

# Airline Management System



## Introduction:

This project aims to enhance the efficiency and effectiveness of managing flights, reservations, and passenger information. The system enables airlines to manage their fleet, schedule flights, allocate seats, and handle bookings seamlessly. It provides functionalities for ticket reservations, seat availability checks, passenger check-ins, and baggage handling. Additionally, the system facilitates communication between airlines, airports, and passengers through automated notifications and alerts. With its user-friendly interface and robust database management, the Airlines Management System optimizes workflow, improves customer satisfaction, and ensures smooth operations for the entire airline industry.

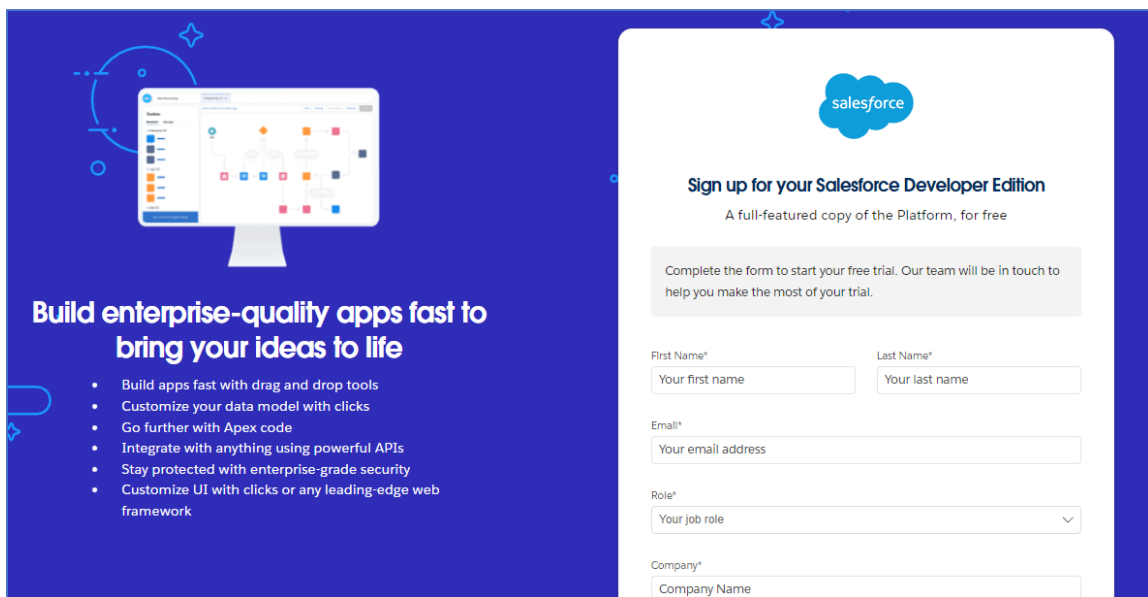
# Airline Management System

## Milestone – 1

### Salesforce

#### Activity – 1 Creating Developer Account

1. Go to <https://developer.salesforce.com/signup>
2. On the sign-up form, enter the following details:



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- Customize your data model with clicks
- Go further with Apex code
- Integrate with anything using powerful APIs
- Stay protected with enterprise-grade security
- Customize UI with clicks or any leading-edge web framework

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Complete the form to start your free trial. Our team will be in touch to help you make the most of your trial.

First Name\*  Last Name\*

Email\*

Role\*

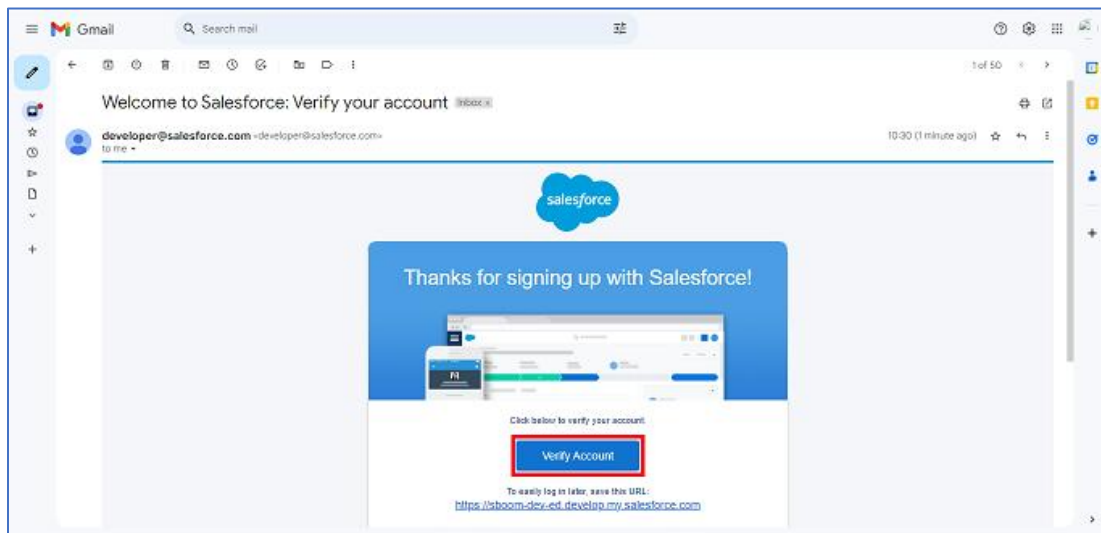
Company\*

1. First name - Akhil
2. Last name - Pillari
3. Email – pillari.akhil2005@gmail.com
4. Role: Developer
5. Company: Gayatri Degree College Tirupati
6. County: India

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## Activity – 2 Account Activation

1. 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 5-10mins.

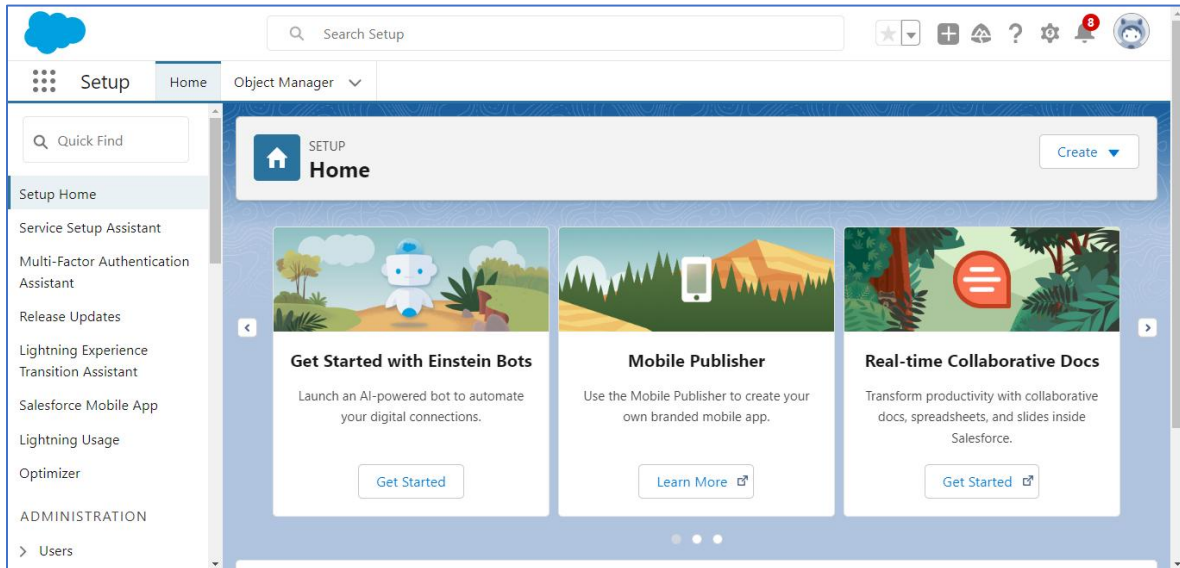


2. Click on Verify Account
3. Give a password and answer a security question and click on change password.

A screenshot of the 'Change Your Password' form. The form is titled 'Change Your Password' and asks the user to 'Enter a new password for lead@sb.oom. Make sure to include at least: 8 characters, 1 letter, 1 number'. There are three green checkmarks indicating these requirements are met. The form contains four main sections: 'New Password' with a text input field (highlighted with a red box) and a 'Good' status indicator; 'Confirm New Password' with a text input field (highlighted with a red box) and a 'Match' status indicator; 'Security Question' with a dropdown menu showing 'In what city were you born?'; and 'Answer' with a text input field containing 'asdfghjkl'. A blue 'Change Password' button is at the bottom of the form, also highlighted with a red box.

# Airline Management System

4. Then you will redirect to your salesforce setup page.



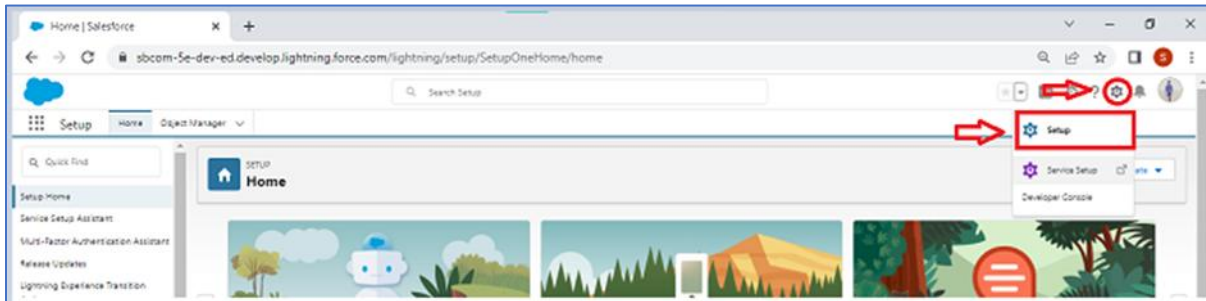
# Airline Management System

## Milestone – 2

### Object

To Navigate to Setup page:

Click on gear icon --> click setup.

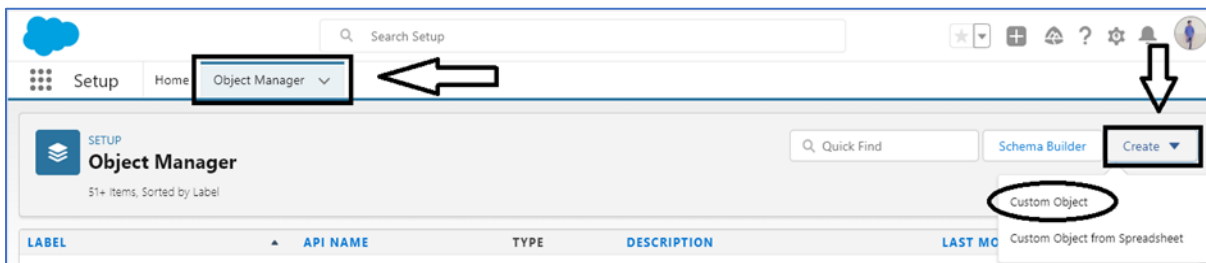


### Activity – 1 Create Flight Object

The purpose of creating a Flight custom object is to have a clear picture of the flight details.

To create an object:

1. From the setup page --> Click on Object Manager --> Click on Create --> Click on Custom Object.



1. Enter the label name--> Flight
2. Plural label name--> Flights
3. Enter Record Name Label and Format
  - Record Name: Flight Name
  - Data Type: Text

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**SETUP**  
New Custom Object

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**

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

Label: Flight Example: Account  
Plural Label: Flights Example: Accounts  
Starts with vowel sound: ☐  
The Object Name is used when referencing the object via the API.  
Object Name: Flight Example: Account  
Description:   
Context-Sensitive Help Setting: ☒ Open the standard Salesforce.com Help & Training window  
☐ Open a window using a Visualforce page  
Content Name: --None--

**Enter Record Name Label and Format**

The Record Name appears in page layouts, key lists, related lists, lookups, and search results. For example, the Record Name for Account is "Account Name" and for Case it is "Case Number". Note that the Record Name field is always called "Record Name".

