

MUTHURANGAM GOVT ARTS COLLEGE VELLORE 02

BUILD AN EMPLOYEE TRAVEL APPROVAL APPLICATION FOR CORPORATES

Project Submitted by:

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BUILD AN EMPLOYEE TRAVEL APPROVAL APPLICATION FOR CORPORATES

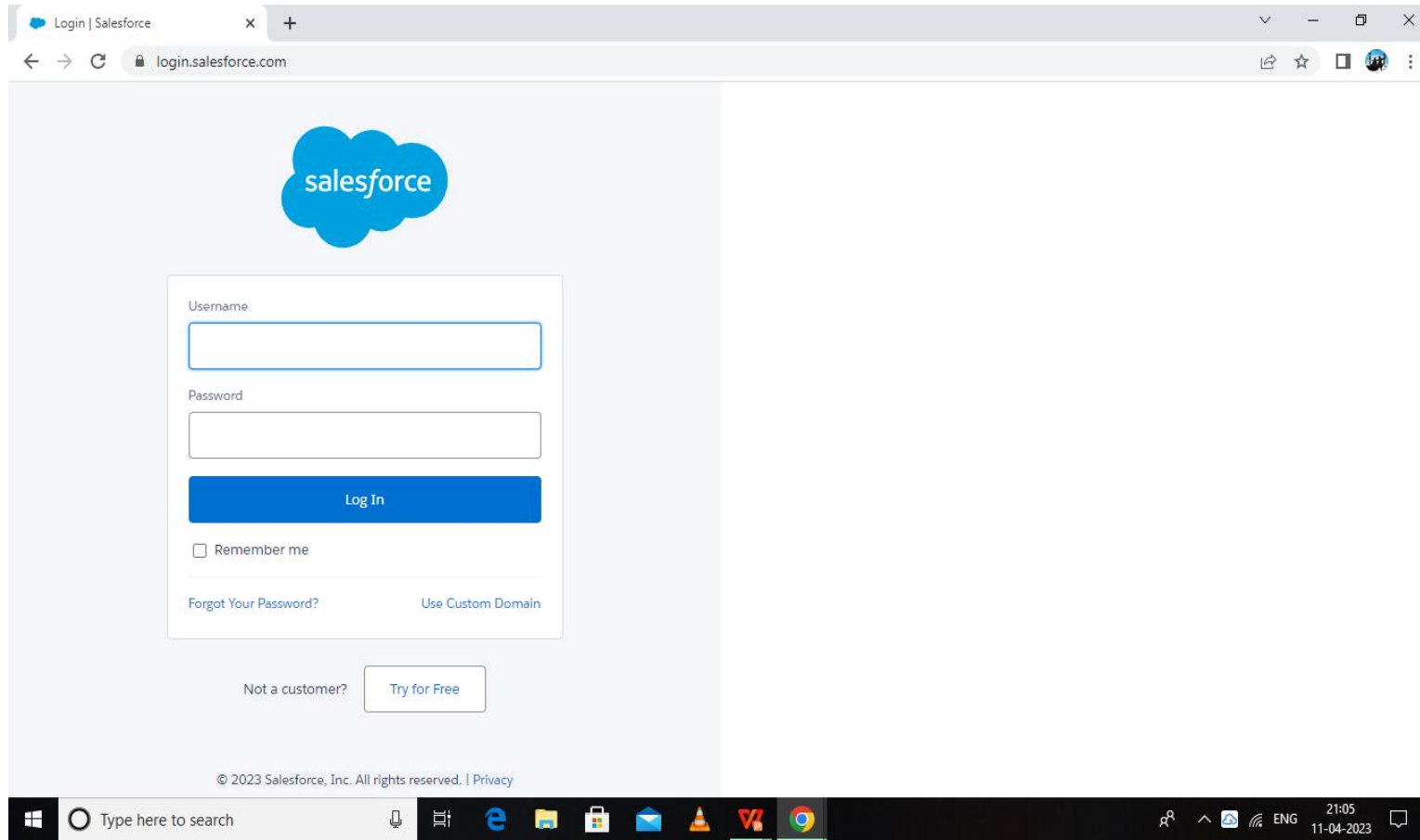
- Milestone 1- Create Salesforce Org
Create Developer Account
- Milestone 2- Creating the Application
Create the Text Application
- Milestone 3-What is an object?
Create the 3 custom objects and tabs
 - a)Department
 - b)Travel Approval
 - c)Expense Item
- Milestone 4- What is a Tab?
Create Fields & Relationships

- Milestone 05- Import Departments
- Milestone 06- Customize User Interface
- Milestone 07- Use Customization
- Milestone 08- Add Business Logic To Travel App
- Milestone 09- What are Reports
- Milestone 10- Dashboards

Milestone 1- Create Salesforce Org:

