

# Project Report On

## Airlines Management System

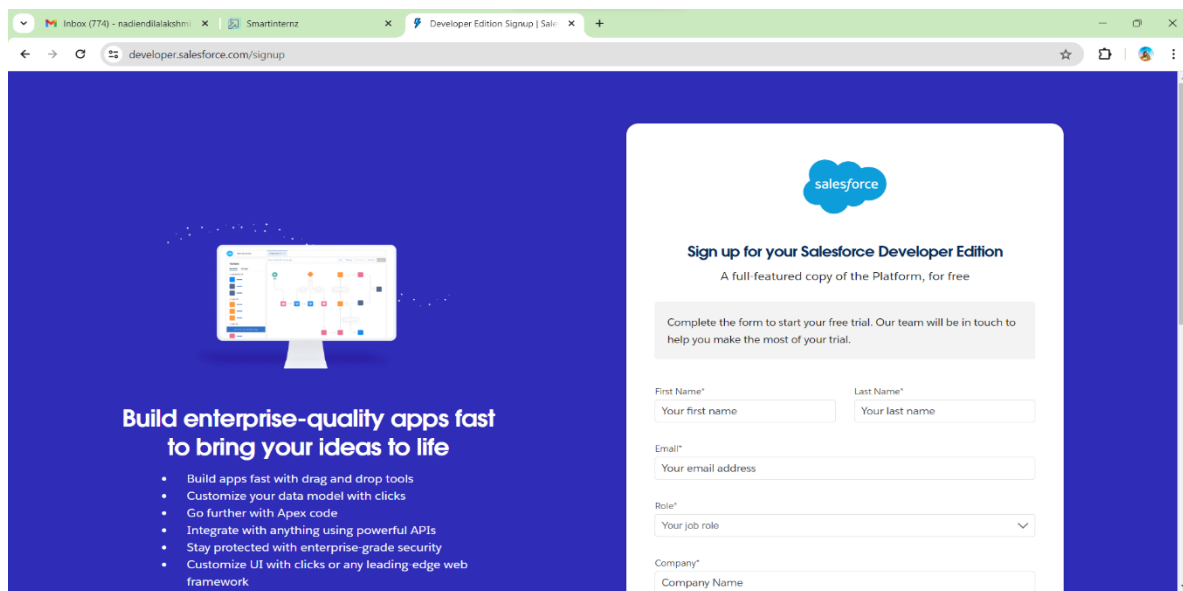
### (DEVELOPER) – (Long-Term)

#### Milestone – 01: Creating Developer Account

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

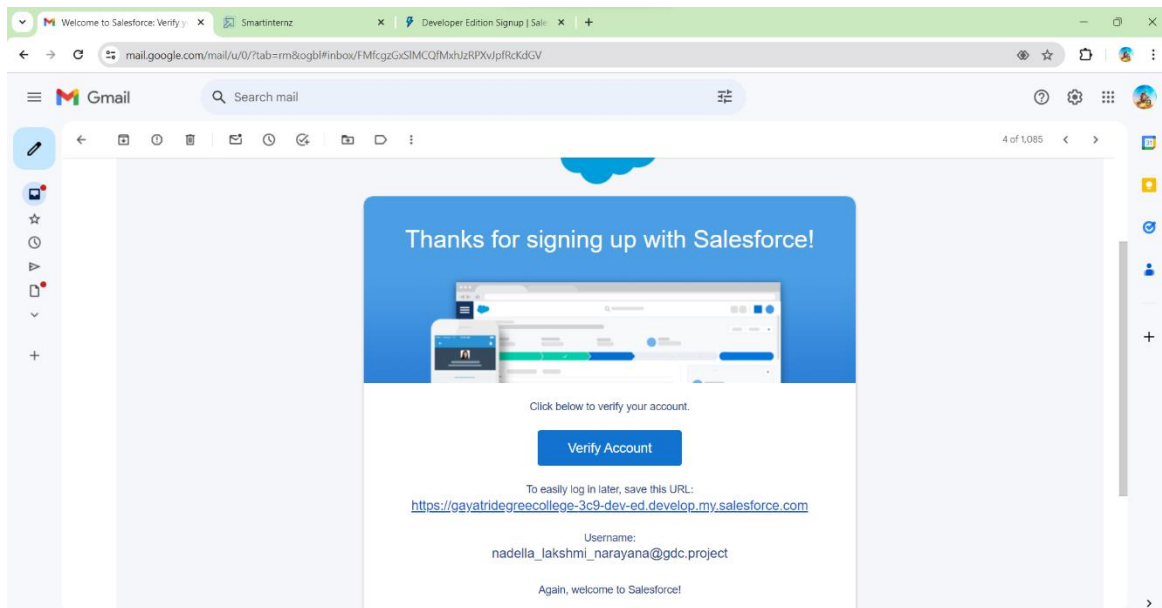
On the **sign up** form, enter the following details :