Record Name: Flight Name Example: Account Name  
Data Type: Text

4. Click on Allow reports,
5. Allow search --> Save.

**Optional Features**

☒ Allow Reports  
☐ Allow Activities  
☐ Track Field History  
☐ Allow in Chatter Groups  
☐ Enable Licensing

**Object Classification**

When these settings are enabled, this object is classified as an Enterprise Application object. When these settings are disabled, this object is classified as a Light Application object. [Learn more](#)

☒ Allow Sharing  
☒ Allow Bulk API Access  
☒ Allow Streaming API Access

**Deployment Status**

☐ In Development  
☒ Deployed

**Search Status**

When this setting is enabled, your users can find records of this object type when they search. [Learn more](#)

☒ Allow Search

**Object Creation Options (Available only when custom object is first created)**

☐ Add Notes and Attachments related list to default page layout  
☐ Launch New Custom Tab Wizard after saving this custom object

[Save] [Save & New] [Cancel]

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## Activity – 2 Create Booking Object

The purpose of creating a Booking object is to have detailed information about booking and reservation of the passengers.

To create an object:

1. From the setup page --> Click on Object Manager --> Click on Create --> Click on Custom Object.
2. Enter the label name--> Booking
3. Plural label name--> Bookings
4. Enter Record Name Label and Format
  - Record Name: Booking Id
  - Data Type: Auto Number
  - Display Format: Bk- {0000}
  - Starting Number: 1
5. Click on Allow reports,
6. Allow search --> Save

## Activity 3

Create 2 more objects with record names as Passenger Id and Crew Id.

# Airline Management System

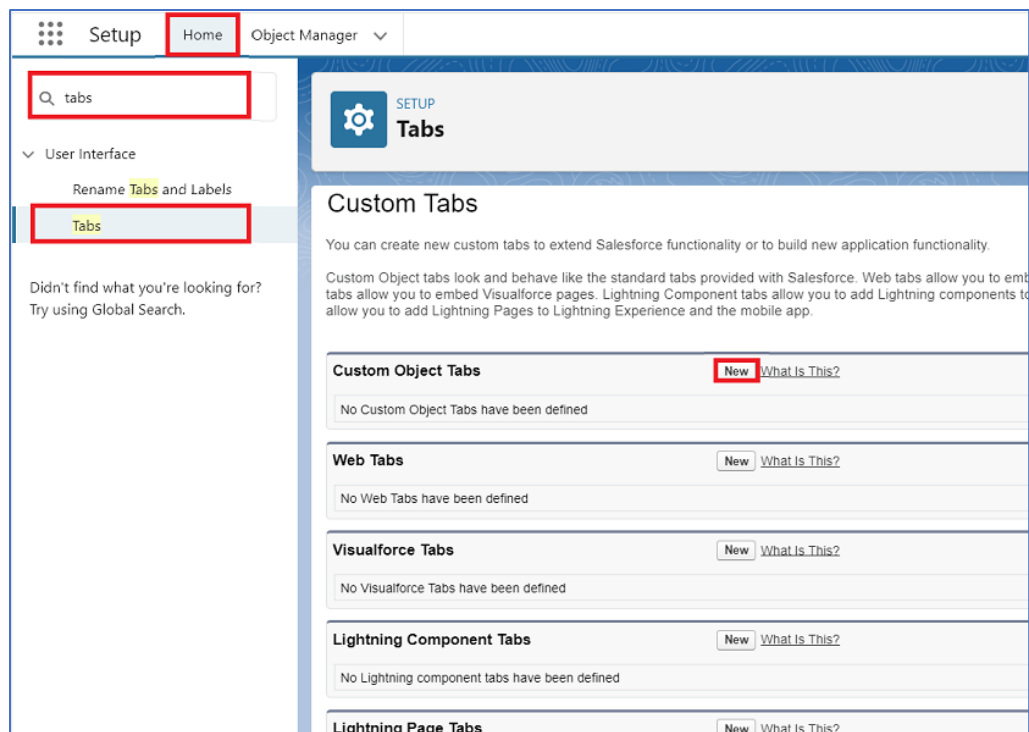
## Milestone – 3

### Tabs

#### Activity – 1 Creating a Custom Tab (Flight)

To create a Tab (Flight)

1. Go to setup page --> type Tabs in Quick Find bar --> click on tabs --> New (under custom object tab)



2. Select Object (Flight) --> Select any tab style --> Next (Add to profiles page) keep it as default -> Next (Add to Custom App) keep it as default --> Save.




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New Custom Object Tab Help for this Page

Step 1. Enter the Details Step 1 of 3

Choose the custom object for this new custom tab. Fill in other details.

Select an existing custom object or [create a new custom object now](#).

Object: --None--  
Tab Style:   
(Optional) Choose a Home Page Custom Link:   
Splash Page Custom Link:   
Enter a short description.  
Description:   
Next Cancel

## Activity – 2 Creating a Custom Tab (Booking)

To create a Tab (Booking)

1. Go to setup page --> type Tabs in Quick Find bar --> click on tabs --> New (under custom object tab)
2. Select Object (Booking) Select the tab style --> Next (Add to profiles page) keep it as default --> Next (Add to Custom App) keep it as default --> Save.

## Activity 3

Now create tabs for Crew and Passengers objects.

# Airline Management System

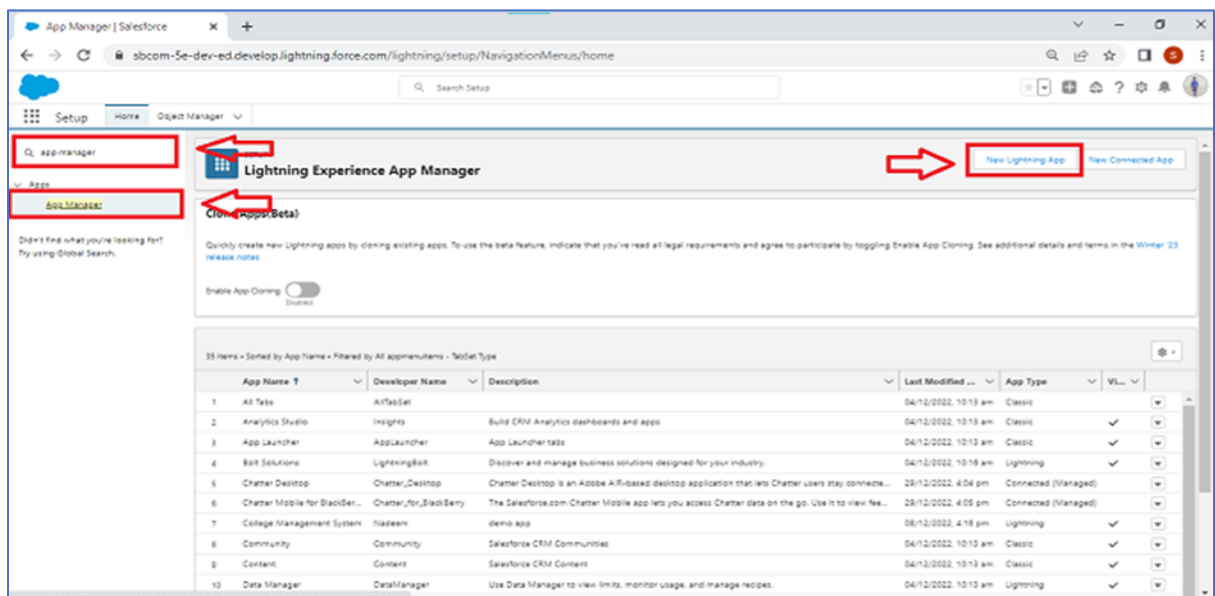
## Milestone – 4

### The Lightning App

#### Activity – 1 Create a Lightning App

To create a lightning app page:

1. Go to setup page --> search "app manager" in quick find --> select "app manager" --> click on New lightning App.



2. Fill the app name in app details and branding as follow  
App Name : AirLine Management System  
Developer Name : this will auto populated  
Description : Give a meaningful description  
Image : optional (if you want to give any image you can otherwise not mandatory)  
Primary color hex value : keep this default
3. Then click Next --> (App option page) keep it as default --> Next --> (Utility Items) keep it as default --> Next.

# Airline Management System

New Lightning App

### 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 ⓘ  
Name your app...

\*Developer Name ⓘ  
Enter a developer name...

Description ⓘ  
Enter a description...

#### App Branding

Image ⓘ  
Upload

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

Next

## 4. To Add Navigation Items

New Lightning App

### 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

Create

Type to filter list...

- Accounts
- Alert Settings
- All Sites
- Alternative Payment Methods
- Analytics
- App Launcher
- Appointment Invitations

#### Selected Items

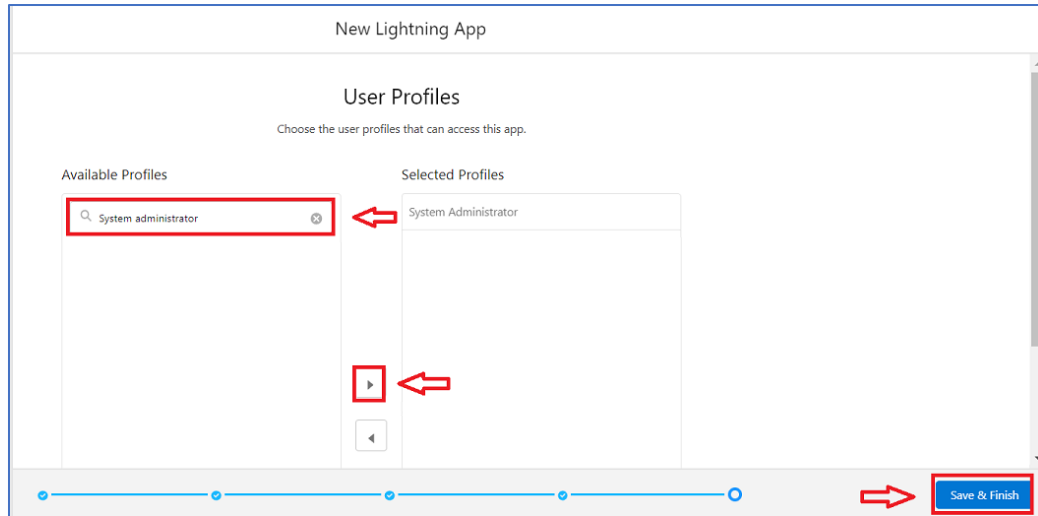
- Flights
- Passengers
- Crews
- Bookings
- Reports
- Dashboards

Back Next

Search the items in the search bar(Flight, Passengers, Booking, Crew, Reports, Dashboard) from the search bar and move it using the arrow button --> Next.  
Note: select the custom object which we have created in the previous activity.

## 5. To Add User Profiles:

# Airline Management System



Search profiles (System administrator) in the search bar --> click on the arrow button --> save & finish.

# Airline Management System

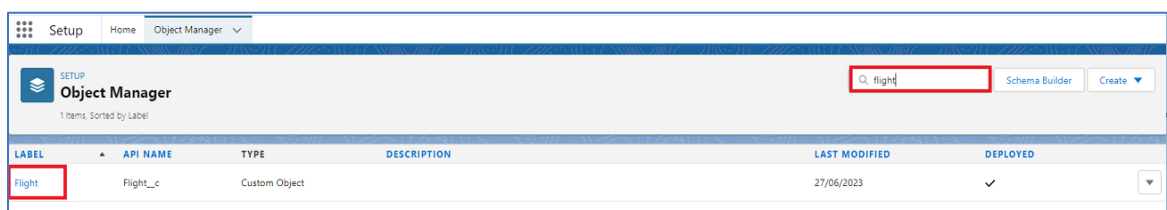
## Milestone – 5

### Fields

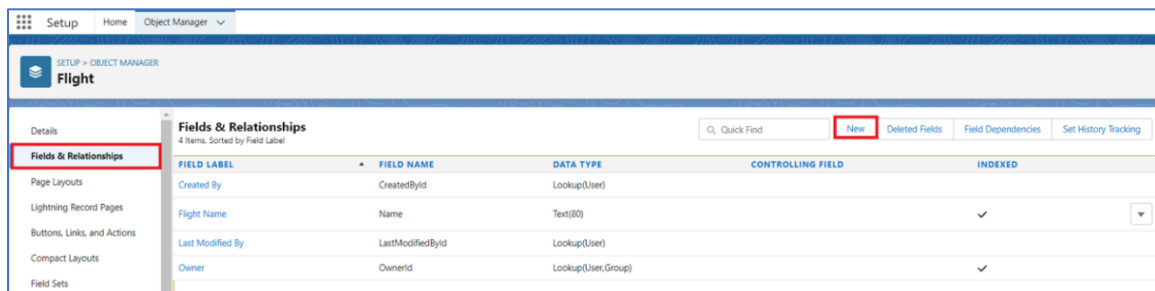
#### Activity 1: Creating Field in Flight Object

To create fields in an object:

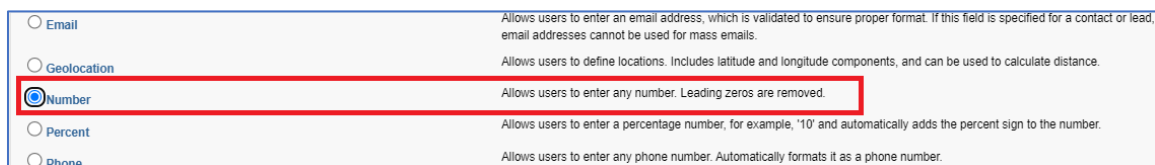
1. Go to setup --> click on Object Manager --> type object name(Flight) in quick find bar--> click on the object.



