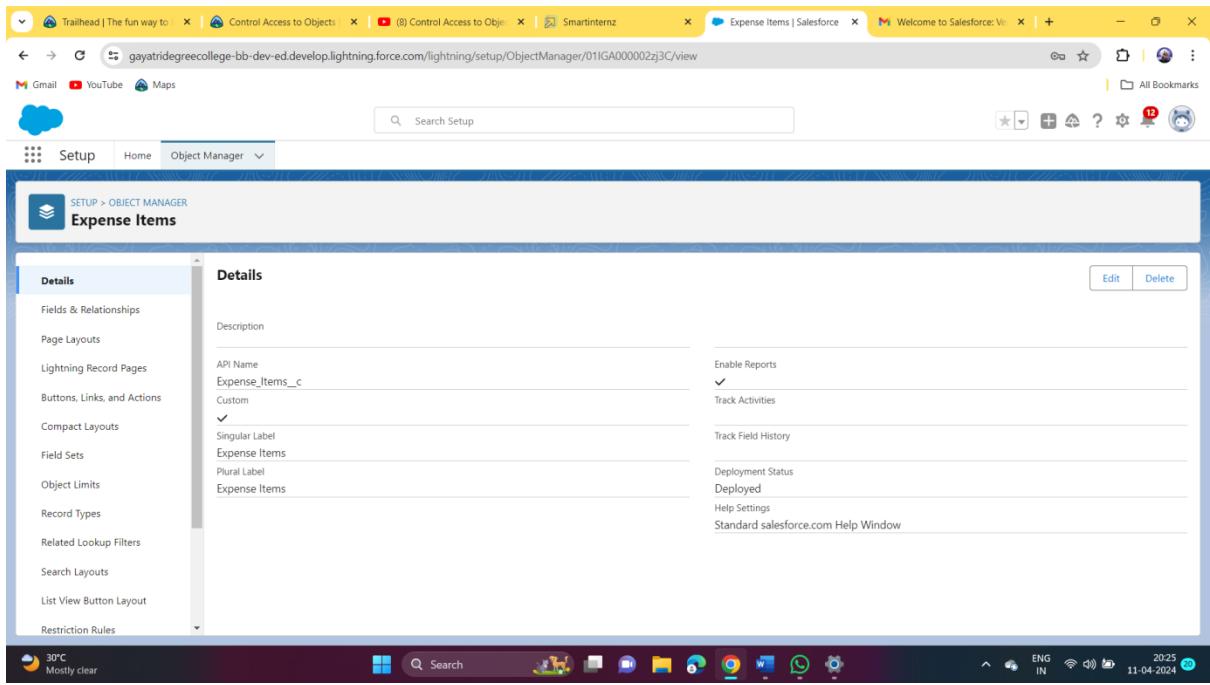
Object – Employee Detail

1. Click on the gear icon and then select Setup.
2. Click in the object manager tab just beside the home tab.
3. After the above steps, have a look in 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 : Expense
6. Plural Label : Expenses
7. Record Name : Expense Name
8. Date type : Select **Auto Number**.
9. Display Format : A-{0000}
10. Check the Allow Reports checkbox
11. Check the Allow Search checkbox
12. Click Save.



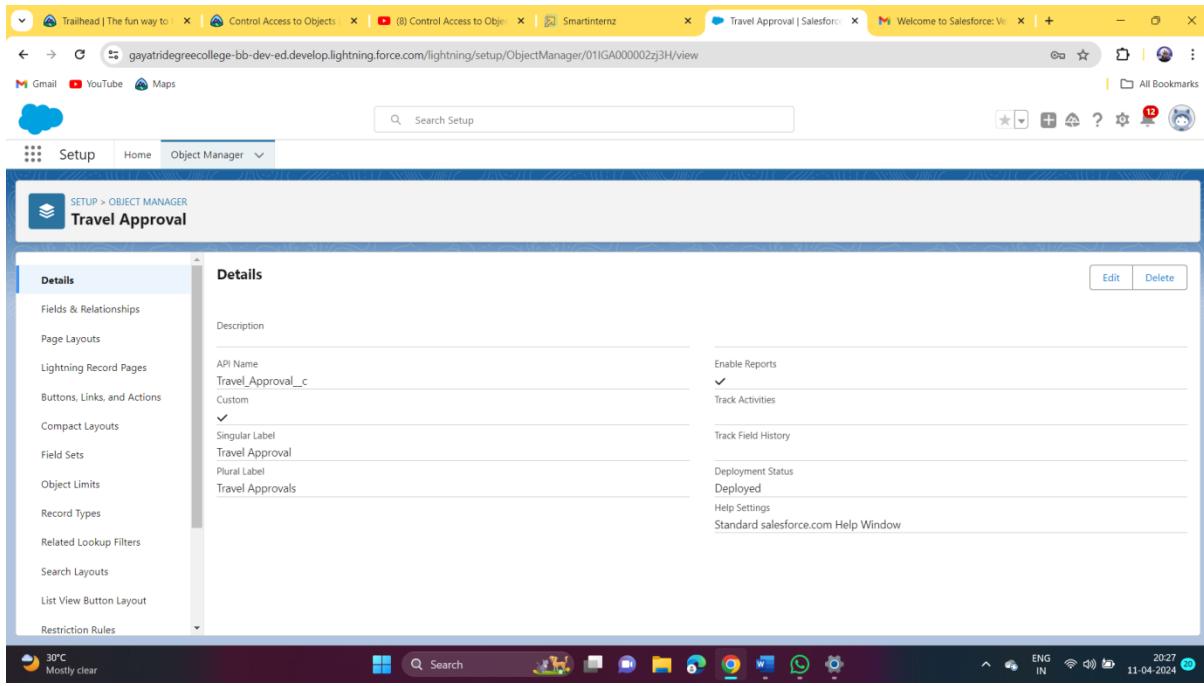
Object – Expense Items

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



Object – Travel Approval

1. Click on the gear icon and then select Setup.
2. Click in the object manager tab just beside the home tab.
3. After the above steps, have a look in 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 : Travel Approval
6. Plural Label : Travel Approvals
7. Record Name : Travel Approval Name
8. Check the Allow Reports checkbox
9. Check the Allow Search checkbox
10. Click Save.

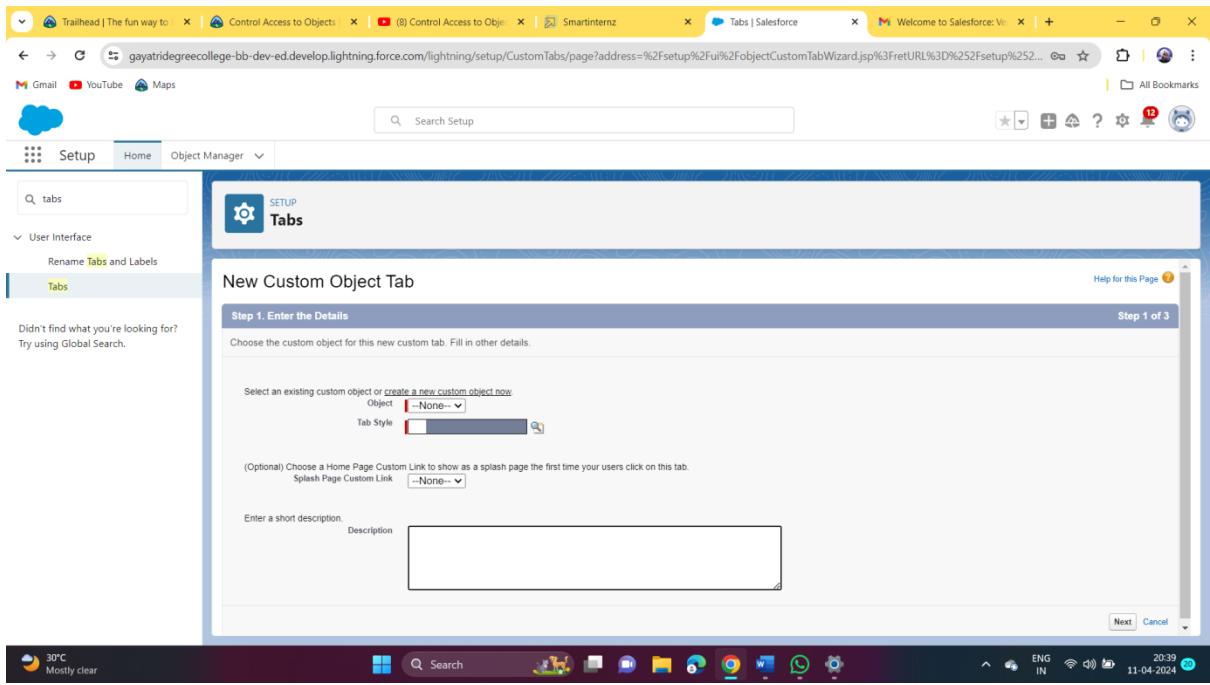


Mildstone – 03 : What is A Tab?

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 Objects, select Departments.
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.



Mildstone – 04 :Lightning 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, 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 Name: Travel Approval
- * Developer Name: Travel_Approval
- Description: Enter a description...