1. **First name & Last name : KUMMARI SREENIVASULU**
2. **Email : sreenukorukolla@gmail.com**
3. **Role : Developer**
4. **Company : Gayatri Degree College**
5. **County : India**
6. **Postal Code : 517501**
7. **Username : sreenu@airlinemanagement.com**

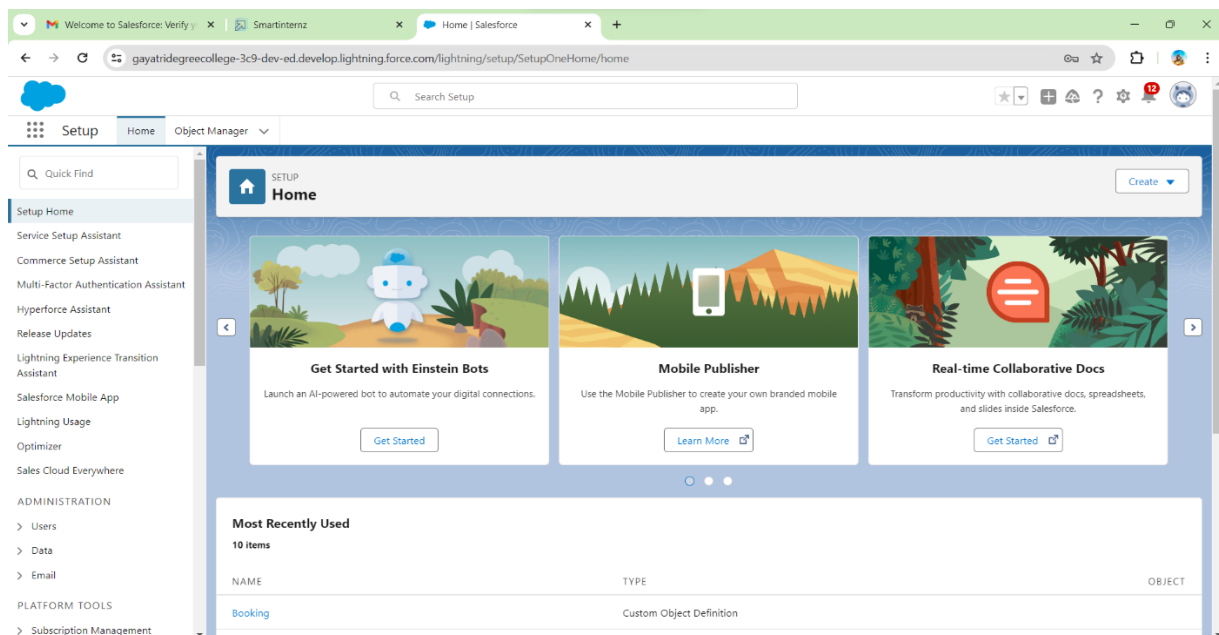


#### Account Activation:

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