2. Now click on "Fields & Relationships" --> New



3. Select Data type as "Number".



# Airline Management System

4. Click on Next

Flight  
New Custom Field

Help for this Page

Step 2. Enter the details

Step 2 of 4

Previous **Next** Cancel

Field Label: Capacity

Please enter the length of the number and the number of decimal places. For example, a number with a length of 8 and 2 decimal places can accept values up to "12345678.90".

Length: 18

Decimal Places: 0

Field Name: Capacity

Description:

Help Text:

5. Fill the above as following:

- Field Label: Capacity
- Length : 18
- Field Name : gets auto generated
- Click on Next ? Next --> Save and new.

# Airline Management System

## Activity 2: Creating Departure Date on Booking Object

1. Go to setup --> click on Object Manager --> type object name(Booking) in quick find bar --> click on the object.
2. Now click on "Fields & Relationships" --> New.
3. Select Data type as "Date" and click Next.

<input type="radio"/> Checkbox	Allows users to select a True (checked) or False (unchecked) value.
<input type="radio"/> Currency	Allows users to enter a dollar or other currency amount and automatically formats the field as a currency amount. This can be useful if you export data to Excel or another spreadsheet.
<input type="radio"/> Date	Allows users to enter a date or pick a date from a popup calendar.
<input type="radio"/> Date/Time	Allows users to enter a date and time, or pick a date from a popup calendar. When users click a date in the pop-up, that date and the current time are entered into the Date/Time field.
<input type="radio"/> Email	Allows users to enter an email address, which is validated to ensure proper format. If this field is specified for a contact or lead, users can choose the address when clicking Send an Email. Note that custom email addresses cannot be used for mass

4. Click on Next.
5. Fill the above as following:
  - Field Label: Departure Date.
  - Field Name: gets auto generated.
  - Click on Next --> Next --> Save and new.

# Airline Management System

## Activity 3: Creating Picklist field on Flight object.

1. Go to setup --> click on Object Manager --> type object name (Flight) in quick find bar--> click on the object.
2. Now click on "Fields & Relationships" --> New.
3. Select Data type as "Picklist" and click Next.
4. Enter Field Label as "Departs From", under values select "Enter values, with each value separated by a new line" and enter values as shown below:

Delhi  
Mumbai  
Bengaluru  
Chennai  
Kolkata

Flight  
New Custom Field

Step 2. Enter the details

Field Label: Departs From

Values:

- ☐ Use global picklist value set
- ☒ Enter values, with each value separated by a new line

Delhi - Indira Gandhi International Airport (DEL)  
Mumbai - Chhatrapati Shivaji Maharaj International Airport (BOM)  
Bengaluru - Kempegowda International Airport (BLR)  
Chennai - Chennai International Airport (MAA)  
Kolkata - Netaji Subhash Chandra Bose International Airport (CCU)

☐ Display values alphabetically, not in the order entered

Previous Next Cancel

5. Click Next--> Next --> Next --> Save & New.



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## Activity 4: Creating Lookup Relationship between Flight and Booking

Creating Lookup Relationship between Flight & Booking Object

To Create a lookup relationship

1. Go to the setup page --> click on object manager --> type object name(Booking) in the quick find bar--> click on the object.
2. Click on fields & relationship --> click on New.
3. Select "lookup relationship" as data type and click Next.
4. For field label related to: select "Flight" object and click Next.
5. Give Field Label as "Flight" and click Next.
6. Next --> Next --> Save.

# Airline Management System

## Activity 5: Creating Remaining fields

Now create the remaining fields using the data types mentioned in the table.

Sl No	Object	Field	Datatype
1	Passenger	<ol style="list-style-type: none"><li>1. Name</li><li>2. Phone</li><li>3. Passport Number</li><li>4. Passport Issue Date</li><li>5. Passport Expiry Date</li><li>6. Date of Birth</li><li>7. Nationality</li></ol>	<p>Text</p> <p>Phone</p> <p>Number</p> <p>Date</p> <p>Date</p> <p>Date</p> <p>Picklist : Values as below</p> <div><p>India</p><p>China</p><p>USA</p><p>Canada</p><p>Mexico</p><p>Australia</p><p>South Korea</p><p>North Korea</p><p>Germany</p></div>
2	Booking	<ol style="list-style-type: none"><li>1. Passenger Name</li><li>2. Departs From</li><li>3. Departs To</li></ol>	<p>Lookup relationship with Passenger</p> <p>Picklist : Values are same as Activity 3</p> <p>Picklist : Values are same as Activity 3</p>

# Airline Management System

		<p>4. Travellers</p> <p>5. Class</p>	<p>Picklist : Values as below</p> <div> <p>Adult</p> <p>Child</p> <p>Infant</p> </div> <p>Picklist : Values as below</p> <div> <p>Economy</p> <p>Business</p> <p>First Class</p> </div>
3	Flight	<p>1. Departs to</p> <p>2. PNR Number</p> <p>3. Departure Date</p> <p>4. Departure Time</p> <p>5. Arrival Time</p>	<p>Picklist : Values are same as Activity 3</p> <p>Number</p> <p>Date</p> <p>Time</p> <p>Time</p>
4	Crew	<p>1. Flight</p> <p>2. Crew Member</p> <p>3. Phone</p> <p>4. Email</p> <p>5. Qualification</p> <p>6. Role</p>	<p>Lookup relationship with Flight</p> <p>Text(20)</p> <p>Phone</p> <p>Email</p> <p>Text</p> <p>Picklist: Values as below</p> <div> <p>Pilot</p> <p>Co-Pilot</p> </div>

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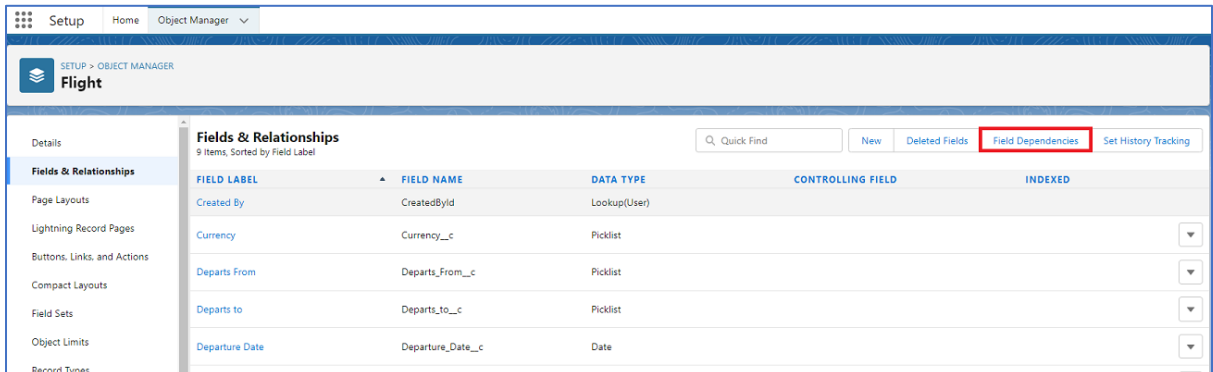
			<div>Flight Attendants</div> <div>Air Hosts</div> <div>Air Hostesses</div> <div>Air Stewards</div> <div>Air Stewardesses</div> <div>On-Board Chefs</div>	
--	--	--	--	--

# Airline Management System

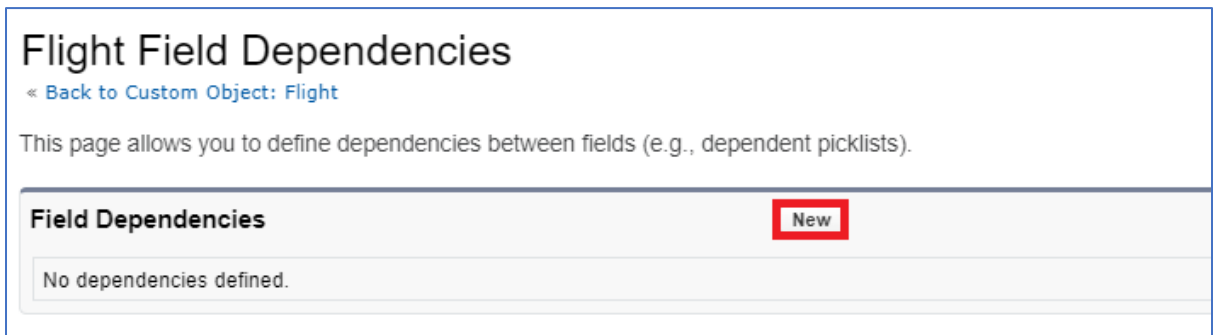
## Activity 6: Creating Field dependencies

To create a field dependency:

1. Go to object manager --> select the object (flight) --> click fields & relationships -  
-> click "Field Dependencies".



2. Click "New" under Field Dependencies.



3. Select "Departs From" for Controlling Field.
4. Select "Departs to" for Dependent Field and click Continue

# Airline Management System

## New Field Dependency

Create a dependent relationship that causes the values in a picklist or multi-select picklist to be dynamically filtered based on the value selected by the user in another field.

- The field that drives filtering is called the "controlling field." Standard and custom checkboxes and picklists with at least one and less than 300 values can be controlling fields.
- The field that has its values filtered is called the "dependent field." Custom picklists and multi-select picklists can be dependent fields.

**Step 1.** Select a controlling field and a dependent field. Click Continue when finished.

**Step 2.** On the following page, edit the filter rules that control the values that appear in the dependent field for each value in the controlling field.

Continue

Cancel

Controlling Field

Depends From

Dependent Field

Depends to

Continue

Cancel

5. While pressing CTRL button select the values as shown below and click on include values.

Click button to include or exclude selected values from the dependent picklist:

Include Values

Exclude Values

Showing Columns: 1 - 5 (of 5) < Previous | Next > View All Go to

Departs From:	Delhi	Mumbai	Bengaluru	Chennai	Kolkata
Departs to:	Delhi	Delhi	Delhi	Delhi	Delhi
	Mumbai	Mumbai	Mumbai	Mumbai	Mumbai
	Bengaluru	Bengaluru	Bengaluru	Bengaluru	Bengaluru
	Chennai	Chennai	Chennai	Chennai	Chennai
	Kolkata	Kolkata	Kolkata	Kolkata	Kolkata

Showing Columns: 1 - 5 (of 5) < Previous | Next > View All

Click button to include or exclude selected values from the dependent picklist:

Include Values

Exclude Values

Save

Cancel

Preview

6. Click on Save.

# Airline Management System

## Activity 7

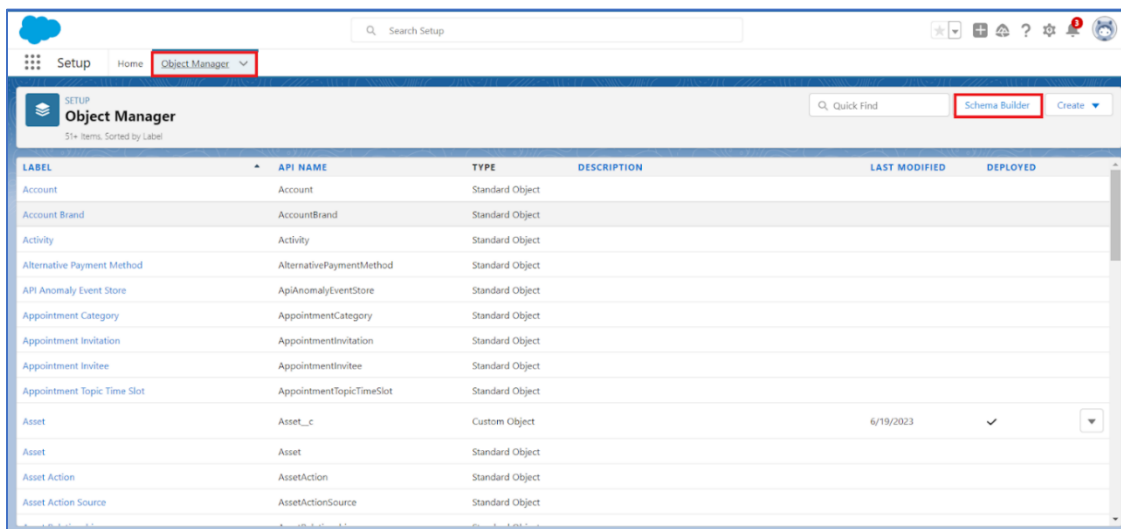
Create similar Field dependencies for booking object as we have done in activity 6.