App Branding

- Image:
- 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

App Settings

App Details & Branding

App Options

Utility Items (Desktop Only)

Navigation Items

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

Available Items

Icon	Item
Account	Accounts
All Site	All Sites
Alternative Payment Methods	Alternative Payment Methods
Analytics	Analytics
App Launcher	App Launcher
Appointment Categories	Appointment Categories
Appointment Invitations	Appointment Invitations
Approval Requests	Approval Requests
Asset Action Sources	Asset Action Sources
Asset Actions	Asset Actions

Selected Items

Icon	Item
Departments	Departments
Employee Details	Employee Details
Expenses	Expenses
Expense Items	Expense Items
Travel Approvals	Travel Approvals
Reports	Reports
Dashboards	Dashboards

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.

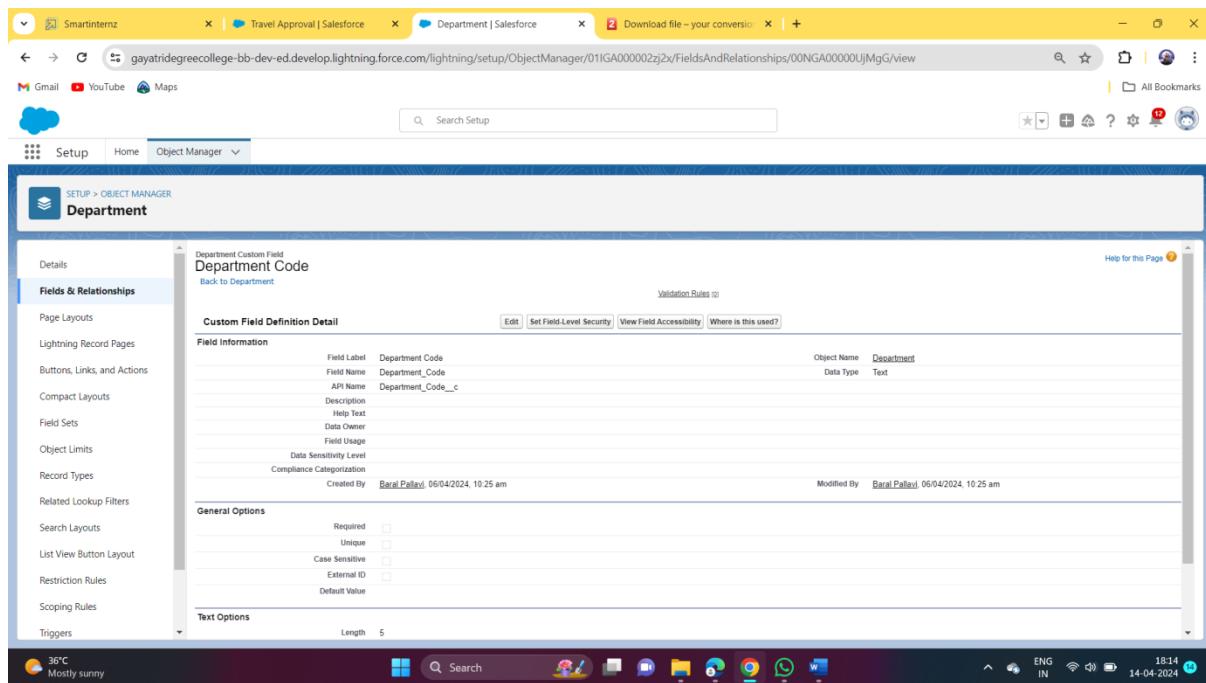
Mildstone – 05 : Fields and Relationship

Enrollment in local colleges, 2005

Object Name	Field Name	Data Type
Employee Details	Date of Birth	Date
	Gender	Picklist (Male, Female)
	Department	Lookup (Department)(See activity 2 to create lookup)
	Employee ID	Text (Length – 12)
Expense	Employee	Lookup (Employee Detail)
	Total Item	Rollup Summary (Expense Item)
Expense Item	Expense	Master Detail (Expense)
	Expense Type	Pick List (Values are – Transport, Hotel, Meal, Others)
	Amount	Currency
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)

Creation of Field for the Department Object :

1. click the gear icon and select 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.



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 District and State code and enter 40 in Length.

8. Click Next, Next, then Save.

The screenshot shows the Salesforce Object Manager interface. A custom field named 'District' is being created under the 'Department' object. The 'Field Information' section shows the following details:

Field Label	District
Field Name	District
API Name	District__c
Description	(empty)
Help Text	(empty)
Data Owner	(empty)
Field Usage	(empty)
Data Sensitivity Level	(empty)
Compliance Categorization	(empty)

The 'General Options' section includes:

- Required:
- Unique:
- Case Sensitive:
- External ID:
- Default Value: (empty)

The 'Text Options' section shows a 'Length' field set to 40.

The screenshot shows the Salesforce Object Manager interface. A custom field named 'State' is being created under the 'Department' object. The 'Field Information' section shows the following details:

Field Label	State
Field Name	State
API Name	State__c
Description	(empty)
Help Text	(empty)
Data Owner	(empty)
Field Usage	(empty)
Data Sensitivity Level	(empty)
Compliance Categorization	(empty)

The 'General Options' section includes:

- Required:
- Unique:
- Case Sensitive:
- External ID:
- Default Value: (empty)

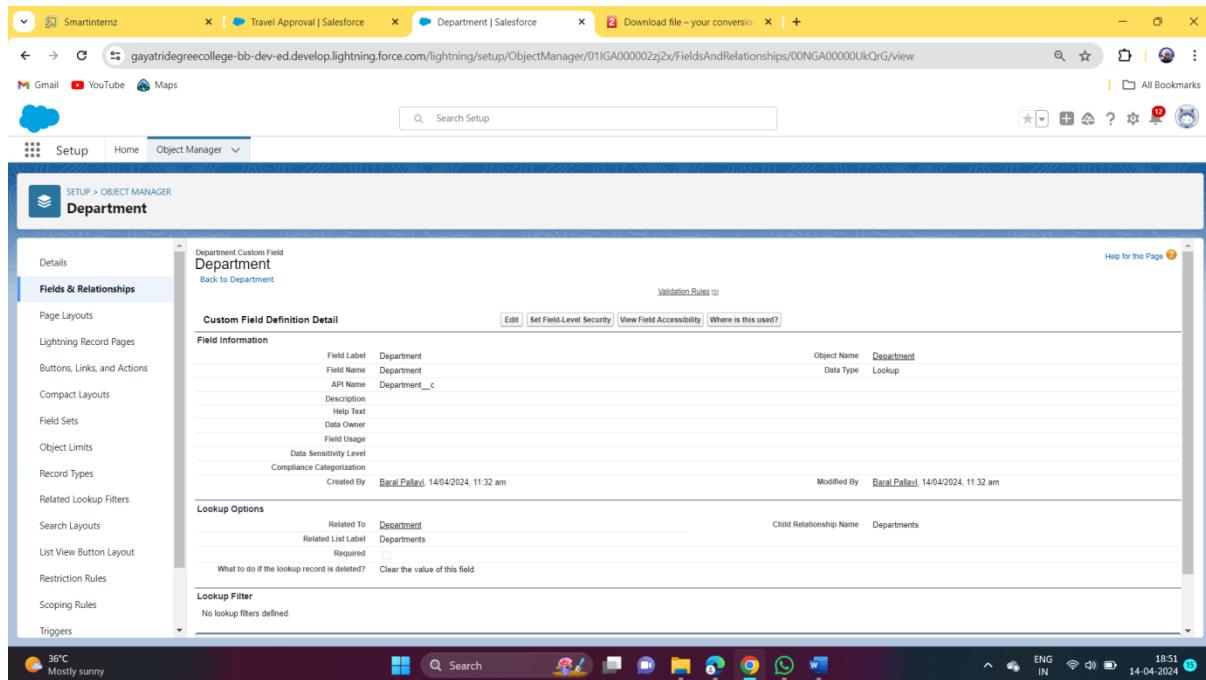
The 'Text Options' section shows a 'Length' field set to 40.

Lookup Relationship with Department

Let's create a Lookup relationships with Department object on Employee Detail onbject

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 look up Relationship as the Data type and click Next.
7. For Related to, enter Department .
8. Click Next.
9. For Field Label, enter Department.
10. Click Next, Next, Next and Save.

