

BUILD AN EMPLOYEE TRAVEL APPROVAL APPLICATION FOR CORPORATES



1. INTRODUCTION

1.1 OVERVIEW :

The project aim is to provide real-time knowledge for all the students who have basic knowledge of Salesforce and Looking for a real-time project.



1.2 PURPOSE :

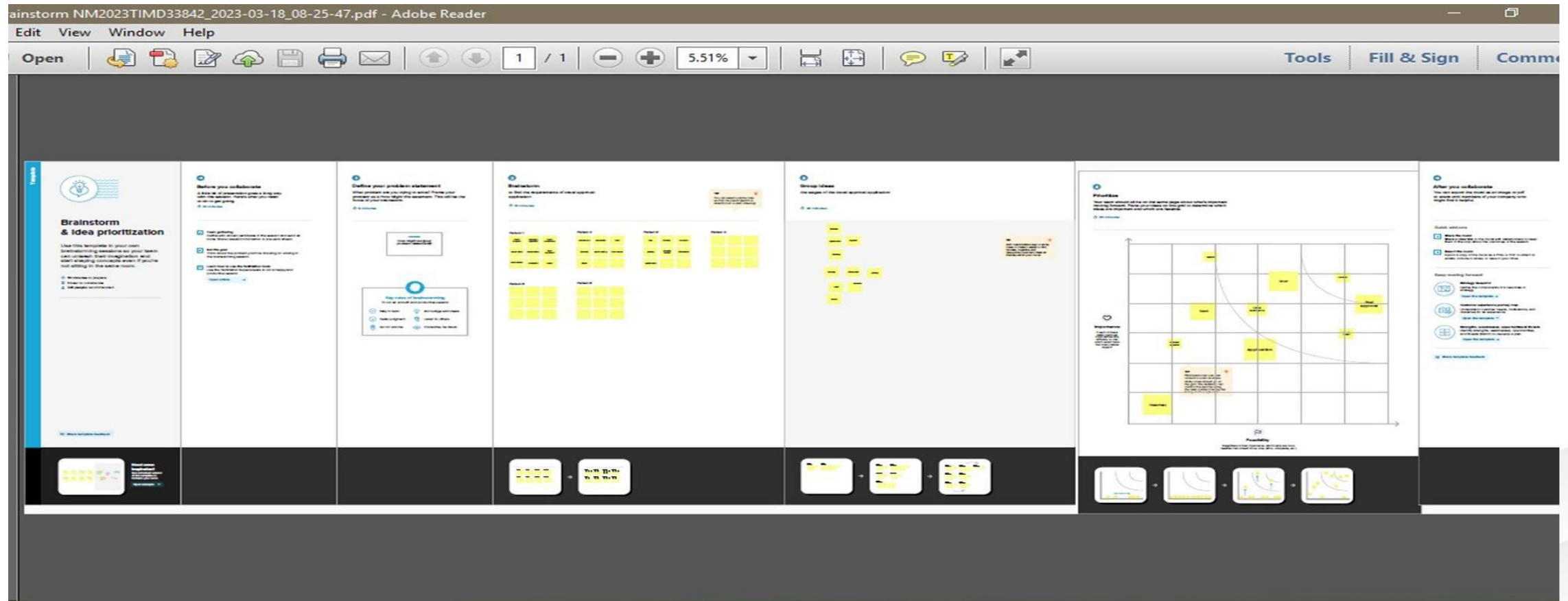
This project will also help to those professionals who are in cross- technology and wanted to switch to Salesforce with the help of this project they will gain knowledge and can include into their resume as well.



2.1 EMPATHY MAP :



2.2 IDEATION AND BRAINSTORMING MAP



3. RESULT

3.1 DATA MODEL :

Object Name	Filed in the object
Department	Field label Data Type
	Department code Text (10)
	Department Name Text (80)



Travel Approval

Field label	Data Type
Department	Lookup (Department)
Destination State	Text (2)
Out-of-State	Checkbox
Purpose of trip	Text Area (255)
Status	Picklist
Status Indicator	Formula (Text)
Total Expenses	Roll-Up Summary (Sum Expenses item)
Travel Approval	Auto Number
Trip End Date	Date
Trip Start Date	Date



	Field label	Data Type
Expenses Item	Amount	Currency (16,2)
	Expense Item	Number Auto Number
	Travel Approval	Master-Detail (Travel Approval)



3.2 ACTIVITY AND SCREENSHORT

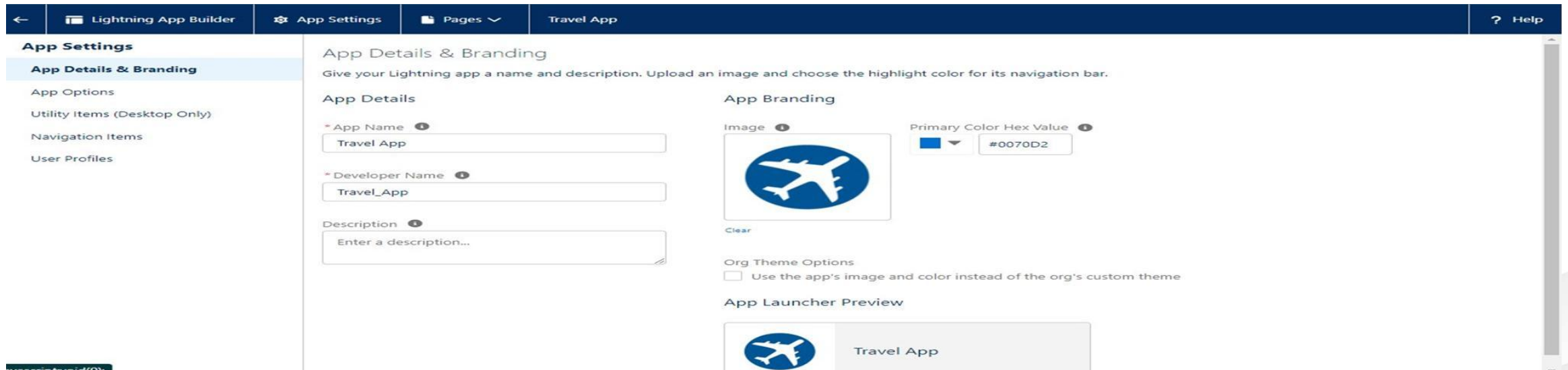
Milestone 1 - Create Salesforce Org :

