

AIRLINES MANAGEMENT SYSTEM

Team ID : LTVIP2024TMID11598

Team Size : 4

Team Leader : P HARIPRASATH

Team member : K N CHANDRA SEKHAR

Team member : BIYYAPU VISHNUVARDHAN REDDY

Team member : R YUVARAJ

Airlines Management System

Hardware Required:

laptops

System Required:

Windows 8 machine Install with two web browser Bandwidth of 30mbps

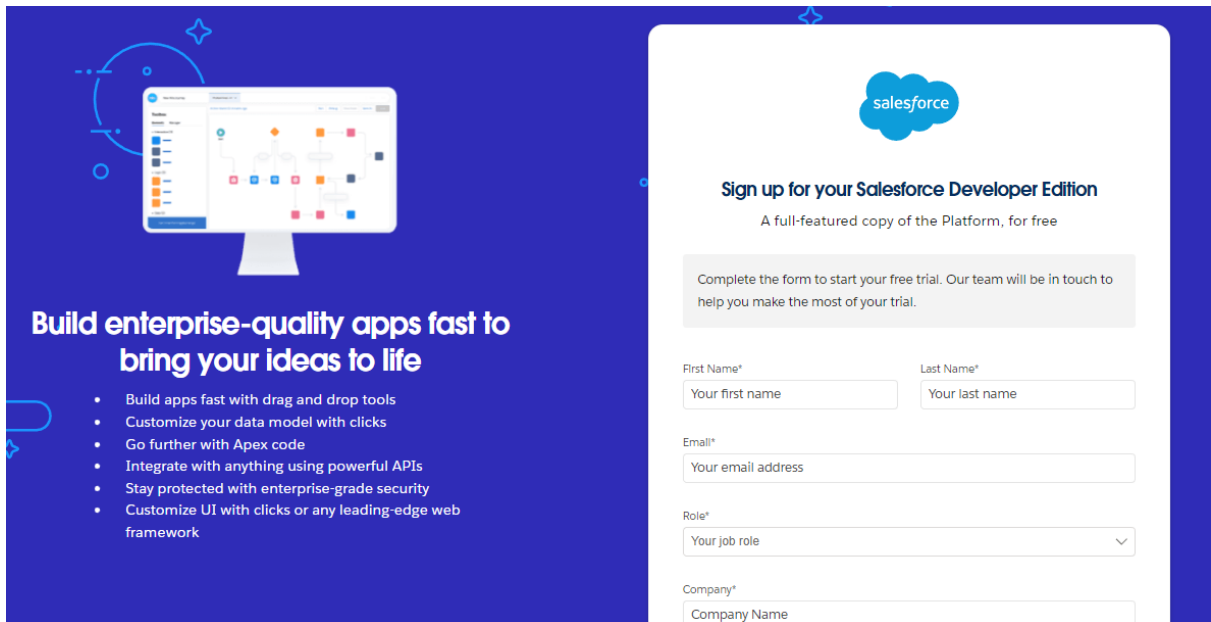
This project aims to enhance the efficiency and effectiveness of managing flights, reservations, and passenger information. The system enables airlines to manage their fleet, schedule flights, allocate seats, and handle bookings seamlessly. It provides functionalities for ticket reservations, seat availability 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.

SALESFORCE

Creating Developer Account

Creating a developer org in salesforce.

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



Build enterprise-quality apps fast to bring your ideas to life

- Build apps fast with drag and drop tools
- 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

Sign up for your Salesforce Developer Edition
A full-featured copy of the Platform, for free

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*
Your first name

Last Name*
Your last name

Email*
Your email address

Role*
Your job role

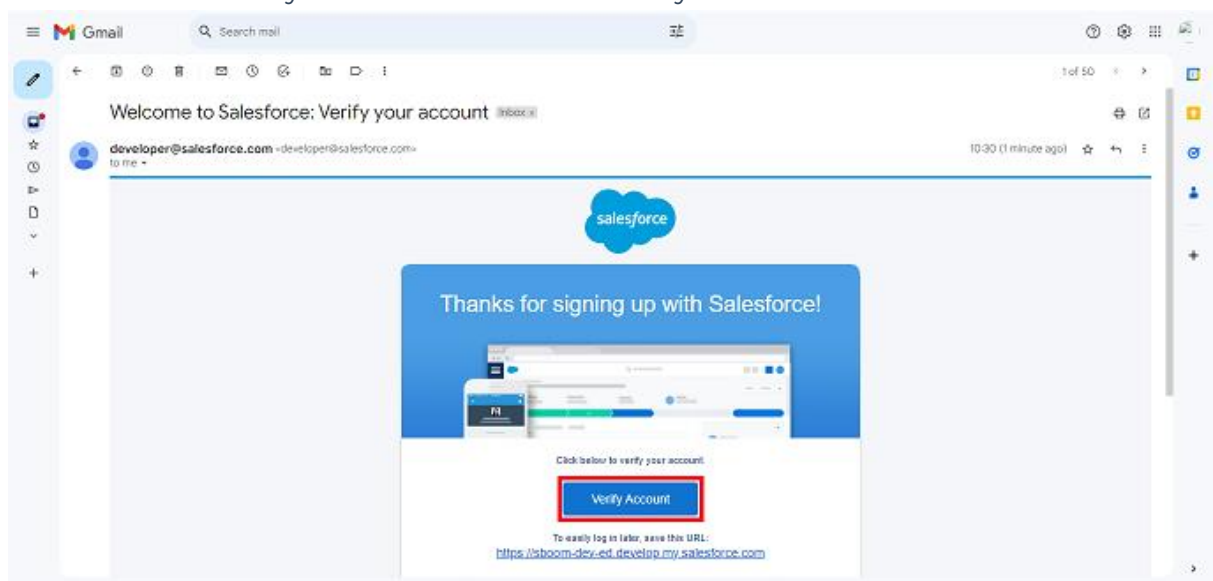
Company*
Company Name

1. First name & Last name
2. Email
3. Role : Developer
4. Company : College Name
5. Country : India
6. Postal Code : pin code
7. Username : should be a combination of your name and company

This need not be an actual email id, you can give anything in the format : `username@organization.com`
Click on sign me up after filling these.

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.

Change Your Password

Enter a new password for lead@sb.oom.
Make sure to include at least:

- ✓ 8 characters
- ✓ 1 letter
- ✓ 1 number

* New Password
..... Good

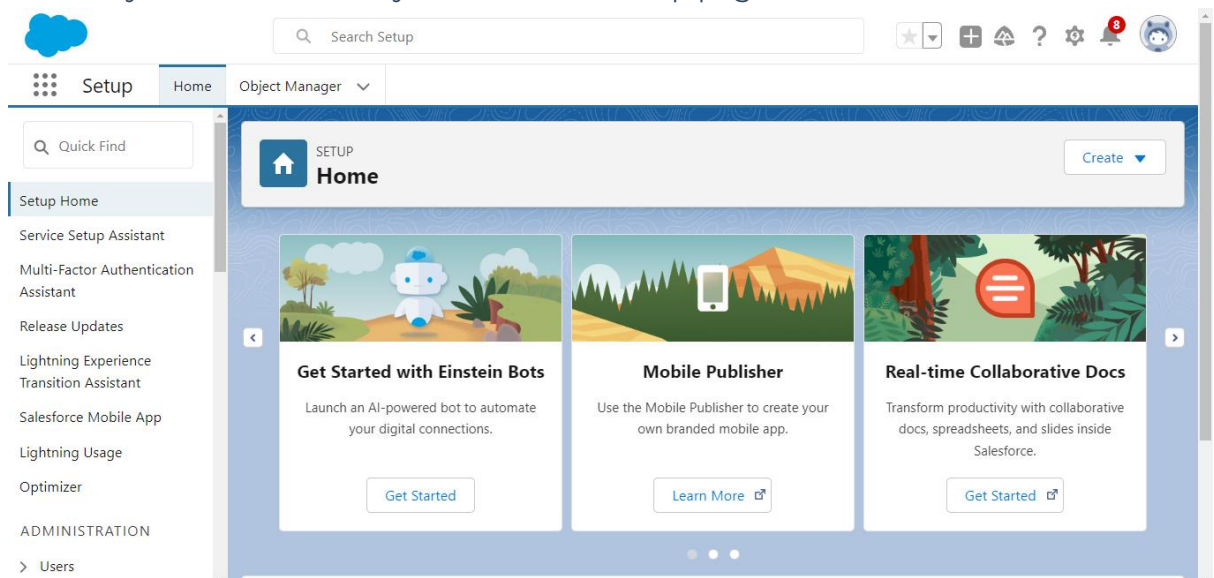
* Confirm New Password
..... Match

Security Question
▼ In what city were you born?

* Answer
asdfghjkl

Change Password

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

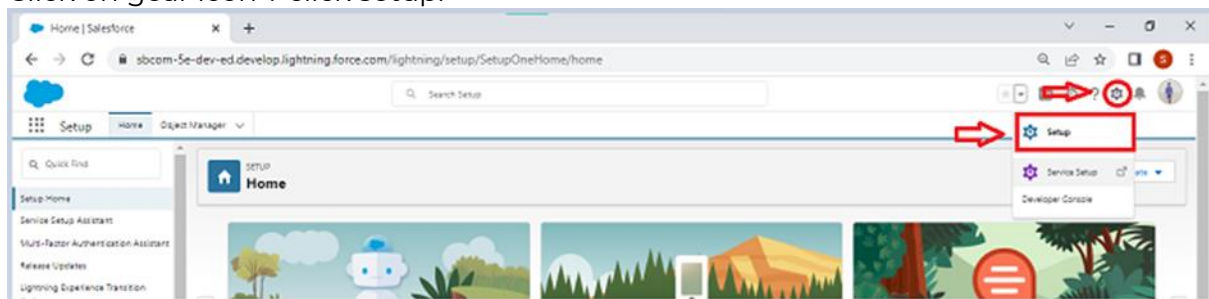


OBJECT

Use Case:

Creating an object in Salesforce organization is essential for efficient data management and process automation. By defining custom objects, businesses can structure and store data specific to their needs, enabling streamlined workflows, personalized reporting, and enhanced user experiences. Objects serve as the foundation for organizing and leveraging critical information within Salesforce. As an Admin for The Air India airlines, It's your responsibility to store the data as per the organization needs.

To Navigate to Setup page:
Click on gear icon ? click setup.