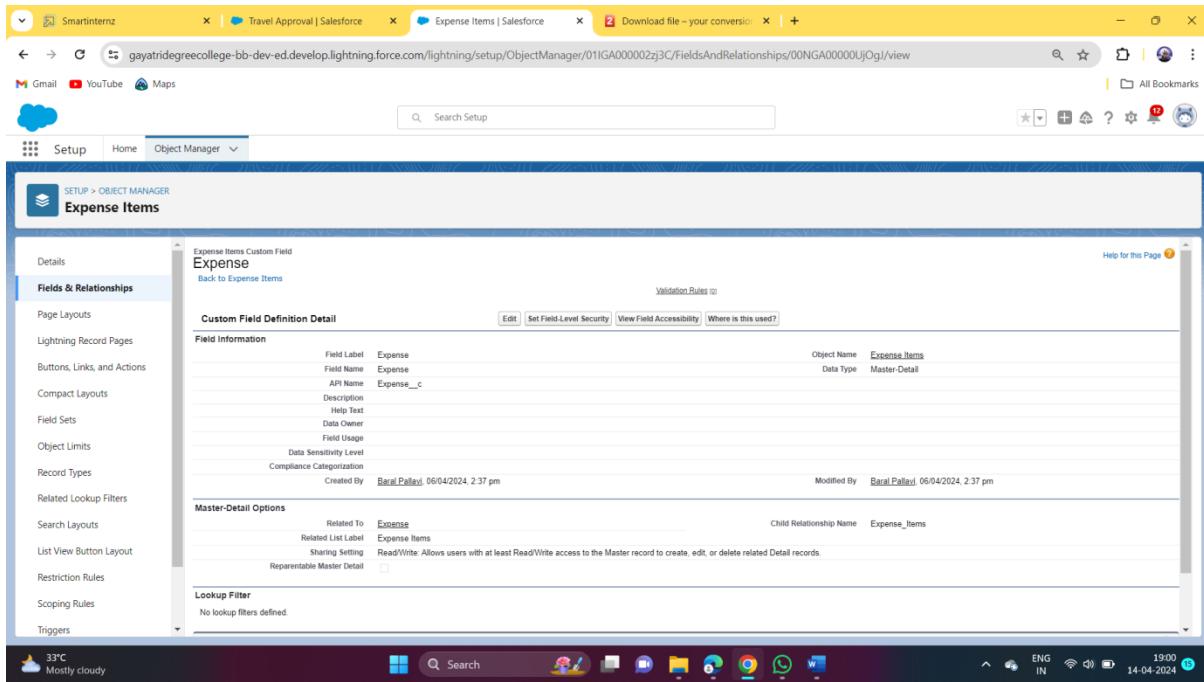


Let's create a master-detail relationship on Expense Item object

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 Master-Details Relationship as the Data Type and click Next.
7. For Related to, enter Expense.
8. Click Next.

9. For Field Label, enter Expense.

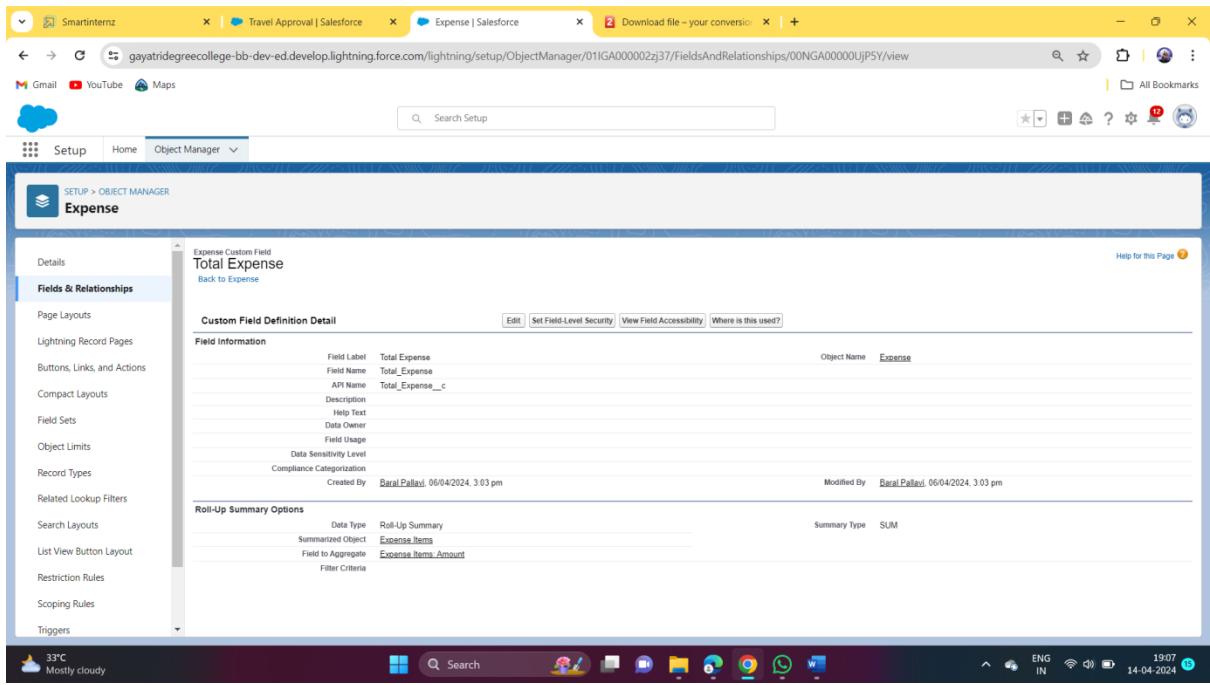
10. Click Next, Next, Next and Save.



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 Maanger.
3. Select Expense.
4. Click Fields & Relationships
5. Click New.
6. Select the Roll-up summary field as the data type Enter the field label as Total Expense.
7. Click Next.
8. Then select the master object summarized as expense items.
9. Select Sum as roll-up and Field to aggregate Amount then click Next, Next and save.



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

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

- Tab Bar:** Smartinternz, Travel Approval | Salesforce, Expense Item | Salesforce, Download file – your conversion...
- Header:** Search Setup, All Bookmarks
- Page:** SETUP > OBJECT MANAGER, Expense Items
- Left Sidebar (Fields & Relationships):** Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, Restriction Rules, Scoping Rules, Triggers.
- Current View:** Expense Items Custom Field, Expense Type (Back to Expense Items)
- Custom Field Definition Detail:**
 - Field Information:** Field Label: Expense Type, Field Name: Expense_Type, API Name: Expense_Type_c, Description, Help Text, Data Owner, Field Usage, Data Sensitivity Level, Compliance Categorization, Created By: Baral_Pallav, 06/04/2024, 2:41 pm.
 - General Options:** Required, Default Value: [New]
 - Picklist Options:** Restrict picklist to the values defined in the value set, Controlling Field: [New]
- Bottom:** Picklist Values Used, System bar with icons (Search, Home, etc.) and system status (ENG IN, 19:12, 14-04-2024).

Milestone – 06 : Import Departments

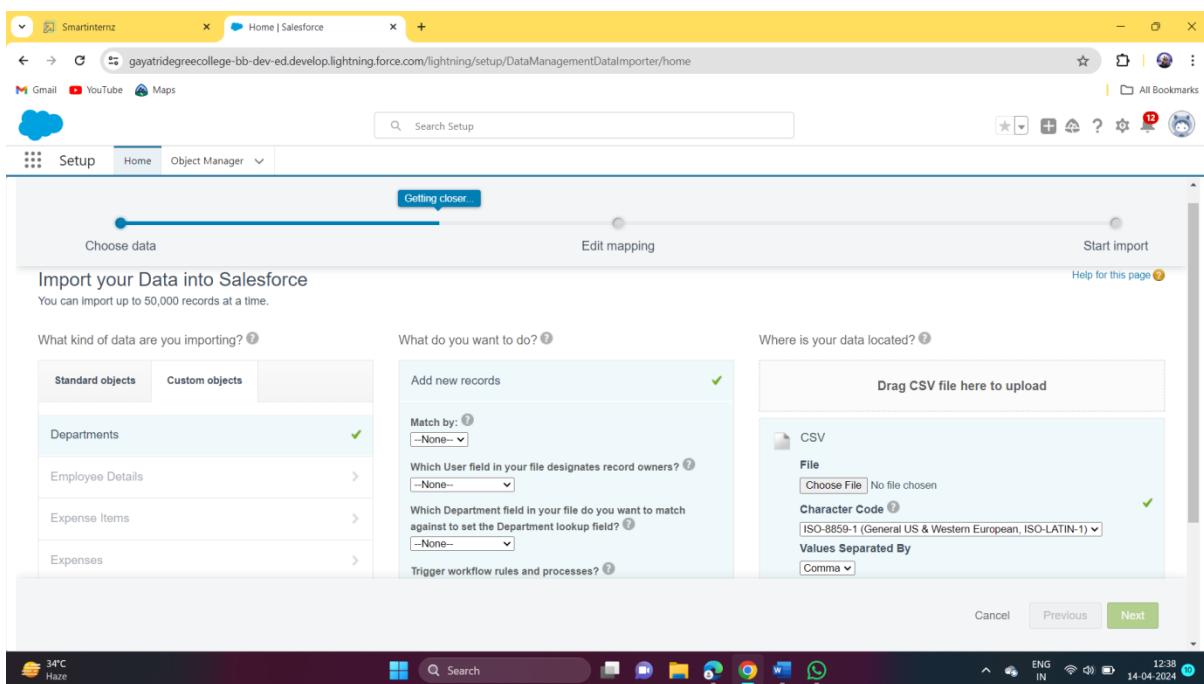
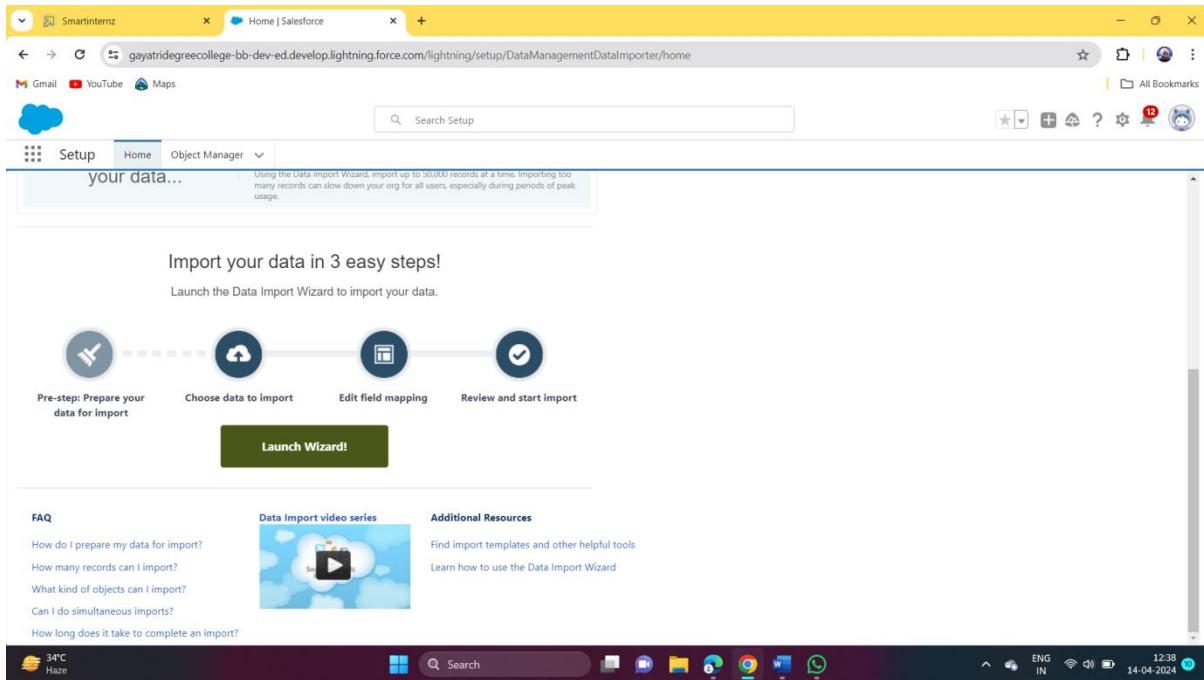
Data Import :