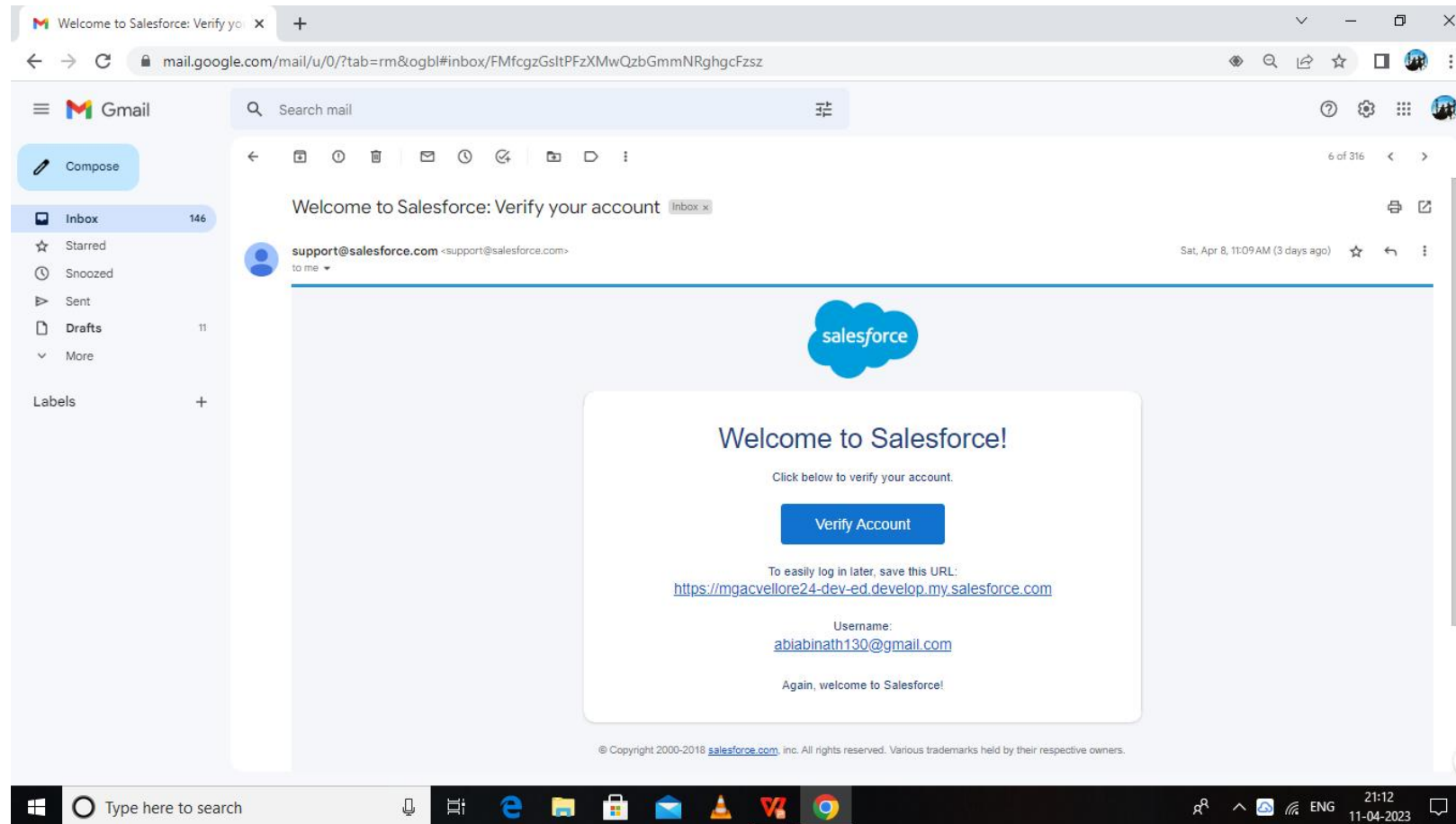
Creating Developer Org in Salesforce

1. Go to developers.salesforce.com
2. Click on sign up.
3. On the Sign-up form, enter the following details:



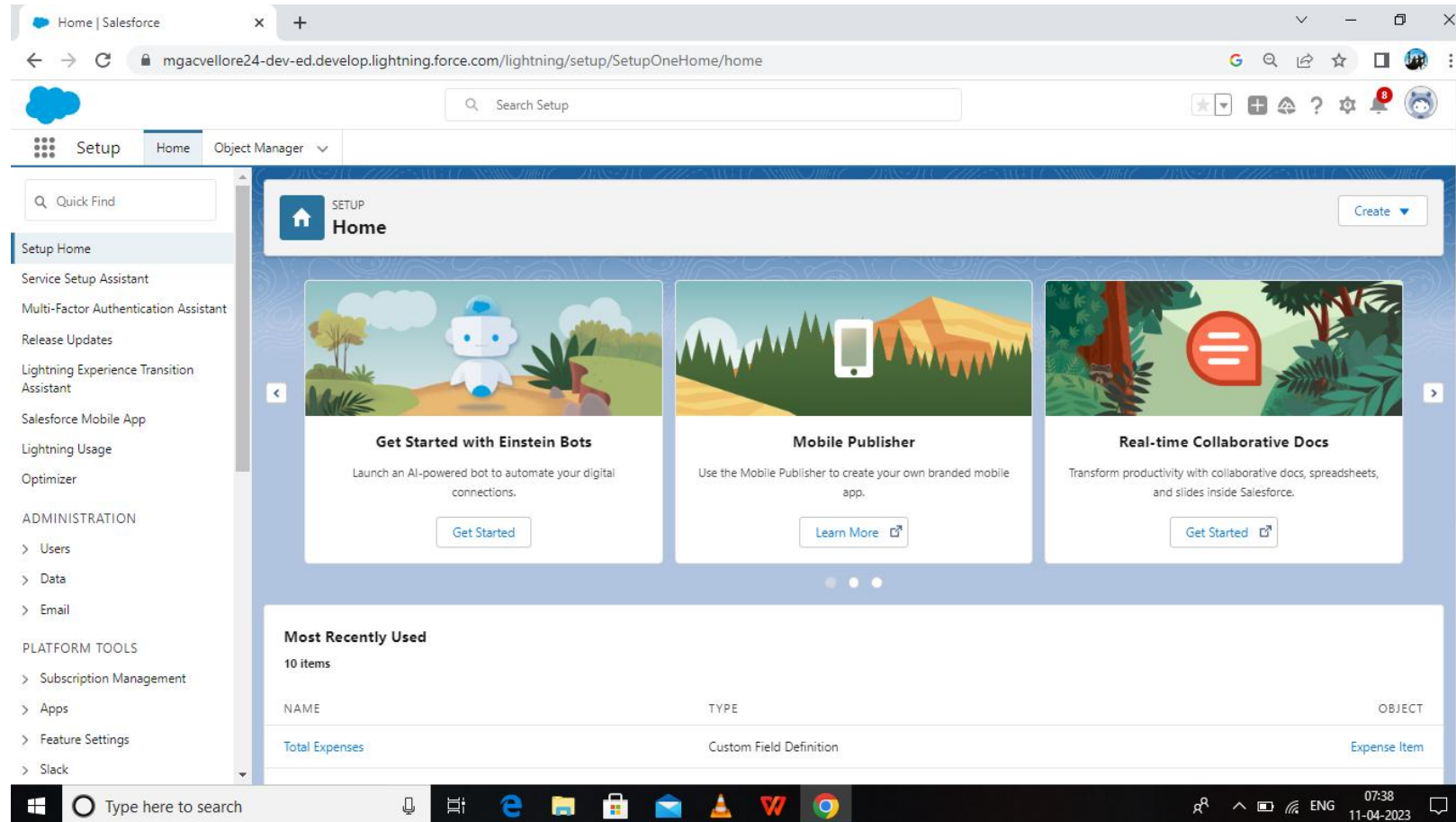
Account Activation :-

Go to the Inbox of the email that while signing up. Click on the Verivfy account to activate your account.



Login To Your Salesforce Account :

1. Go to Salesforce.com and Click on login.
2. After login this is the home page which you will see.



MILESTONE 2 - Create the Application:

Create the Travel Application

Search AppManager to quick find box, click on new lightning app.

Enter Travel Approval as the App Name, then click Next

Under app and Utility Items leave default, and click Next.

The screenshot shows the 'New Lightning App' setup page in Salesforce. The page is titled 'App Details & Branding' and includes instructions: 'Give your Lightning app a name and description. Upload an image and choose the highlight color for its navigation bar.' The form is divided into two main sections: 'App Details' and 'App Branding'.

App Details:

- *App Name:** A text input field with the placeholder 'Name your app...'.
- *Developer Name:** A text input field with the placeholder 'Enter a developer name...'.
- Description:** A text input field with the placeholder 'Enter a description...'.

App Branding:

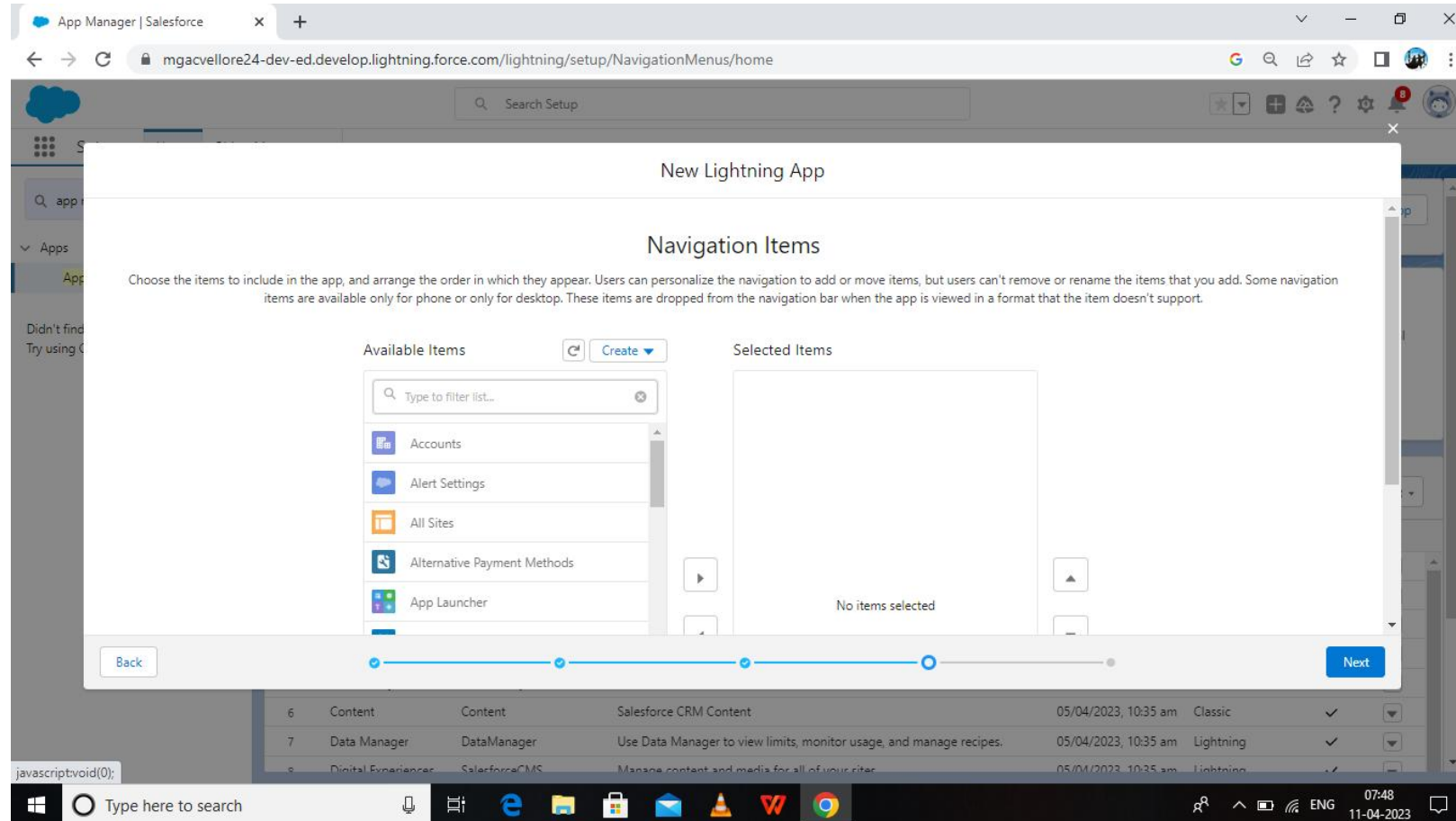
- Image:** A section with an 'Upload' button and a placeholder image.
- Primary Color Hex Value:** A dropdown menu showing a blue color and a text input field containing '#0070D2'.
- Org Theme Options:** A checkbox labeled 'Use the app's image and color instead of the org's custom theme'.