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

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 Example: Account

Plural Label Example: Accounts

Starts with vowel sound ☐

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

Object Name Example: Account

Description

Context-Sensitive Help Setting ☒ Open the standard Salesforce.com Help & Training window
☐ Open a window using a Visualforce page

Content Name

Enter Record Name Label and Format


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 Example: Account Name

Data Type

2. Click on Allow reports,
3. Allow search --> Save.

Optional Features

☒ Allow Reports 

☐ Allow Activities

☐ Track Field History

☐ Allow in Chatter Groups

☐ Enable Licensing [Learn more](#)

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 [What is this?](#)

☐ 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 

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.
 1. Enter the label name--> Booking
 2. Plural label name--> Bookings
 3. Enter Record Name Label and Format
 - Record Name : Booking Id
 - Data Type : Auto Number
 - Display Format : Bk-{0000}
 - Starting Number : 1
2. Click on Allow reports,
3. Allow search --> Save

Activity 3

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

TABS

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)

The screenshot shows the Salesforce Setup interface. The top navigation bar has 'Setup' selected. The 'Quick Find' bar contains the text 'tabs'. In the left sidebar, under 'User Interface', the 'Tabs' link is highlighted. The main content area shows the 'Custom Tabs' page. The 'Custom Object Tabs' section has a 'New' button highlighted in red. Below this, there are sections for 'Web Tabs', 'Visualforce Tabs', 'Lightning Component Tabs', and 'Lightning Page Tabs', each with a 'New' button and a 'What Is This?' link. The status for each section is 'No [Tab Type] Tabs have been defined'.

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

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

Tab Style 

(Optional) Choose a Home Page Custom Link is a splash page the first time your users click on this tab.

Enter a short description.
Description

Next Cancel

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

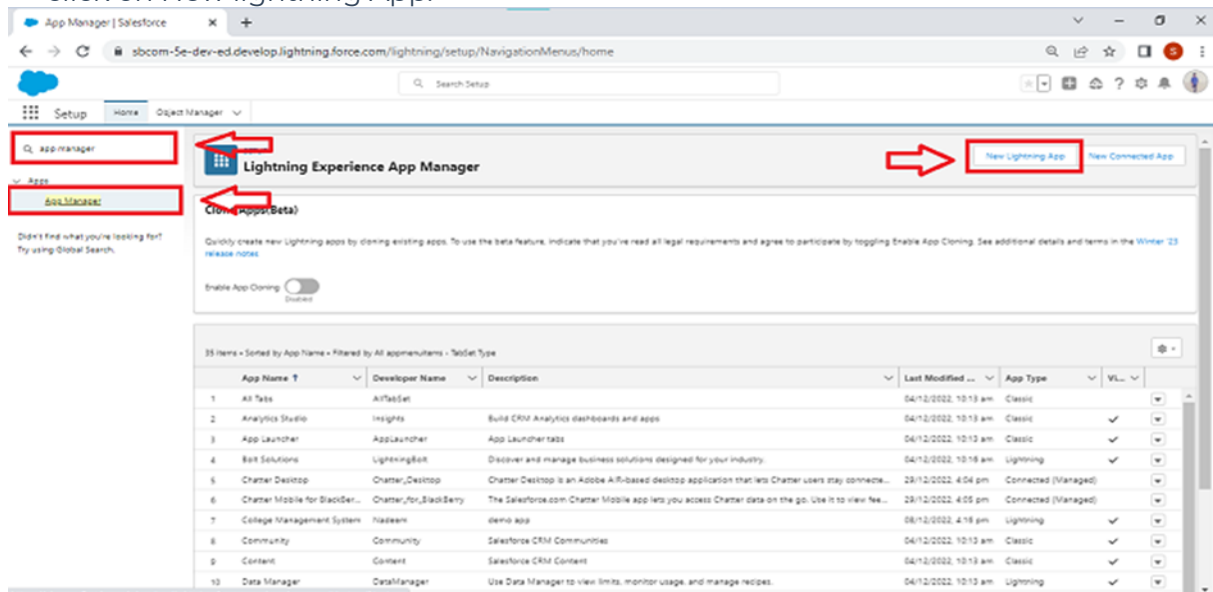
Now create tabs for Crew and Passengers objects.

THE LIGHTNING APP

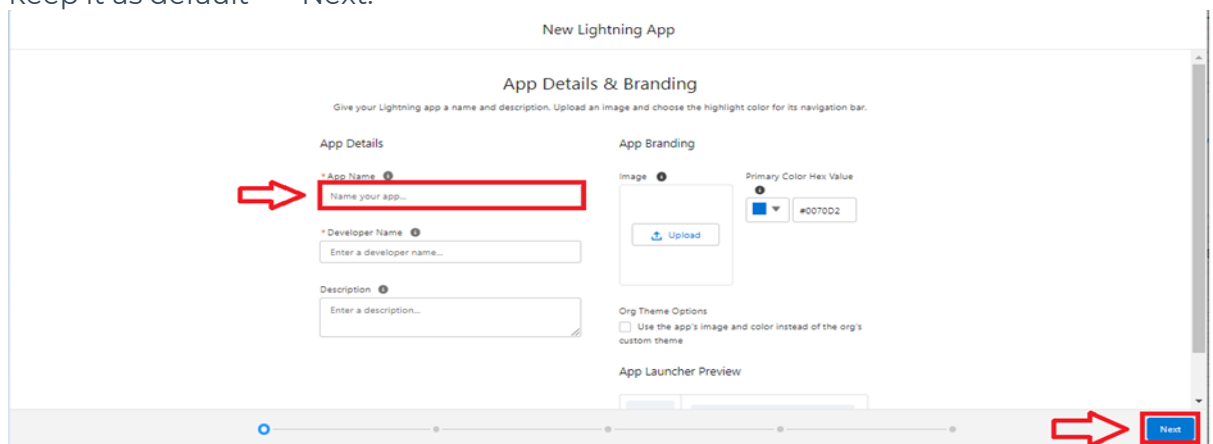
Create A Lightning App

To create a lightning app page:

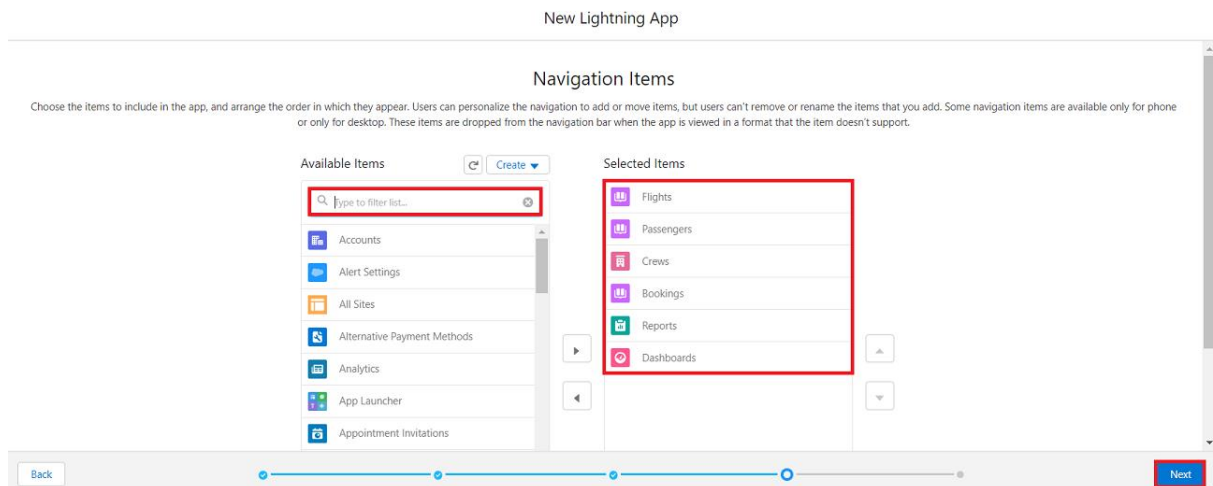
1. Go to setup page --> search “app manager” in quick find -->select “app manager” -->click on New lightning App.



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.

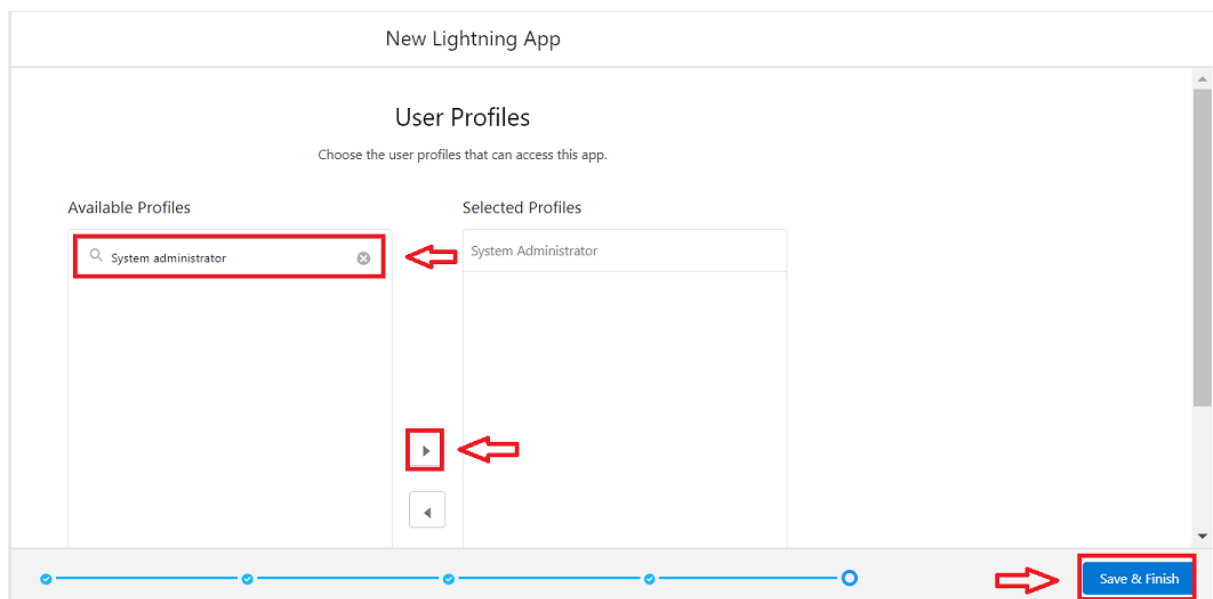


4. To Add Navigation Items:



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:



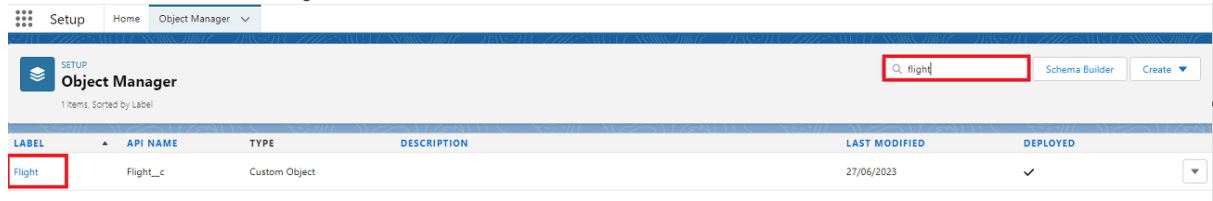
Search profiles (System administrator) in the search bar --> click on the arrow button --> save & finish.