We have created the developer account and login for Salesforce account.



Milestone 2 - Creating the Application :

We have created the Travel Application. For that we have used the lightning experience app manager.



The screenshot displays the 'App Settings' interface for a Lightning application named 'Travel App'. The interface is divided into a left sidebar and a main content area.

Left Sidebar (App Settings):

- App Settings
- App Details & Branding** (selected)
- App Options
- Utility Items (Desktop Only)
- Navigation Items
- User Profiles

Main Content Area (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 App
- * Developer Name: Travel_App
- Description: Enter a description...

App Branding

- Image: [Image of an airplane icon]
- Primary Color Hex Value: #0070D2
- Clear

Org Theme Options

- ☐ Use the app's image and color instead of the org's custom theme

App Launcher Preview

- [Image of the app icon] Travel App

Milestone 3 - Object :

In this Travel Approval application we need to create three objects :

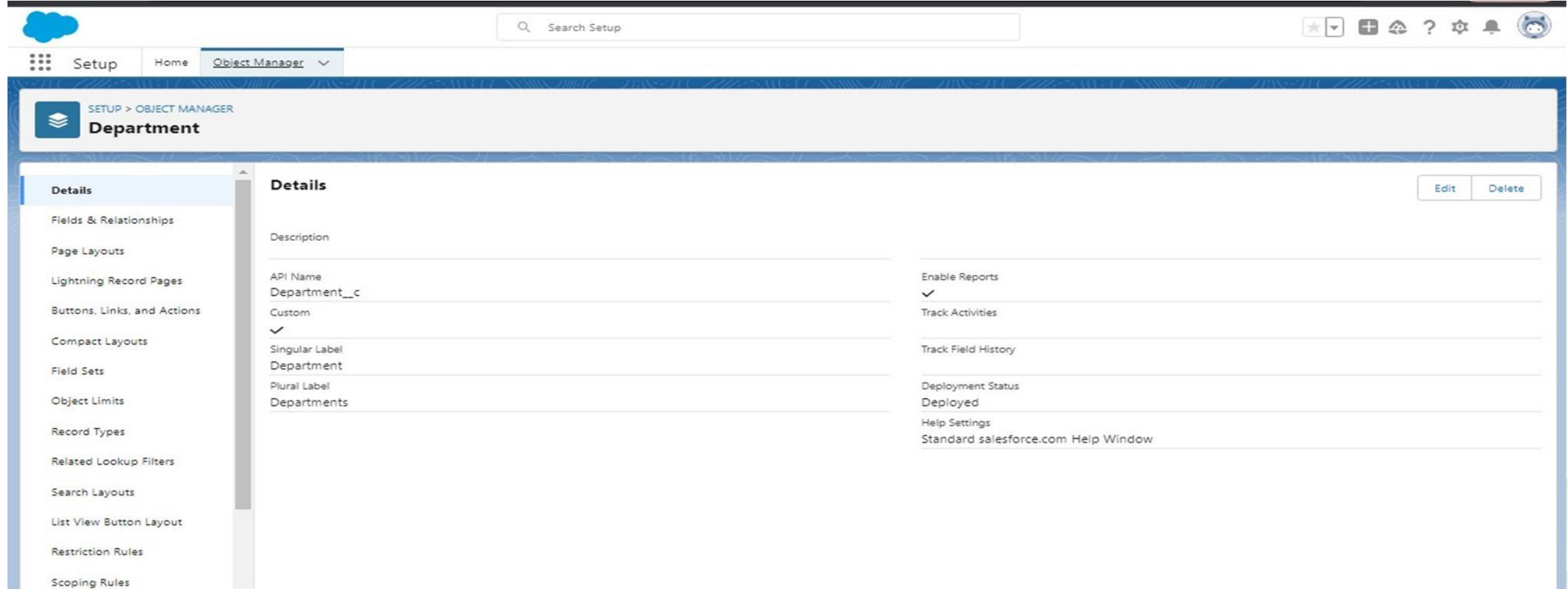
Department

Travel Approval

Expenses Item



Department



The image shows the Salesforce Setup interface for the 'Department' object. The top navigation bar includes the Salesforce logo, a search bar labeled 'Search Setup', and several utility icons. Below this, the 'Setup' menu is open, showing 'Home' and 'Object Manager' as options. The 'Object Manager' page for 'Department' is displayed, with a left sidebar containing a list of configuration options. The main content area is titled 'Details' and contains several sections: 'Description', 'API Name' (Department__c), 'Custom' (checked), 'Singular Label' (Department), 'Plural Label' (Departments), 'Enable Reports' (checked), 'Track Activities', 'Track Field History', 'Deployment Status' (Deployed), and 'Help Settings' (Standard salesforce.com Help Window). 'Edit' and 'Delete' buttons are located in the top right corner of the details section.