At the bottom right of the form is a blue 'Next' button. Below the form is a progress bar with four steps, the first of which is active. The background shows the Salesforce App Manager interface with a search bar and a sidebar menu.

Item	Label	Content	Created	Status
6	Content	Content	Salesforce CRM Content	05/04/2023, 10:35 am
7	Data Manager	DataManager	Use Data Manager to view limits, monitor usage, and manage recipes.	05/04/2023, 10:35 am
8	Digital Experiences	SalesforceCMS	Manage content and media for all of your sites	05/04/2023, 10:35 am

From available Profiles, select System Administrator and move it to Selected Profiles click save and Finish.

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



MILESTONE 3

Custom Object Creation

From the setup page, Click on Object manager, Click create, Click on Custom Object.
Enter label name, plural label name, click on Allow reports, Allow search and save.

The screenshot shows the Salesforce Object Manager interface. The browser address bar displays the URL: `mgacvellone24-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/home`. The page header includes a search bar and navigation tabs for Setup, Home, and Object Manager. The main content area shows a list of standard objects with columns for LABEL, API NAME, TYPE, DESCRIPTION, and LAST MODIFIED. A dropdown menu is open next to the 'Create' button, showing options for 'Custom Object' and 'Custom Object from Spreadsheet'.

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED
Account	Account	Standard Object		
Activity	Activity	Standard Object		
Alternative Payment Method	AlternativePaymentMethod	Standard Object		
API Anomaly Event Store	ApiAnomalyEventStore	Standard Object		
Appointment Invitation	AppointmentInvitation	Standard Object		
Appointment Invitee	AppointmentInvitee	Standard Object		
Appointment Topic Time Slot	AppointmentTopicTimeSlot	Standard Object		
Asset	Asset	Standard Object		
Asset Action	AssetAction	Standard Object		
Asset Action Source	AssetActionSource	Standard Object		
Asset Relationship	AssetRelationship	Standard Object		
Asset State Period	AssetStatePeriod	Standard Object		

Create 3 Objects and Tabs.

- a) Departments
- b) Travel Approval
- c) Expense Items

The screenshot shows the Salesforce 'New Custom Object' setup page in a web browser. The browser's address bar displays the URL: `mgacvellone24-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/new`. The page title is 'New Custom Object'. A yellow warning banner at the top states: 'Permissions for this object are disabled for all profiles by default. You can enable object permissions in permission sets or by editing custom profiles. [Tell me more!](#) [Don't show this message again](#)'. Below the banner is the 'Custom Object Definition Edit' section with buttons for 'Save', 'Save & New', and 'Cancel'. The 'Custom Object Information' section includes fields for 'Label' (with example 'Account'), 'Plural Label' (with example 'Accounts'), 'Object Name' (with example 'Account'), and a 'Description' text area. There is also a checkbox for 'Starts with vowel sound' and a 'Context-Sensitive Help Setting' with two radio button options: 'Open the standard Salesforce.com Help & Training window' (selected) and 'Open a window using a Visualforce page'. At the bottom, there is a 'Content Name' dropdown menu set to 'None--'. The Windows taskbar is visible at the bottom of the screen.

Setup Home Object Manager

SETUP
New Custom Object

New Custom Object [Help for this Page](#)

Permissions for this object are disabled for all profiles by default. You can enable object permissions in permission sets or by editing custom profiles. [Tell me more!](#) [Don't show this message again](#)

Custom Object Definition Edit Save Save & New Cancel

Custom Object Information ! = Required Information

The singular and plural labels are used in tabs, page layouts, and reports.

Label Example: Account

Plural Label Example: Accounts

Starts with vowel sound ☐

The Object Name is used when referencing the object via the API.

Object Name Example: Account

Description

Context-Sensitive Help Setting

☒ Open the standard Salesforce.com Help & Training window

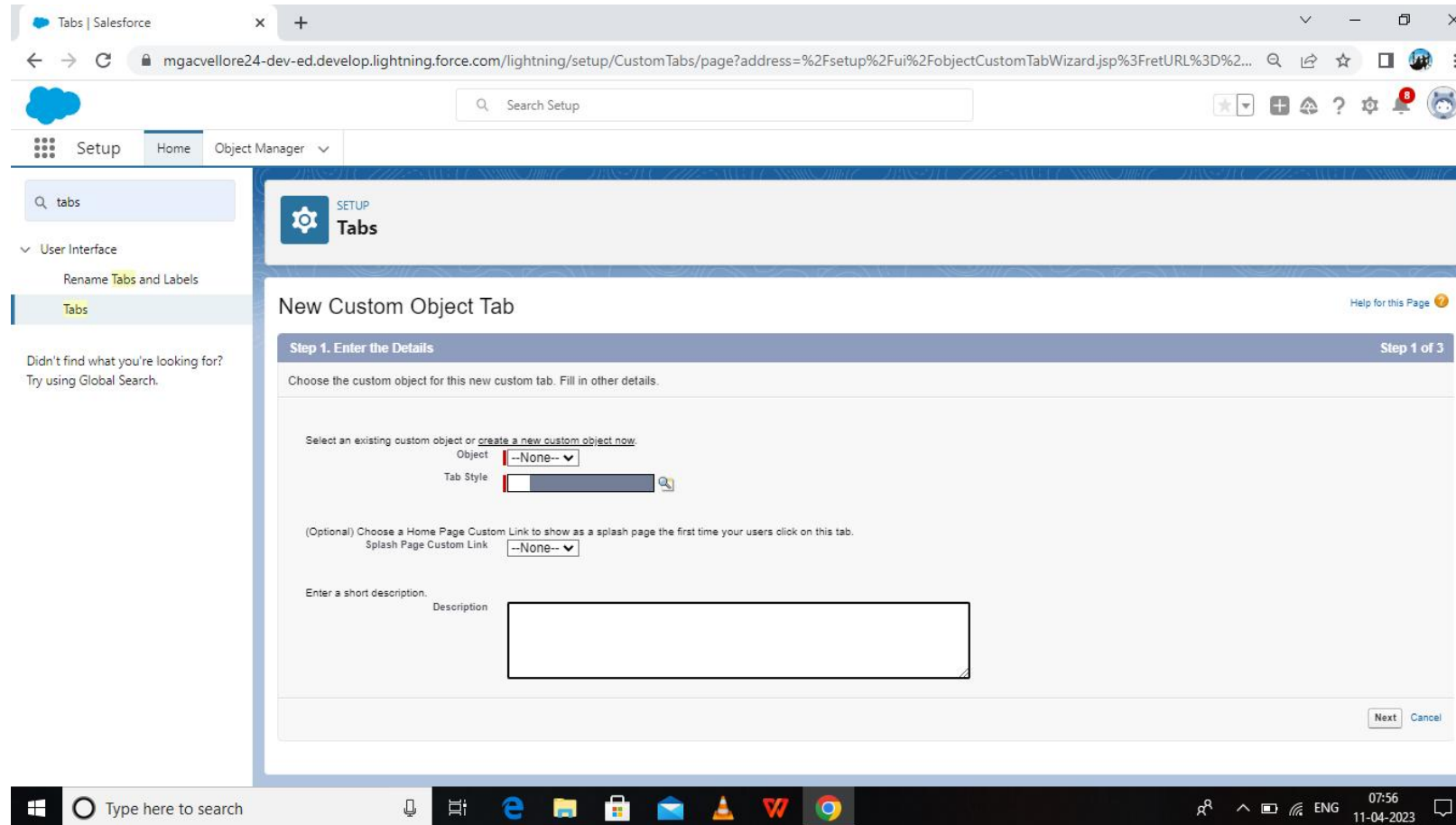
☐ Open a window using a Visualforce page