FIELDS

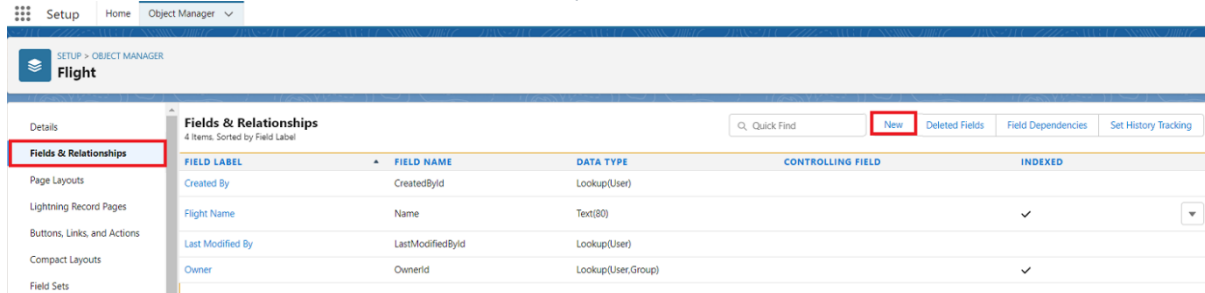
Activity 1: Creating Field In Flight Object

To create fields in an object:

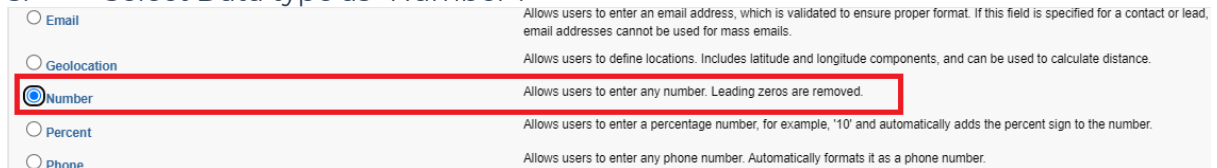
1. Go to setup --> click on Object Manager --> type object name(Flight) in quick find bar--> click on the object.



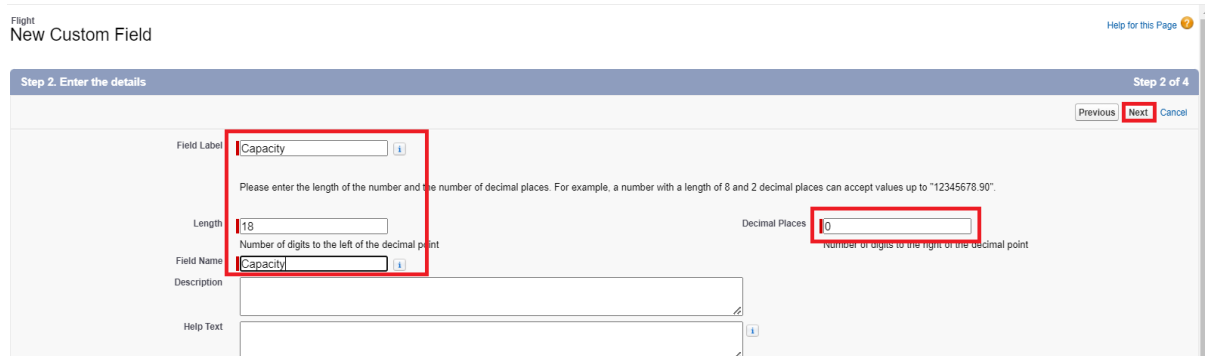
2. Now click on “Fields & Relationships” --> New



3. Select Data type as “Number”.



4. Click on Next



5. Fill the above as following:
 - o Field Label: Capacity
 - o Length : 18
 - o Field Name : gets auto generated
 - o Click on Next ? Next --> Save and new.

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 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 checked="" 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:
 - a. Field Label:Departure Date.
 - b. Field Name : gets auto generated.
 - c. Click on Next --> Next --> Save and new.

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

Step 2. Enter the details Step 2 of 4

Field Label: Previous **Next** Cancel

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

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

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.

Activity 5: Creating Remaining Fields

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

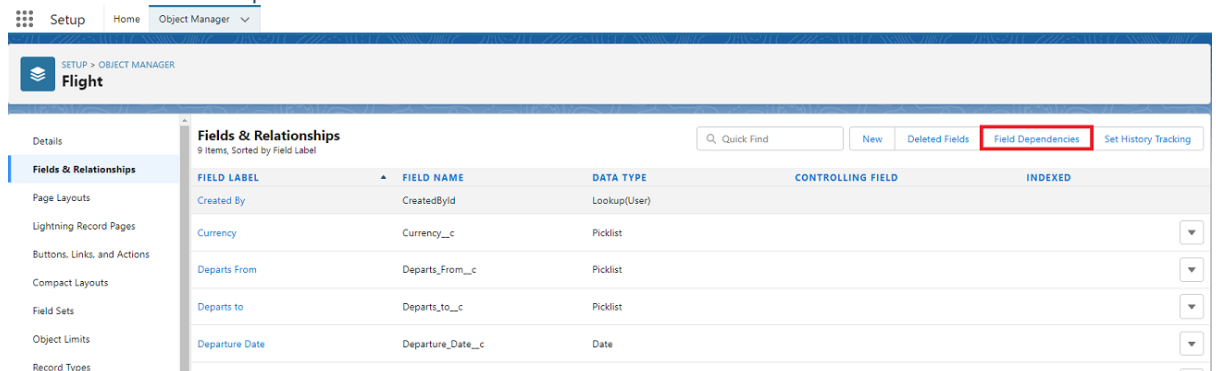
| Sl No | Object | Field | Datatype |
|-------|-----------|--|--|
| 1 | Passenger | 1. Name 2. Phone 3. Passport Number 4. Passport Issue Date 5. Passport Expiry Date 6. Date of Birth 7. Nationality | Text Phone Number Date Date Date Picklist : Values as below <div style="border: 1px solid black; padding: 5px;"> India China USA Canada Mexico Australia South Korea North Korea Germany </div> |

| | | | |
|---|---------|---|---|
| 2 | Booking | <ol style="list-style-type: none"> 1. Passenger Name 2. Departs From 3. Departs To 4. Travellers | <p>Lookup relationship with Passenger Picklist : Values are same as Activity 3 Picklist : Values are same as Activity 3 Picklist : Values as below</p> <div> Adult Child Infant </div> <p>Picklist : Values as below</p> <div> Economy Business First Class </div> |
| 3 | Flight | <ol style="list-style-type: none"> 1. Departs to 2. PNR Number 3. Departure Date 4. Departure Time 5. Arrival Time | <p>Picklist : Values are same as Activity 3 Number Date Time Time</p> |
| 4 | Crew | <ol style="list-style-type: none"> 1. Flight 2. Crew Member 3. Phone 4. Email 5. Qualification 6. Role | <p>Lookup relationship with Flight Text(20) Phone Email Text Picklist: Values as below</p> <div> Pilot Co-Pilot Flight Attendants Air Hosts Air Hostesses Air Stewards Air Stewardesses On-Board Chefs </div> |

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".

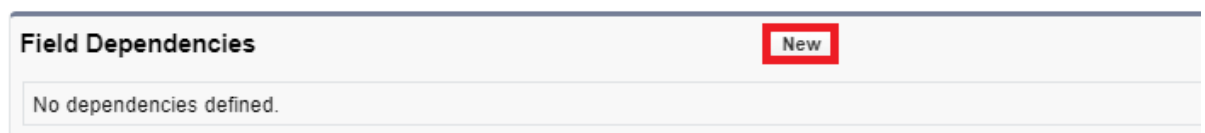


2. Click "New" under Field Dependencies.

Flight Field Dependencies

« [Back to Custom Object: Flight](#)

This page allows you to define dependencies between fields (e.g., dependent picklists).



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

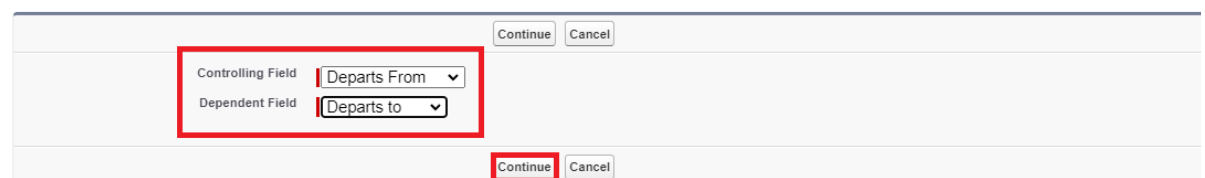
New Field Dependency

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.

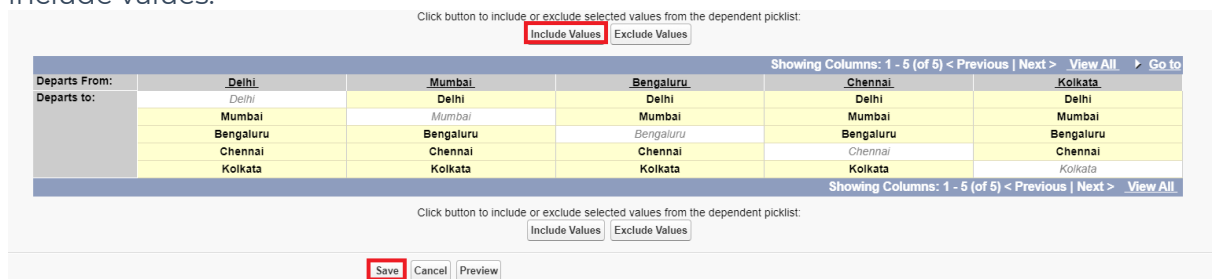
- The field that drives filtering is called the "controlling field." Standard and custom checkboxes and picklists with at least one and less than 300 values can be controlling fields.
- The field that has its values filtered is called the "dependent field." Custom picklists and multi-select picklists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