Setup > OBJECT MANAGER

Department

[Edit](#) [Delete](#)

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

Details

Description

API Name
Department__c

Custom
✓

Singular Label
Department

Plural Label
Departments

Enable Reports
✓

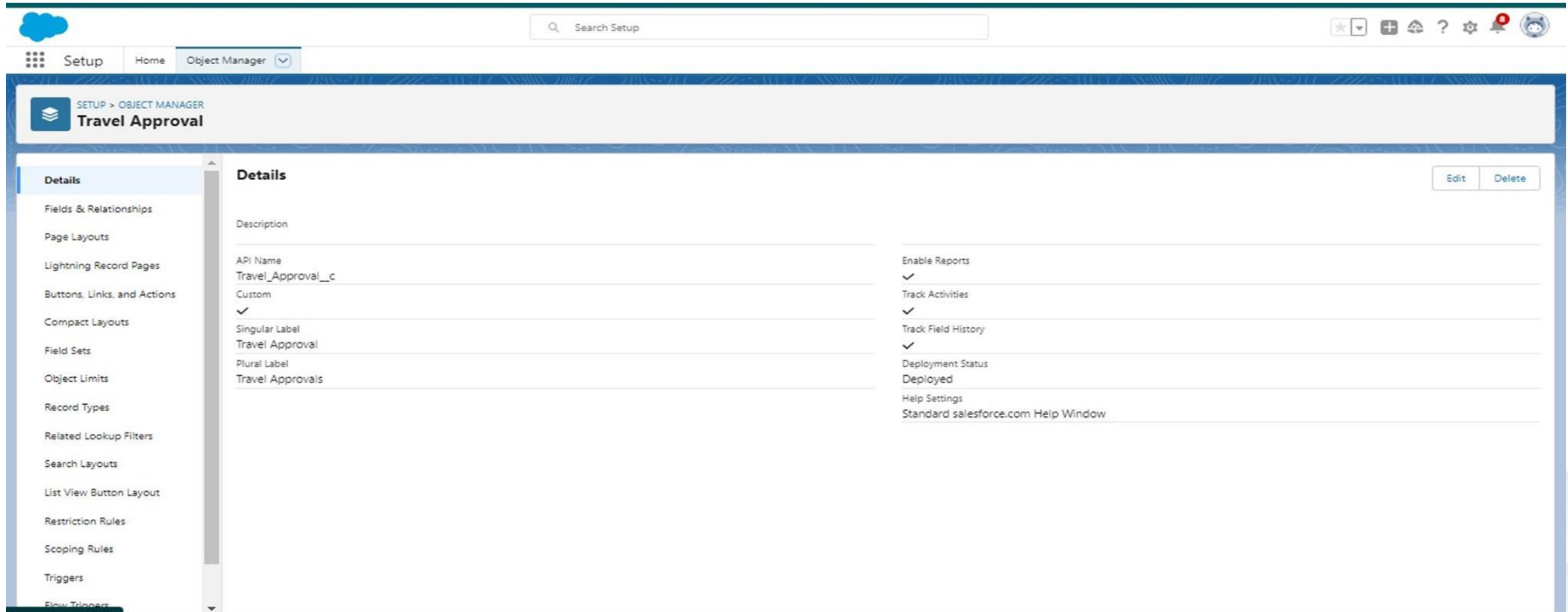
Track Activities

Track Field History

Deployment Status
Deployed

Help Settings
Standard salesforce.com Help Window

Travel Approval



The screenshot shows the Salesforce Setup interface for the 'Travel Approval' object. The top navigation bar includes the Salesforce logo, a search bar labeled 'Search Setup', and various utility icons. The main navigation menu on the left lists various setup areas, with 'Object Manager' selected. The 'Travel Approval' object is highlighted in the breadcrumb trail. The left sidebar contains a list of configuration options for the object, with 'Details' selected. The main content area displays the 'Details' configuration for the object, including fields like API Name, Custom, Singular Label, and Plural Label. The right sidebar shows the 'Enable Reports' section with checkboxes for 'Track Activities' and 'Track Field History', and the 'Deployment Status' section with a 'Deployed' status.

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
List View Button Layout
Restriction Rules
Scoping Rules
Triggers
Flow Triggers

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

Expenses Item

The screenshot shows the Salesforce Setup interface for the 'Expense Item' object. The top navigation bar includes the Salesforce logo, a search bar labeled 'Search Setup', and several utility icons. Below this, the 'Setup' menu is open, showing 'Home' and 'Object Manager' as options. The 'Object Manager' section is active, displaying the 'Expense Item' object. The left sidebar lists various configuration options for the object, with 'Details' selected. The main content area shows the 'Details' tab, which includes fields for 'Description', 'API Name' (Expense_Item__c), 'Custom' (checked), 'Singular Label' (Expense Item), and 'Plural Label' (Expense Items). On the right side of the details, there are checkboxes for 'Enable Reports' (checked), 'Track Activities', and 'Track Field History'. Below these, the 'Deployment Status' is shown as 'Deployed', and a link to 'Help Settings' is provided, pointing to the 'Standard salesforce.com Help Window'. 'Edit' and 'Delete' buttons are located in the top right corner of the details section.