Content Name

Enter Record Name Label and Format

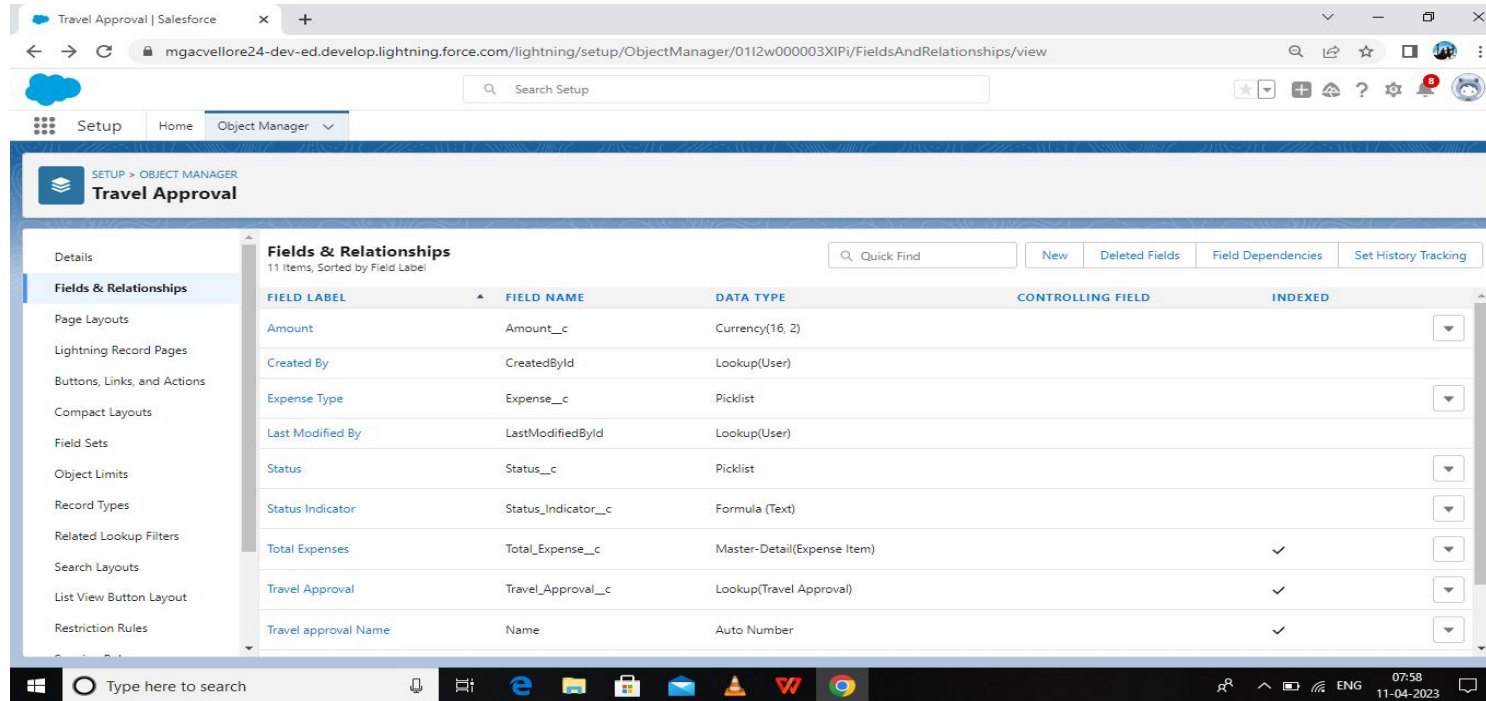
MILESTONE 4 - TABS

Click the Home tabs, enter tabs in Quick find and select Tabs Click New.
Select Event, select any icon. 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 Fields and Relationships:

Click Fields and Relationships, and Click New.



for data type, select currency. Enter these details.

- For Field label, enter Amount
- For Length enter 16
- For Decimal places, enter 2
- Select Required Click Next, Next then Save and New.

Create the Expense Type Field

Select Picklist as data type.

Select enter values, with each values in new line

Add these values (Airfare, Hotel, Rentalcars, Meals, others)

Select Required Click Next, Next then Save & New.

The screenshot displays the Salesforce Setup interface for configuring a custom object. The browser address bar shows the URL: `mgacvellore24-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/0112w000003XIPi/FieldsAndRelationships/new`. The page title is "Travel Approval | Salesforce".

The left sidebar contains the following navigation items:

- Setup
- Home
- Object Manager

The main content area is titled "SETUP > OBJECT MANAGER" and "Travel Approval". The "Fields & Relationships" section is active, showing the following fields:

- Field Label:
- Length: (Number of digits to the left of the decimal point)
- Decimal Places: (Number of digits to the right of the decimal point)
- Field Name:
- Description:
- Help Text:
- Required: ☐ Always require a value in this field in order to save a record
- Auto add to custom report type: ☒ Add this field to existing custom report types that contain this entity
- Default Value: (Show Formula Editor)

The bottom of the screen shows the Windows taskbar with the search bar and various application icons. The system clock indicates 08:02 on 11-04-2023.

Create the Travel Approval Field

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

The screenshot shows the Salesforce Setup interface for editing a custom field. The browser address bar indicates the URL is mgacvellone24-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/0112w000003XIPi/FieldsAndRelationships/page?address=%2F00N2w00000aiR.... The page title is 'Edit Travel Approval Custom Field' and the field name is 'Total Expenses'. The 'Field Information' section includes fields for 'Field Label' (Total Expenses), 'Field Name' (Total_Expense), 'Description', 'Help Text', 'Data Owner' (User), 'Field Usage' (None), 'Data Sensitivity Level' (None), and 'Compliance Categorization' (Available: PII, HIPAA, GDPR, PCI; Chosen:). The 'Master-Detail Options' section shows 'Related To' (Expense Item), 'Related List Label' (Travel Approvals), 'Sharing Setting' (Read/Write), and 'Child Relationship Name' (Travel Approvals). The 'Lookup Filter' section is also visible.

