

PROJECT REPORT ON

BUILD AN EMPLOYEE TRAVEL APPROVAL APPLICATION FOR CORPORATES(ADMIN)

Create Salesforce Org

1. Go to developers.salesforce.com/
2. Click on sign up.
3. On the sign-up form, enter the following details:
4. First name & Last name : JEEVAN & K
5. Email : chintuchakri666@gmail.com
6. Role: Developer
7. Company: College Name : GAYATRI DEGREE COLLEGE-TIRUPATI
8. County: India
9. Postal Code: pin code : 517105
10. Username: jeevank@gdctirupati.com

Developer Edition link

<https://developer.salesforce.com/signup>

Account Activation

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.

Salesforce Login URL

<https://login.salesforce.com>

Object In Salesforce

Salesforce objects are database tables that permit you to store data that is specific to an organization

Salesforce objects are of two types:

1. Standard Objects

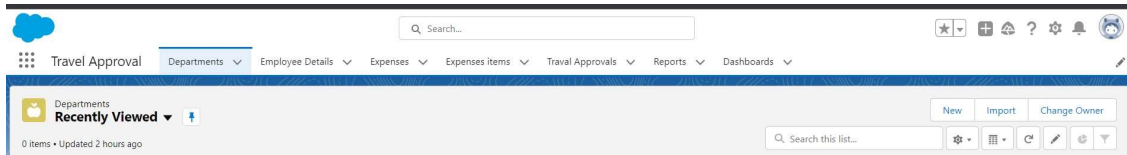
2. Custom Objects

Creation Of Department Object For Travel Approval App

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

Create Department Object:

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



What Is A Tab?

Tabs in Salesforce help users view the information at a glance. It displays the data of objects and other web content in the application.

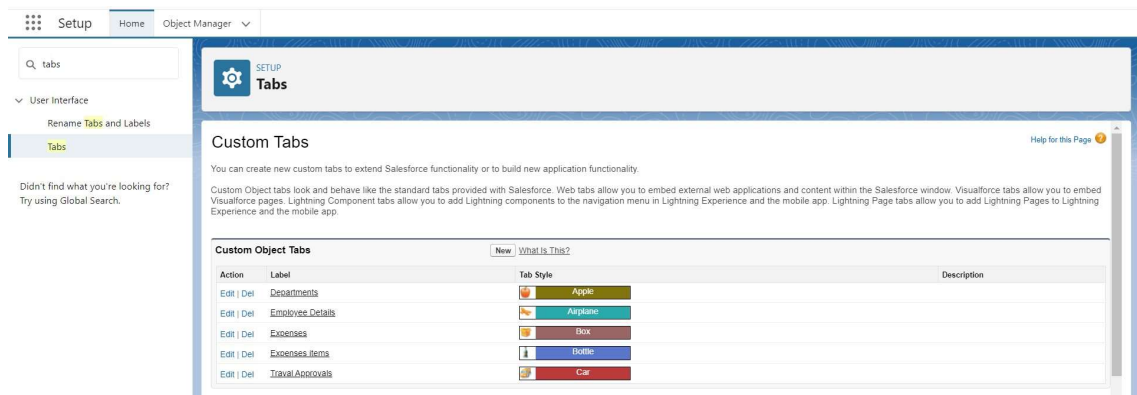
There are mainly 4 types of tabs:

- (A) Standard Object Tabs
- (B) Custom Object Tabs
- (C) Web Tabs
- (D) Visualforce Tabs

Custom Tab Creation

Now create a custom tab. Click the Home tab.

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



Lightning App

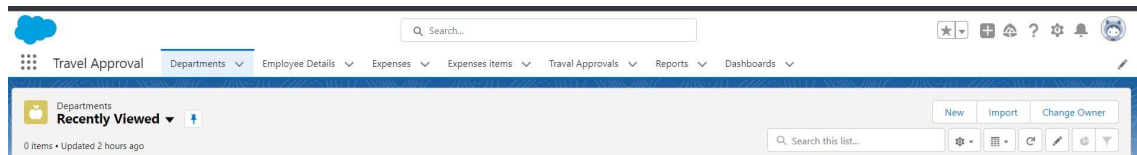
Apps in Salesforce are a group of tabs that help the application function by working together as a unit.