1. From Setup, click the Home Tab.
2. In the Quick Find box, enter Data Import and select Data Import Wizard.
3. Click Launch Wizard.
4. Click the Custom Objects tab and select the Departments object.
5. Select the Add new records.
6. Click CSV and choose file Department_CSV which we made earlier. Click Next.
7. 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.
8. The next screen gives you a summary of your data import.
9. Click Start Import.
10. Click Ok on the popup.

Note – Do Field mapping carefully.

Department CSV File

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



Milestone – 07 : Users

Creating A User In Salesforce

1. From Setup, in the Quick Find Box, enter Users.
2. Select Users.
3. Click New User.

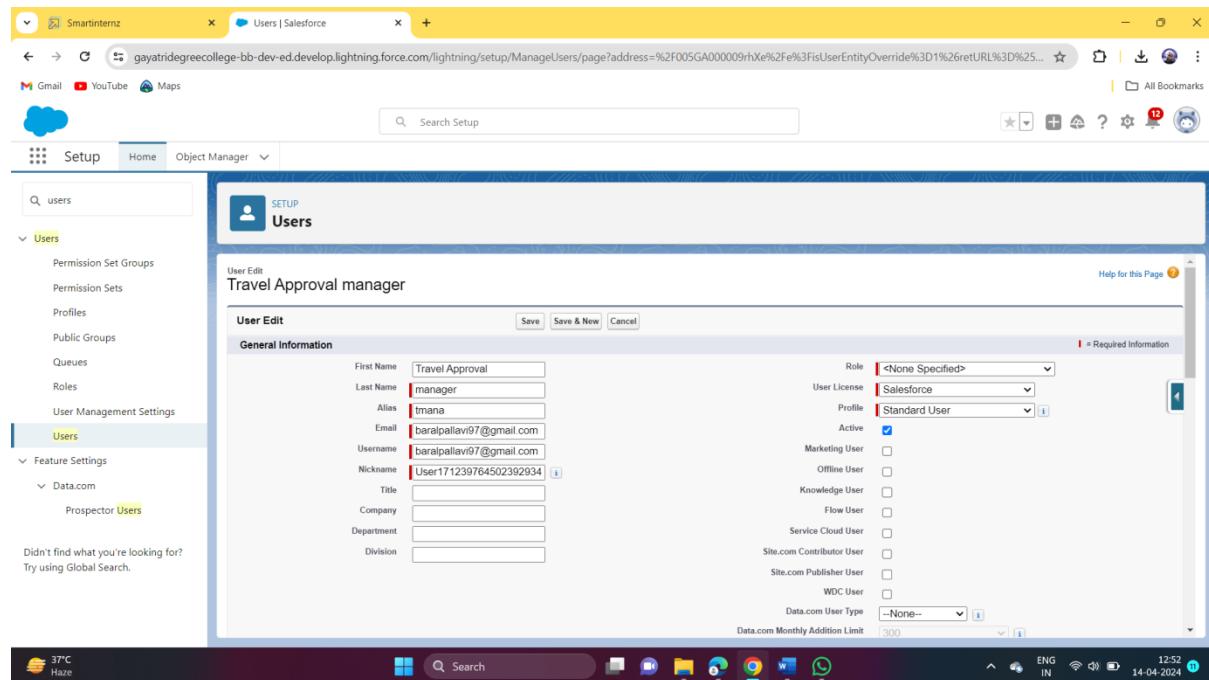
4. Enter the First Name Travel Approval and Last Name manager and (Your) email address and a unique username in the form of an email address. By default, the username is the same as the email address.

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 licence than 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 you email.



Milestone – 08 : Use Customization

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

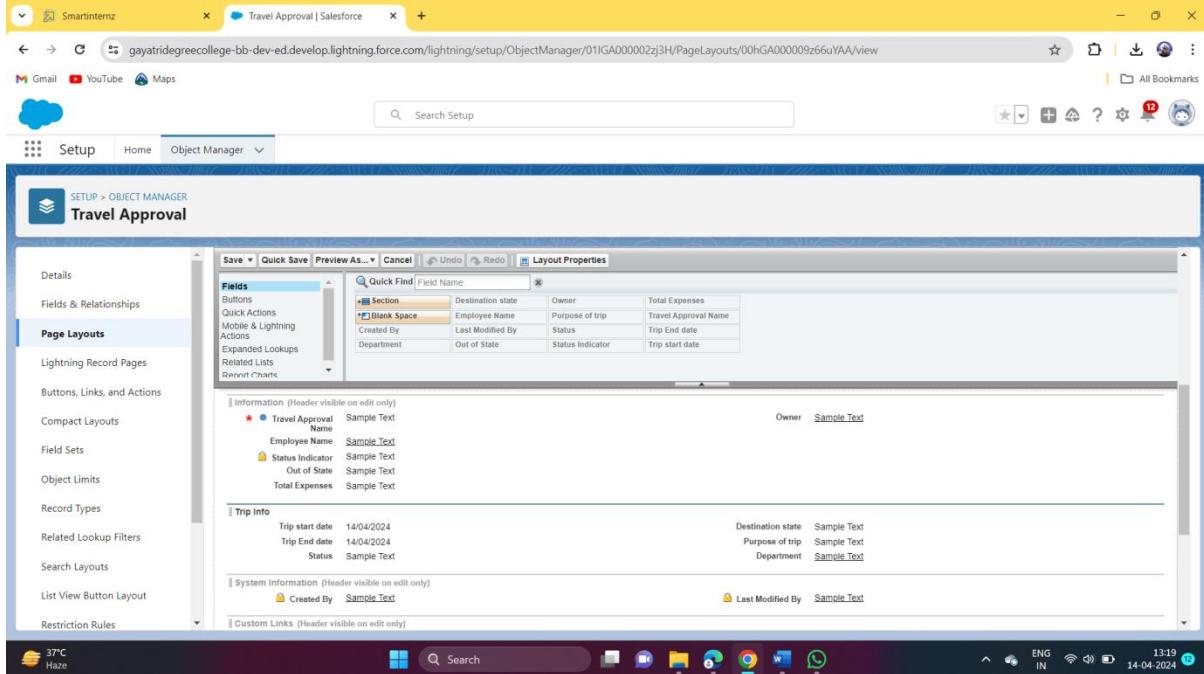
Information section. When dragging over the page, you get a visual indicator

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.

