

## 1 INTRODUCTION

### 1.2 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.

### 1.2 Purpose

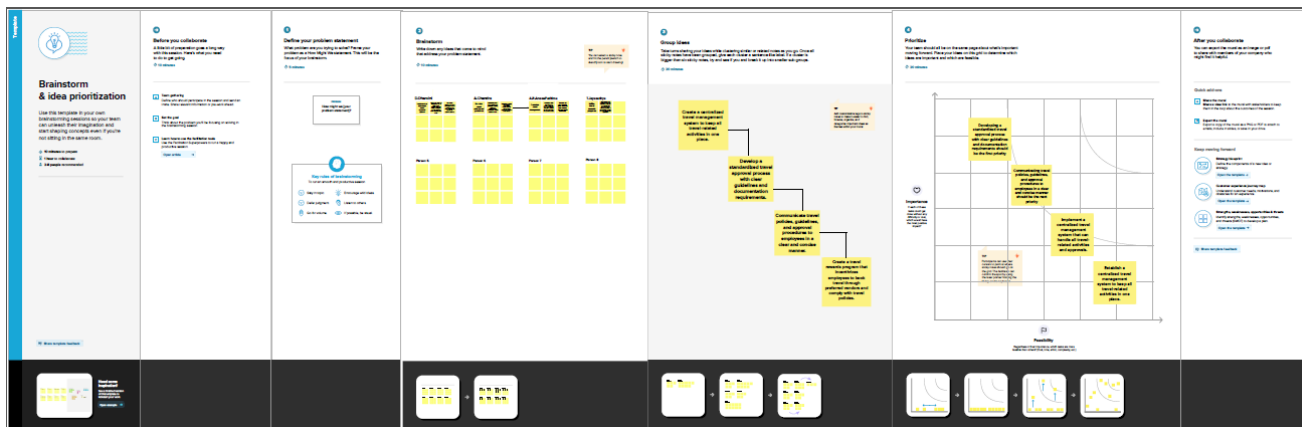
A travel approval application can provide significant benefits for companies by streamlining the approval process, controlling costs, ensuring compliance, improving travel planning, and enhancing security.

## 2 Problem Definition & Design Thinking

### 2.1 Empathy Map



### 2.2 Ideation & Brainstorming Map



### 3 RESULT

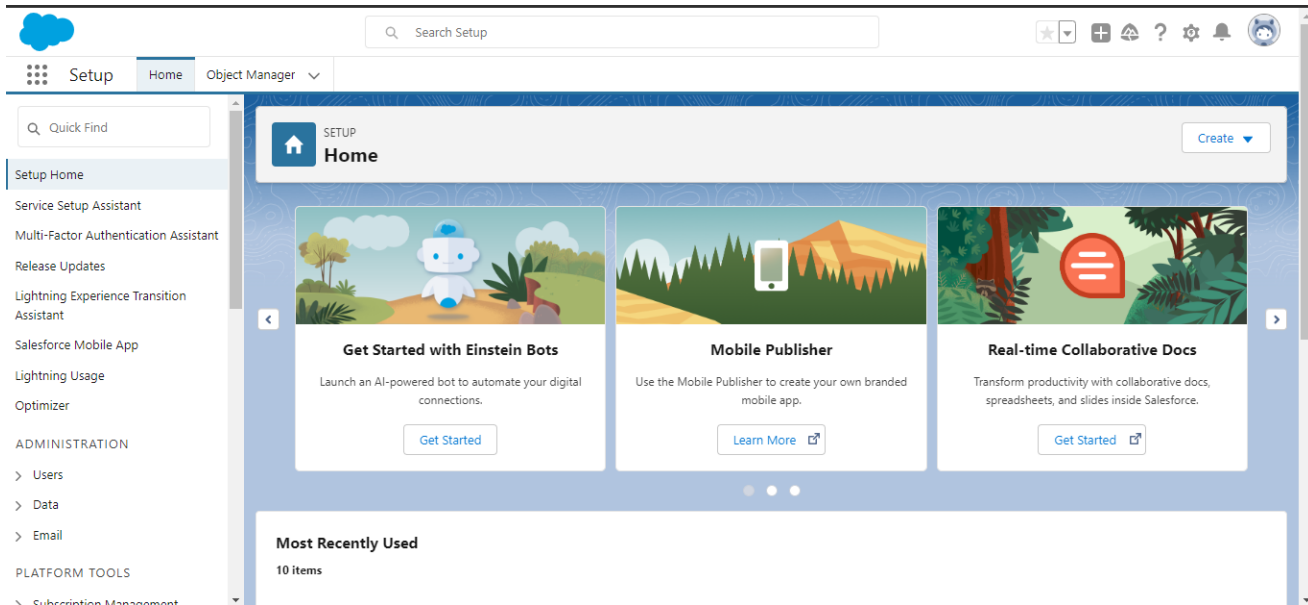
#### 3.1 Data Model:

Object name	Fields in the Object
Obj1 Department object	Field label-Department Data type -Text
Obj2 Travel approval object	Field label-Travel Approval Dta type-Auto Number
Obj3 Expense item	Field label -Expense Item Data Type-Auto Number

#### 3.2 Activity & Screenshot

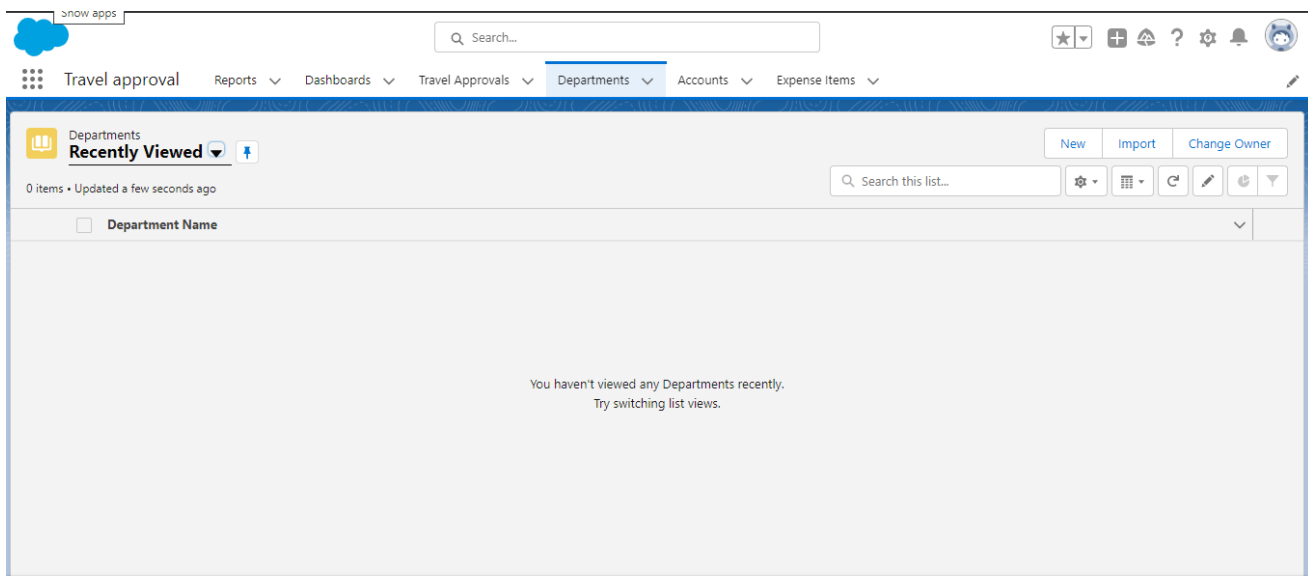
Milestone 1- Create Salesforce Org:

Creating my developer account and account activation.and login to my salesforce account.



## Milestone 2 Creating the Application:

Creat the travel application app.



## Milestone 3 -What is an object?:

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

1. Department
2. Travel approval
3. Expense Item

In Activity 1 create custom object

Cloud logo | Search Setup | Setup | Home | Object Manager

Setup > OBJECT MANAGER

### Account

**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

**Details**

EditDelete

Description	
API Name	Enable Reports
Account__c	✓
Custom	Track Activities
✓	
Singular Label	Track Field History
Account	
Plural Label	Deployment Status
Accounts	Deployed
	Help Settings
	Standard salesforce.com Help Window

And Activity 2 creat department object,travel approval object and expanse object.