## Activity 8: Schema Builder

Schema Builder is a powerful tool within Salesforce that allows you to visualise, explore, and design the relationships between objects in your Salesforce organisation. It provides a graphical representation of the data model, making it easier to understand the structure and connections between different objects.

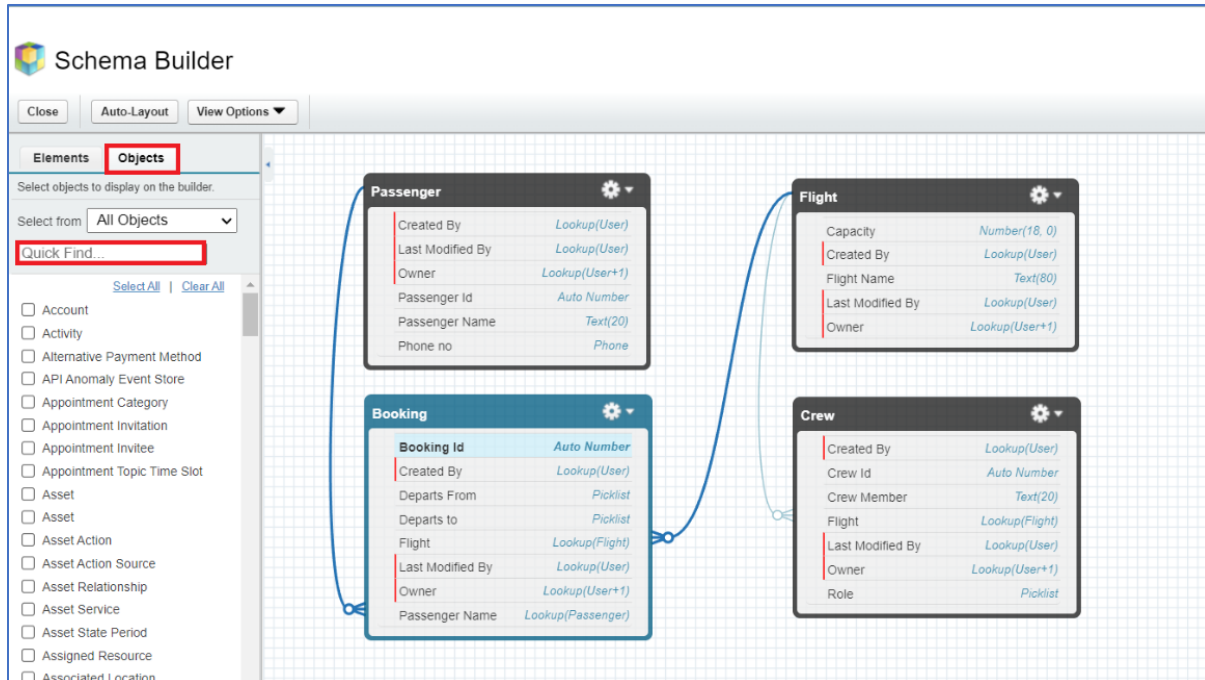
Creating Schema Builder

1. Go to setup --> click on Object Manager --> Schema Builder.



2. Click on Clear All
3. Select objects--> Enter Objects which we have created in the above Milestone 2 (Passenger, Booking, Flight & Crew) in a quick box and select them.

# Airline Management System





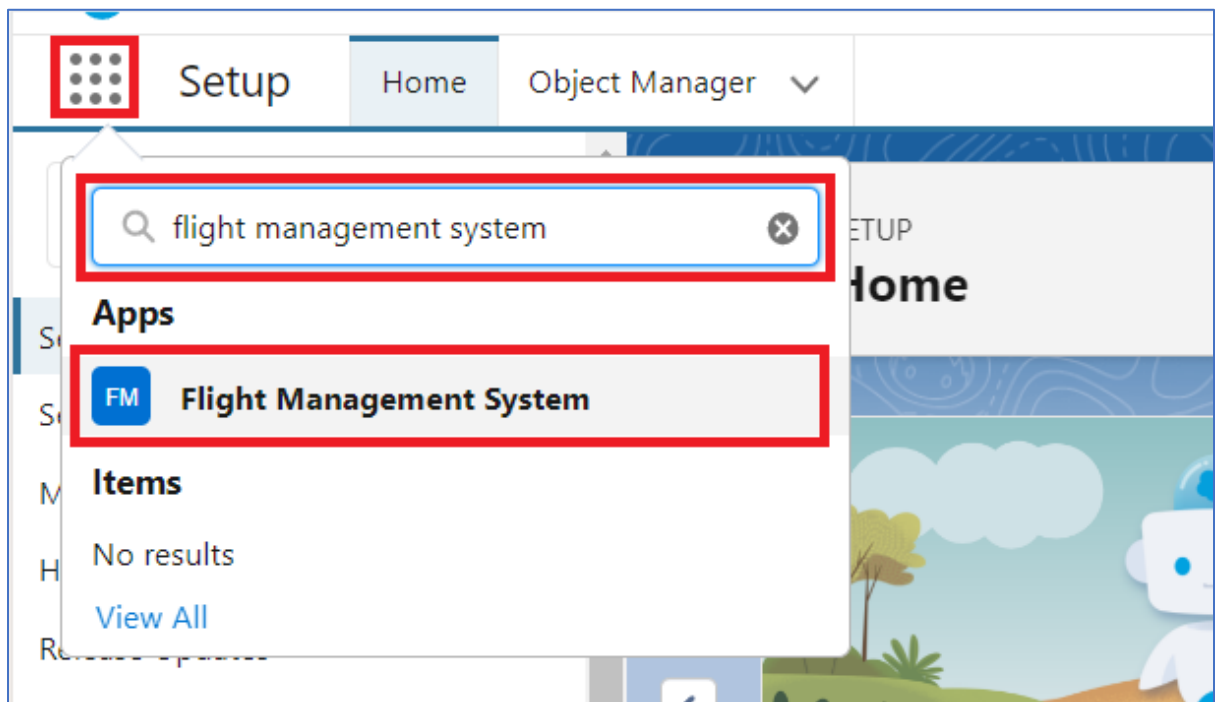
# Airline Management System

## Milestone - 6

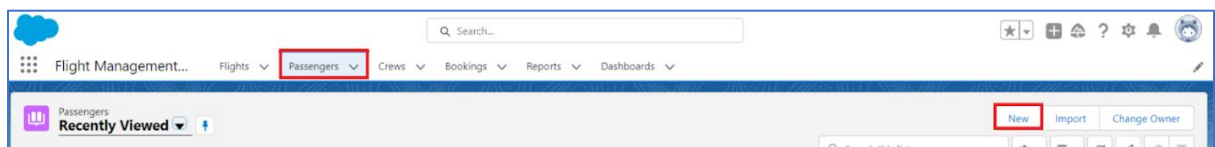
### User Adoption

#### Activity 1: Create a Record (Passenger)

1. Click on App Launcher on the left side of the screen.
2. Search AirLine Management System & click on it.



3. Click on the Passenger tab.
4. Click New.



5. Fill the Details and click on Save.

# Airline Management System



## **Activity 2: View a Record(Passenger)**

1. Click on App Launcher on the left side of the screen.
2. Search AirLine Management System & click on it.
3. Click on the Passenger Tab.
4. Click on any record name. you can see the details of the Passenger.

## **Activity 3: Delete a Record(Passenger)**

1. Click on App Launcher on the left side of the screen.
2. Search AirLine Management System & click on it.
3. Click on the Passenger Tab.
4. Click on Arrow at right hand side on that Particular record.
5. Click delete.

## **Activity 4:**

Create at least 10 records for each of the objects: Passenger, Booking, Flight, Crew.

# Airline Management System

## Milestone 7:

### Profiles

Types of profiles in salesforce

#### 1. Standard profiles:

By default, salesforce provides below standard profiles.

- Contract Manager
- Read Only
- Marketing User
- Solutions Manager
- Standard User
- System Administrator.

We cannot delete standard ones

Each of these standard ones includes a default set of permissions for all of the standard objects available on the platform.

#### 2. Custom Profiles:

Custom ones defined by us.

They can be deleted if there are no users assigned with that particular one.

Use Case:

Great work Admin, you have done so good till now. The CEO wants you to differentiate the users based on their functionalities, position and based on this those users need to have the minimum access to the database object in the organization. Now it's time to use your Admin skills to focus on the users, their functionality and position in the organization in order to achieve the CEO requirements.

# Airline Management System

## Activity 1: General Admin Profile

To create a new profile:

1. Go to setup --> type profiles in quick find box --> click on profiles --> clone the desired profile (Standard Platform User)-->enter profile name (General Admin) --> Save.

### Clone Profile

Enter the name of the new profile.

**You must select an existing profile to clone from.**

Existing Profile	Standard Platform User
User License	Salesforce Platform
Profile Name	<input type="text" value="General Admin"/>

2. While still on the profile page, then click Edit.
3. Scroll down to Custom Object Permissions and Give access permissions for read, create and edit on Passenger, and booking objects.

# Airline Management System

Custom Object Permissions						
	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
Assets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Asset Services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Billings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bookings	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Candidates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Crews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Customer Orders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employment Websites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flights	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jewel Customers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
Job Applications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leaves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Passengers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Positions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Projects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ProjectTasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reviews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sessions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
StudentSessions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trainers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Scroll down and Click on Save.

# Airline Management System



## Activity 2: Management Admin Profile

1. Go to setup --> type profiles in quick find box --> click on profiles --> clone the desired profile (Standard Platform User) --> enter profile name (Management Admin) --> Save.
2. While still on the profile page, then click Edit.
3. Scroll down to Custom Object Permissions and Give access permissions for read, edit and create Flight and Crew.
4. Scroll down and Click on Save.

## Activity 3: Create Senior Admin & Crew Member Profiles

Create Crew Member Profile for Crew Members and give them access permission to read only as we have done in the previous activity.

Create Senior Admin Profiles for Senior Admin in the Organization and give him access permission to read, create, edit and delete for all 4 objects.

Note: for Senior Admin clone System Administrator profile.