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
List View Button Layout
Restriction Rules
Scoping Rules
Triggers
Flow Triggers
Validation Rules

Details [Edit](#) [Delete](#)

Description

API Name
Expense_Item__c

Custom
✓

Singular Label
Expense Item

Plural Label
Expense Items

Enable Reports
✓

Track Activities

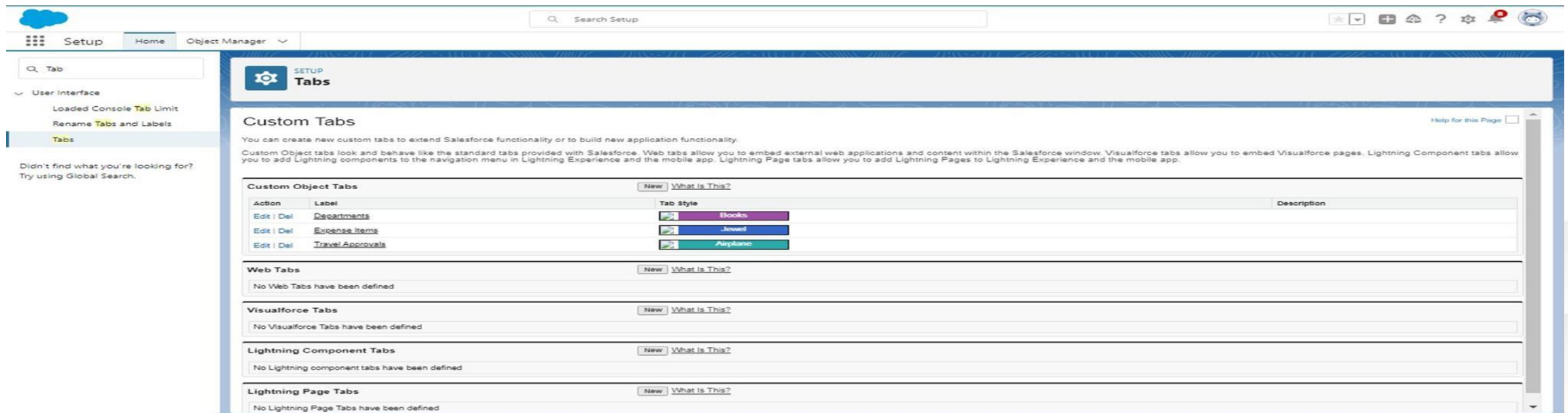
Track Field History

Deployment Status
Deployed

Help Settings
Standard salesforce.com Help Window

Milestone 4 - Tab :

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



The screenshot shows the Salesforce Setup interface for the 'Custom Tabs' section. The left sidebar contains navigation links for 'Setup', 'Home', and 'Object Manager'. The main content area is titled 'Custom Tabs' and includes a search bar and a 'Help for this Page' link. Below the title, there is a descriptive paragraph about creating custom tabs. The interface is divided into five sections, each with a 'New' button and a 'What Is This?' link:

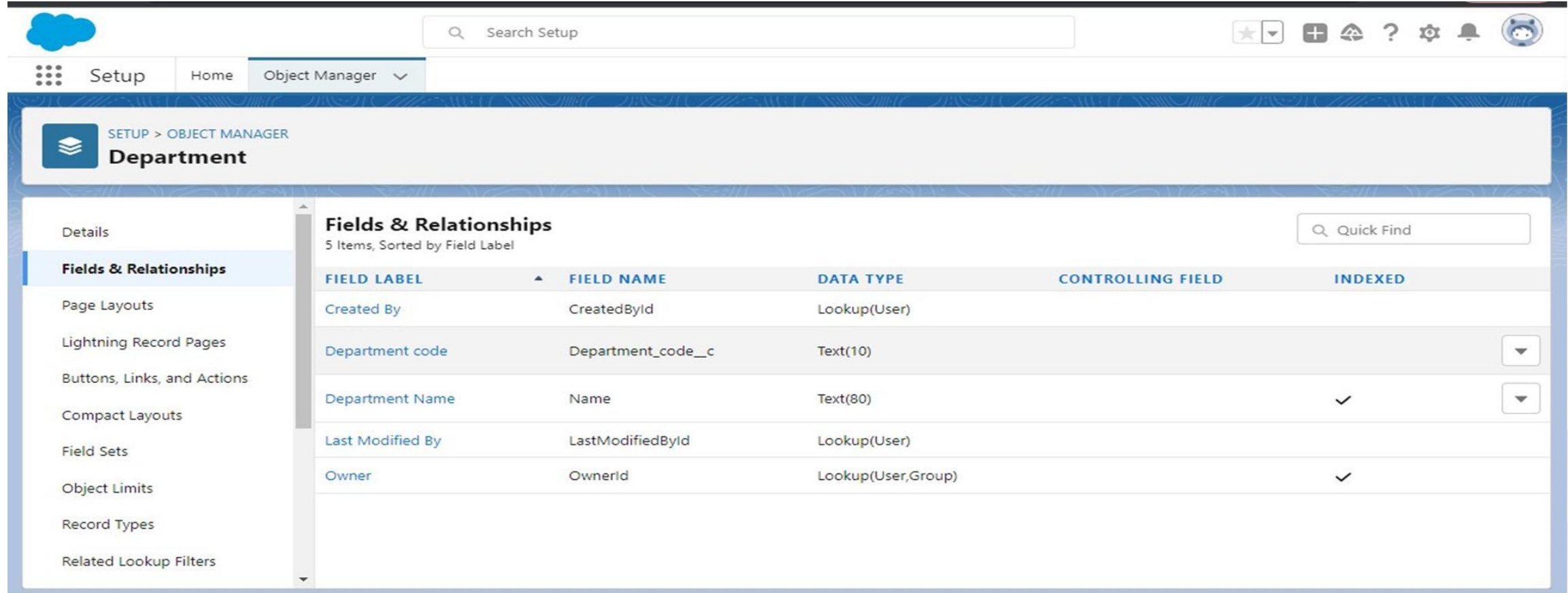
- Custom Object Tabs:** A table with columns for 'Action', 'Label', 'Tab Style', and 'Description'. It lists three tabs: 'Departments' (with 'Edit | Del' actions), 'Expense Items' (with 'Edit | Del' actions), and 'Travel Approvals' (with 'Edit | Del' actions). The 'Tab Style' column shows icons for 'Books', 'Jewelry', and 'Airplane'.
- Web Tabs:** A section indicating 'No Web Tabs have been defined'.
- Visualforce Tabs:** A section indicating 'No Visualforce Tabs have been defined'.
- Lightning Component Tabs:** A section indicating 'No Lightning component tabs have been defined'.
- Lightning Page Tabs:** A section indicating 'No Lightning Page Tabs have been defined'.