Department object:

Setup > OBJECT MANAGER

### Department

**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

**Details**

EditDelete

Description	
API Name	Enable Reports
Department__c	✓
Custom	Track Activities
✓	✓
Singular Label	Track Field History
Department	
Plural Label	Deployment Status
Departments	Deployed
	Help Settings
	Standard salesforce.com Help Window

Travel approval object:

SETUP > OBJECT MANAGER

Travel Approval

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

Details

Description

API Name

Travel\_Approval\_\_c

Custom

✓

Singular Label

Travel Approval

Plural Label

Travel Approvals

Enable Reports

✓

Track Activities

✓

Track Field History

✓

Deployment Status

Deployed

Help Settings

Standard salesforce.com Help Window

Edit

Delete

Expanse item object:

SETUP > OBJECT MANAGER

Expense Item

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

Details

Description

API Name

Expense\_Item\_\_c

Custom

✓

Singular Label

Expense Item

Plural Label

Expense Items

Enable Reports

✓

Track Activities

✓

Track Field History

✓

Deployment Status

Deployed

Help Settings

Standard salesforce.com Help Window

Edit

Delete

Milestone 4 Create- Fields& Relationships :

In Activity !,2,3 creat the field and relationships for department and travel approval and expanse items.

Creat department field and relationships:

SETUP > OBJECT MANAGER

Department

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

Department Custom Field

Department Code

Back to Department

Validation Rules 00

Custom Field Definition Detail

EditSet Field-Level SecurityView Field AccessibilityWhere is this used?

Field Information

Field Label	Department Code	Object Name	Department
Field Name	Department_Code	Data Type	Text
API Name	Department_Code__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	Dharsini D. 02/04/2023, 3:51 pm	Modified By	Dharsini D. 02/04/2023, 3:51 pm

General Options

Required	<input checked="" type="checkbox"/>
----------	-------------------------------------

Creat travel approval field and relationships:

SETUP > OBJECT MANAGER

Travel Approval

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Travel Approval Field

Travel Approval #

Back to Travel Approval

Set Field-Level SecurityView Field Accessibility

Field Information

Field Label	Travel Approval #	Field Name	Name
Data Type	Auto Number		
Description			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Display Format	TA-{00000}		

Creat expanse item field and relationships:

SETUP > OBJECT MANAGER

Expense Item

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

Expense Item Custom Field

Travel Approval

Back to Expense Item

Validation Rules 00

Custom Field Definition Detail

EditSet Field-Level SecurityView Field AccessibilityWhere is this used?

Field Information

Field Label	Travel Approval	Object Name	Expense Item
Field Name	Travel_Approval	Data Type	Master-Detail
API Name	Travel_Approval__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	Dharsini D. 05/04/2023, 9:42 pm	Modified By	Dharsini D. 05/04/2023, 9:42 pm

Master-Detail Options

Related To	Travel Approval	Child Relationship Name	Expense_Items
Related List Label	Expense Items		

Milestone 5-Import Departments:

In this activity we import department csv file.

Bulk Data Load Job Detail

Reload

Job ID	7502w00000PsVUa	Job Type	Bulk V1	Status	Closed
Submitted By	Dharsini D	Operation	Insert	Total Processing Time (ms)	264
Start Time	11/04/2023, 7:57 pm IST	Queued Batches	0	API Active Processing Time (ms)	220
End Time	11/04/2023, 7:57 pm IST	In Progress Batches	0	Apex Processing Time (ms)	0
Time to Complete ([hh:mm:ss])	00:02	Completed Batches	1		
Object	Department	Failed Batches	0		
External ID Field		Progress	100%		
Content Type	CSV	Records Processed	16		
Concurrency Mode	Parallel	Records Failed	16		
API Version	57.0	Retries	0		

Reload

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>	7512w00000Vj0Vm	11/04/2023, 7:57 pm	11/04/2023, 7:57 pm	264	220	0	16	16	0		Completed