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



6. Click on Save.

Activity 7

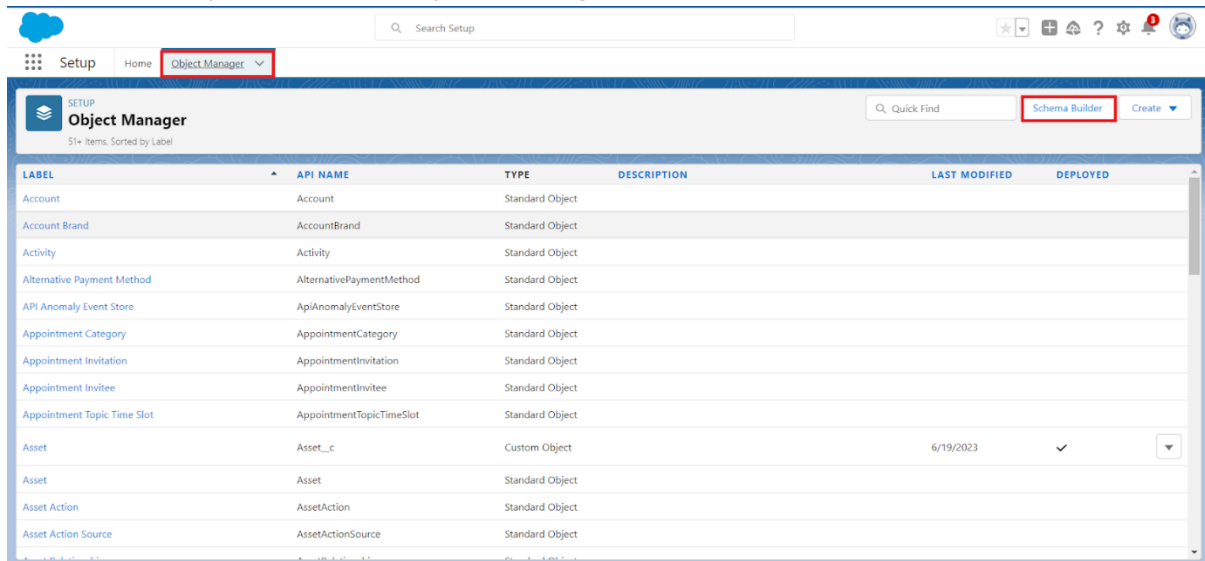
Create similar Field dependencies for booking object as we have done in activity 6.

Activity 8: Schema Builder

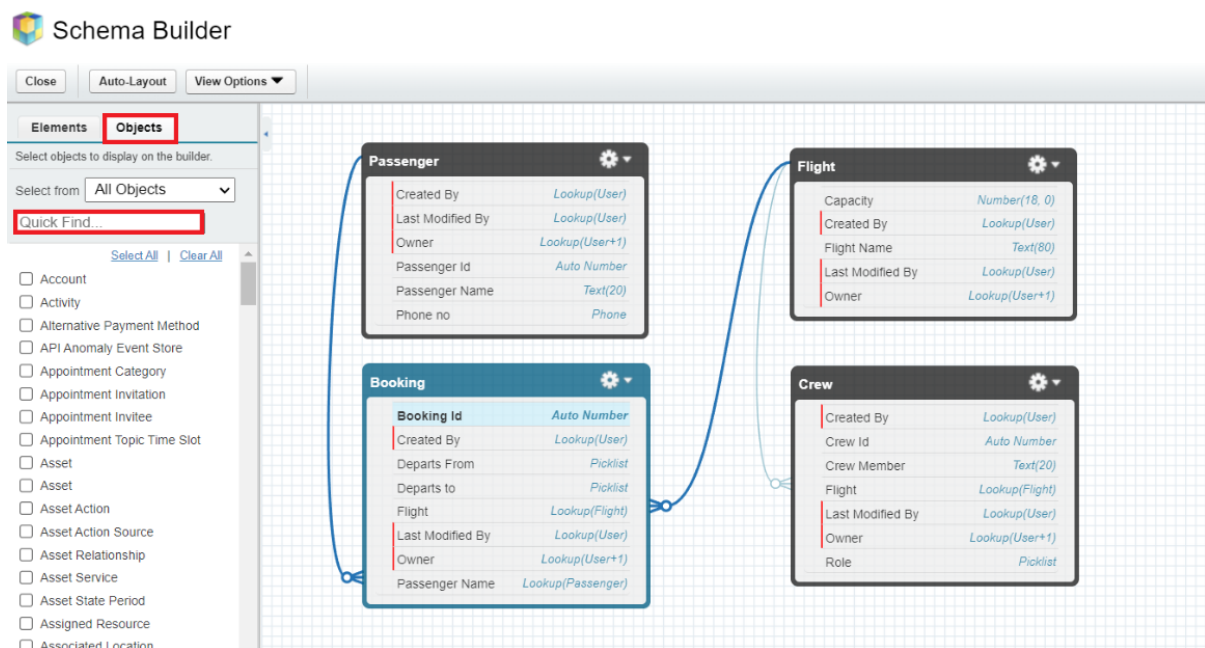
Schema Builder is a powerful tool within Salesforce that allows you to visualise, explore, and design the relationships between objects in your Salesforce organisation. It provides a graphical representation of the data model, making it easier to understand the structure and connections between different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

Creating Schema Builder

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



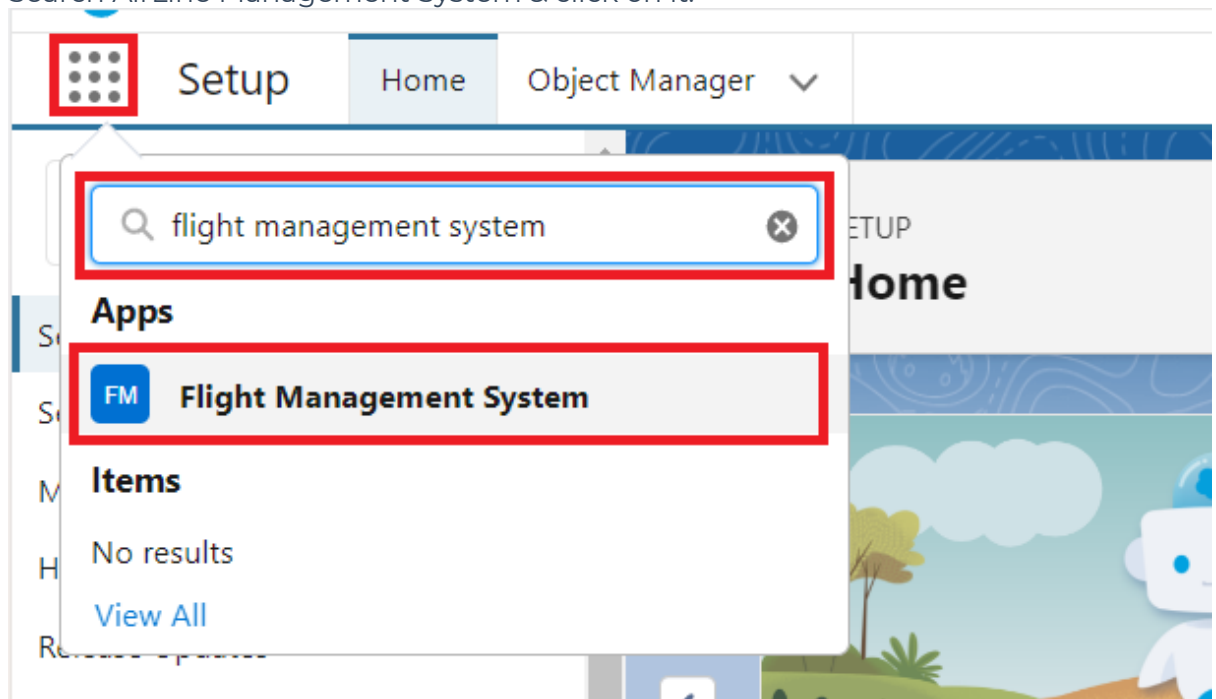
2. Click on Clear All
3. Select objects--> Enter Objects which we have created in the above Milestone 2 (Passenger, Booking, Flight & Crew) in a quick box and select them.



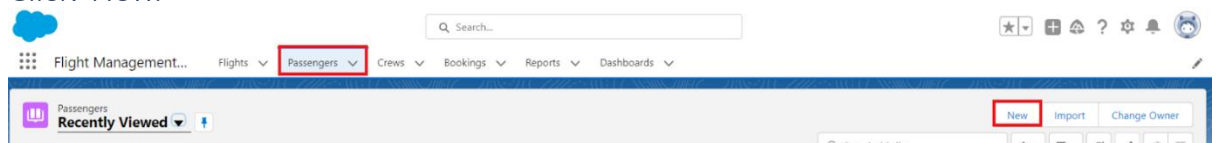
MILESTONE 6 - USER ADOPTION

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.

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.

MEILESTONE 7 : PROFILES

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.

| 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.

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.

MILESTONE 8 : ROLE

Activity 1: Creating Admin Manager Role

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

The screenshot shows the Salesforce Setup interface. On the left, the 'Setup' menu is visible with 'Roles' highlighted. The main content area is titled 'Understanding Roles' and displays a 'Sample Role Hierarchy' diagram. The diagram shows a hierarchy starting with 'Executive Staff' (CEO, President, CFO, VP, Sales) at the top, branching down to 'Western Sales Director', 'Eastern Sales Director', and 'International Sales Director'. Below these are further sub-roles like 'Western Sales Rep', 'Eastern Sales Rep', 'International Sales Rep', 'Sales Rep', 'Sales Rep', and 'Sales Rep'. A 'Set Up Roles' button is visible at the bottom right of the diagram area.

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



- 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

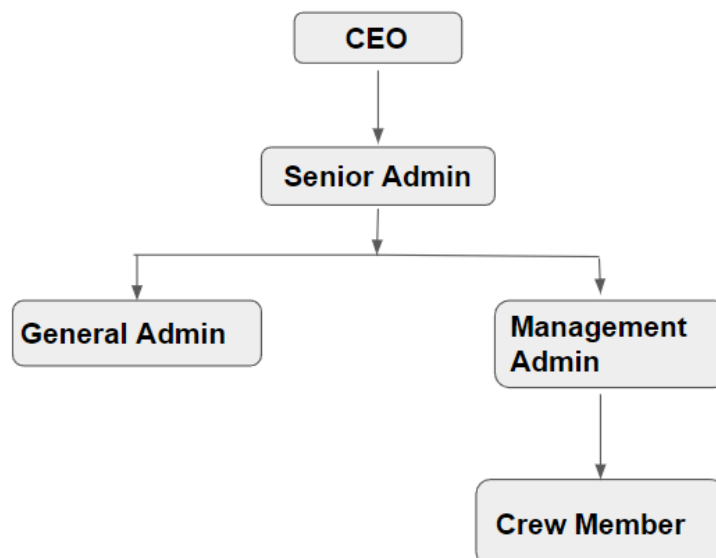
Role Name

This role reports to

Role Name as displayed on reports

Save Save & New Cancel

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



Role Hierarchy: The above diagram represents which role reports to which one.