Milestone 5 - Create-Fields and Relationships :

Fields in Salesforce represents about the columns in relational databases mean. It can store data values which are required for a particular object in a record.



Department



The screenshot shows the Salesforce Setup interface for the 'Department' object. The top navigation bar includes the Salesforce logo, a 'Search Setup' field, and various utility icons. The left sidebar contains navigation links: Setup, Home, and Object Manager (selected). The main content area is titled 'SETUP > OBJECT MANAGER Department'. A left-hand menu lists options: Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, and Related Lookup Filters. The 'Fields & Relationships' section displays a table of 5 items, sorted by Field Label. A 'Quick Find' search box is located in the top right of this section. The table has columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed. The rows are: Created By (CreatedBy, Lookup(User)), Department code (Department_code__c, Text(10)), Department Name (Name, Text(80)), Last Modified By (LastModifiedById, Lookup(User)), and Owner (OwnerId, Lookup(User,Group)).

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

5 Items, Sorted by Field Label








Quick Find

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedBy	Lookup(User)		
Department code	Department_code__c	Text(10)		
Department Name	Name	Text(80)		✓
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		✓

Travel Approval



Search Setup



SetupHomeObject Manager

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

List View Button Layout

Restriction Rules

Scoping Rules

Triggers

Flow Triggers

Validation Rules

13 Items, Sorted by Field Label

Quick Find

NewDeleted FieldsField DependenciesSet History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Department	Department__c	Lookup(Department)		✓
Destination State	Destination_State__c	Text(2)		
Last Modified By	LastModifiedById	Lookup(User)		
Out of State	Out_of_State__c	Checkbox		
Owner	OwnerId	Lookup(User,Group)		✓
Purpose of Trip	Purpose_of_Trip__c	Text Area(255)		
Status	Status__c	Picklist		
Status Indicator	Status_Indicator__c	Formula (Text)		
Total Expenses	Total_Expenses__c	Roll-Up Summary (SUM Expense Item)		
Travel Approval	Name	Auto Number		✓
Trip End Date	Trip_End_Date__c	Date		
Trip Start Date	Trip_Start_Date__c	Date		



Expenses Item

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
- List View Button Layout
- Restriction Rules
- Scoping Rules
- Triggers

Fields & Relationships

6 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Amount	Amount__c	Currency(16, 2)		
Created By	CreatedById	Lookup(User)		
Expense Item Number	Name	Auto Number		✓
Expense type	Expense_type__c	Picklist		
Last Modified By	LastModifiedById	Lookup(User)		
Travel Approval	Travel_Approval__c	Master-Detail(Travel Approval)		✓

Milestone 6 - Import Department :

The screenshot shows the Salesforce Setup interface. The left sidebar contains a search bar with 'imp' and a navigation menu with 'User Interface', 'Translation Workbench', 'Import', and 'Integrations'. The main content area is titled 'Bulk Data Load Jobs' and displays details for a specific job. The job details include a table with various metrics and a 'Bulk Data Load Job Detail' section with a 'Reload' button.

Setup | Home | Object Manager

Search Setup

imp

User Interface

Translation Workbench

Import

Integrations

Data Import Wizard

Didn't find what you're looking for? Try using Global Search.

Bulk Data Load Jobs

Bulk Data Load Job
7505i00000Gk2Sx

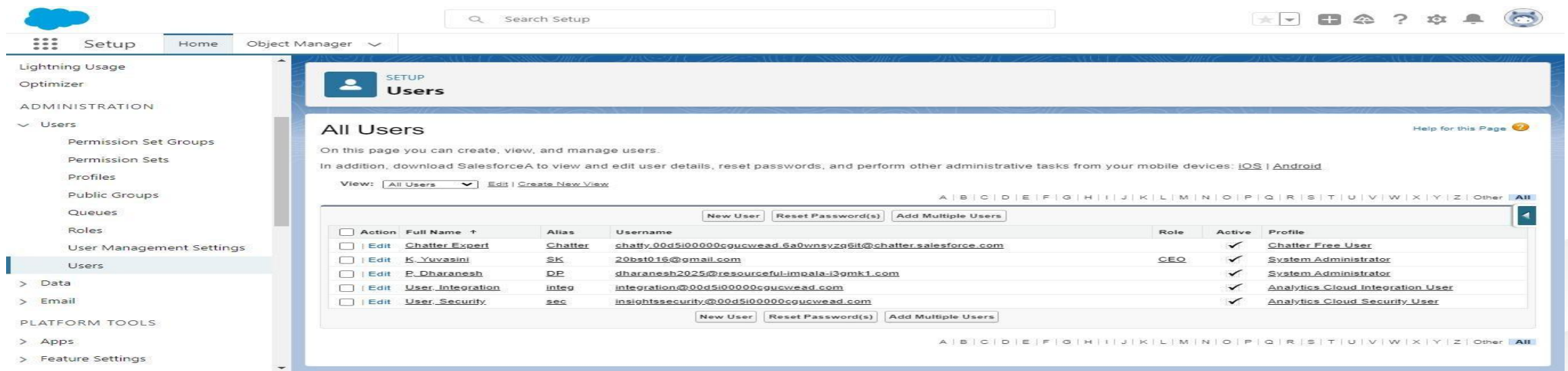
View the details of a bulk data load job.