There are two types of apps –

1. Standard App
2. Custom Apps

Create the Travel Approval app

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



Fields And Relationships

Creation Of Fields For The Department Object:

1. Click the gear icon and select Setup. This launches Setup in a new tab.
2. Click the Object Manager tab next to Home.
3. Select Department
4. Select Fields & Relationships from the left navigation
5. Click New
6. Select the Text as the Data Type, click Next.
7. For Field Label, enter Department Code and enter 5 in Length.
8. Click Next, Next, then Save & New.
9. Follow above steps and create two more Text type field - District & State.

10. Also, Provide Length 40 for both District and State field.
11. Create URL type field & give "School website" as the field label.



Lookup Relationship With Department

Let's create a Lookup relationship with Department object on Employee Detail object. Follow steps 1 to 5 of field creation then follow below steps.

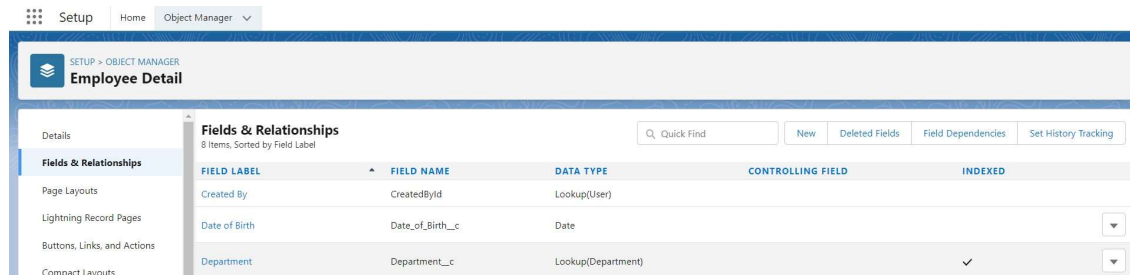
Select look up Relationship as the Data Type and click Next.

For Related to, enter Department.

Click Next.

For Field Label, enter Department.

Click Next, Next, Next and Save.

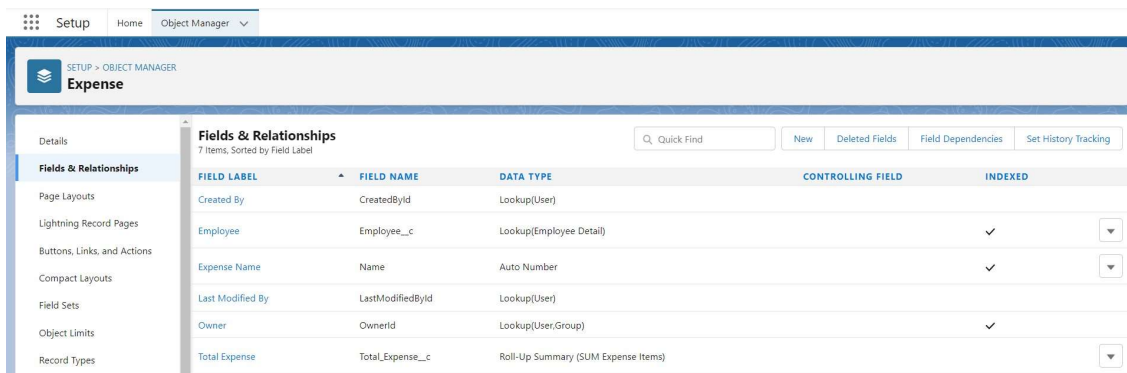


Roll Up Summary Fields On Expense Object

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

Click the gear icon Select Setup, This launches Setup in a new tab

1. click Object Manager
2. Select Expense.
3. Click Fields & Relationships
4. Click New.
 Select the Roll-up summary field as the data type
 Enter the field label as Total Expense
 Click Next
 Then select the master object summarized as Expense items
 Select Sum as roll-up and Field to aggregate Amount then click Next, Next and save.