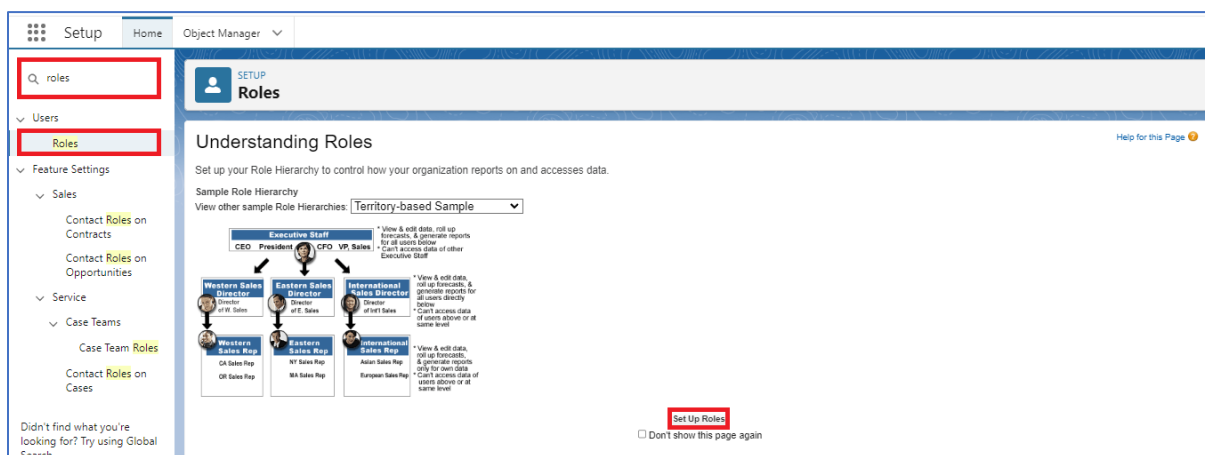
# Airline Management System

## Milestone - 8

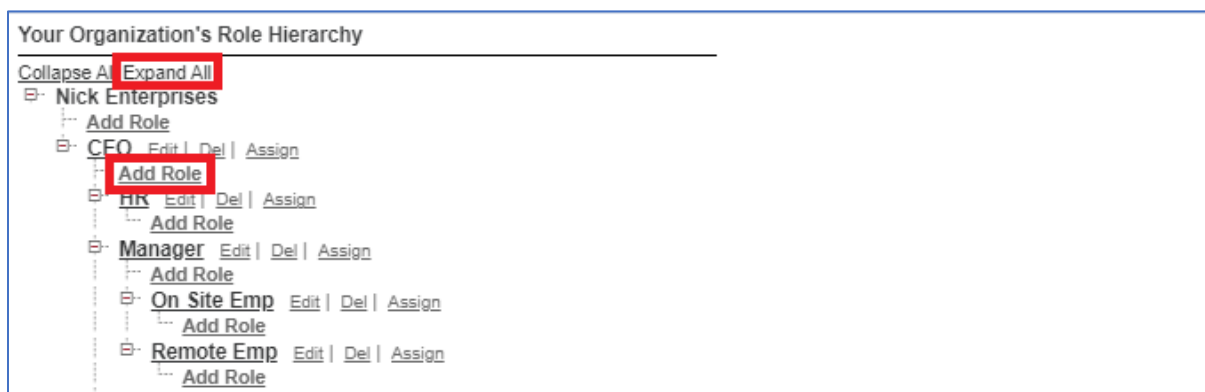
### Role

#### Activity 1: Creating Admin Manager Role

1. Go to quick find --> Search for Roles --> click on set up roles.



2. Click on Expand All and click on add role under whom this role works.



# Airline Management System

3. Give Label as "Senior Admin" and Role name gets auto populated. Check to whom this role (Senior Admin) reports. Then click on Save.

Role Edit  
New Role

Role Edit

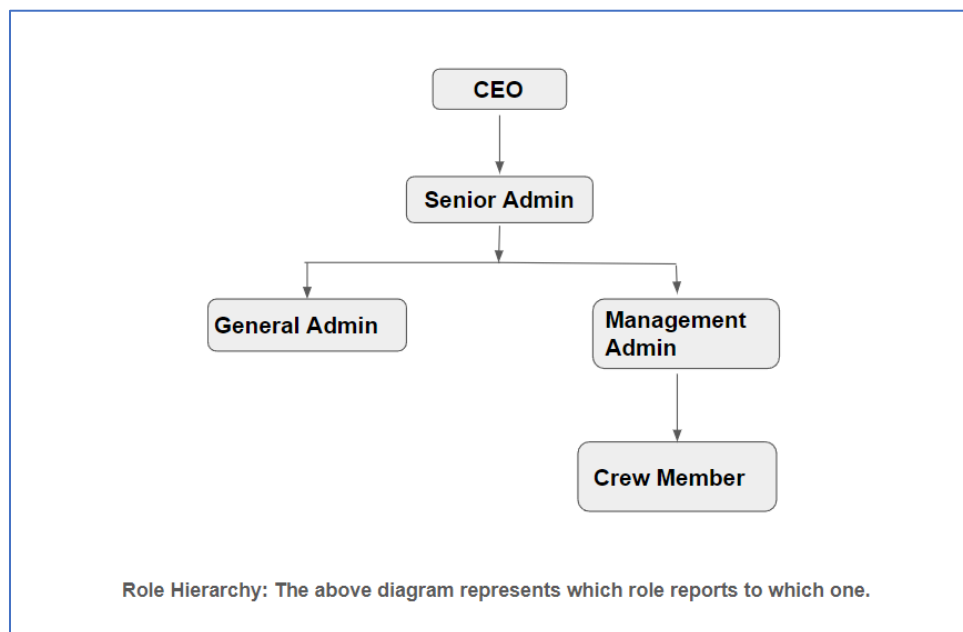
Label

Role Name

This role reports to

Role Name as displayed on reports

4. Refer the below diagram to understand which role reports to which role.





# Airline Management System



## Activity 2:

Create three more roles for General Admin, Management Admin and Crew Member.

Note: Crew Members report to Management Admin, Management Admin & General Admin Reports to Senior Admin and only Senior Admin reports to CEO.

# Airline Management System

## Milestone - 9

### Users

#### Activity 1: Create User

1. Go to setup --> type users in quick find box --> select users --> click New user.
2. Fill in the fields
  1. First Name : Niklaus
  2. Last Name : Mikaelson
  3. Alias : Give a Alias Name
  4. Email id : Give your Personal Email id
  5. Username : Username should be in this form: text@text.text
  6. Nick Name : Give a Nickname
  7. Role : Senior Admin
  8. User licence : Salesforce
  9. Profiles : Senior Admin

The screenshot shows the 'User Edit' page in Salesforce. The user being edited is 'Niklaus Mikaelson'. The page has a 'General Information' section with fields for First Name, Last Name, Alias, Email, Username, Nickname, Title, Company, Department, and Division. The 'First Name' field contains 'Niklaus', 'Last Name' contains 'Mikaelson', 'Email' contains 'example@gmail.com', 'Username' contains 'nikmik@smart.com', and 'Nickname' contains 'Niklaus'. To the right of these fields are checkboxes for 'Active', 'Marketing User', 'Offline User', 'Knowledge User', 'Flow User', 'Service Cloud User', 'Site.com Contributor User', 'Site.com Publisher User', and 'WDC User'. Below these are dropdowns for 'Data.com User Type' (set to '--None--') and 'Data.com Monthly Addition Limit' (set to '300'). At the bottom, there is a checkbox for 'Accessibility Mode (Classic Only)'. A red box highlights the 'First Name', 'Last Name', 'Email', 'Username', and 'Nickname' fields. Another red box highlights the 'Role' dropdown (set to 'Senior Admin'), 'User License' dropdown (set to 'Salesforce'), and 'Profile' dropdown (set to 'Senior Admin').

10. Save.

# Airline Management System



## Activity 2

1. Go to setup --> type users in quick find box --> select users --> click New user.
2. Fill in the fields
  - First Name : Kol
  - Last Name : Mikaelson
  - Alias : Give a Alias Name
  - Email id : Give your Personal Email id
  - Username : Username should be in this form: text@text.text
  - Nick Name : Give a Nickname
  - Role : General Admin
  - User license : Standard Platform
  - Profiles : General Admin
3. Save.

## Activity 3

Create two more users for Management Admin and Crew Members as mentioned in activity 2.

# Airline Management System

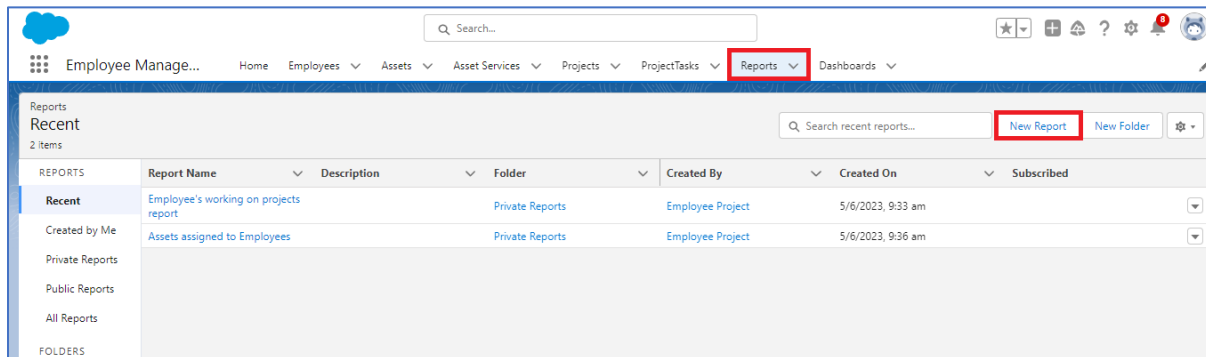
## Milestone – 10

### Reports

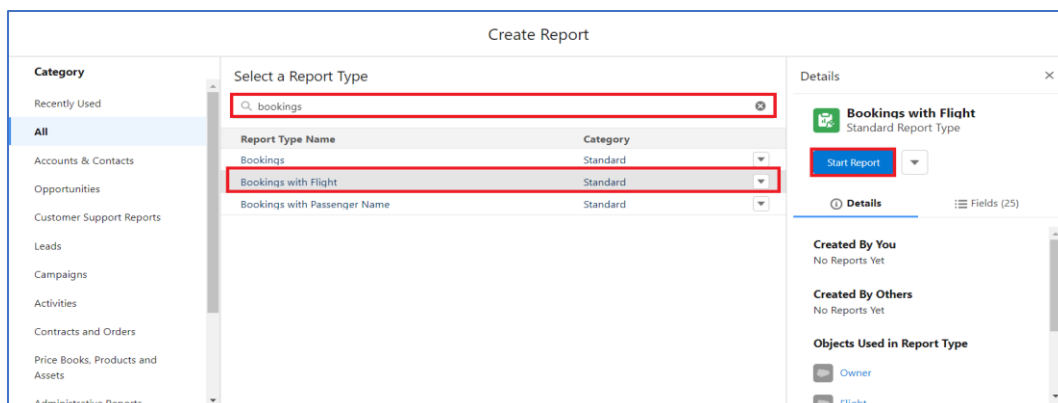
#### Activity 1

#### Create Report

1. Go to the app --> click on the reports tab
2. Click New Report.



3. Select report type from category or from report type panel or from search panel -  
-> click on start report.



# Airline Management System

## 4. Customize your report

- Check the toggle on the update preview automatically button.
- Add fields from the left pane as shown below.
- Add the "Traveller" field in Group Rows.
- Turn the toggle off for the subtotal button.

REPORT New Bookings with Flight Report

Bookings with Flight

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

Update Preview Automatically

Travellers	Flight: PNR Number	Booking: Booking Id	Flight: Flight Name	Class	Departs From	Departs to	Passenger Name	Flight: Capacity	Flight: Arrival Time
Adult (2)	6,78,901	Bk-0001	Air India Express	Economy	Delhi	Bengaluru	P-0005	500	2:30 am
	6,78,901	Bk-0007	Air India Express	-	Delhi	Chennai	P-0004	500	2:30 am
Child (7)	6,78,901	Bk-0005	Air India Express	-	Kolkata	Delhi	P-0004	500	2:30 am
	6,78,901	Bk-0008	Air India Express	-	Delhi	Kolkata	P-0004	500	2:30 am
	6,78,901	Bk-0009	Air India Express	-	Delhi	Kolkata	P-0005	500	2:30 am
	6,78,901	Bk-0010	Air India Express	Business	Delhi	Kolkata	P-0004	500	2:30 am
	4,56,788	Bk-0002	Indigo	Business	Mumbai	Bengaluru	P-0006	500	2:00 am
	4,56,788	Bk-0004	Indigo	-	Chennai	Kolkata	P-0002	500	2:00 am
	1,23,456	Bk-0006	Flight Emirates	-	Delhi	Bengaluru	P-0002	500	2:00 am
Infant (1)	4,56,788	Bk-0003	Indigo	First Class	Bengaluru	Chennai	P-0003	500	2:00 am
Total (10)	12,59,145							1,500	

Row Counts ☒ Detail Rows ☒ Subtotals ☐ Grand Total ☒

## 5. Click on save.

## 6. Save the report as "Bookings with Flight Details".

Save Report

Report Name
Bookings with Flight Details

Report Unique Name
New\_Bookings\_with\_Flight\_Report\_129

Report Description

Folder
Private Reports
Select Folder

Cancel Save

# Airline Management System



7. Click on Save.

Note: Reports may get varied from the above pictures as the data might be different.

## Activity 2

1. Create a report with a report type: "Booking with Passenger Name".
2. Create a report with report type: "Crew with Flight".