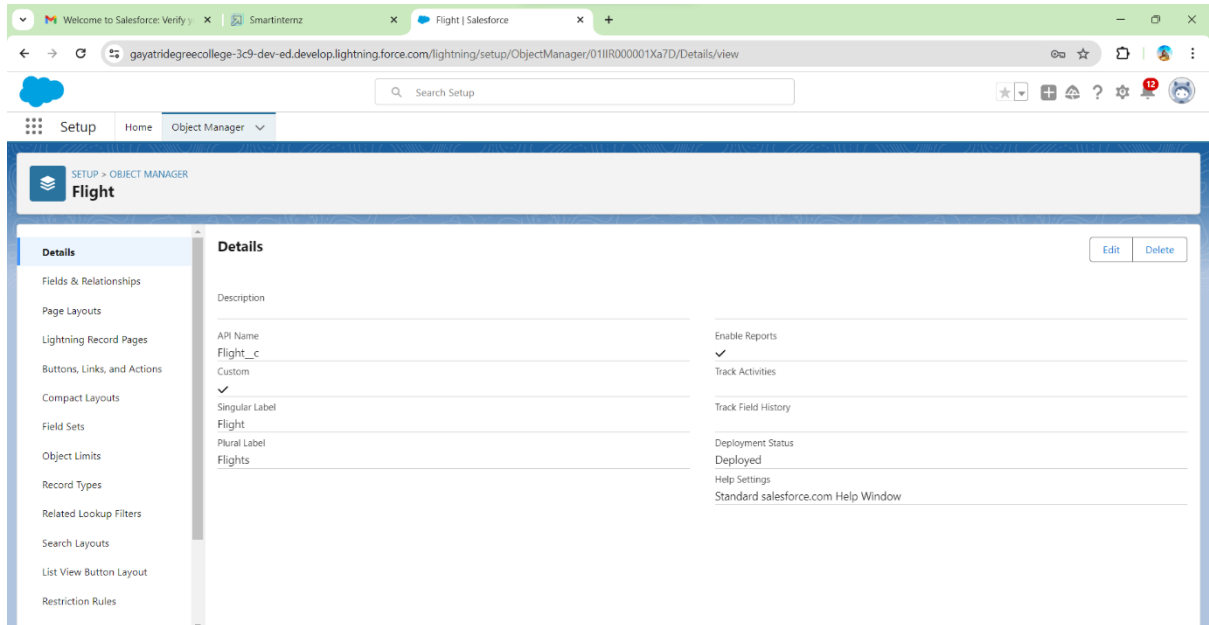
## Milestone - 02:- Object

### creating a Flight Object:

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

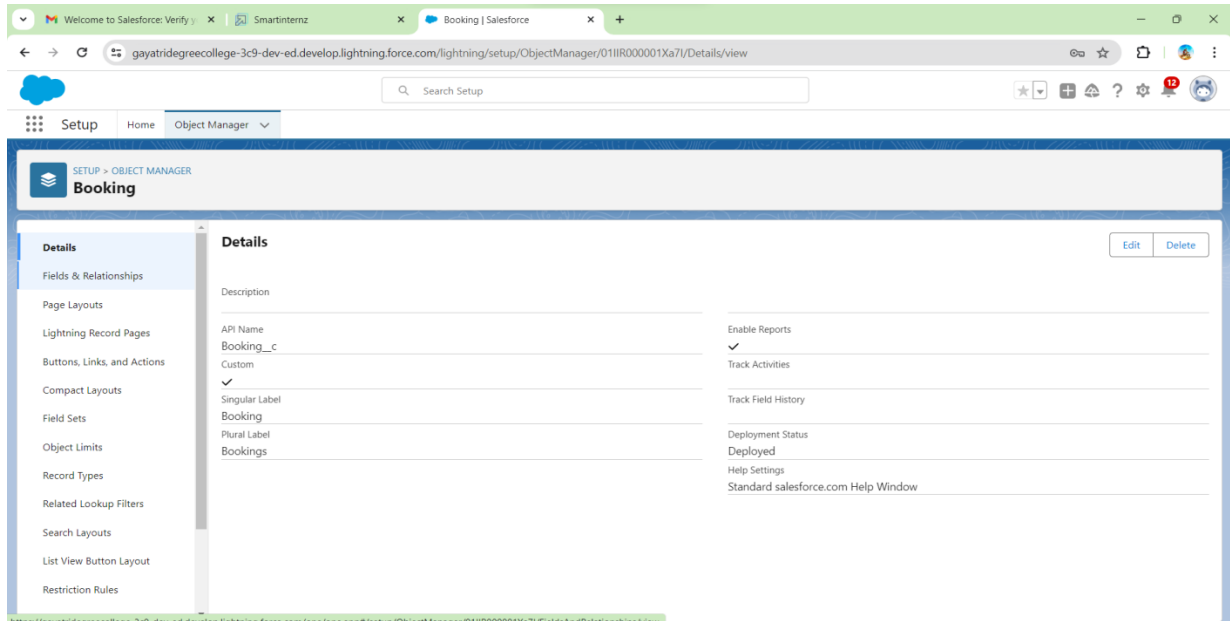
1. Enter the label name--> Flight
2. Plural label name--> Flights
3. Enter Record Name Label and Format