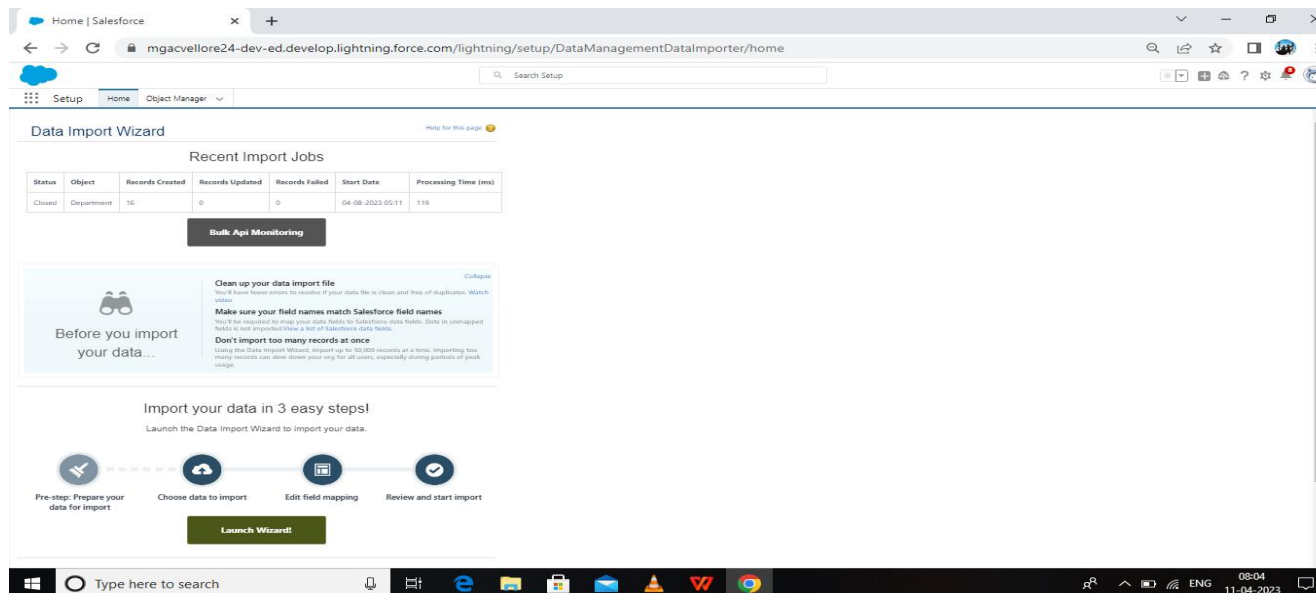
MILESTONE 5 - Import Departments

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

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

From Setup, Click the Home tab.

1. In the Quick find box, enter Data Import and select Data Import Wizard.
2. Click Launch Wizard!



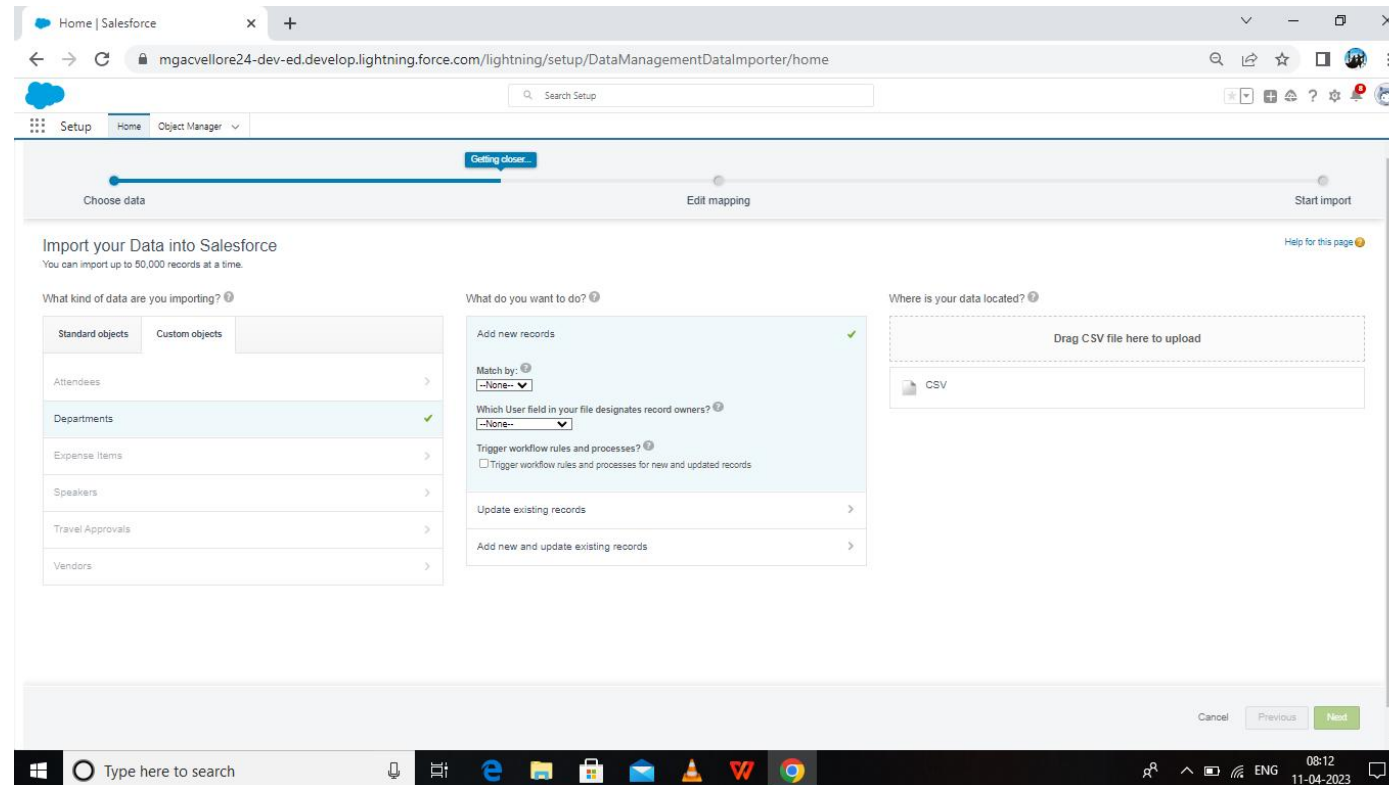
Click the Custom Objects tab and select the departments object.

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. In summary of data import. Click Start Import. Click OK on the popup.

That the process has completed and 16 records has been sucessfully imported. and you got the mail.



MILESTONE 6 - Customize User Interface

Create User and Setup Approvals

1. Enter users in the quickfind box and select users.
2. Click new user. Follow the Instruction as username feild.

The screenshot displays the Salesforce 'New User' setup page. The browser address bar shows the URL: `mgacvellingore24-dev-ed.develop.lightning.force.com/lightning/setup/ManageUsers/page?address=%2F005%2Fe%3FretURL%3D%252F005%253FisUserEntityOverrid...`. The left sidebar contains a search bar with 'user' and a list of navigation items: Users, Permission Set Groups, Permission Sets, Profiles, Public Groups, Queues, Roles, User Management Settings, Users (selected), Feature Settings, Data.com, Prospectors, User Interface, Action Link Templates, Actions & Recommendations, App Menu, Custom Labels, Density Settings, Global Actions, Publisher Layouts, Lightning App Builder, Lightning Extension, Loaded Console Tab Limit, Path Settings, and Quick Text Settings. The main content area is titled 'New User' and includes a 'User Edit' section with 'Save', 'Save & New', and 'Cancel' buttons. The 'General Information' section contains fields for First Name, Last Name, Alias, Email, Username, Nickname, Title, Company, Department, and Division. The 'Role' section includes dropdowns for Role (set to '<None Specified>'), User License (set to 'XOrg Proxy User'), and Profile (set to 'Cross Org Data Proxy User'). The 'Active' checkbox is checked. The 'Marketing User' checkbox is unchecked. The 'Offline User' checkbox is unchecked. The 'Knowledge User' checkbox is unchecked. The 'Flow User' checkbox is unchecked. The 'Service Cloud User' checkbox is unchecked. The 'Site.com Contributor User' checkbox is unchecked. The 'Site.com Publisher User' checkbox is unchecked. The 'WDC User' checkbox is unchecked. The 'Data.com User Type' dropdown is set to '--None--'. The 'Data.com Monthly Addition Limit' dropdown is set to 'Default Limit (300)'. The 'Accessibility Mode (Classic Only)' checkbox is unchecked. The 'High-Contrast Palette on Charts' checkbox is unchecked. The 'Load Lightning Pages While Scrolling' checkbox is checked. The 'Debug Mode' checkbox is unchecked. The 'Quick Access Menu' checkbox is checked. The 'Salesforce CRM Content User' checkbox is unchecked. The 'Receive Salesforce CRM Content Email Alerts' checkbox is unchecked. The 'Receive Salesforce CRM Content Alerts as Daily Digest' checkbox is unchecked. The 'Allow Forecasting' checkbox is unchecked. The 'Call Center' field is empty. The 'Phone' field is empty. The bottom status bar shows the Windows taskbar with the search bar, taskbar icons, and system tray showing the time as 08:15 on 11-04-2023.