# Airline Management System

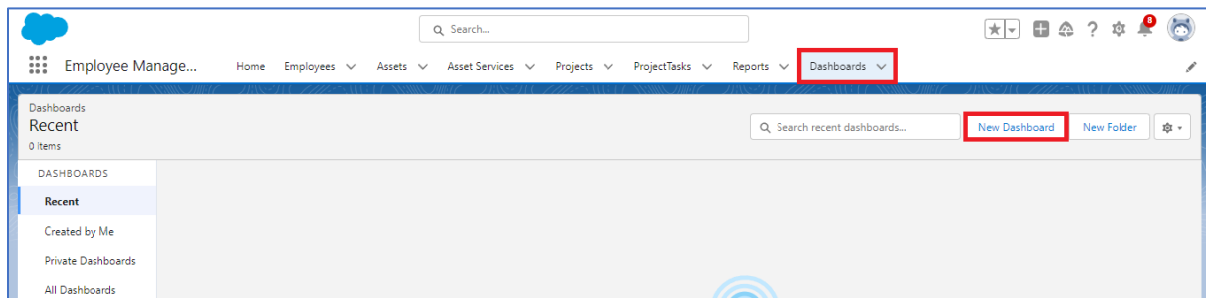
## Milestone – 11

### Dashboards

#### Activity 1

##### Create Dashboard

1. Go to the app --> click on the Dashboards tabs.



2. Give a Name and click on Create.

### New Dashboard

\* Name

Booking with Flights Component

Description

using the Booking with flight report

Folder

Private Dashboards

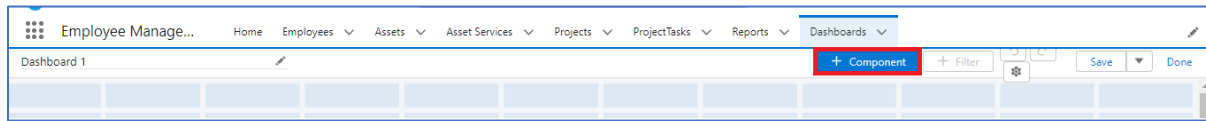
Select Folder

Cancel

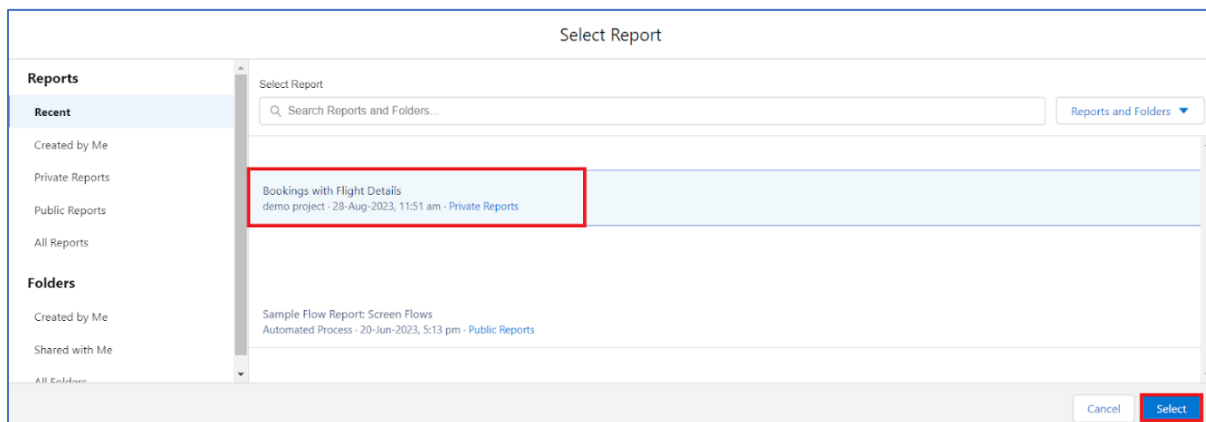
Create

# Airline Management System

3. Select add component.

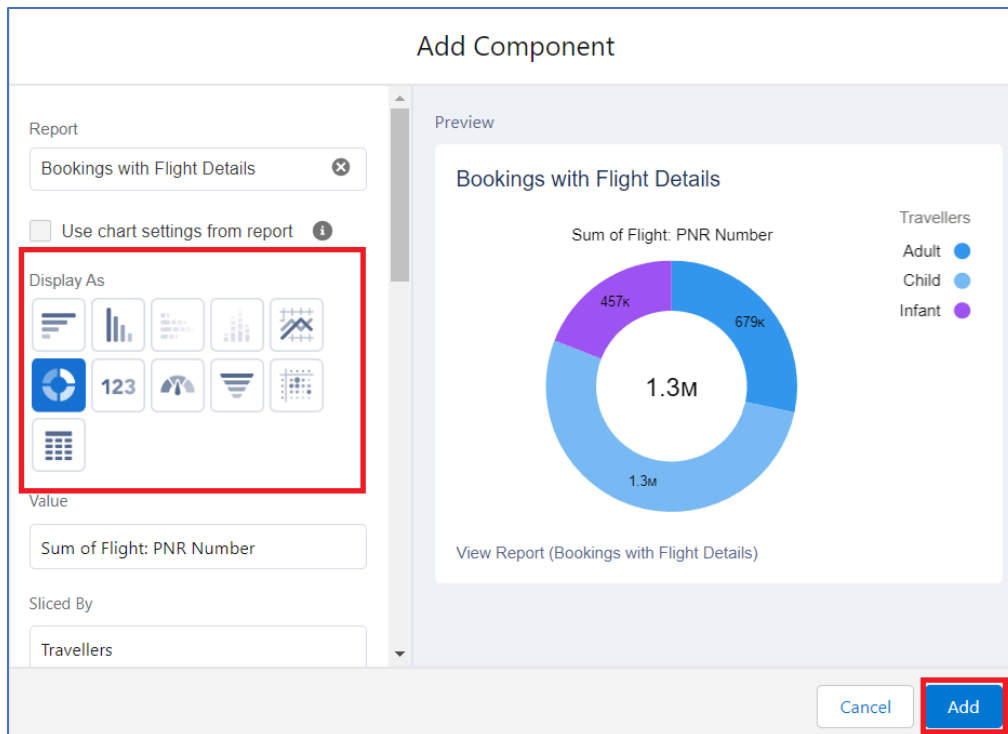


4. Select a Report and click on select.

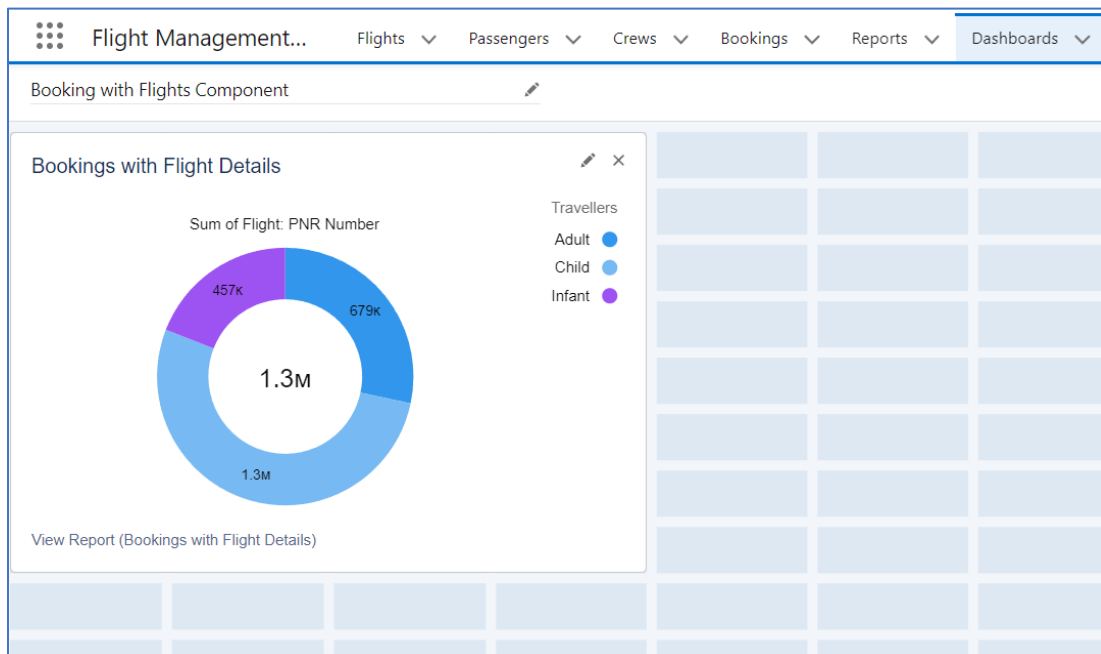


5. Select the Donut option under display as and click on Add.





6. Your dashboard display as below:



# Airline Management System



## Activity 2

Create two more Dashboards using the reports which we have created in the milestone 10 activity 2.

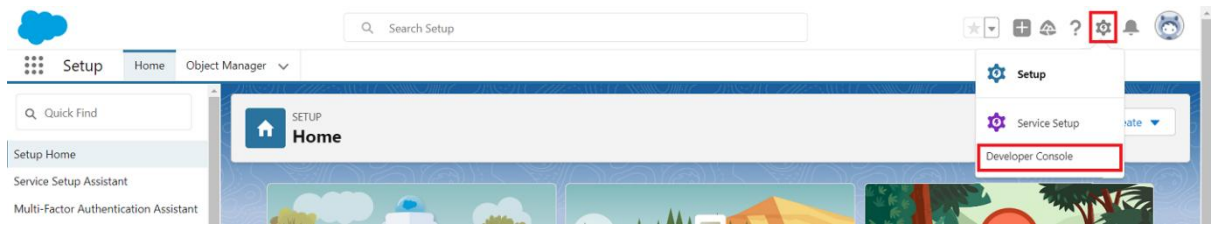
# Airline Management System

## Milestone – 12

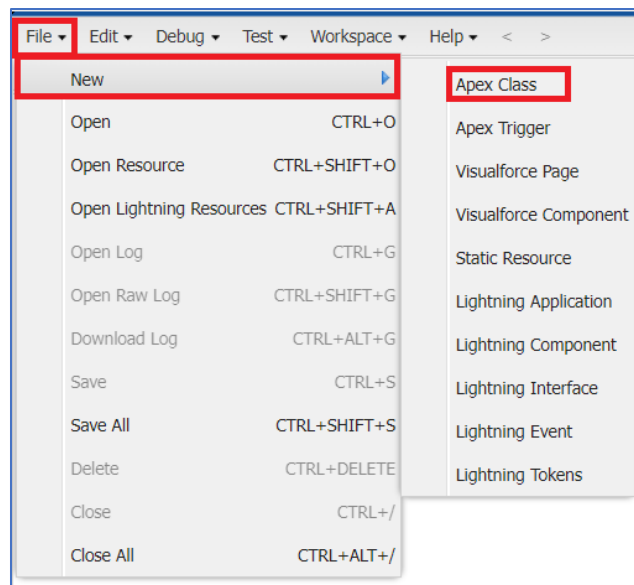
### Apex

#### Activity 1 : Create an Apex Class

1. Go to Setup --> Click on the gear icon --> Select Developer Console.

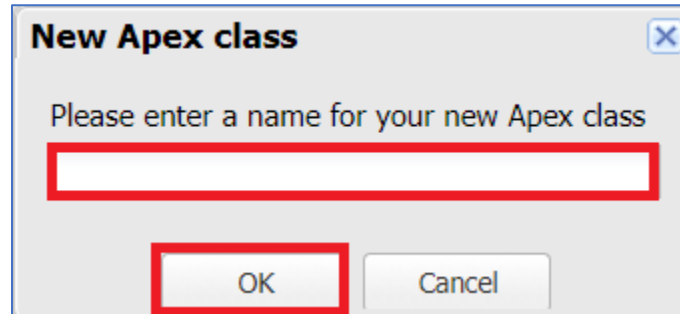


2. Then we can see the Developer console. Click on the developer console and you will navigate to a new console window.
3. To create a new Apex Class follow the below steps:  
Click on the file --> New --> Apex Class.