- Record Name : Flight Name
  - Data Type : Text
4. Click on Allow reports,
  5. Allow search --> Save.



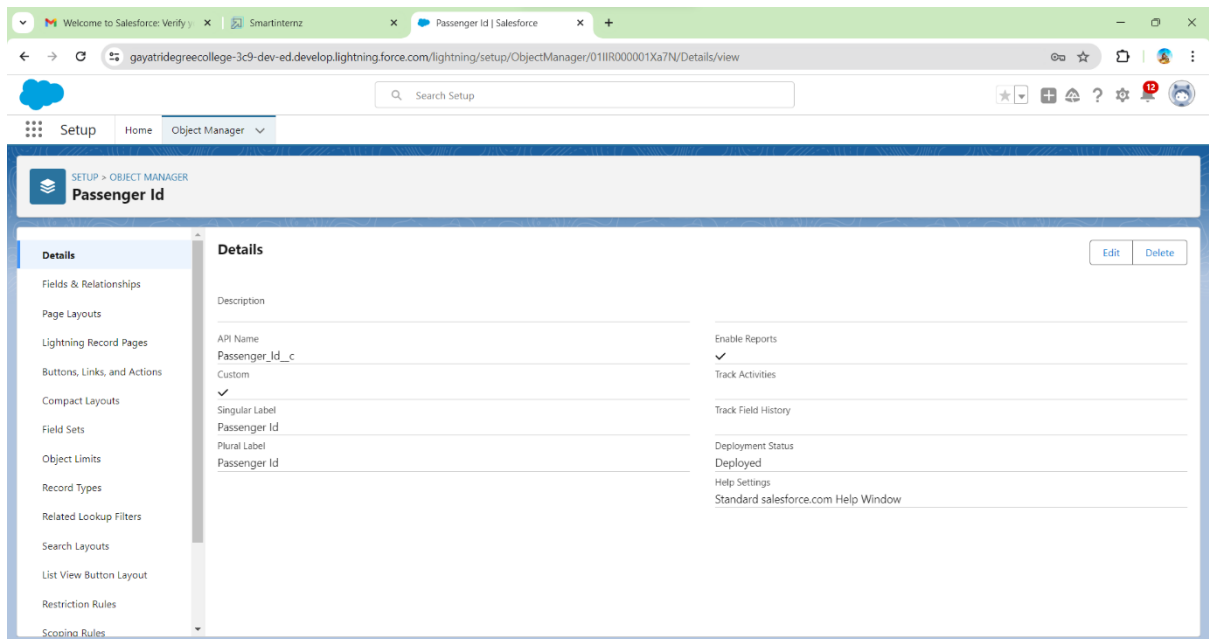
### creating Booking object:

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

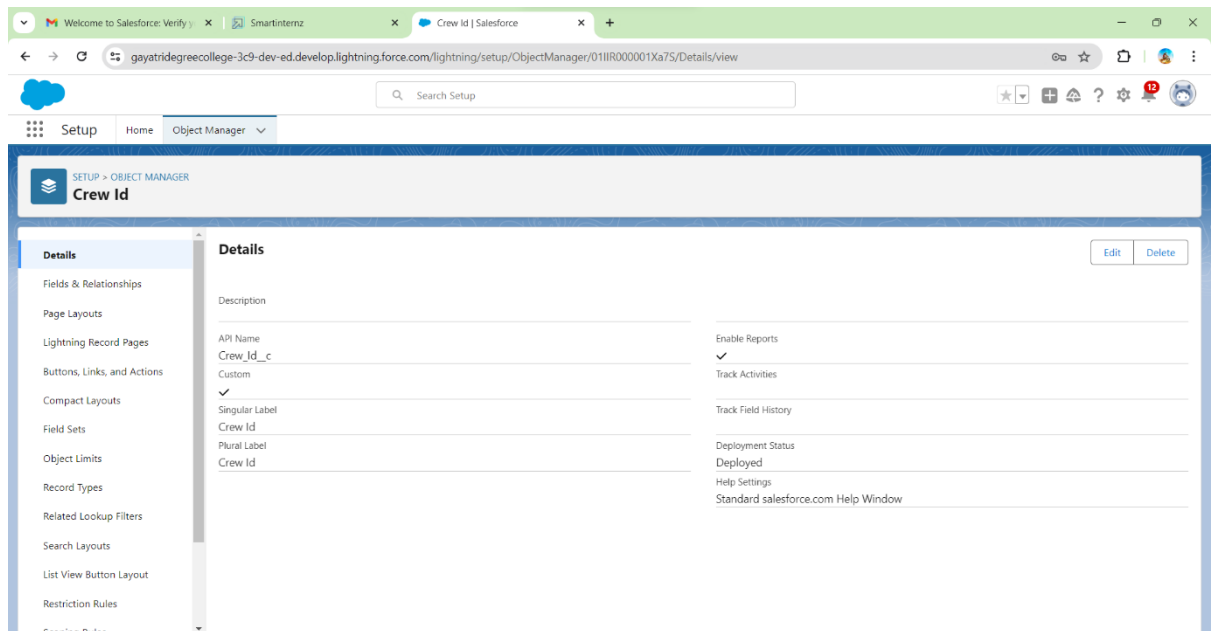


### Activity 3:

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



- **Crew Id:**



## Milestone – 03:- Tabs

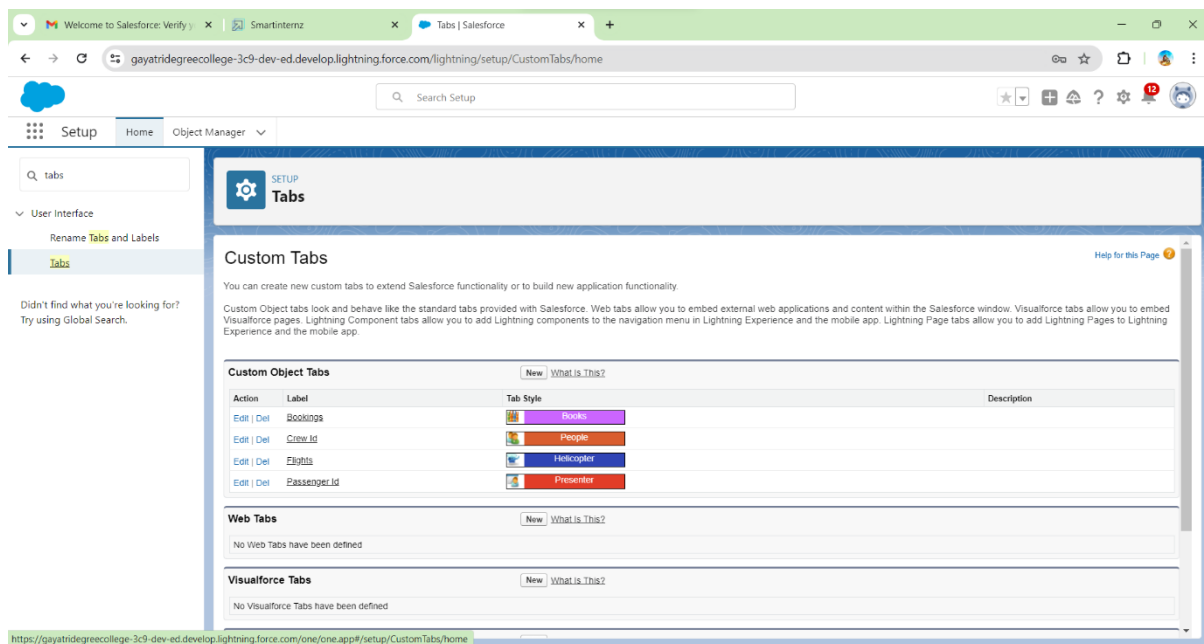
### Creating A Custom Tab(Flight):