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.

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 for 'Niklaus Mikaelson' in Salesforce. The page has a 'SETUP Users' header. Below the header, there are buttons for 'Save', 'Save & New', and 'Cancel'. The 'General Information' section contains the following fields:

- First Name: Niklaus
- Last Name: Mikaelson
- Alias: nmika
- Email: example@gmail.com
- Username: nikmik@smart.com
- Nickname: Niklaus
- Title: (empty)
- Company: (empty)
- Department: (empty)
- Division: (empty)

On the right side, there are several dropdown menus and checkboxes:

- Role: Senior Admin
- User License: Salesforce
- Profile: Senior Admin
- Active: ☐
- Marketing User: ☐
- Offline User: ☐
- Knowledge User: ☐
- Flow User: ☐
- Service Cloud User: ☐
- Site.com Contributor User: ☐
- Site.com Publisher User: ☐
- WDC User: ☐
- Data.com User Type: --None--
- Data.com Monthly Addition Limit: 300
- Accessibility Mode (Classic Only): ☐

3. Save.

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

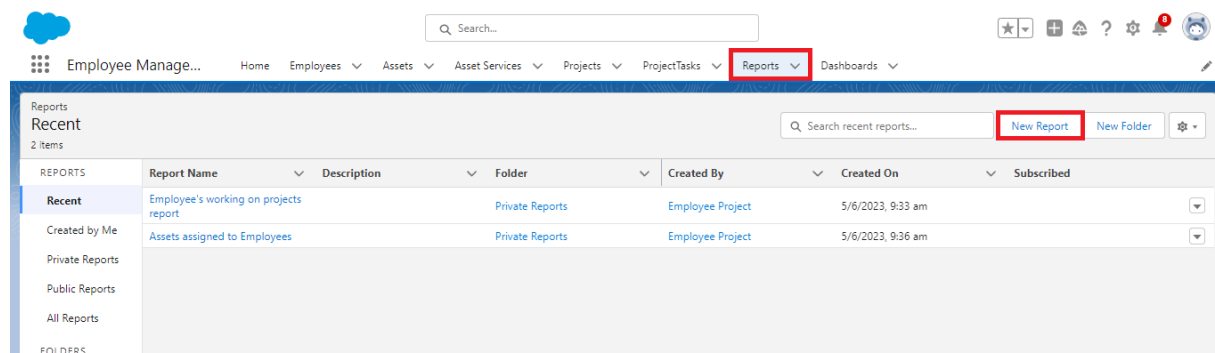
Create two more users for Management Admin and Crew Members as mentioned in activity 2.

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.

Create Report

Category
 Recently Used
All
 Accounts & Contacts
 Opportunities
 Customer Support Reports
 Leads
 Campaigns
 Activities
 Contracts and Orders
 Price Books, Products and Assets
 Administrative Reports

Select a Report Type

| Report Type Name | Category |
|------------------------------|----------|
| Bookings | Standard |
| Bookings with Flight | Standard |
| Bookings with Passenger Name | Standard |

Details

Bookings with Flight
 Standard Report Type

Details
 Fields (25)

Created By You
 No Reports Yet

Created By Others
 No Reports Yet

Objects Used in Report Type
 Owner
 Flight

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.

Flight Management...
 Flights Passengers Crews Bookings **Reports** Dashboards Leaves

REPORT
 New Bookings with Flight Report
 Bookings with Flight

Update Preview Automatically ☒

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

| 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_l29

Report Description

Folder

Private Reports

Select Folder

Cancel

Save

7. Click on Save.

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

Activity 2

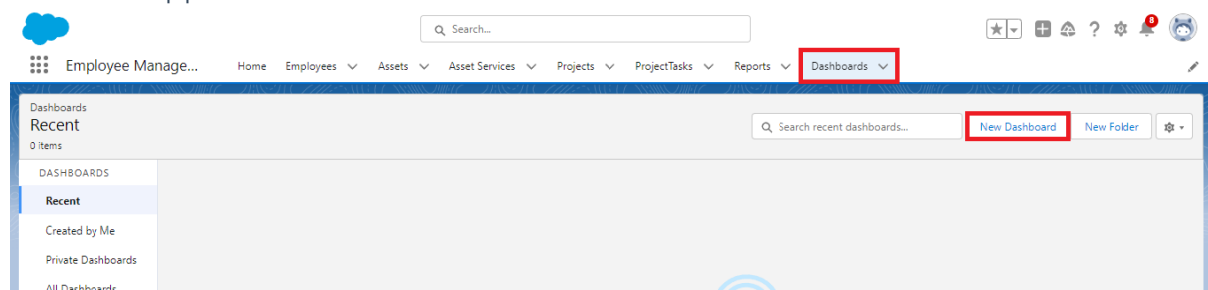
1. Create a report with a report type: “Booking with Passenger Name”.
2. Create a report with report type: “Crew with Flight”.

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.

* Name

Booking with Flights Component

Description

using the Booking with flight report

Folder

Private Dashboards

Select Folder

Cancel

Create

- Employee Manage... Home Employees Assets Asset Services Projects ProjectTasks Reports Dashboards
- Dashboard 1 + Component + Filter Save Done

- Reports

Recent

Created by Me

Private Reports

Public Reports

All Reports

Folders

Created by Me

Shared with Me

All Folders

Select Report

Bookings with Flight Details
demo project - 28-Aug-2023, 11:51 am - Private Reports

Sample Flow Report: Screen Flows
Automated Process - 20-Jun-2023, 5:13 pm - Public Reports

Cancel

Select

- Report

Bookings with Flight Details

☐ Use chart settings from report

Display As

Sum of Flight: PNR Number

Sliced By

Travellers

Preview

Bookings with Flight Details

Sum of Flight: PNR Number

457k

679k

1.3M

1.3M

Travellers

Adult

Child

Infant

View Report (Bookings with Flight Details)

Cancel

Add

- Flight Management...

FlightsPassengersCrewsBookingsReportsDashboards

Booking with Flights Component

Bookings with Flight Details

Sum of Flight: PNR Number

| Travellers | Sum of Flight: PNR Number |
|------------|---------------------------|
| Adult | 679k |
| Child | 1.3M |
| Infant | 457k |

Travellers

Adult

Child

Infant

View Report (Bookings with Flight Details)

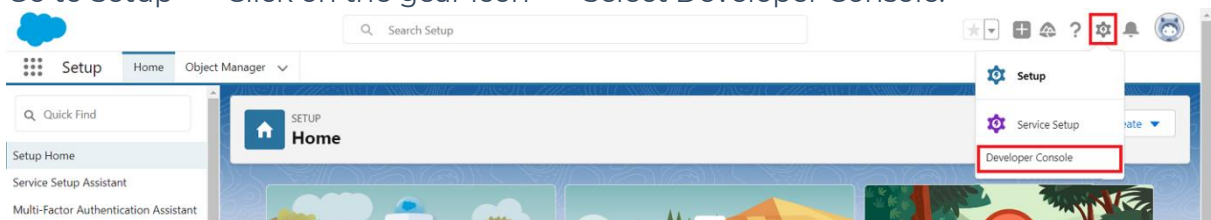
Activity 2

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

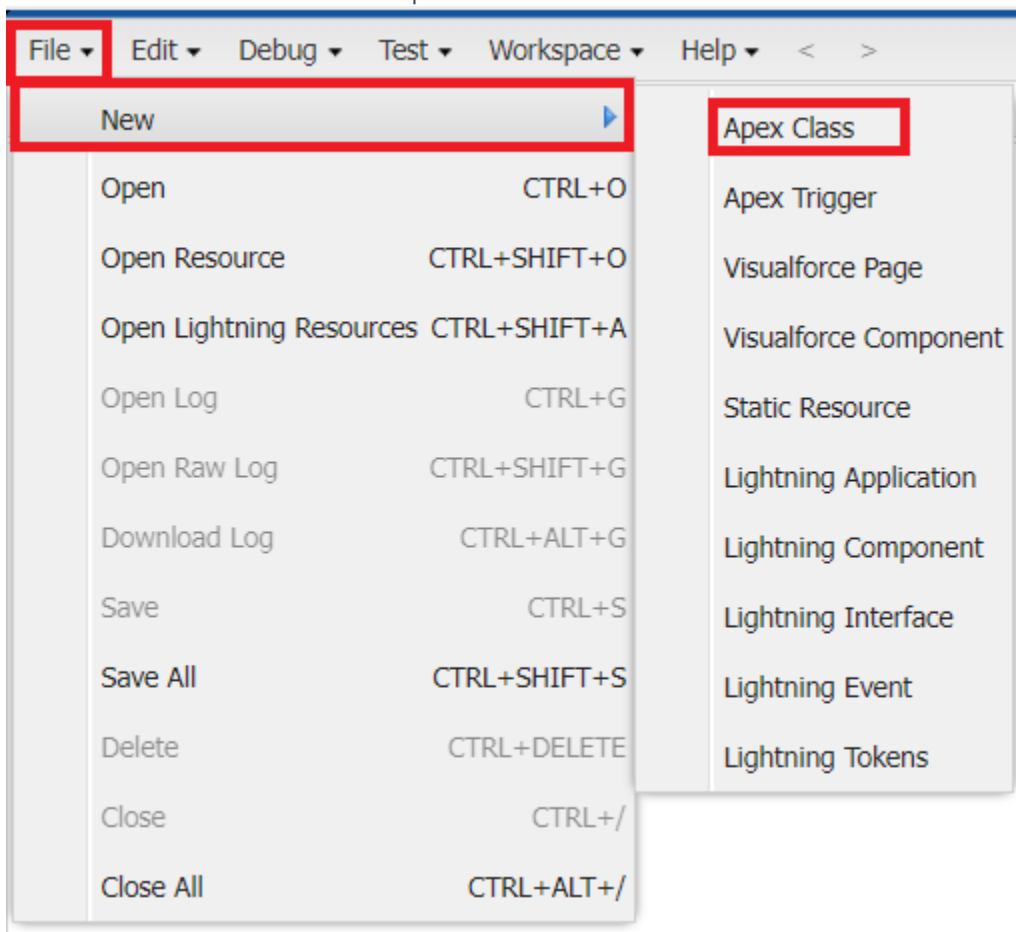
MILESTONE 12: APEX

Activity 1 : Create An Apex Class

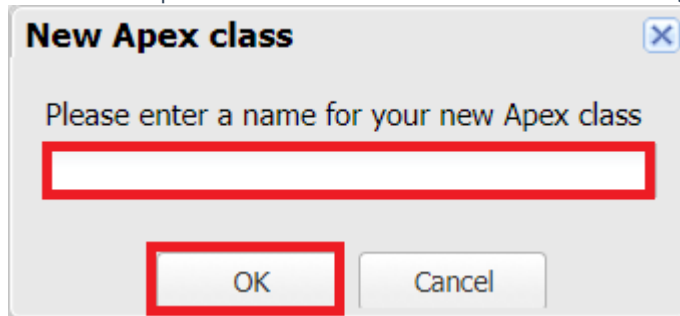
1. Go to Setup --> Click on the gear icon --> Select Developer Console.