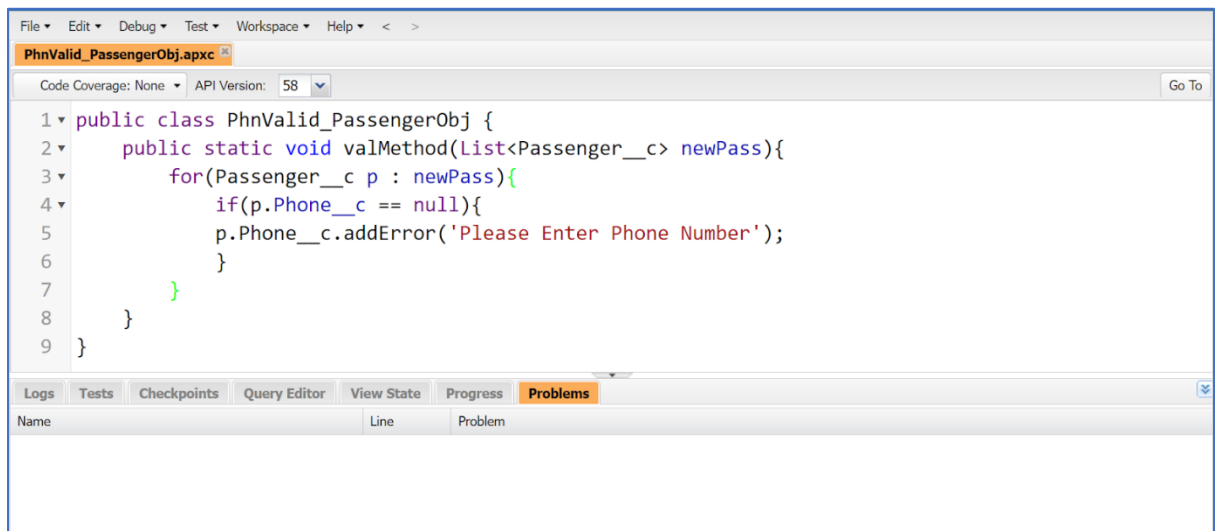


# Airline Management System

4. Give the Apex Class name as "PhnValid\_PassengerObj".



5. Click ok.
6. Now write the code logic here



# Airline Management System

## Source Snippet:

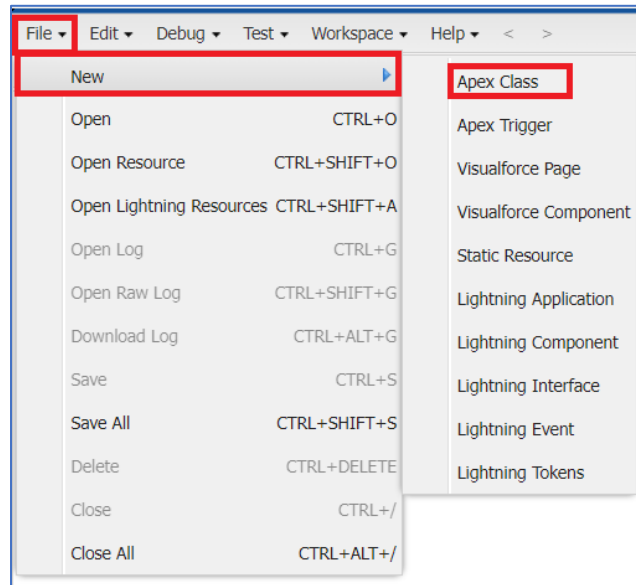
```
public class PhnValid_PassengerObj {  
    public static void valMethod(List<Passenger__c> newPass){  
        for(Passenger__c p:newPass){  
            if(p.Phone__c==null){  
                p.Phone__c.addError('please Enter phone Number');  
            }  
        }  
    }  
}
```

7. Save the code.(click on file --> Save)

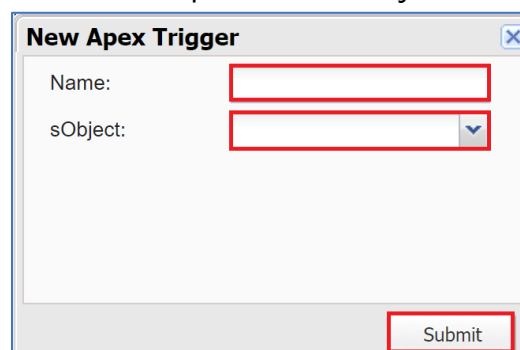
# Airline Management System

## Activity 2 : Create an Apex Trigger

1. To create a new Apex Class follow the below steps:  
Click on the file --> New --> Apex Class.

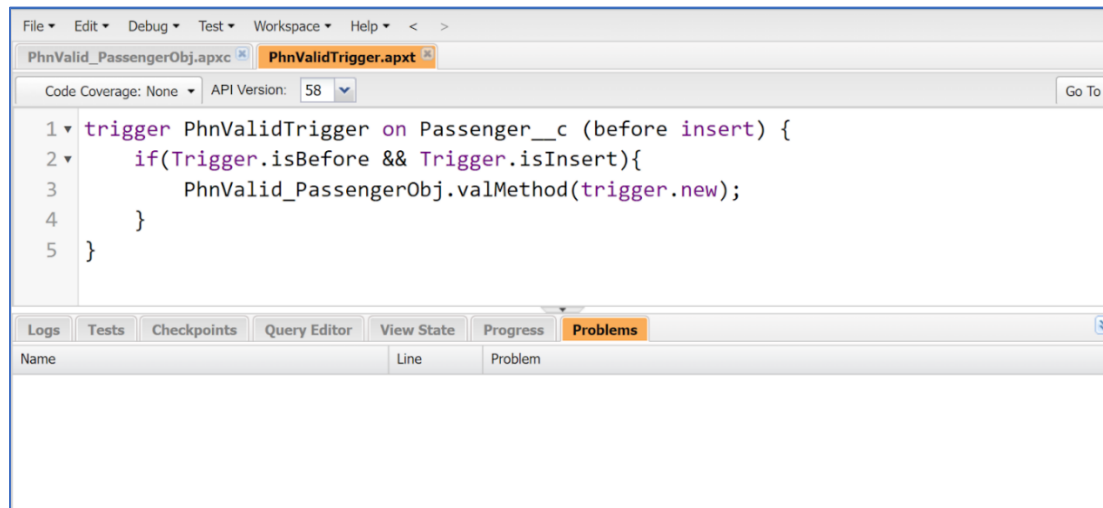


2. Give the Apex Trigger name as "PhnValidTrigger", and select "Passenger\_\_c" from the dropdown for sObject.



3. Click Submit.
4. Now write the code logic here

# Airline Management System



## Source Code:

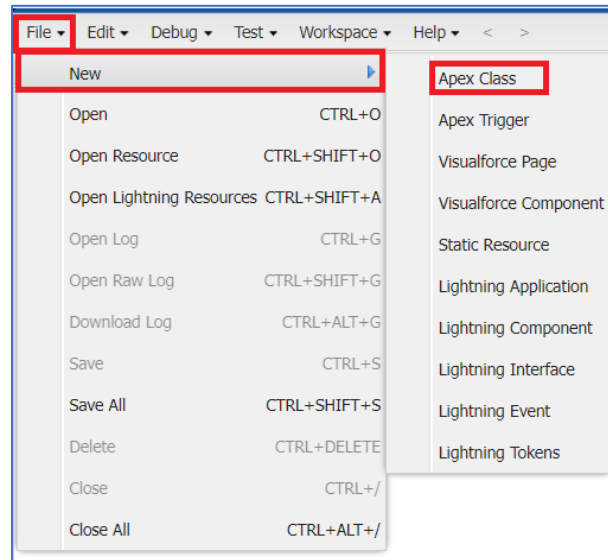
```
trigger PhnValidTrigger on passenger__c (before insert) {  
if(trigger.isBefore && trigger.isInsert){  
PhnValid_PassengerObj.valMethod(trigger.new);  
}  
}
```

5. Save the code.(click on file --> Save)

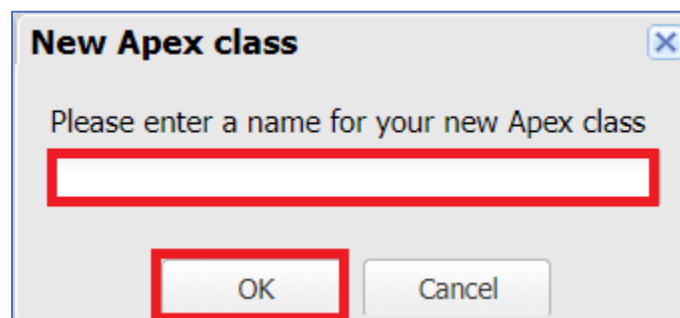
# Airline Management System

## Activity 3 : Create an Apex Test Class

1. To create a new Apex Class follow the below steps:  
Click on the file --> New --> Apex Class.



2. Give the Apex Class name as "PhnValid\_TestClass".

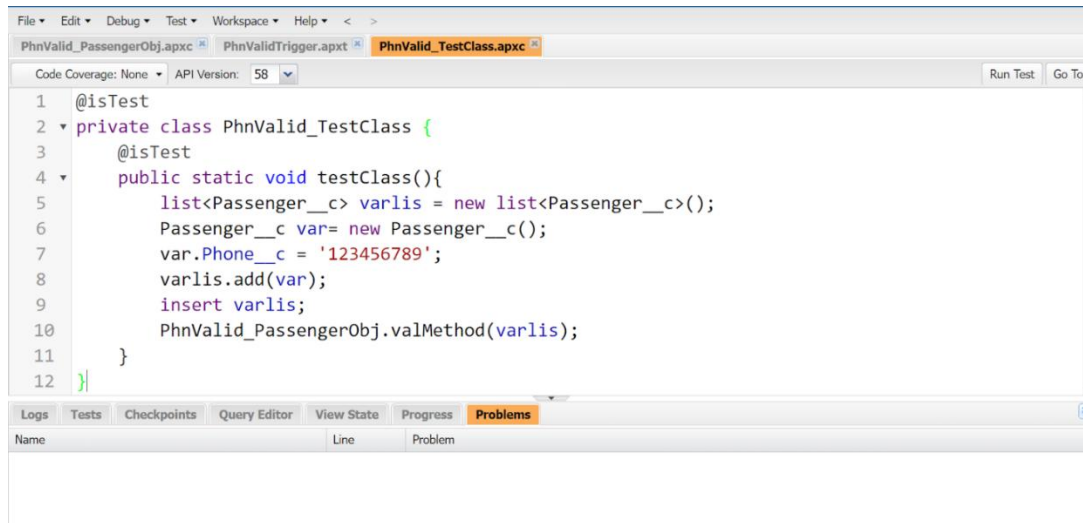


3. Click ok.



# Airline Management System

4. Now write the code logic here



```
1 @isTest
2 private class PhnValid_TestClass {
3     @isTest
4     public static void testClass(){
5         list<Passenger__c> varlis = new list<Passenger__c>();
6         Passenger__c var= new Passenger__c();
7         var.Phone__c = '123456789';
8         varlis.add(var);
9         insert varlis;
10        PhnValid_PassengerObj.valMethod(varlis);
11    }
12 }
```

## Source Code:

```
@isTest
public class PhnValid_TestClass {

    @isTest

    public static void testClass(){
        list <Passenger__c> varlis = new list<Passenger__c>();
        Passenger__c var = new Passenger__c();
        var.Phone__c = null;
        varlis.add(var);
        insert varlis;
        PhnValid_PassengerObj.valMethod(varlis);
    }
}
```

# Airline Management System

5. Save the code.(click on file --> Save).
6. Click on "Run Test" and then click on Test under the terminal section and do check that your overall code coverage should be more than 75%.

The screenshot shows an IDE with a code editor and a test results panel. The code editor displays the following code:

```
1 @isTest
2 private class PhnValid_TestClass {
3     @isTest
4     public static void testClass(){
5         list<Passenger__c> varlis = new list<Passenger__c>();
6         Passenger__c var= new Passenger__c();
7         var.Phone__c = '123456789';
8         varlis.add(var);
9         insert varlis;
10        PhnValid_PassengerObj.valMethod(varlis);
11    }
12 }
```

The test results panel shows the following data:

Status	Test Run	Enqueued Time	Duration	Failures	Total	Overall Code Coverage
✓	TestRun @ 2:15:50 pm			0	1	
✓	TestRun @ 3:00:33 pm			0	1	
✓	TestRun @ 3:01:07 pm			0	1	
✓	TestRun @ 3:02:27 pm			0	1	
✓	TestRun @ 4:02:37 pm			0	1	

The overall code coverage is 83%.