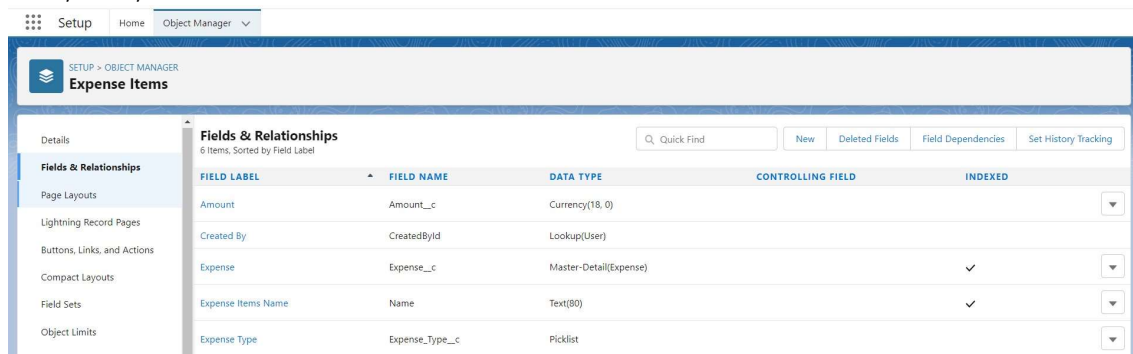
Pick List Field

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

Next, Next, then Save & Next



Import Departments

Data Import

From Setup, click the Home tab.

- 1) In the Quick Find box, enter Data Import and select Data Import Wizard.
- 2) Click Launch Wizard!
- 3) Click the Custom Objects tab and select the Departments object.
- 4) Select Add new records.
- 5) Click CSV and choose file Department CSV which we made earlier. Click Next.
- 6) Since the field names in the CSV file (CSV Header) are the same as the field names in your object (Mapped Salesforce Object), the fields are automatically mapped. Click Next.

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

The screenshot shows the 'Start Import' step of the Salesforce Data Import Wizard. It features a progress bar at the top with three stages: 'Choose data', 'Edit mapping', and 'Start import'. The main content area is divided into three sections: 'What kind of data are you importing?', 'What do you want to do?', and 'Where is your data located?'. The first section shows 'Departments' selected under 'Standard objects'. The second section shows 'Add new records' selected. The third section shows 'File' selected with 'Departments.csv' as the file name, 'ISO-8859-1' as the character code, and 'Comma' as the values separated by. At the bottom right, there are 'Cancel', 'Previous', and 'Next' buttons.

Users

A user is anyone who logs into Salesforce.