Milestone 6-Customize User Interface:

In this activity we creat user and setup approvals:

Setup	Home	Object Manager
-------	------	----------------

user

Users

Permission Set Groups

Permission Sets

Profiles

Public Groups

Queues

Roles

User Management Settings

Users

Feature Settings

Data.com

Prospector Users

User Interface

Action Link Templates

Actions & Recommendations

SETUP

Users

User Dharsini D

Permission Set Assignments (1) | Permission Set Assignments: Activation Required (0) | Permission Set Group Assignments (0) | Permission Set License Assignments (0) | Personal Groups (0) | Public Group Membership (0) | Queue Membership (0) | Team (1) | Managers in the Role Hierarchy (0) | OAuth Connected Apps (3) | Third-Party Account Links (0) | Installed Mobile Apps (0) | Authentication Settings for External Systems (0) | Login History (10x) | User Provisioning Accounts (0)

User Detail

Name

Dharsini D

Role

CEO

Alias

DD

User License

Salesforce

Email

dharsinidd@gmail.com

Profile

System Administrator

Username

dharsinidavid@salesforce.com

Active

✓

Nickname

dharsinidavid

Marketing User

✓

Title

Offline User

✓

Company

L.R.G. GOVT.ARTS.COLLEGE FOR WOMEN

Knowledge User

Department

Flow User

Division

Service Cloud User

✓

Address

IN

Site.com Contributor User

Time Zone

(GMT+05:30) India Standard Time (Asia/Kolkata)

Site.com Publisher User

Locale

English (India)

WDC User

Milestone 7- Use customization:

We creat customize travel approval object page layout in this activity.

SETUP > OBJECT MANAGER

Travel Approval

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

SaveQuick SavePreview As...CancelUndoRedoLayout Properties

EditDeleteCloneChange OwnerChange Record TypePrintable ViewSharingSharing Hierarchy

Information (Header visible on edit only)

Travel Approval #GEN-2004-001234

OwnerSample Text

StatusSample Text

DepartmentSample Text

Total Expenses₹123.45

Status IndicatorSample Text

System Information (Header visible on edit only)

Created BySample Text

Last Modified BySample Text

Trip Info

Purpose of TripSample Text

Out-of-State✓

Trip Start Date11/04/2023

Destination StateSample Text

Trip End Date11/04/2023

Custom Links (Header visible on edit only)

Mobile Cards (Salesforce mobile only)

Milestone 8-Add Business Logic to Travel App:

In activity 1 we creat a validation rule .

SETUP > OBJECT MANAGER

Travel Approval

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Travel Approval Validation Rule

Back to Travel Approval

Validation Rule Detail

EditClone

Rule NameEnd\_Date\_Start\_Date

Active✓

Error Condition FormulaTrip\_End\_Date\_\_c<Trip\_Start\_Date\_\_c

Error LocationTrip End Date

Error Messagetrip end date cannot be less then trip start date

Description

Created ByDharsini D. 05/04/2023, 9:02 pm

Modified ByDharsini D. 05/04/2023, 9:02 pm

EditClone

In activity 2 creat Rollup summary fields.



SETUP > OBJECT MANAGER

Travel Approval

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

Custom Field Definition Detail

Edit

Set Field-Level Security

View Field Accessibility

Where is this used?

Field Information

Field Label	Total Expenses	Object Name	Travel Approval
Field Name	Total_Expenses		
API Name	Total_Expenses__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	Dharsini D. 05/04/2023, 9:45 pm	Modified By	Dharsini D. 05/04/2023, 9:45 pm

Roll-Up Summary Options

Data Type	Roll-Up Summary	Summary Type	SUM
Summarized Object	Expense Item		
Field to Aggregate	Expense Item: Amount		
Filter Criteria			

In activity 3 we creat formula fields:

SETUP > OBJECT MANAGER

Travel Approval

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

Custom Field Definition Detail

Edit

Set Field-Level Security

View Field Accessibility

Where is this used?