Class	Percent	Lines
Overall	83%	
PhnValidTrigger	100%	2/2
PhnValid_PassengerObj	75%	3/4

# Airline Management System

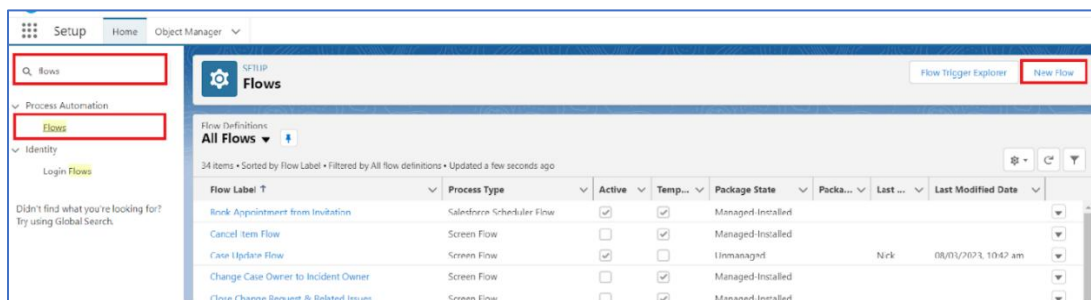
## Milestone – 13

### Flows

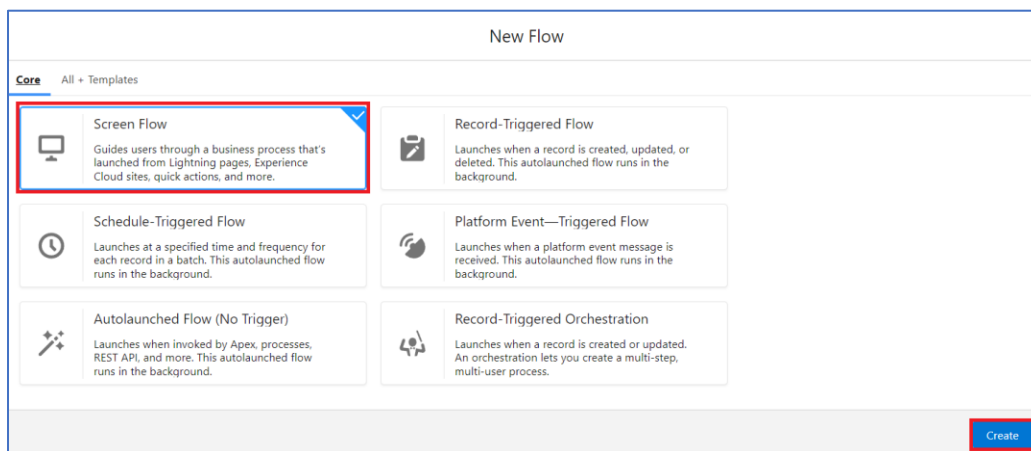
#### Activity 1 : Creating a Screen Element on booking object

Let's start by creating a screen flow and adding a screen to it.

1. From Setup search for the "Flows" in quick find and select "New Flow".

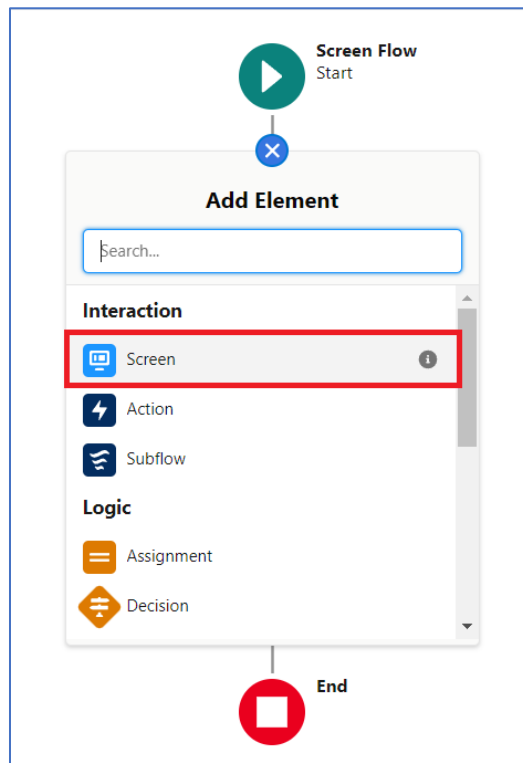


2. Select "Screen Flow" and then click on "Create".

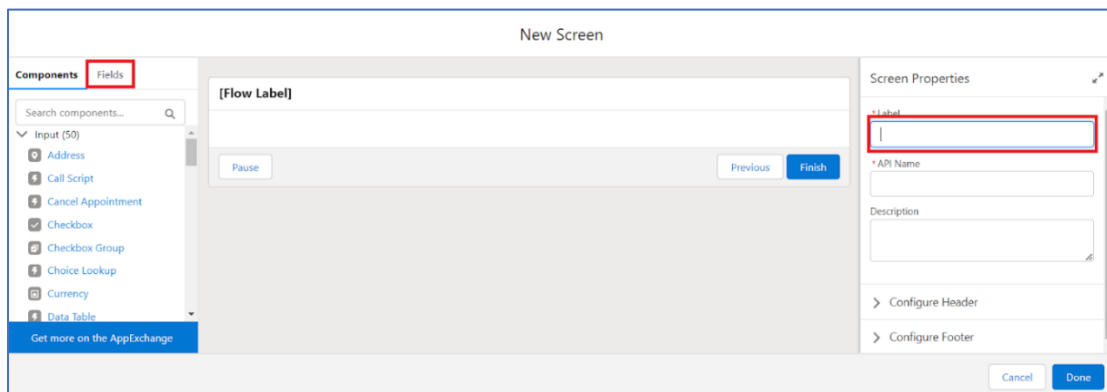


3. Place the cursor in between the Start and End element, a "+" icon appears, click on that and select "Screen".

# Airline Management System

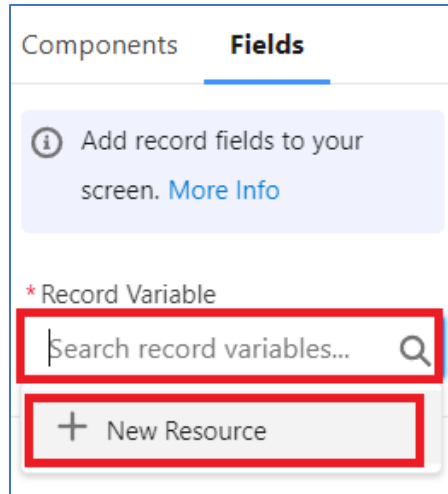


4. Give the label as "Booking Screen", and select "Fields".



5. Click on the lookup icon in the input field and select "New Resource".

# Airline Management System



Components **Fields**

*i* Add record fields to your screen. [More Info](#)

\* Record Variable

Search record variables... *Q*

+ New Resource

6. Filling the fields as given below:

- API name : bookingObject
- Datatype : Record
- Object : Booking
- Available for input : Checked
- Available for output: Checked

# Airline Management System

New Resource

\* API Name  
A value is required

Description

\* Data Type  
Record  
Allow multiple values (collection)

\* Object  
Search objects...

Availability Outside the Flow

☐ Available for input  
☐ Available for output

Cancel Done

7. Click on done
8. Once you are done with the creation of a resource with the name "bookingObject" go back to step 5 and click on the lookup icon and select "bookingObject" from the list.
9. After selecting "bookingObject" you'll have all the fields which are in the object, drag and drop each field on the screen.
10. Your screen will look like as shown below:

Edit Screen

Booking Screen Flow

Passenger Name  
No preview is available for this component.

Flight  
No preview is available for this component.

Departs From  
No preview is available for this component.

Components Fields

Search Booking fields...

Fields (7)

- Class
- Departs From
- Departs to
- Departure Date
- Flight
- Passenger Name
- Travellers

Field Information

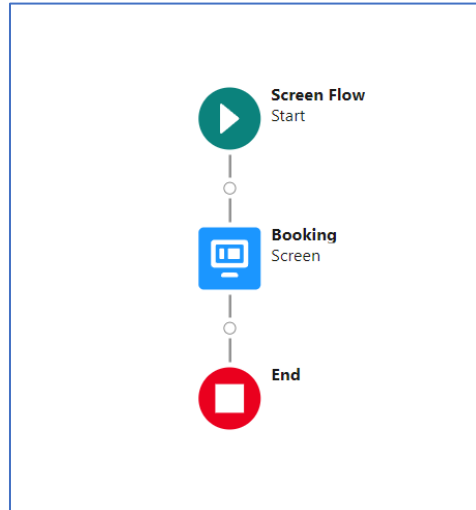
Object: Booking...c  
Field Label: Flight  
Field Name: Flight\_c  
Data Type: Lookup(Flight...c)  
Required: No  
Update: Yes  
Compatible: Yes  
Create: Yes  
Compatible: Yes

This field is managed in Object Manager. Your permissions affect the Update Compatible and Create

Cancel Done

# Airline Management System

11. Click on done and Save.
12. The flow will look like as shown below.



Let's create a "Create Element" and add it to screen flow.

# Airline Management System



## Activity 2 : Creating a Create Element on booking object

1. In the Create New path, hover over circle and click '+' icon in between booking screen and end.
2. Click Create Records.
3. In the New Create Records window, enter these values.

Field	Value
Label	Create Booking Record
API name	Gets autopopulated
How many records to create	one
How to set the record fields	Use separate resources and literal values
Object	Booking



# Airline Management System

### New Create Records

Create Salesforce records using values from the flow.

\* Label

\* API Name

A value is required.

Description

How Many Records to Create

☒ One

☐ Multiple

How to Set the Record Fields

☐ Use all values from a record

☒ Use separate resources, and literal values

4. Map the fields as shown below:

### Set Field Values for the Booking

Field	Value
Class__c	bookingObject > Class X
Departs_From__c	bookingObject > Departs From X
Departs_to__c	bookingObject > Departs to X
Departure_Date__c	bookingObject > Departure Date X
Flight__c	A bookingObject > Flight X
Passenger_Name__c	A bookingObject > Passenger Name X
Travellers__c	bookingObject > Travellers X

+ Add Field

Cancel Done

5. Click Done.

# Airline Management System

## Activity 3 : Creating a Success Screen Element

1. In the Create New path, hover over circle and click '+' icon in between Create Booking Record and end.
2. Click the Screen element.
3. Give a label name as "SuccessScreen".
4. From components search "Display text" and drag that component in the canvas and give an API Name as "SuccessMessage".
5. Inside the text area copy this message.

We are happy to inform you that your booking for [tour name] is confirmed! Get ready to create some unforgettable memories. We've made things easy for you and included all of your booking details in this very email. All you need to do is show us this email on the day you arrive, and you'll be good to go!

Date: {!bookingObject.Departure\_Date\_\_c}

Departs from: {!bookingObject.Departs\_From\_\_c}

Departs to: {!bookingObject.Departs\_to\_\_c}

Class: {!bookingObject.Class\_\_c}

Travellers: {!bookingObject.Travellers\_\_c}

Passengers Name: {!bookingObject.Passenger\_Name\_\_r.Passenger\_Name\_\_c}

We can't wait to see you!

6. Click Done
7. Save the flow and Activate it.

# Airline Management System

Outputs:

New passenger:


New Passenger

\* = Required Information

Information

\* Passenger ID

Owner


 Akhil Pillari

Name


Phone

Passport Number

Passport Issue Date



Passport Expiry Date



Date of Birth

Cancel

Save & New

Save

Flight:


New Flight

\* = Required Information

Information


\* Flight Name

Owner

 Akhil Pillari


Capacity

Departure Date



Departs From


--None--



[View all dependencies](#)

Departs to

--None--



[View all dependencies](#)

PNR Number

Cancel

Save & New

Save

# Airline Management System

## Bookings:

New Booking

\* = Required Information

Information

Booking Id

Owner

Akhil Pillari

Flight

Search Flights...

Passenger Name

Search Passengers...

Departs From

--None--

[View all dependencies](#)

Departs To

--None--

[View all dependencies](#)

Travellers

--None--

Cancel

Save & New

Save

## Crew:

New Crew

\* = Required Information

Information

\*Crew ID

Owner

Akhil Pillari

Flight

Search Flights...

Crew Member

Phone

Email

Qualification

Role

Cancel

Save & New

Save