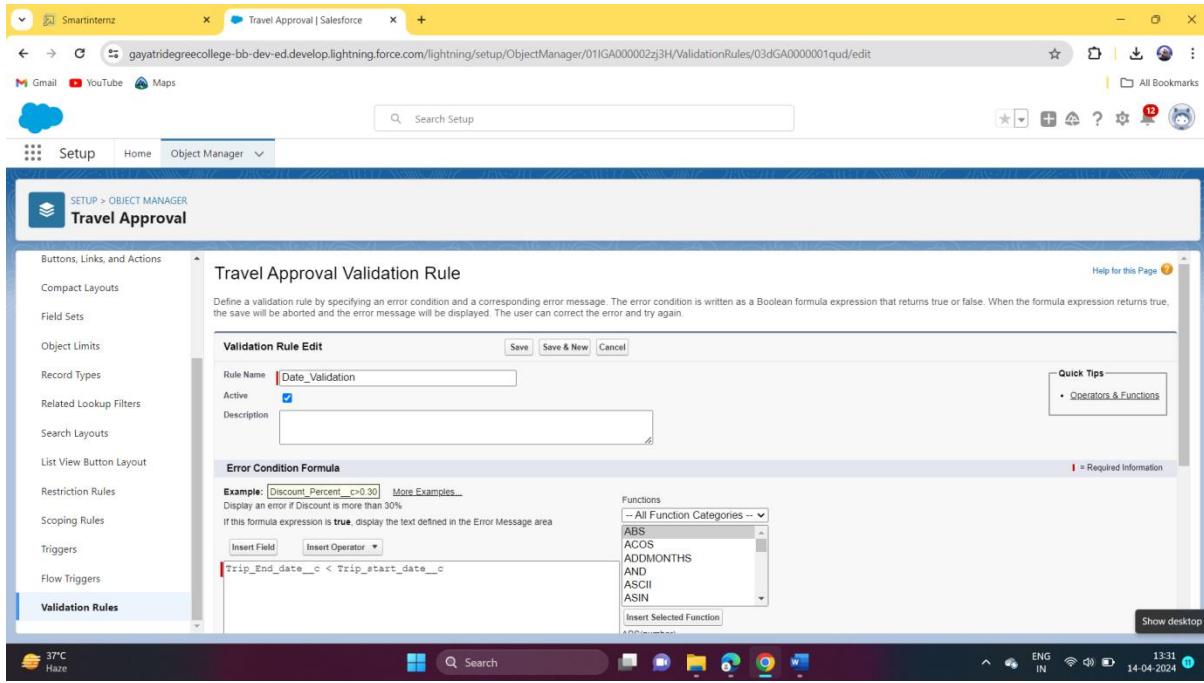


Milestone – 09 : App Business Logic To Travel App

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 < Trip_Start_Date , Click Save .



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 a file titled StatusImages.zip
2. Click the setup
3. Click Static Resources in Quick Find & Click New.
4. Enter the following values for your static resource

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

Now select the travel approval object.

1. Select Fields & Relationships, Click New
2. Select Formula data type, and Click Next.
3. Enter the following values:
4. Field Label : Status Indicator

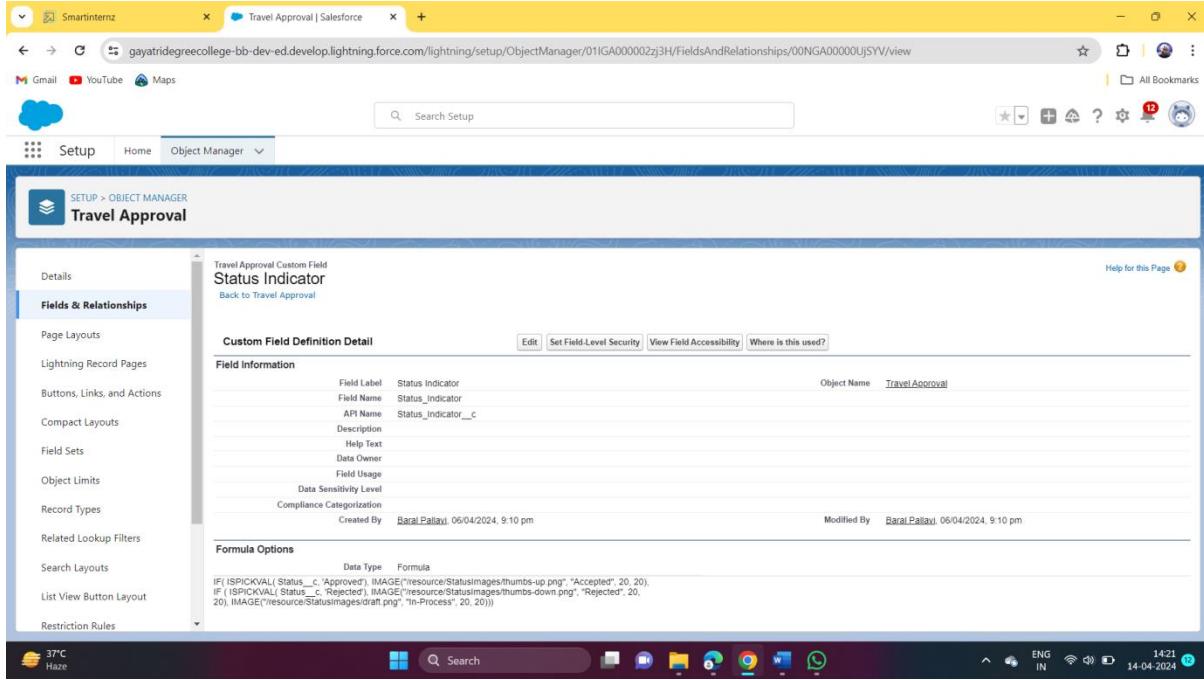
5. Field Name :Status_Indicator (This automatically gets send when you tab out of the Field Label field)

6. Formula Return Type : Tex

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

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

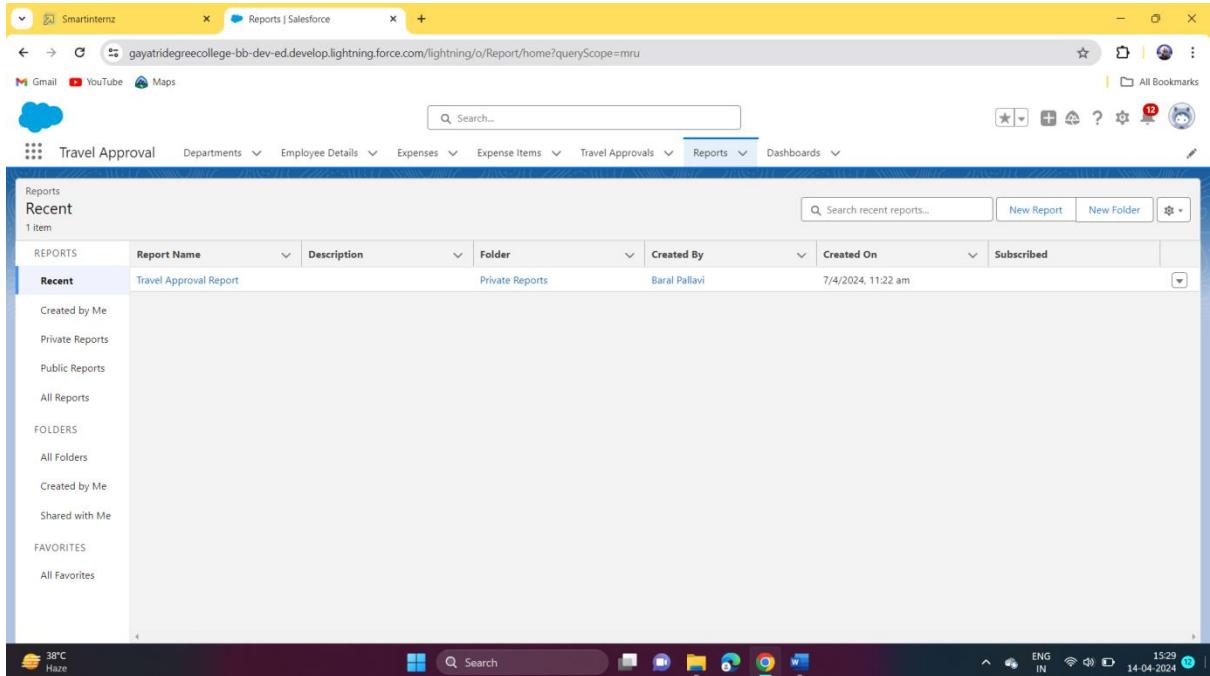
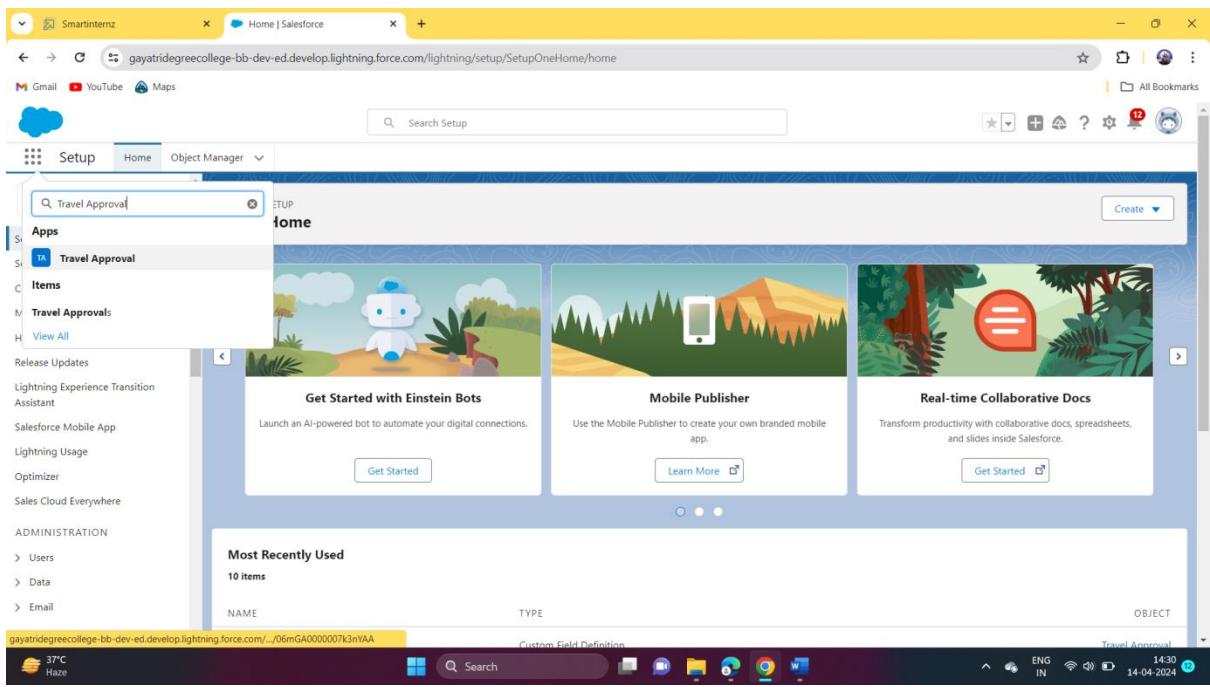
```
IF ( ISPICKVAL( Status__c, 'Rejected'), IMAGE("/resource/StatusImages/thumbs-down.png", "Rejected", 20, 20), IMAGE("/resource/StatusImages/draft.png", "In-Process", 20, 20))
```