Field Information

Field Label	Status Indicator	Object Name	Travel Approval
Field Name	Status_Indicator		
API Name	Status_Indicator__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	Dharsini D. 05/04/2023, 10:53 pm	Modified By	Dharsini D. 05/04/2023, 10:53 pm

Formula Options

Data Type	Formula
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 9 What are Reports?:

From this milestone we are going to import the data and create the reports and dashboards for data visualization in the application

Bulk Data Load Job Detail				Reload	
Job ID	7502w00000PsZ8x	Job Type	Bulk V1	Status	Closed
Submitted By	Dharsini D	Operation	Insert	Total Processing Time (ms)	445
Start Time	12/04/2023, 6:30 am IST	Queued Batches	0	API Active Processing Time (ms)	292
End Time	12/04/2023, 6:30 am IST	In Progress Batches	0	Apex Processing Time (ms)	0
Time to Complete ([hh:mm:ss])	00:01	Completed Batches	1		
Object	Travel Approval	Failed Batches	0		
External ID Field		Progress	100%		
Content Type	CSV	Records Processed	300		
Concurrency Mode	Parallel	Records Failed	229		
API Version	57.0	Retries	0		
Reload					

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>	7512w00000Vj4Pe	12/04/2023, 6:30 am	12/04/2023, 6:30 am	445	292	0	300	229	0		Completed

First we creat travel request by department.

Report: Travel Approvals

Travel Requests by Department

Enable Field Editing

<input type="checkbox"/> Department ↑	<input type="checkbox"/> Travel Approval: Travel Approval #	<input type="checkbox"/> Status	<input type="checkbox"/> Out-of-State	<input type="checkbox"/> Destination State	<input type="checkbox"/> Trip Start Date	<input type="checkbox"/> Trip End Date
<input type="checkbox"/> Audit Services (5)	TA-00025	Approved	<input type="checkbox"/>	OK	09/03/2019	09/03/2019
	TA-00050	Approved	<input type="checkbox"/>	OK	07/08/2019	07/08/2019
	TA-00033	Approved	<input type="checkbox"/>	OK	07/08/2019	07/09/2019
	TA-00041	Approved	<input type="checkbox"/>	FL	08/07/2019	08/07/2019
	TA-00045	Approved	<input type="checkbox"/>	OK	11/04/2019	11/07/2019
Subtotal			0			
<input type="checkbox"/> Contract Management (5)	TA-00010	Approved	<input type="checkbox"/>	OK	05/11/2019	05/11/2019
	TA-00067	Approved	<input type="checkbox"/>	TX	07/04/2019	07/04/2019
	TA-00068	Approved	<input type="checkbox"/>	CA	07/05/2019	07/08/2019
	TA-00071	Approved	<input type="checkbox"/>	TX	04/04/2019	04/04/2019
	TA-00035	Approved	<input type="checkbox"/>	GA	02/09/2019	02/09/2019
Subtotal			0			

Row Counts ☒ Detail Rows ☒ Subtotals ☒ Grand Total ☒

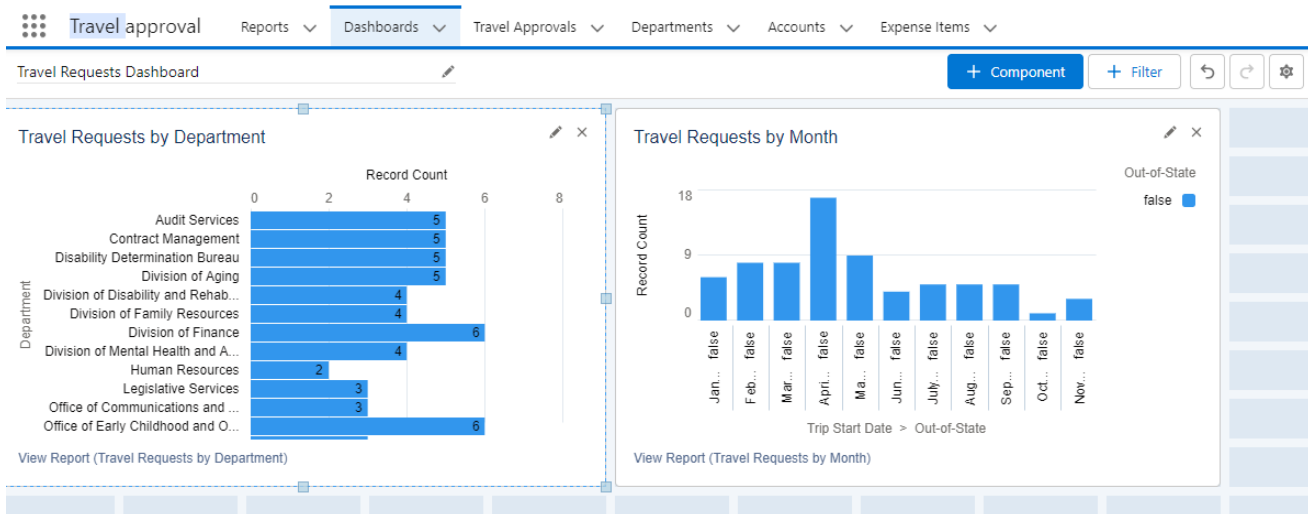
Next we creat travel request by month.