[Back to List: Bulk Data Load Jobs](#)

Bulk Data Load Job Detail				
Job ID	7505i00000Gk2Sx	Job Type	Bulk V1	Status
Submitted By	Dharanesh P	Operation	Insert	Closed
Start Time	21/04/2023, 1:38 pm IST	Queued Batches	0	Total Processing Time (ms)
End Time	21/04/2023, 1:38 pm IST	In Progress Batches	0	API Active Processing Time (ms)
Time to Complete (hh:mm:ss)	00:00	Completed Batches	1	Apex Processing Time (ms)
Object	Department	Failed Batches	0	
External ID Field		Progress	100%	
Content Type	CSV	Records Processed	16	
Concurrency Mode	Parallel	Records Failed	0	

Milestone 7 - Customize User Interspace :

In this Milestone we have setup the users, customizing the page layout.

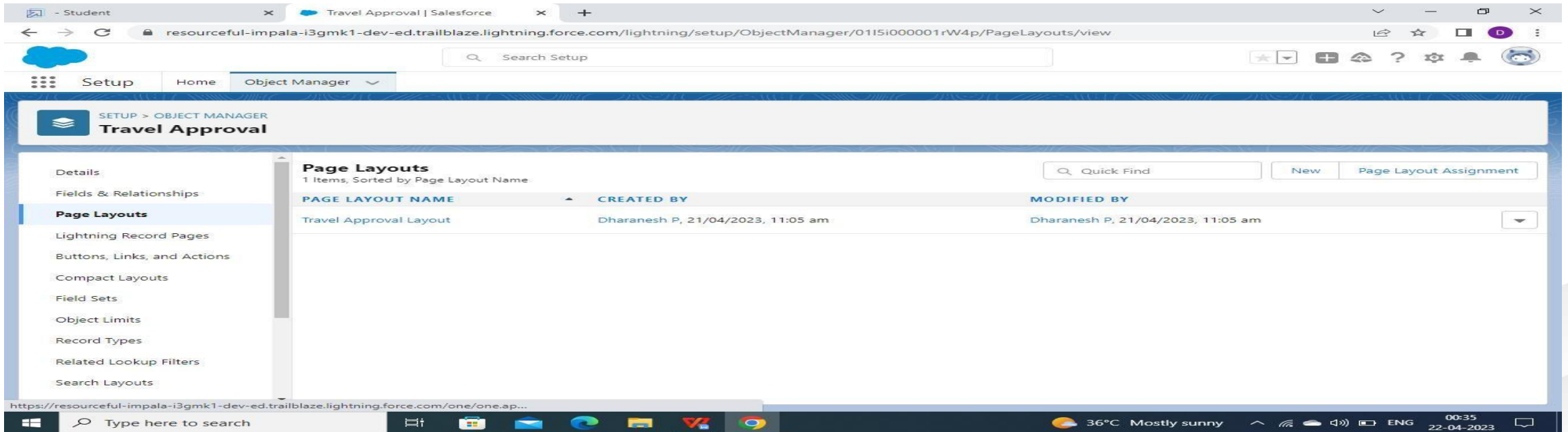


The screenshot shows the Salesforce Setup interface for managing users. The left sidebar contains navigation links for Setup, Home, and Object Manager. The main content area is titled 'Users' and includes a search bar, a 'View: All Users' dropdown, and a table of users. The table has columns for Action, Full Name, Alias, Username, Role, Active, and Profile. The table lists five users: Chatter Expert, K. Yuvashini, P. Dharanesh, User Integration, and User Security. The bottom of the page features a decorative image of a group of people holding hands.

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/> Edit	Chatter Expert	Chatter	chatty.00d5i00000cgucwead.6a0wnsvzg6it@chatter.salesforce.com		✓	Chatter Free User
<input type="checkbox"/> Edit	K. Yuvashini	SK	20bst016@gmail.com	CEO	✓	System Administrator
<input type="checkbox"/> Edit	P. Dharanesh	DP	dharanesh2025@resourceful-impala-j39mk1.com		✓	System Administrator
<input type="checkbox"/> Edit	User Integration	integ	integration@00d5i00000cgucwead.com		✓	Analytics Cloud Integration User
<input type="checkbox"/> Edit	User Security	sec	insightssecurity@00d5i00000cgucwead.com		✓	Analytics Cloud Security User

Milestone 8 - Use Customization :

In this Milestone we have to customized Travel Approval Object Page Layout.