Firstname<yourname>@<yourname>.com

....or create a username If your choice that should be unique.

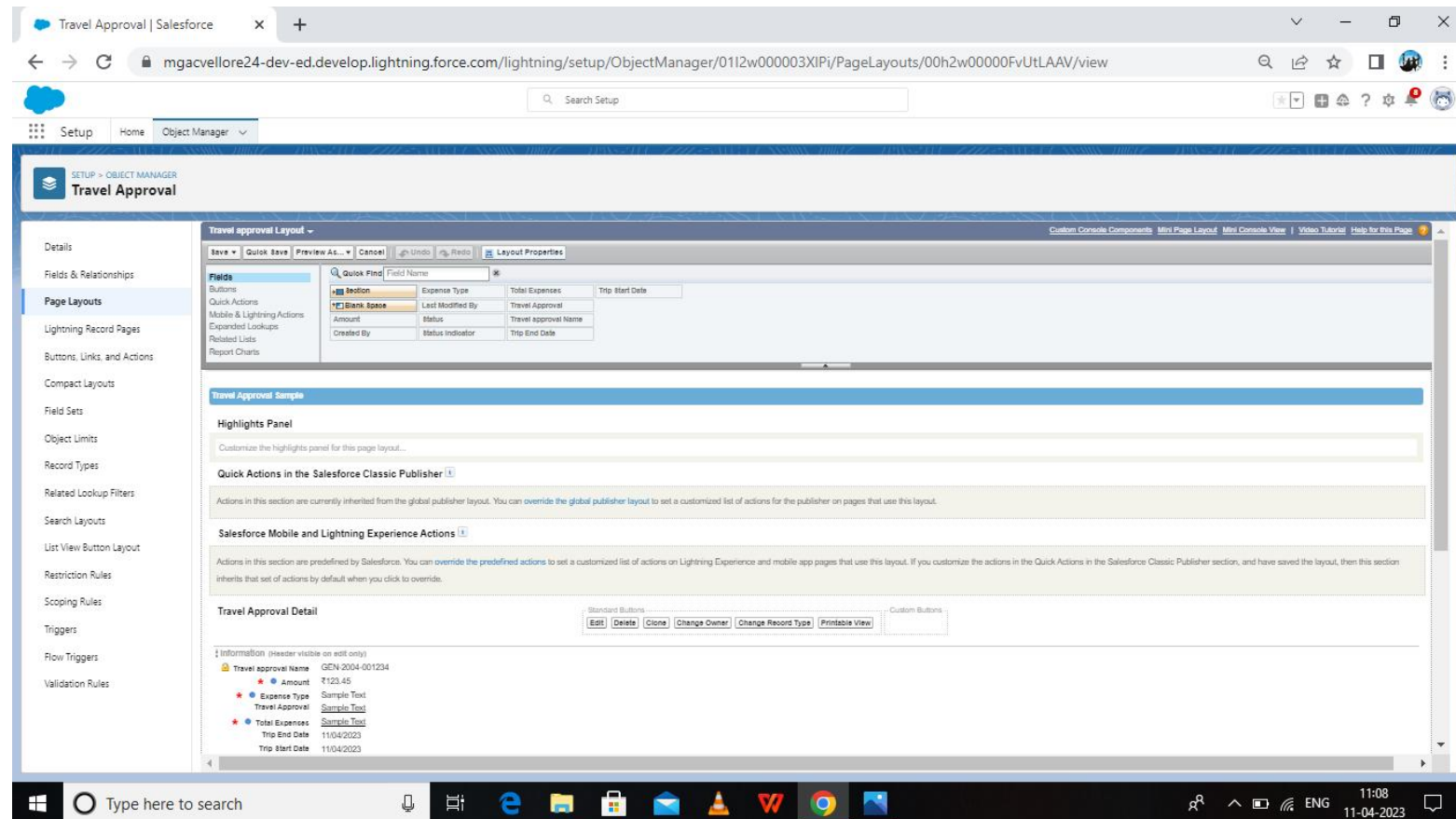
5. Give the role as a CEO, Profile as System Administrator and licence as salesforce.
6. From setup, enter Users in the Quick Find box and select Users.
7. select your user account in the last provided. Click Edit.
8. Scroll down the Approver Settings. set your manager as the user you have created recently.
9. Click Save.

MILESTONE 7 - Use Customization

Customize Travel Approval Object Page layout.

1. From the Object Manager, search for the travel approval object and click page layout and click edit.
2. Drag the section from top pane to lower pane below Information section. while dragging over page you get the visual indicator of where you can drop the new section.
3. Name the Section Trip info, leave the default then click ok.

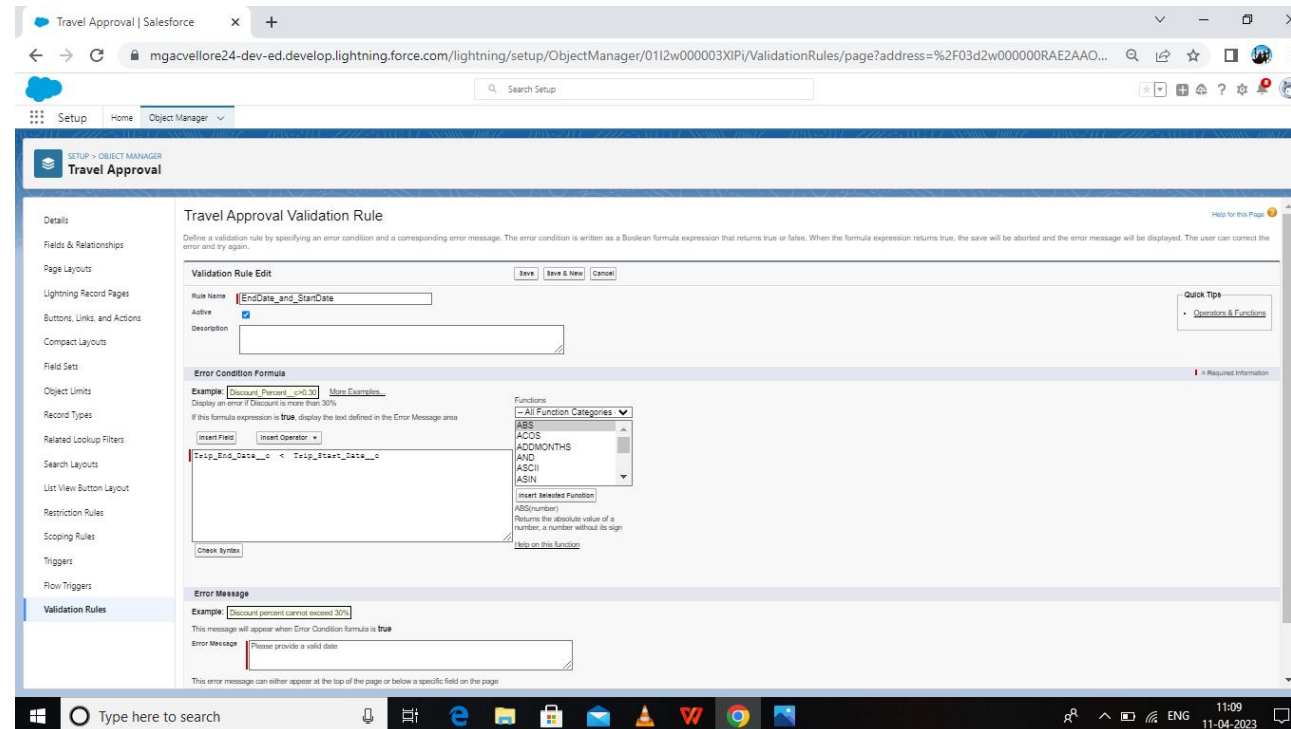
4. Drag the Purpose of trip field from the Information section to Trio section.
5. Drag the Trip End date and Trip start Date from the top of the pane into the Left of Trip Info section.
6. Drag the DEpartment field from the left hand column of trip info section to the right column.
7. Click Save. (You may need to refresh the browser to show changes)