Report: Travel Approvals						
Travel Requests by Month						
Trip Start Date	Out-of-State	Travel Approval: Travel Approval #	Department	Status	Destination State	Trip End Date
January 2019 (6)	(6)	TA-00003	Disability Determination Bureau	Approved	OK	10/01/2019
		TA-00014	Division of Family Resources	Approved	TX	04/01/2019
		TA-00034	Office of Medicaid Policy and Planning	Approved	TX	07/07/2019
		TA-00039	Division of Finance	Approved	OK	02/04/2019
		TA-00040	Division of Finance	Approved	TX	10/01/2019
		TA-00073	Office of General Counsel	Approved	TX	04/01/2019
	Subtotal					
Subtotal						
February 2019 (8)	(8)	TA-00012	Office of Communications and Media	Approved	OK	06/12/2019
		TA-00027	Human Resources	Approved	GA	05/12/2019
		TA-00044	Office of General Counsel	Approved	GA	03/08/2019
		TA-00049	Division of Aging	Approved	FL	09/01/2019

Row Counts ☐ Detail Rows ☒ Subtotals ☒ Grand Total ☒

## Milestone 10- Dashboards:

In this activity We Creat travel approvals dashboard.



## 4 Trailhead Profile Public URL :

Team Lead -<https://trailblazer.me/id/dhard173>

Team Member 1 - <https://trailblazer.me/id/aneat8>

Team Member 2 - <https://trailblazer.me/id/chana98>

Team Member 3 -<https://trailblazer.me/id/jaathiya2>

## 5 ADVANTAGES & DISADVANTAGES

List of advantages:

1. Streamlining the approval process: The application can automate the approval process, reducing the time and effort required to manage requests.
2. Cost control: By implementing an approval process, companies ensure that employee travel is authorized and budgeted, helping to control costs associated with travel.

List of disadvantages:

1. Initial development costs: Developing a travel approval application can be expensive and time-consuming, particularly if it requires custom Development.
2. Maintenance and support costs: The application will need ongoing maintenance and support, which can add to the overall cost of the project

## 6 APPLICATIONS

Better travel planning: The travel approval application can help employees plan their travel more effectively, ensuring that they have the necessary approvals and that their travel plans align with company policies. This can lead to improved travel experiences for employees and better business outcomes for the company.

## 7 CONCLUSION

building an Employee Travel Approval Application for corporate requires careful planning, design, and development. It can help streamline the travel approval process, save time and resources, and improve the overall efficiency of the organization.

## 8 FUTURE SCOPE

Artificial intelligence: AI technology could be used to analyze travel data and provide insights to help companies make more informed decisions about employee travel. For example, AI could help to identify patterns in travel expenses and suggest ways to reduce costs.

Mobile accessibility: As mobile devices become increasingly popular, travel approval applications could be developed with mobile-friendly interfaces that allow employees to manage their travel requests from their smartphones or tablets

Integration with other systems: The travel approval application could be integrated with other systems such as expense management software, HR systems, or accounting systems. This would allow companies to manage all aspects of employee travel in one place and improve overall efficiency.

---