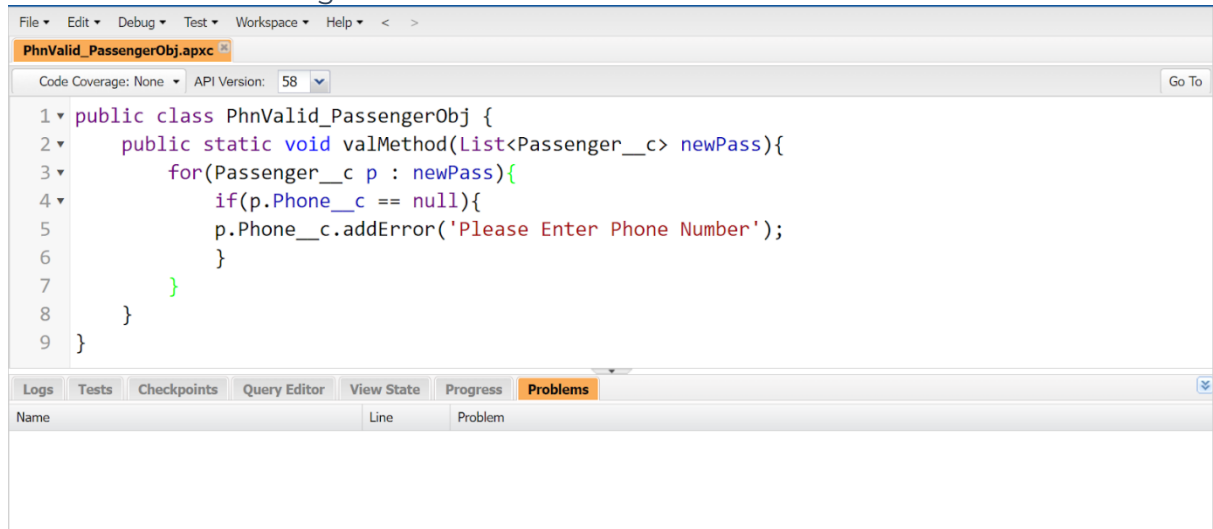
2. Then we can see the Developer console. Click on the developer console and you will navigate to a new console window.
3. To create a new Apex Class follow the below steps:
Click on the file --> New --> Apex Class.



4. Give the Apex Class name as “PhnValid_PassengerObj”.



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



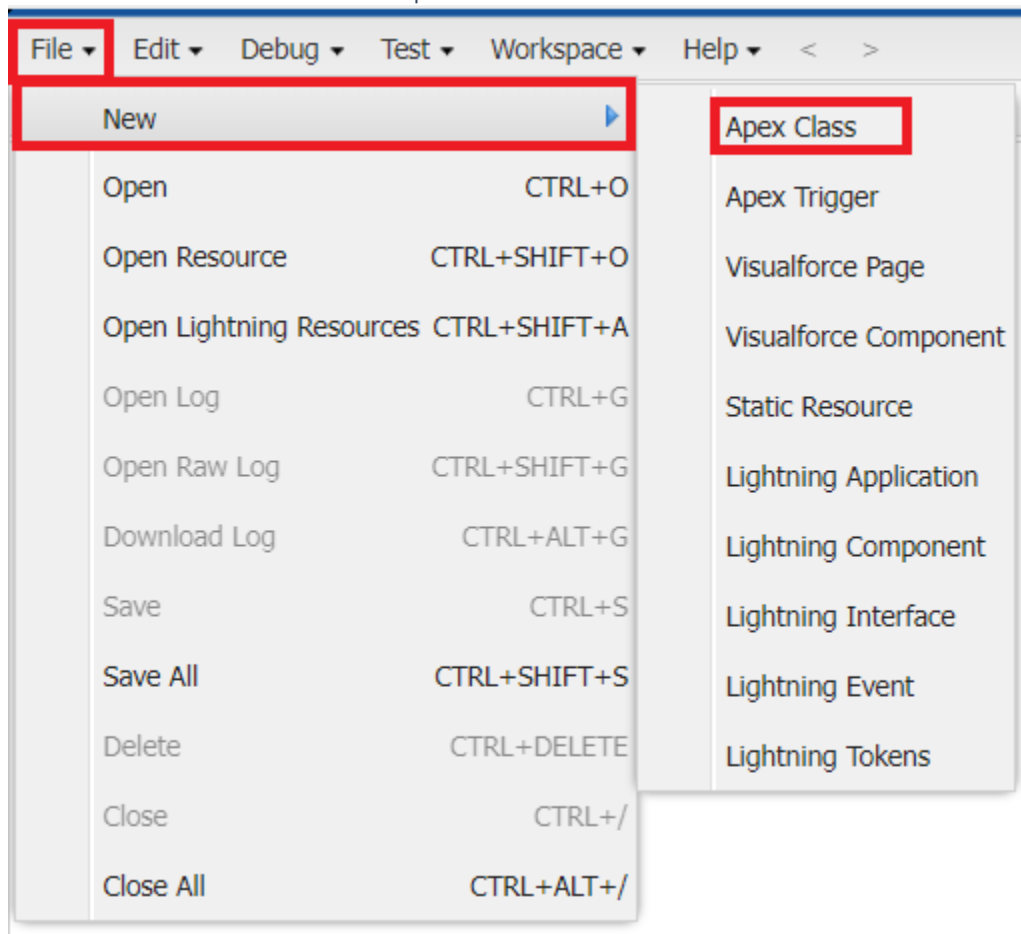
Source Snippet:

```
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');
            }
        }
    }
}
```

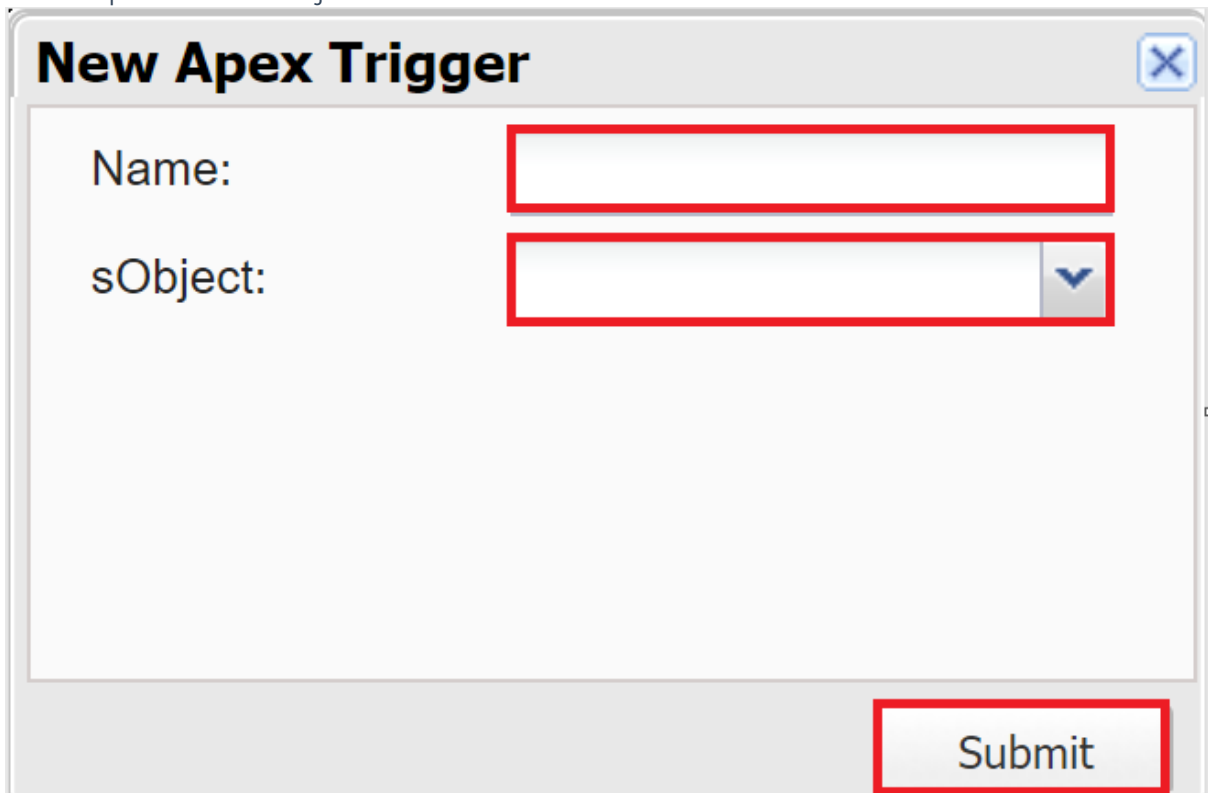
7. Save the code.(click on file --> Save)

Activity 2 : Create An Apex Trigger

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

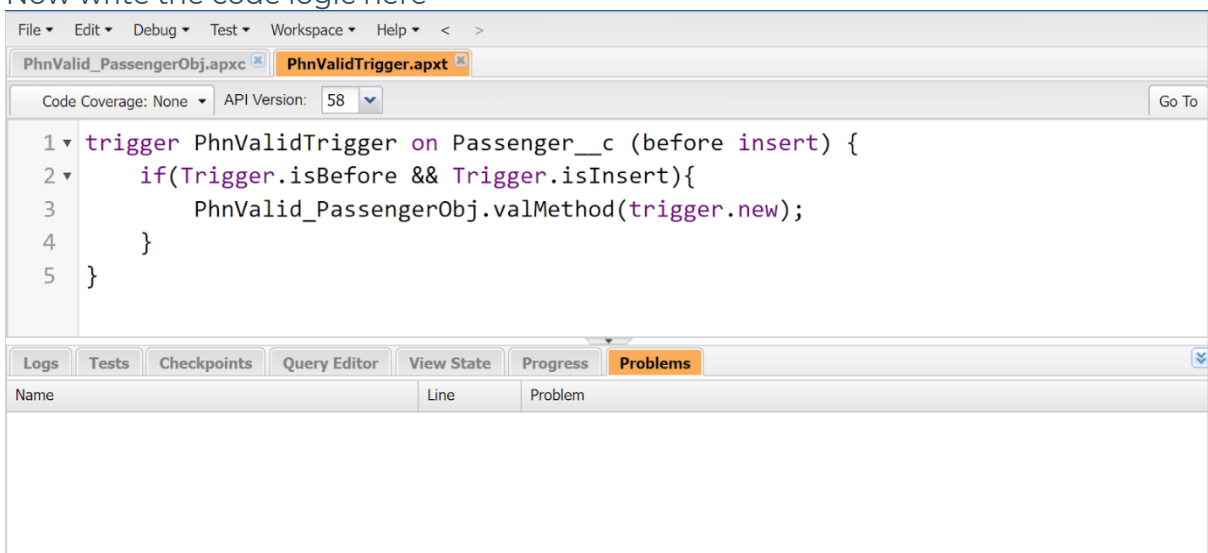


2. Give the Apex Trigger name as “PhnValidTrigger”, and select “Passenger__c” from the dropdown for sObject.



The image shows a 'New Apex Trigger' dialog box. It has a title bar with a close button. Inside, there are two fields: 'Name:' with a text input box, and 'sObject:' with a dropdown menu. Both fields are highlighted with red rectangles. At the bottom right, there is a 'Submit' button, also highlighted with a red rectangle.