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

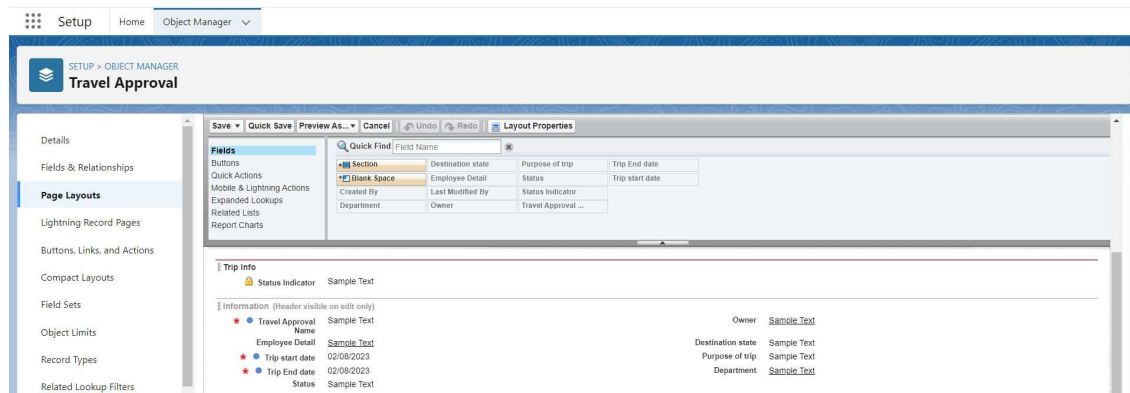
The screenshot shows the 'Users' page in Salesforce Setup. The left sidebar contains a search bar with 'users' entered and a list of navigation items including 'Users', 'Permission Set Groups', 'Permission Sets', 'Profiles', 'Public Groups', 'Queues', 'Roles', and 'User Management Settings'. The main content area is titled 'All Users' and includes a table of users. The table has columns for 'Action', 'Full Name', 'Alias', 'Username', 'Role', 'Active', and 'Profile'. The table lists several users, including 'Chatter Expert', 'K. Jeevan', 'manager Travel Approval', 'User Integration', and 'User Security'. At the bottom of the table, there are links for 'New User', 'Reset Password(s)', and 'Add Multiple Users'.

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 of where you can drop the new section.

4. Name the section Trip Info, leave the rest of the settings at their default values, and
5. Then click on OK.
6. Drag Trip Start Date and Trip End Date, Status from the top pane into the left-hand column of the Trip Info section.
7. Drag the Destination State and Purpose of a trip from, department the top pane into the right-hand column of the Trip Info section.
8. Click Save.

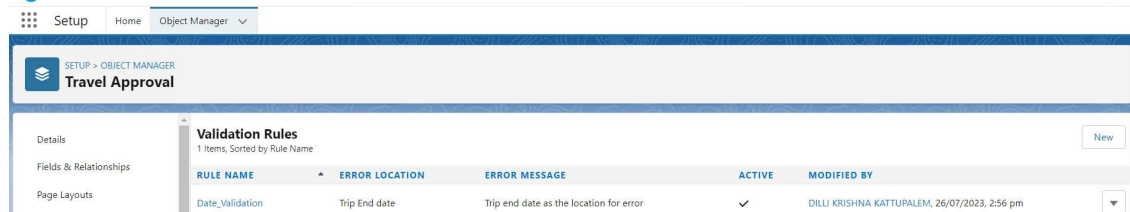


Add Business Logic To Travel App

Create Validation Rule

Search for the travel approval object from the object manager and open the object.

- 1) Click on validation rules and click new on the left corner
- 2) Give your rule name Date _ Validation and make sure that the rule is set to active.
- 3) In the error condition formula enter `Trip_End_Date c < Trip_Start_Date c`, click save.



Create Formulae Fields

1) First, we need to upload a zip file to your Salesforce environment that contains all the images we use. You should have

2) a file titled StatusImages.zip.

Now select the travel approval object.

Select Fields & Relationships, Click New

Select Formula data type, and Click Next.

Enter the following values:

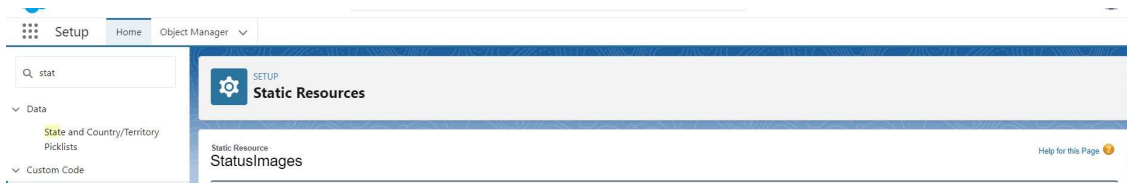
Field Label: Status Indicator ☐

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

Formula Return Type: Text

Click next & Copy and paste the following formula into the formula editor. `IF(ISPICKVAL(Status c c, 'Approved'), IMAGE("/resource/StatusImages/thumbs-up.png", "Accepted", 20, 20), IF (ISPICKVAL(Status c c, 'Rejected'), IMAGE("/resource/StatusImages/thumbs-down.png", "Rejected", 20, 20), IMAGE("/resource/StatusImages/draft.png", "In-Process", 20, 20)))`

Click Next, Next, Save.