MILESTONE 8 - Add Business Logic to Travel App

Create Validation Rule

1. Search for the travel approval object from the object manager and open object.
2. Click on Validation Rule and give your rule a name make sure rule is set to active
3. In the Error location select field and pick Trip_End_Date_c < Trip_Start_Date_c.
4. For the location select field and pick up trip end date for error.



Creat Rollup Summary F ields

1. From the Travel Apporval object,aelect Fields&Relationship. Click New
2. Select the Roll-Up Summary data type. Click New.
3. 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 Fields Lable field
4. Click Next
5. Configure the roll-up calculation.
 - Summarized Object: Expense Items
 - Roll-Up Type: SUM
 - Fields to Aggreate: Amount
 - Filter Criteria: All records should be inculded in the calculation
6. Click Next, Next, Save

Create Formula Fields

1. First,we need to upload a zip file to your Saleseforce environment that contains all the image we use. You should have a file titled StatusImages.Zip.
2. Click Custom Code| Static Resources (or enter Static in the Quick Find to filter down the options).
3. Click New Select formula data type. Click Next

Enter the following values:

Field Label: Status Indicator

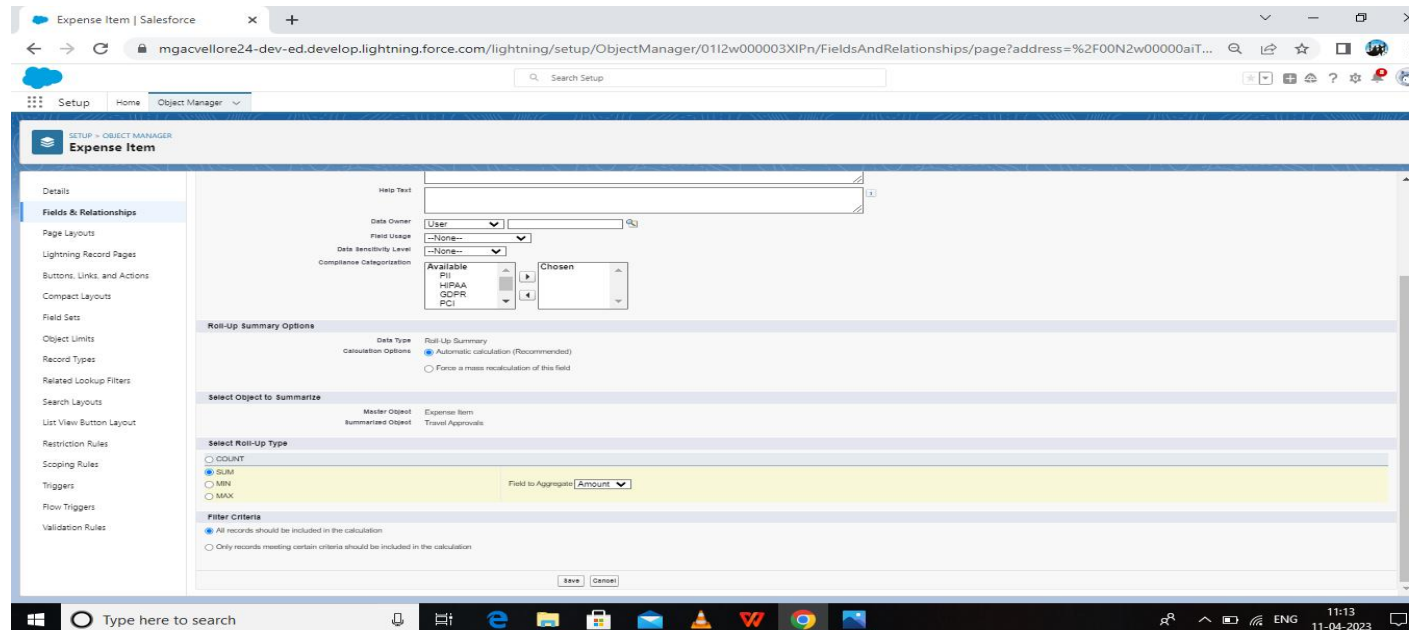
Field Name: Status_Indicator (This automatically gets sent when you tab out of the Field Label field)

Formula Return Type: Text

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.