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



The image shows the Apex IDE code editor. The top bar includes menus for File, Edit, Debug, Test, Workspace, and Help. Below the menus, there are tabs for 'PhnValid_PassengerObj.apxc' and 'PhnValidTrigger.apxt'. The code editor shows the following code:

```
1 trigger PhnValidTrigger on Passenger__c (before insert) {  
2     if(trigger.isBefore && trigger.isInsert){  
3         PhnValid_PassengerObj.valMethod(trigger.new);  
4     }  
5 }
```

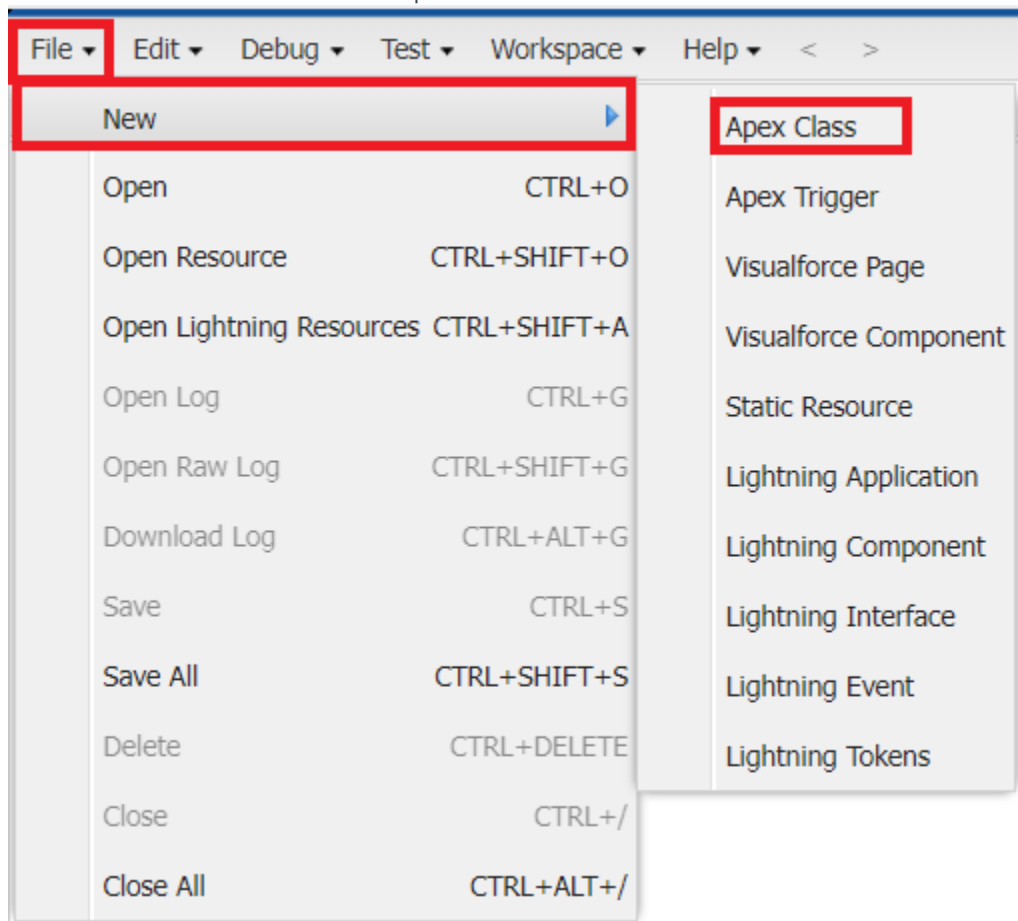
Below the code editor, there is a toolbar with buttons for Logs, Tests, Checkpoints, Query Editor, View State, Progress, and Problems. At the bottom, there is a table with columns for Name, Line, and Problem.

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

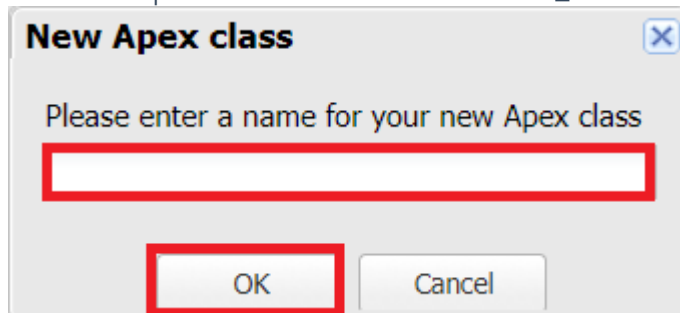
5. Save the code.(click on file --> Save)

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.

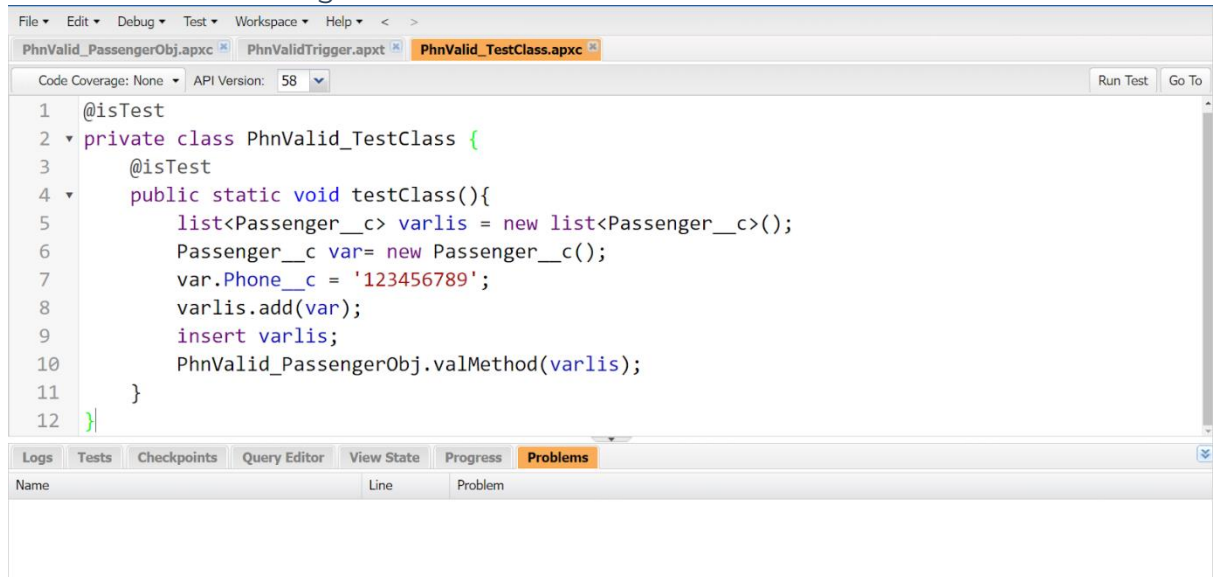


2. Give the Apex Class name as "PhnValid_TestClass".



3. Click ok.

4. Now write the code logic here

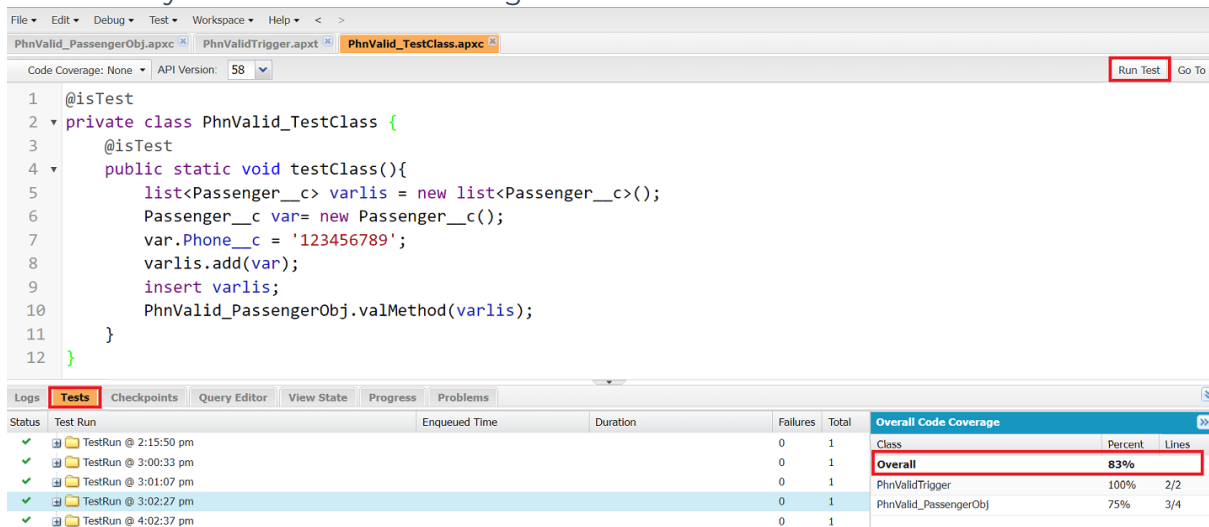


Source Code:

```
@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);
    }
}
```

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 a test class with 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 |
|--------|----------------------|---------------|----------|----------|-------|
| ✓ | 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 table shows the following data:

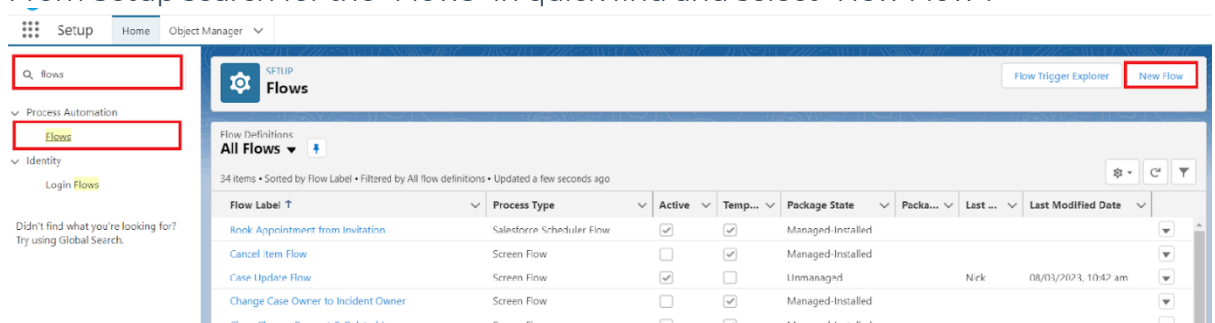
| Class | Percent | Lines |
|-----------------------|---------|-------|
| Overall | 83% | |
| PhnValidTrigger | 100% | 2/2 |
| PhnValid_PassengerObj | 75% | 3/4 |

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.