User Adoption - Create Record

Create Record

Click App Launcher and select Travel Approval App

1)Click reports tab

2)Click New Report.

3)Click the report type as Travel approval with Departments Click Start report.

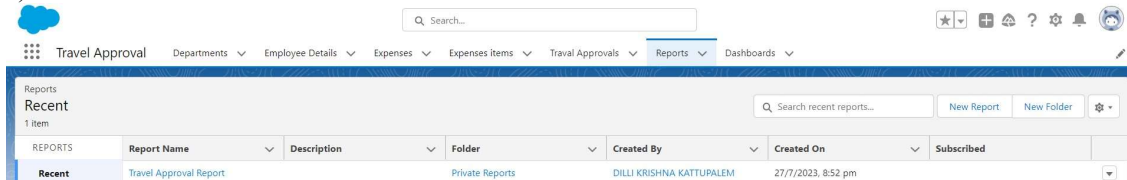
4)Customize your report, in group rows select - Department Name

5)Click refresh

6)Click save and run

7)Give report name – Travel Approval Report

8)Click Save



View Record

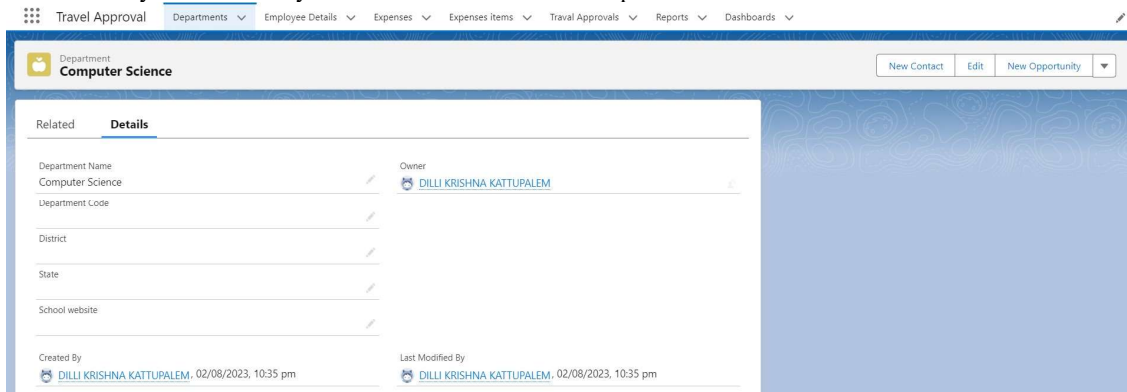
View Record (Department):

1.Click on App Launcher on left side of screen.

2.Search Travel Approval & click on it.

3.Click on Department Tab.

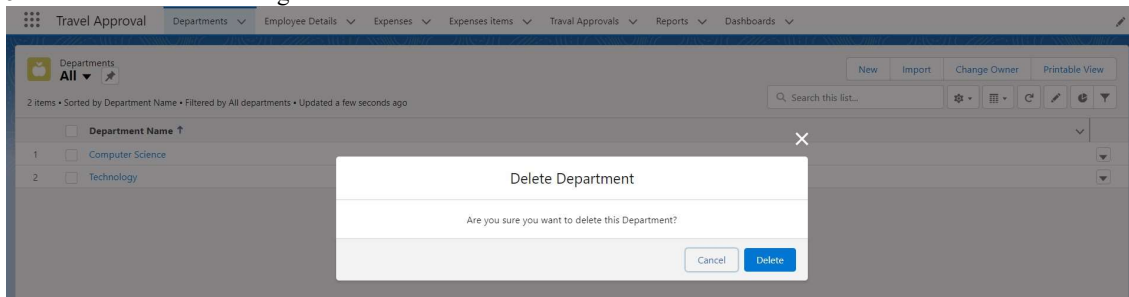
4.Click on any record name. you can see the details of the Department