Milestone – 10 : User Adoption – Create Record

Create Record

1. Click App Launcher and select Travel Approval App
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.



View Record :

View Record (Department) :

1. Click on App Launcher on left side of screen.
2. Click on Department Tab.
3. Click on Department Tab.
4. Click on any record name. You can see the details of the Department.

The screenshot shows a Salesforce report titled "Travel Approval Report". The report displays travel approvals categorized by department. The data is presented in a table with two columns: "Department: Department Name" and "Travel Approval: Travel Approval Name". The departments listed are B.Com (1), BCCA (1), BSC (2), and MSCs (1). The travel approval names are J Neha, P Leelavathi, B Pallavi, Prabhu Mounika, and G Jyotika respectively. The total number of records is 5.

Department: Department Name	Travel Approval: Travel Approval Name
B.Com (1)	J Neha
Subtotal	P Leelavathi
BCCA (1)	B Pallavi
Subtotal	Prabhu Mounika
BSC (2)	G Jyotika
Subtotal	
MSCs (1)	
Total (5)	

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 on that particular record.
5. Click delete and delete again.

The screenshot shows the "Recently Viewed" section of the Department list in Salesforce. It displays four items: B.Com, BCCA, MSCs, and BSC, all updated 3 minutes ago. The "Edit" and "Delete" options are visible for each item in the context menu.

Department Name
1 B.Com
2 BCCA
3 MSCs
4 BSC

Milestone – 11 : 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 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 :

This 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 supreport 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 :

Reports types determines which set of records will be available in 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 reports 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 type 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.

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 reports 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 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.

The screenshot shows the Salesforce Reports page. At the top, there's a navigation bar with links for Smartinternz, Reports | Salesforce, and other tabs. Below the bar, the URL is gayatridegreecollege-bb-dev-ed.lightning.force.com/lightning/o/Report/home?queryScope=mru. The main content area displays a table of recent reports. The table has columns for Report Name, Description, Folder, Created By, Created On, and Subscribed. One record is listed: "Travel Approval Report" under "Private Reports" folder, created by Baral Pallavi on 7/4/2024, 11:22 am. On the left sidebar, there are sections for Reports (Recent), Folders (Created by Me, Private Reports, Public Reports, All Reports), and Favorites (All Favorites). The bottom of the screen shows the Windows taskbar with various pinned icons and system status indicators.

REPORTS	Report Name	Description	Folder	Created By	Created On	Subscribed
Recent	Travel Approval Report		Private Reports	Baral Pallavi	7/4/2024, 11:22 am	

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.

The screenshot shows a Salesforce Lightning interface for a travel approval report. The top navigation bar includes links for Smartinternz, Travel Approval Report | Sales, and a search bar. Below the navigation is a header with a cloud icon, 'Travel Approval' tab, and various menu options like Departments, Employee Details, Expenses, Expense Items, Travel Approvals, Reports, and Dashboards. The main content area is titled 'Report: Travel Approvals with Department' and 'Travel Approval Report'. It displays a table with the following data:

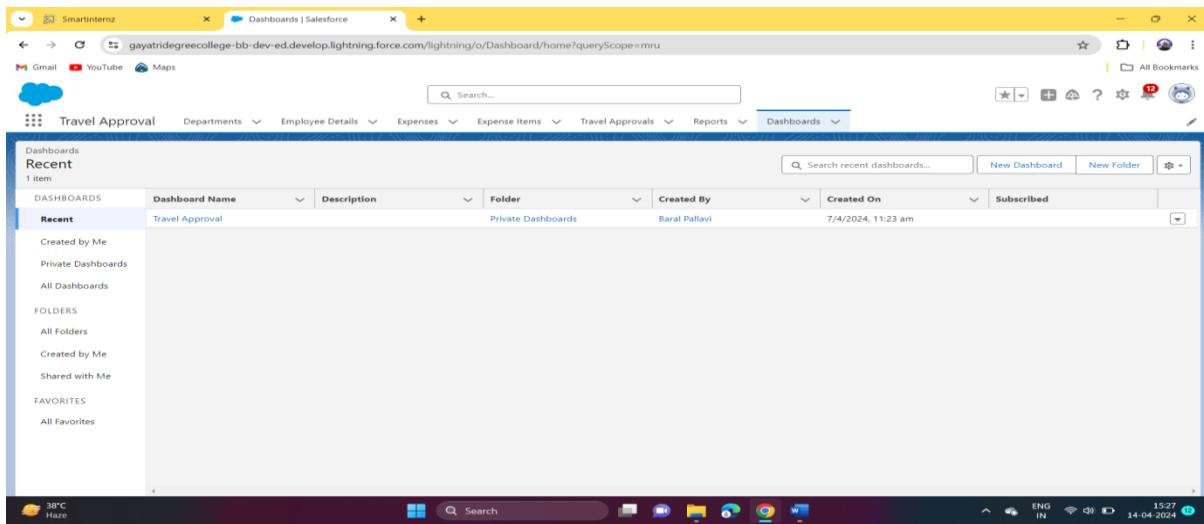
Department: Department Name	Travel Approval: Travel Approval Name
B.Com (1)	J Neha
Subtotal	
BCCA (1)	P Leelavathi
Subtotal	
BSC (2)	B Pallavi Prabhu Mounika
Subtotal	
MSCs (1)	G Jyotika
Subtotal	
Total (5)	

At the bottom of the report, there are buttons for Row Counts, Detail Rows, Subtotals, and Grand Total. The status bar at the bottom of the screen shows weather (38°C Haze), system information (ENG IN), and the date and time (14-04-2024 15:22).

Milestone – 12 : Dashboards

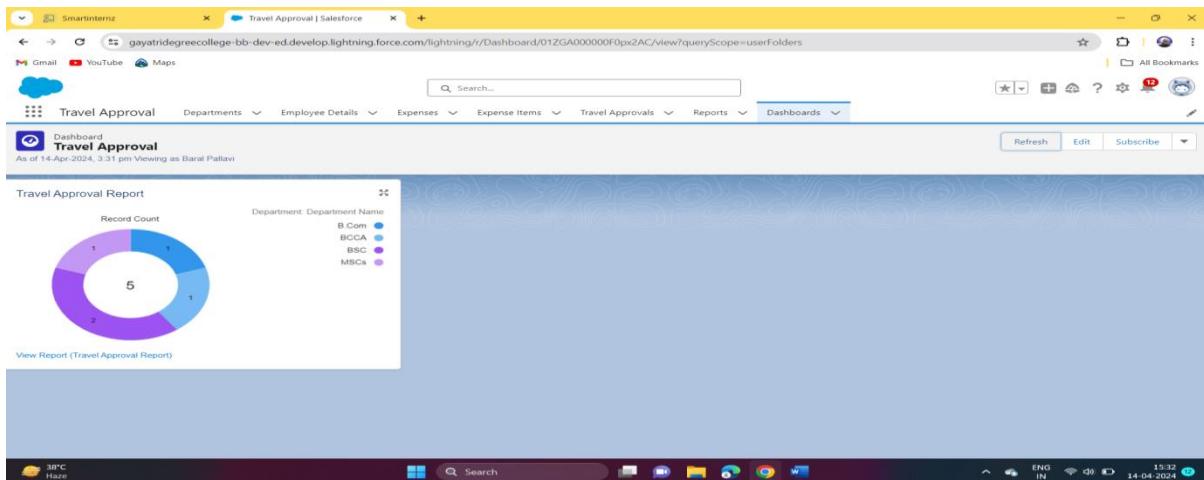
Create Dashboard

1. Click on the Dashboards tab from the Travel Approval application
2. Click on a new dashboard
3. Give name – Travel Approval
4. Click Create
5. Give your dashboard a name and click on +component, select the Travel Approval Report that you created.
6. For the data visualization select any of the chart, table etc as your wish.
7. Click add.
8. Click Save.