The screenshot shows the Salesforce Setup interface for the 'Travel Approval' object. The left sidebar contains a navigation menu with the following items: Details, Fields & Relationships, Page Layouts (selected), Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, and Search Layouts. The main content area is titled 'Page Layouts' and shows '1 Items, Sorted by Page Layout Name'. A table lists the page layouts with columns for 'PAGE LAYOUT NAME', 'CREATED BY', and 'MODIFIED BY'. The table contains one entry: 'Travel Approval Layout' created by 'Dharanesh P' on '21/04/2023, 11:05 am' and modified by 'Dharanesh P' on '21/04/2023, 11:05 am'. The browser address bar shows the URL: 'resourceful-impala-i3gm1-dev-ed.trailblaze.lightning.force.com/lightning/setup/ObjectManager/01I5i000001rW4p/PageLayouts/view'. The Windows taskbar at the bottom shows the search bar, task view button, and several application icons. The system tray on the right shows the temperature as 36°C, weather as 'Mostly sunny', and the date and time as '22-04-2023 00:35'.

PAGE LAYOUT NAME	CREATED BY	MODIFIED BY
Travel Approval Layout	Dharanesh P, 21/04/2023, 11:05 am	Dharanesh P, 21/04/2023, 11:05 am



Search Setup



Setup

Home

Object Manager



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

Save Quick Save Preview As... Cancel Undo Redo Layout Properties

Fields

Buttons
Quick Actions
Mobile & Lightning Actions
Expanded Lookups
Related Lists
Report Charts

Quick Find Field Name

Section	Destination State	Purpose of Trip	Travel Approval
Blank Space	Last Modified By	Status	Trip End Date
Created By	Out-of-State	Status Indicator	Trip Start Date
Department	Owner	Total Expenses	

Information (Header visible on edit only)

Travel Approval	GEN-2004-001234	Owner	Sample Text
Status	Sample Text		
Total Expenses	₹123.45		
Status Indicator	Sample Text		

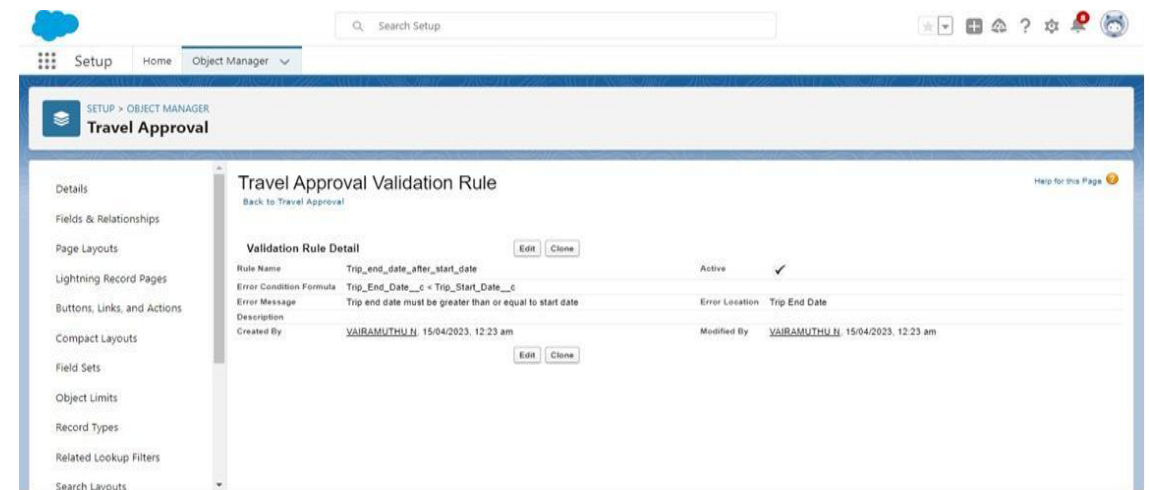
Trip info

Purpose of Trip	Sample Text	Department	Sample Text
Trip Start Date	15/04/2023	Trip End Date	15/04/2023
Out-of-State	✓	Destination State	Sample Text

System Information (Header visible on edit only)

Milestone 9 - ADD BUSINESS LOGIC TO TRAVEL APP :

In this Milestone we have created validation rules, rollup summary fields, formula fields, workflows and approval process.



Setup

Home

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

List View Button Layout

Restriction Rules

Scoping Rules

Travel Approval Custom Field

Total Expenses

Back to Travel Approval

Custom Field Definition Detail

Field Information

Field Label

Total Expenses

Field Name

Total_Expenses

API Name

Total_Expenses__c

Description

Help Text

Data Owner

Field Usage

Data Selectivity Level

Compliance Categorization

Created By

VAIRAMUTHU N

15/04/2023, 12:28 am

Modified By

VAIRAMUTHU N

15/04/2023, 12:28 am

Roll-Up Summary Options

Data Type

Roll-Up Summary

Summarized Object

ExpenseItem

Field to Aggregate

ExpenseItem.Amount

Filter Criteria

Object Name

TravelApproval

Summary Type

SUM

Setup

Home

Object Manager

Static Resources

Static Resource

StatusImages

Static Resource Detail

Name

StatusImages

Namespace Prefix

Description

MIME Type

application/x-zip-compressed

Cache Control

Public

Size

39,130 bytes

View file

Created By

VAIRAMUTHU N

15/04/2023, 12:28 am

Last Modified By

VAIRAMUTHU N

15/04/2023, 12:28 am

Milestone 10- Reports :

Travel App Chatter Reports Dashboards Departments Travel Approvals Expense Items

Search...