Delete Record

Delete Record (Department):

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

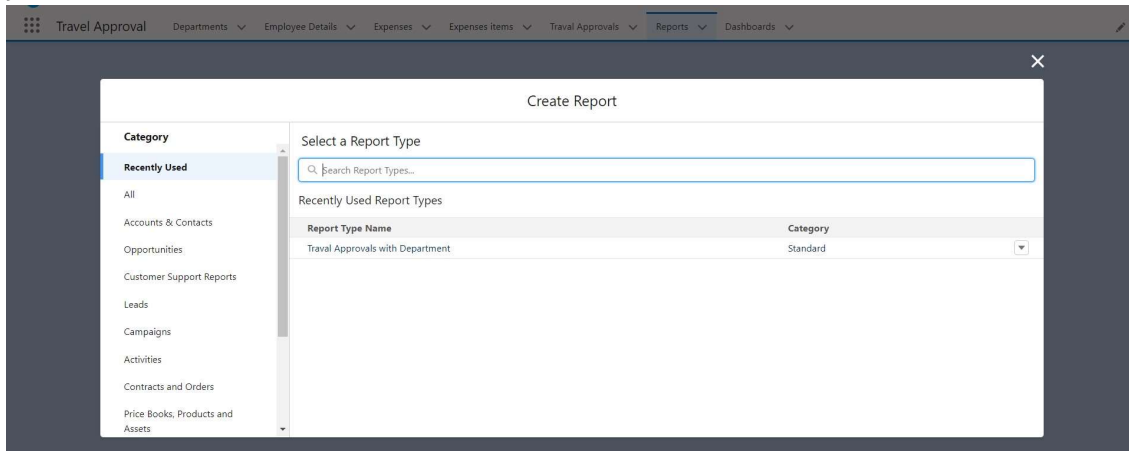


What Are Reports?

Reports in Salesforce is a list of records that meet a particular criterion which gives an answer to a particular question.

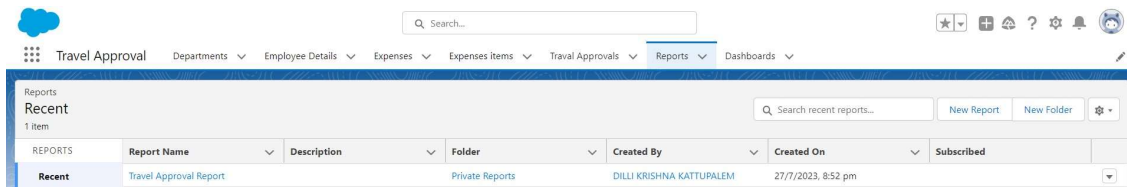
Create Report

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



View Report

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

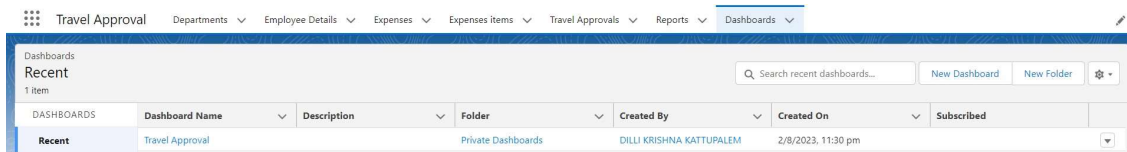


Dashboards

Dashboards let you curate data from reports using charts, tables, and metrics.

Create Dashboard

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



***** THE END*****