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.

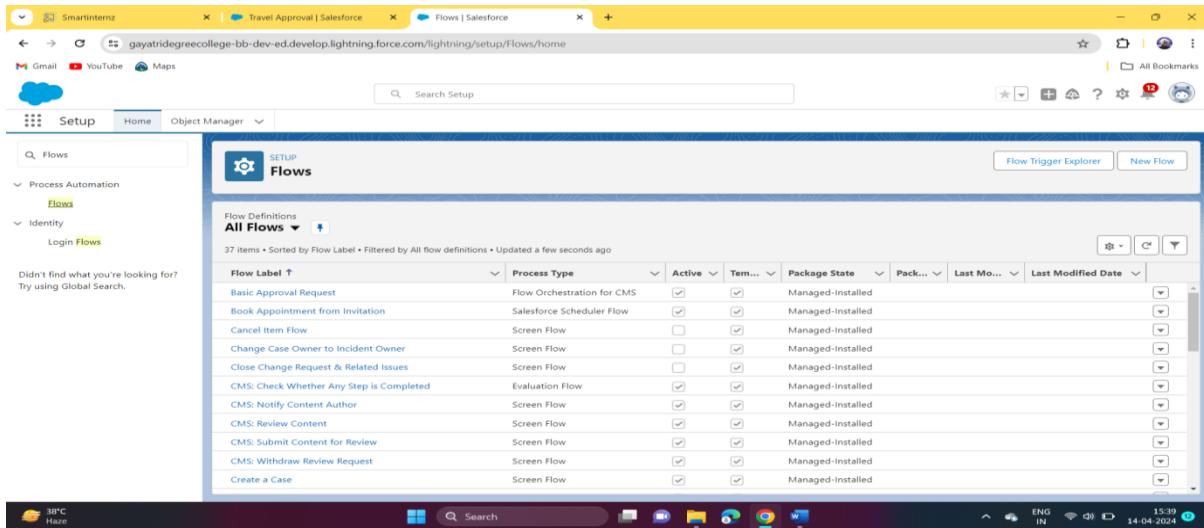


Milestone – 13 : Flows

Create a Flow

Now create a flow that uses the update record node to set the out-of-state flag.

1. From Setup, click the Home tab.
2. Select Process Automation | Flows (or use the Quick Find and search for flows)



3. Click New Flow

4. Select Record-Triggered Flow then click Create.

5. Enter these values :

Parameter	Value
Object	Travel Approval
Configure Trigger	Trigger the flow when: A record is Created or Updated
Conditional Requirements	None
Optimize the Flow For	Fast Field Updates

6. Click Done.

7. In this Layout dropdown, select Freeform.

Add a Decision Element

1. From the left-hand toolbox column, drag a Decision element onto the flow builder screen.

2. Set the following parameters:

Parameter	Values
Label	Is Travel Out of State

API Name	Is_Travel_Out_of_State (This automatically gets set when you tab out of the Label field)
Description	Leave blank

3. Set the Outcomes.

4. For the first outcomes, set these parameters :

Parameter	Value
Label	Yes Out of State
Outcome API Name	Yes_Out_of_State (This automatically gets set when you tab out of the label filed)
Condition Requirement to Execute Outcome	All Conditions Are Met(AND)
Resource	\$Record > Destination State
Operator	Does Not Equal
Value	TX
When to Execute the Outcomes	Only if the record that triggered the flow to run is updated to meet the condition requirements

5. Next to Outcomes Order click the +button to add another outcome.

6. Set these parameters :

Parameter	Value
Label	In State
Outcome API Name	In_State(This automatically gets set when you tab out of the label filed)
Condition Requirement to Execute Outcome	All conditions Are Met (AND)
Resource	\$Record > Destination State
Value	TX
When to Execute the Outcomes	Only if the record that triggered the flow to run is updated to meet the condition requirements

7. Click Done.

8. Drag the white circle from the start Flow element to the Decision element you

just created to link the direction of the arrow.

Create an Action for the Flow Using Update Records Elements

1. From the left-hand column, the flow toolbox, drag an Update Records element onto the flow screen.

2. Set the parameters for the element :

Parameter	Values
Label	Update Travel Approval Record
Ourcome Api Name	Update_Travel_Approval_Record(This automatically gets set when you tab out of the Label field)
How to find Records to Update and set their values	Use the travel approval record that triggered the flow
Conditions Requirements to Update the Records	None-Always Update the Record
Field	Out_of_State__c
Value	\$GlobalConstant.True (start typing True and the value will be come up).

3. Click Done.

4. Drag the white circle from the Decision Node to the Update Records you just created, and select the decision Yes Out of State | Done.

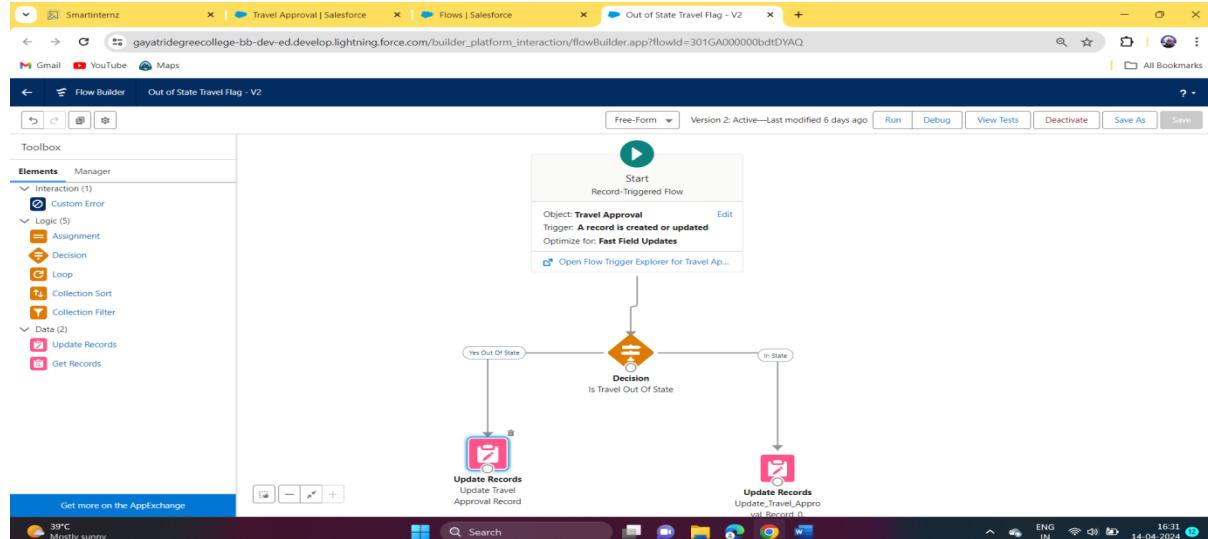
5. Click the Update Records node and make sure it is highlighted in blue. In the top-left corner of the Flow Builder screen, find the and click the duplicate button Duplicate button. Double-click in the new update Records element just created. Note the API name has been automatically updated to Update_Travel_Approval_Record_0.

6. Then update the value of the Out_of_State__c field to FALSE.

7. Delete the True Value and enter False. Select \$GlobalConstant.False.

8. Click Done.

9. Drag the white circle from the Decision Node to the second Update Records you just created and select the decision In State.



Congratulations!! You've completed your first Record Triggered Automation Flow! Last but not least, make sure to save and activate the flow.

1. Click Save.

2. Flow Label : Out of State Travel Flag. Flow API Name will auto populate to Out_of_State_Travel_Flag. Leave Description blank and advanced settings as is.
3. Click Save.
4. Click Active.

Milestone – 14 : Approval Process

Create a Approval Process :

Let's get started.

1. Click and select Setup.
2. Select Process Automation | Approval Process (or use the Quick Find and search for Approval Process).
3. In the Manage Approval Processes For list, select Travel Approval.
4. Click Create New Approval Process and select Use Jump Start Wizard.
5. Enter the following parameter

Parameter	Values
Name	Travel Approval Request
Unique Name	Travel_Approval_Request(This automatically gets sent when you tab out of the name field.)
Approval Assignment Email Template	Leave Blank
Add the submit for Approval button and approval history related list to all travel approval page layouts.	Leave this selected/checked.
Use Approval Field of Travel Approval Owner	Leave Unselected/Unchecked
Specify entry criteria	Use this Approval Process : criteria are met
Field	Travel Approval:Total Expenses
Operator	Greater than
Value	0
Select Approval	<ul style="list-style-type: none"> • Automatically assign and approval using a standard or custom hierarchy field. • Select manager from the option list

6. Click Save.
7. Click View Approval Process Detail Page.

Create an Approval Step for Out-of-State Travel

1. Click New Approval Step.
2. Enter the following details

Parameter	Value
Name	Travel Coordinator Approval
Unique Name	Travel_Coordinator_Approval (This automatically gets set when you tab out of the Name field)
Step Number	2

3. Click Next.
4. Ensure Enter this step if the following is selected and the criteria are met option is selected.
5. Enter the following formula criteria
 - Field : Travel Approval:Out-of-State
 - Operator : equals
 - Value : True
6. Click Next.
7. Select the Automatically assign to the approver(s) option.
8. Select user form the dropdown and select your name as the travel coordinator.
9. Click Save.
10. Select No,I'll do this later. Take me to the approval process detail page to review what I've created and then click Go!