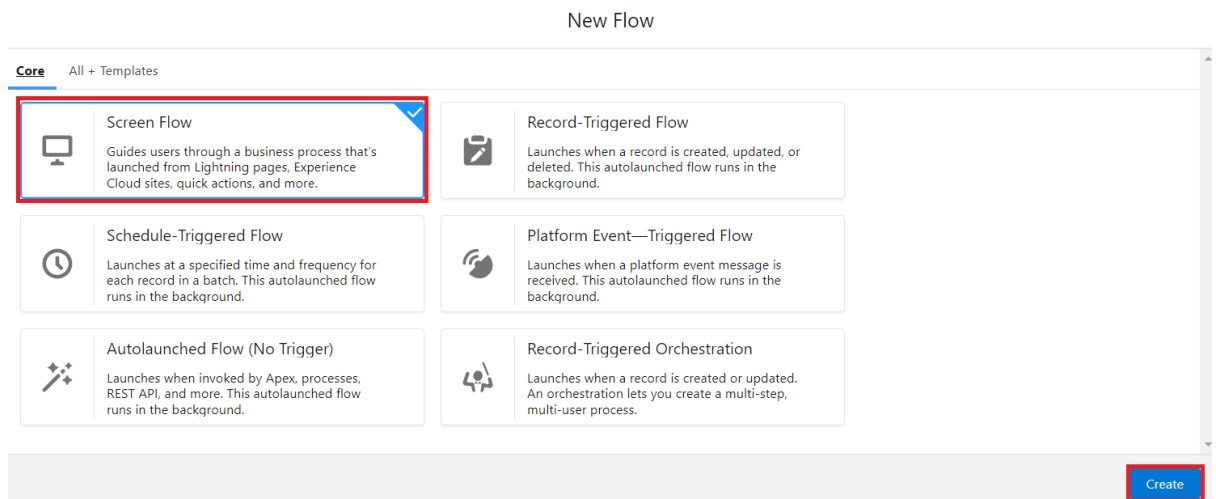
1. From Setup search for the “Flows” in quick find and select “New Flow”.



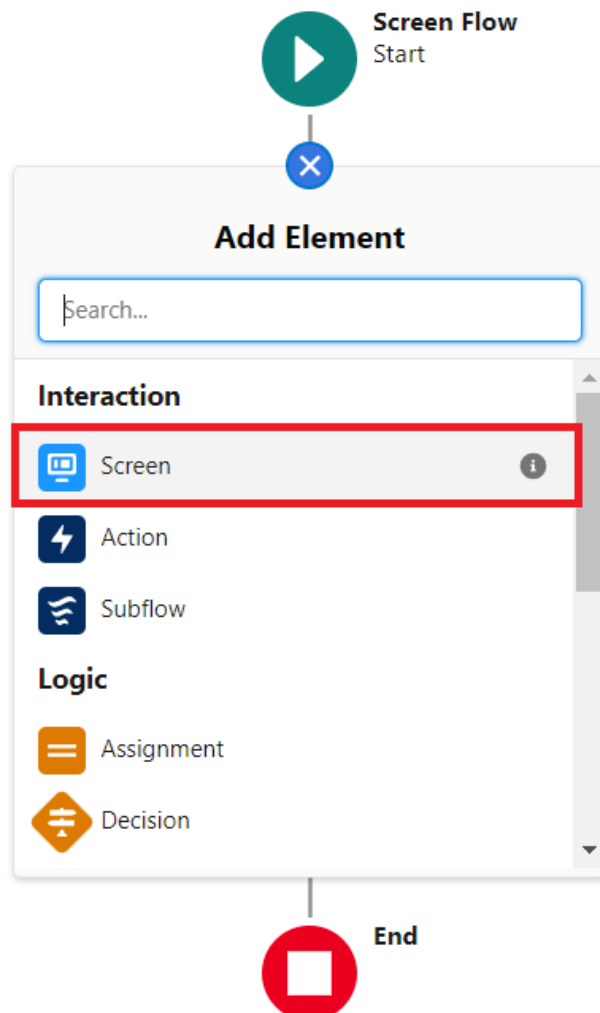
The screenshot shows the Salesforce Setup page with the Flows section selected. The left sidebar shows the navigation menu with "Flows" highlighted. The main content area displays the "All Flows" list with the following data:

| Flow Label ↑ | Process Type | Active | Temp... | Package State | Packa... | Last ... | Last Modified Date |
|---------------------------------------|---------------------------|--------|---------|-------------------|----------|----------------------|--------------------|
| Book Appointment from Invitation | Salesforce Scheduler Flow | ✓ | ✓ | Managed-Installed | | | |
| Cancel Item Flow | Screen Flow | ✓ | ✓ | Managed-Installed | | | |
| Case Update Flow | Screen Flow | ✓ | ✓ | Unmanaged | Nick | 08/03/2023, 10:42 am | |
| Change Case Owner to Incident Owner | Screen Flow | ✓ | ✓ | Managed-Installed | | | |
| Close Change Request & Related Issues | Screen Flow | ✓ | ✓ | Managed-Installed | | | |

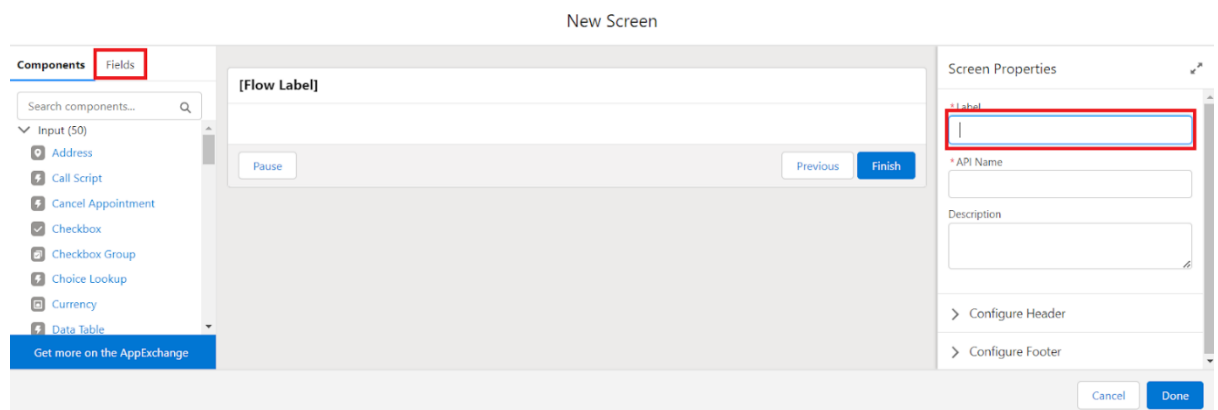
2. Select “Screen Flow” and then click on “Create”.



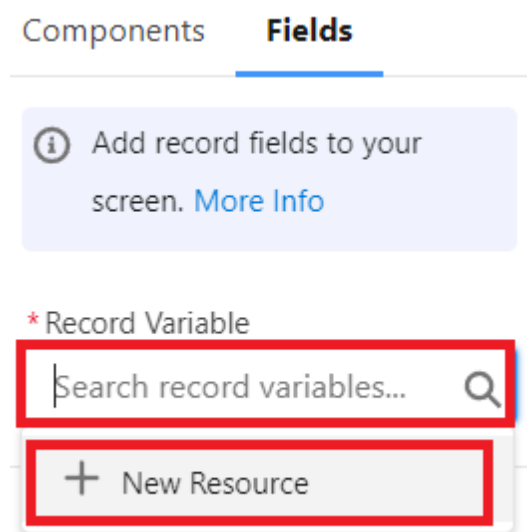
Place the cursor in between the Start and End element, a “+” icon appears, click on that and select “Screen”.



3. Give the label as “Booking Screen”, and select “Fields”.



4. Click on the lookup icon in the input field and select “New Resource”.



5. Filling the fields as given below:
- API name : bookingObject
 - Datatype : Record
 - Object : Booking
 - Available for input : Checked
 - Available for output: Checked

New Resource

*** API Name**

A value is required

Description

*** Data Type**

Record

*** 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.

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

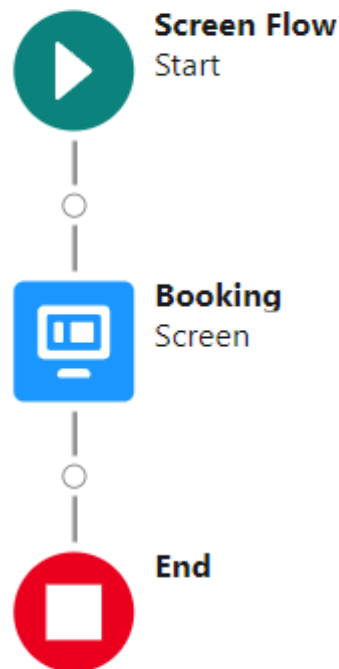
Compatible: Yes

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

Cancel Done

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.

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 |
|--------|---------|

New Create Records

Create Salesforce records using values from the flow.

| | |
|--|--|
| <p>*Label</p> <input type="text"/> <p>A value is required.</p> | <p>*API Name</p> <input type="text"/> |
| <p>Description</p> <input type="text"/> | |

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 |
| Departs_From__c | bookingObject > Departs From |
| Departs_to__c | bookingObject > Departs to |
| Departure_Date__c | bookingObject > Departure Date |
| Flight__c | bookingObject > Flight |
| Passenger_Name__c | bookingObject > Passenger Name |
| Travellers__c | bookingObject > Travellers |

+ Add Field

Cancel Done

5. Click Done.

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.

Thank you....!!