Report: Travel Approvals
Travel Requests by Department

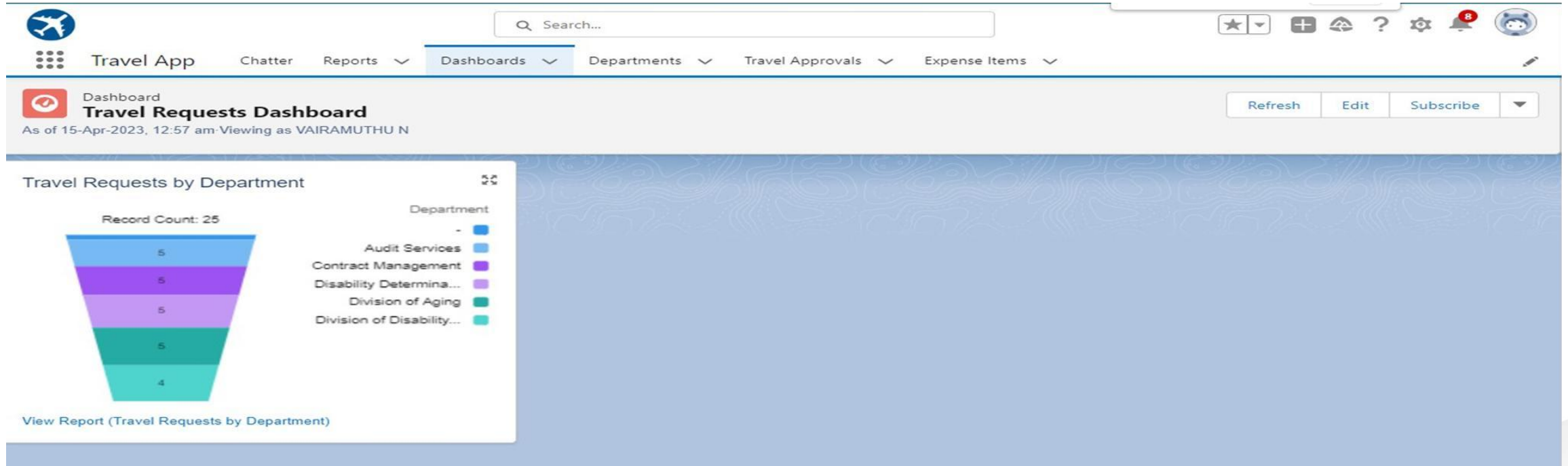
Enable Field Editing Add Chart Edit

Total Records: 72 Total Out-of-State: 1

Department	Travel Approval	Status	Out-of-State	Destination State	Trip Start Date	Trip End Date
- (1)	TA-00001	New	<input checked="" type="checkbox"/>	-	15/04/2023	15/04/2023
Subtotal			1			
Audit Services (5)	TA-00024	Approved	<input type="checkbox"/>	OK	09/03/2019	09/03/2019
	TA-00032	Approved	<input type="checkbox"/>	OK	07/08/2019	07/09/2019
	TA-00040	Approved	<input type="checkbox"/>	FL	08/07/2019	08/07/2019
	TA-00044	Approved	<input type="checkbox"/>	OK	11/04/2019	11/07/2019
	TA-00049	Approved	<input type="checkbox"/>	OK	07/08/2019	07/08/2019
Subtotal			0			
Contract Management (5)	TA-00009	Approved	<input type="checkbox"/>	OK	05/11/2019	05/11/2019
	TA-00034	Approved	<input type="checkbox"/>	GA	02/09/2019	02/09/2019
	TA-00066	Approved	<input type="checkbox"/>	TX	07/04/2019	07/04/2019
	TA-00067	Approved	<input type="checkbox"/>	CA	07/05/2019	07/08/2019
	TA-00070	Approved	<input type="checkbox"/>	TX	04/04/2019	04/04/2019
Subtotal			0			
Disability Determination Bureau (5)	TA-00002	Approved	<input type="checkbox"/>	OK	10/01/2019	10/01/2019
	TA-00008	Rejected	<input type="checkbox"/>	OK	03/06/2019	03/07/2019

Row Counts Detail Rows Subtotals Grand Total

Milestone 11- Dashboard :



4. Trailhead Profile Public URL :

Team Leader : Nithya . P

<https://trailblazer.me/id/nithya-170503-p>

Team Member 1 : Vinotha .M

<https://trailblazer.me/id/vinotha24022003>

Team Member 2 : Kavivarman. S

<https://trailblazer:me/id/skavivarman>

Team Member 3 : Vaiguna .R

<https://trailblazer:me/id/vaiguna58>

5. Advantages & Disadvantages :

Advantages :

- 1) New experience.
- 2) Gain my knowledge.
- 3) Quick service.

Disadvantages :

- 1) It will be time consuming.
- 2) Team coordination will it cause in convenient.



6. APPLICATIONS :

The Travel Support System is a small sample application for Natural ONE. As a sample application, its focus is to show Natural ONE functionality rather than being a full-fledged travel support application.

The Travel Support System (TSS) allows as to request and approve business trips. Flights, hotels and even more external information such as cell phone expenses or car rentals can be entered with the trip request. For the destination, weather information can be queried. A manager can do both, request own trips as well as approve trips that have been requested by employees. After the manager has approved single or multiple requests, the manager can print an itinerary or receive the itinerary as a PDF file.



7. CONCLUSION :

Travel Management simplifies the management process in traveling. Fast processing and immediate results with high security. Minimizing women effort and cost efficient databases. Navigation through the site is easy. It becomes increasingly popular destinations in their own right.



8. FUTURE SCOPE :

It is clear that the online travel business is a booming industry and will continue to be so. Rising to the occasion, even small travel agency owners are also looking to go online. For them, an online travel portal can be an ideal fit.