Add Logic

Next, add logic to set the status of the approval request based on if it was approval for rejected.

Let's start by creating an action if the request was approved by all approvers.

1. Click Add New in the Final Approval Actions area of the approval process form.
2. Select Field Update form the dropdown list.
3. Enter the following values.

Parameter	Values
Name	Set Status to Approved
Unique Name	Set_Status_to_Approved(This automatically gets set when you tab out of the Name field)
Field to Update	Status
Re-evaluated Workflow Rules after Field Change	Leave unchecked
Picklist Options	Select A specific value and select Approved from the dropdown list.

4. Click Save.

Next, let's set the status value of Rejected if any approver rejects the travel approval request.

1. Click Add New in the Final Rejection Actions area if the approval process form.

2. Select Field Update from the dropdown list.

3. Enter the following values.

Parameter	Values
Name	Set Status to Rejected
Unique Name	Set_Status_to_Rejected (This automatically gets sent when you tab out of the Name field)
Field to Update	Status
Re-evaluate Workflow Rules after Field Change	Leave unchecked
Picklist Options	Select A specific value and select Rejected from the dropdown list.

4. Click Save.

5. Click Activate.

6. Select OK in the popup window to confirm activation. Your approval process should now have the Active flag checked.

Next, you enable email approval responses.

1. Click and select Setup.

2. From setup, enter process automation settings in the quick find box and select it.

3. Click the Process Automation Settings link.

4. Make sure Enable Email Approval Response is selected.

5. Set the Default Workflow User to your name.

6. Click Save.

The screenshot shows the Salesforce Setup interface with the 'Approval Processes' tab selected. The main content area displays the 'Travel Approval: Travel Approval Request' configuration. Key details include:

- Process Name:** Travel Approval Request
- Unique Name:** Travel_Approval_Request
- Description:** Travel Approval: Total Expenses GREATER THAN 0
- Record Editability:** Administrator ONLY
- Approval Assignment Email Template:** Initial Submitters
- Initial Submitters:** Travel Approval Owner
- Created By:** Baral Pallavi, 16/04/2024, 10:49 am
- Active:** Yes
- Manager of Record Submitter:** Determined by Next Automated Approver
- Allow Submitters to Recall Approval Requests:** Unchecked
- Modified By:** Baral Pallavi, 16/04/2024, 1:07 pm

The sidebar on the left lists various setup categories like Service Setup Assistant, Multi-Factor Authentication Assistant, etc. The bottom right corner shows system status: 1:08 PM, 4/16/2024.

The screenshot shows the 'Approval Steps' section of the Approval Processes configuration. It includes three steps:

- Action:** Show Actions | **Type:** Step Number | **Name:** Step 1 | **Description:** Lock the record from being edited | **Criteria:** Travel Approval: Out of State EQUALS True | **Assigned Approver:** Manager | **Reject Behavior:** Final Rejection
- Action:** Show Actions | **Type:** Step Number | **Name:** Step 2 | **Description:** Travel Coordinator Approval | **Criteria:** Travel Approval: Out of State EQUALS True | **Assigned Approver:** Manager | **Reject Behavior:** Final Rejection
- Action:** Show Actions | **Type:** Step Number | **Name:** Step 3 | **Description:** Set Status to Approved | **Criteria:** Travel Approval: Out of State EQUALS True | **Assigned Approver:** Manager | **Reject Behavior:** Final Rejection

The sidebar on the left lists various setup categories like Service Setup Assistant, Multi-Factor Authentication Assistant, etc. The bottom right corner shows system status: 1:08 PM, 4/16/2024.

Test Your Approval Process :

Time to Test now you've created your approval process, let's test it out.

1. Using the App Launcher, navigate to the Travel App and click the Travel Approval tab..
2. Select a record from the list. Make sure this is a travel approval record that has at least one expense item and a total expense amount greater than \$0..
3. Click the down arrow next to the New Opportunity button and select Submit for Approval..
4. Enter a comment and click Submit.
5. You should receive an email alert like the following that lets Eric Executive know that he has a travel approval to process. Notice that it provides a link to directly access the Travel Approval record so that Eric could review it. Also, the email includes the option to just respond to the email and reply with text like APPROVE, YES, REJECT, NO.

6. On your Travel Approval record, click the Related tab and you can see the new section titled Approval History that has details of your approval submission. Its status is Pending and it's assigned to Eric Executive.

7. At this point you could log out of Salesforce and log back in as Eric Executive.

8. Click Approve in the Approval History section.

9. In the popup window, enter a comment and click the Approve button once again.

10. Since this was for out-of-town travel, the approval was sent to the Travel Coordinator.

11. Click Approve in the Approve History section to finish the approval.

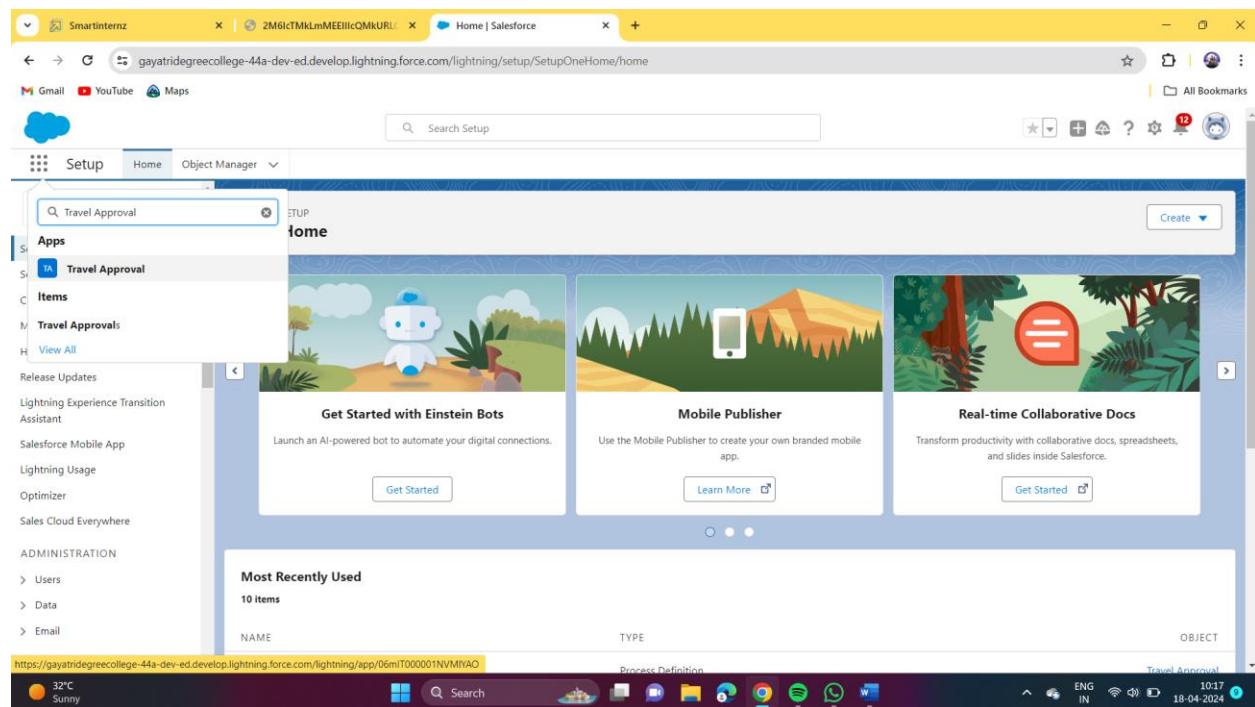
12. Enter a comment in the popup window and click Approve.

13. Click the detail tab for your travel approval record.

14. Pick or create another travel request record and submit it for approval. Check your email and respond to the email with reject.

Congratulations! You have added automation to your application using point and click tools such as :

- Validations Rules
- Formula Fields
- Roll-Up Summary Fields
- Flow Builder
- Approval Processes



Smartinternz | 2M6lcTMkLmMEIIicQMkURL | Travel Exp | Travel Approval | +

gayatridegrecollege-44a-dev-ed.lightning.force.com/lightning/r/Travel_Approval__c/a04IT00002TWq33YAD/view

Gmail YouTube Maps

Travel Approval Departments Expense Items Employee Details Expenses Travel Approvals Reports Dashboards

Travel Approval Travel Exp

New Contact Edit New Opportunity

Related Details

Travel Approval Name: Travel Exp Owner: Baral Pallavi

Employee Name: Madhu Status Indicator:

Out of State: true Total Expenses: 1,000

Trip Info

Trip start date: Destination state: Purpose of trip: Department:

Status: Last Modified By: Baral Pallavi, 16/04/2024, 10:58 am

32°C Sunny

Search

ENG IN 10:18 18-04-2024