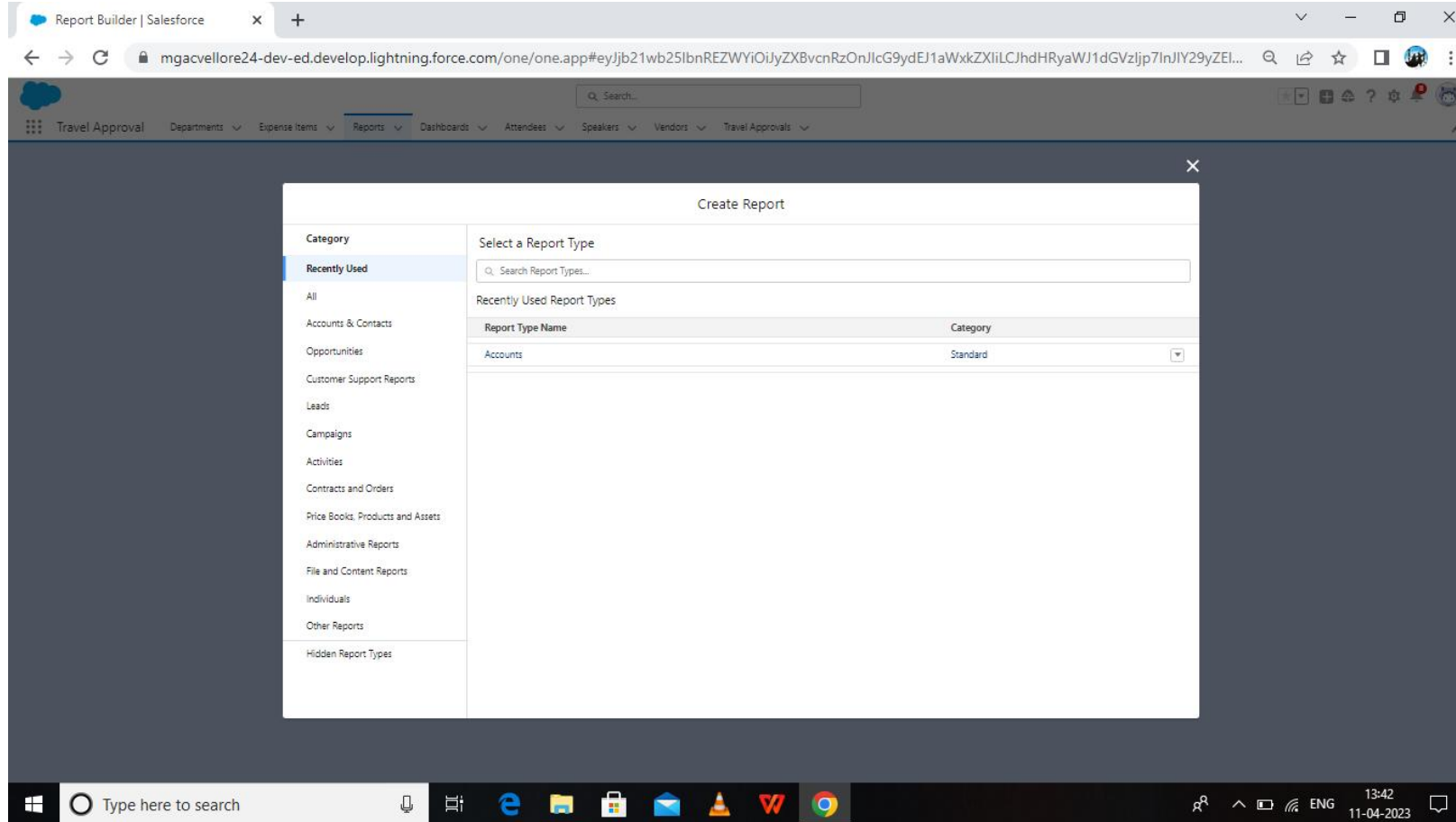
MILESTONE 10 - What are Reports

Add Reports

To create a report, Click on report tab click new report

Select Report type from catagory click on start report

Customize your report.



Then save or Run it.

Report Builder | Salesforce

mgacvellore24-dev-ed.develop.lightning.force.com/one/one.app#eyJjb21wb25lbnREZWYiOiJyZXBvcnRzOnJlcG9ydEJ1aWxkZXliLCJhdHRyaWJ1dGVzlp7InJlY29yZEl...

Search...

Travel Approval Departments Expense Items Reports Dashboards Attendees Speakers Vendors Travel Approvals

REPORT new account report Accounts Save & Run Save Close Run

Outline Filters

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

Fields

Groups

- GROUP ROWS
 - Annual Revenue
 - Employees
- GROUP COLUMNS
 - Add group...
 - Billing City

Columns

- Add column...
- Last Activity
- Account Owner
- Account Name
- Billing State/Province
- Type
- Rating
- Last Modified Date

Annual Revenue	Employees	Billing City	Austin	Burlington	Chicago	Lawrence	Mountain View	New York	Paris
-	-	Record Count	0	0	0	0	0	0	0
3,000	Record Count	0	0	0	0	0	0	0	0
24,000	Record Count	1	0	0	0	0	0	0	0
39,000	Record Count	0	0	0	0	0	0	0	0
Subtotal	Record Count	1	0	0	0	0	0	0	0
₹13,00,00,000	265	Record Count	0	0	0	0	0	1	0
Subtotal	Record Count	0	0	0	0	0	1	0	0
₹5,00,00,000	120	Record Count	0	0	0	0	1	0	0
Subtotal	Record Count	0	0	0	0	0	1	0	0
₹13,90,00,000	1,000	Record Count	0	1	0	0	0	0	0
Subtotal	Record Count	0	1	0	0	0	0	0	0

Details (12 Rows) Click an intersection in the table above to filter details.

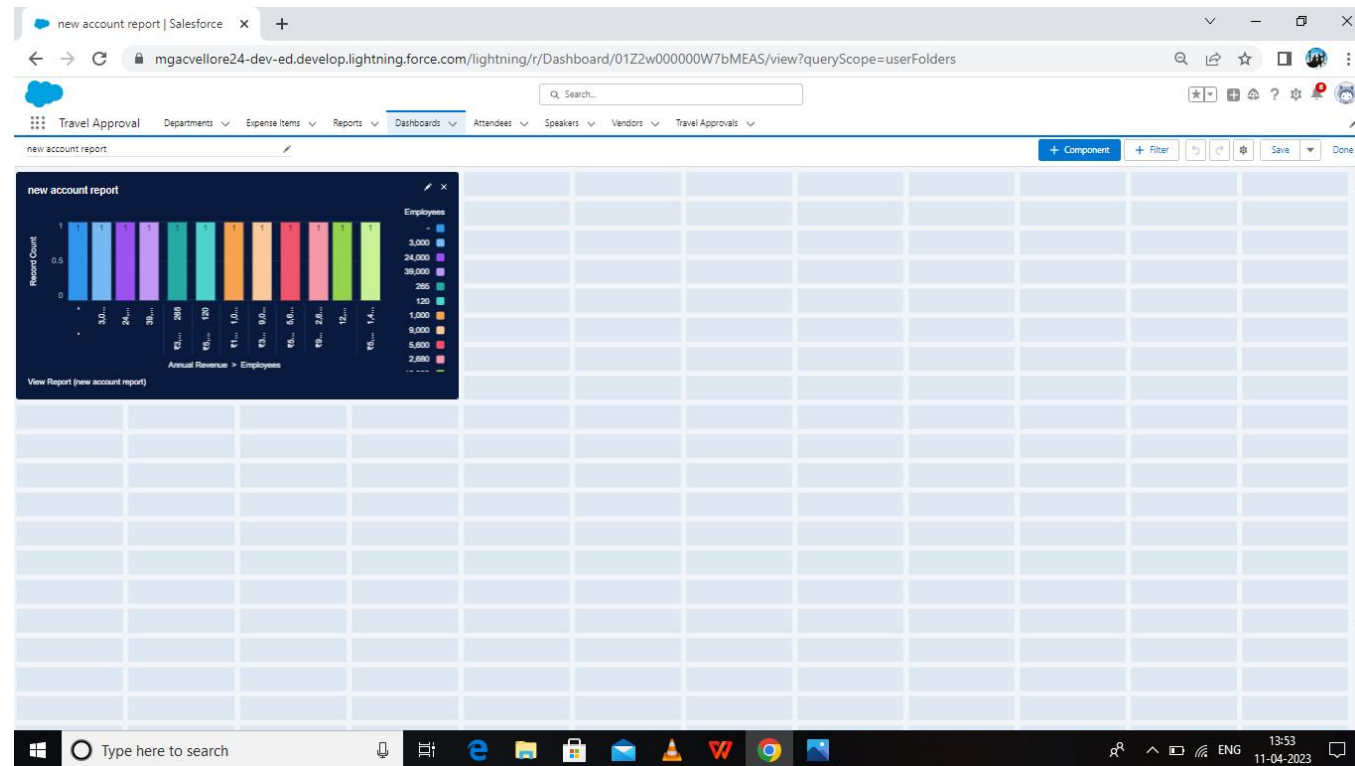
	Last Activity	Account Owner	Account Name	Billing State/Province	Type	Rating	Last Modified Date
1	-	Pragadeesh S	sForce	CA	-	-	05/04/2023
2	-	Pragadeesh S	United Oil & Gas, Singapore	Singapore	Customer - Direct	-	05/04/2023
3	-	Pragadeesh S	United Oil & Gas, UK	UK	Customer - Direct	-	05/04/2023
4	-	Pragadeesh S	University of Arizona	AZ	Customer - Direct	Warm	05/04/2023
5	-	Pragadeesh S	GenePoint	CA	Customer - Channel	Cold	05/04/2023
6	-	Pragadeesh S	Dickenson plc	KS	Customer - Channel	-	05/04/2023
7	-	Pragadeesh S	Edge Communications	TX	Customer - Direct	Hot	05/04/2023
8	-	Pragadeesh S	Burlington Textiles Corp of America	NC	Customer - Direct	Warm	05/04/2023
9	-	Pragadeesh S	Grand Hotels & Resorts Ltd	IL	Customer - Direct	Warm	05/04/2023
10	-	Pragadeesh S	Pyramid Construction Inc.	-	Customer - Channel	-	05/04/2023

Row Counts Detail Rows Subtotals Grand Total Stacked Summaries Conditional Formatting

MILESTONE 11 DASHBOARDS

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.



THANKING YOU

SMART INTERNZ TEAM