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.

### Creating A Custom 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.

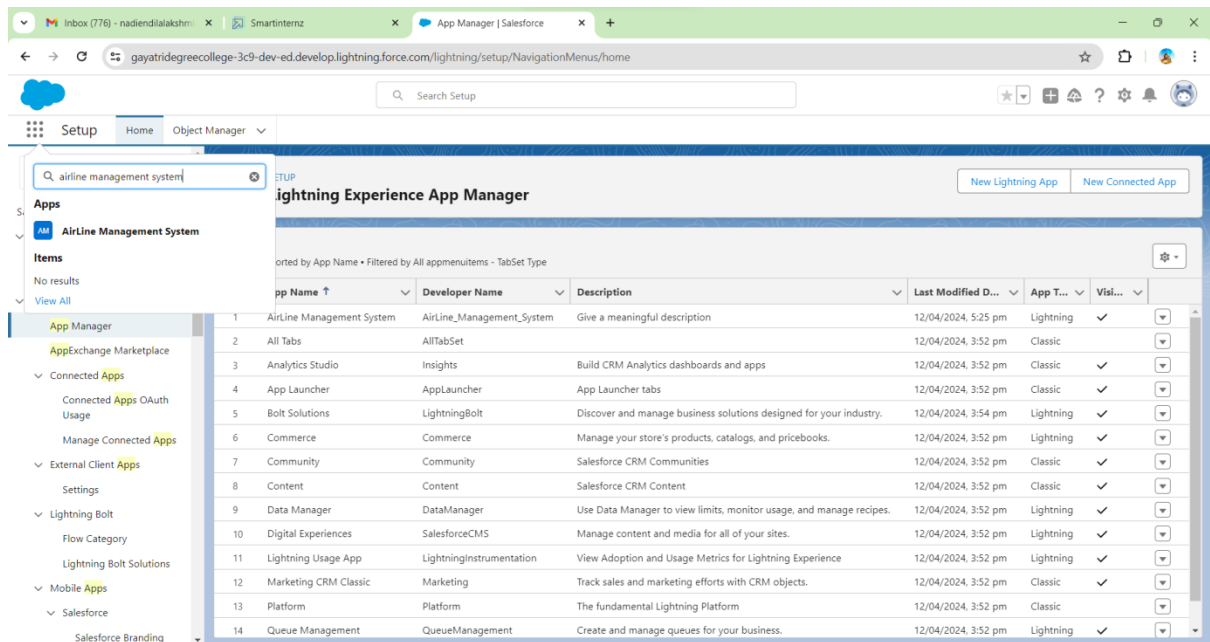
## Activity 3:



## Milestone - 04:- The Lightning apps

### Create A Lightning App :

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:
5. 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.  
To Add User Profiles:
6. Search profiles (System administrator) in the search bar --> click on the arrow button --> save & finish.



## Milestone – 05:- Fields

### Activity 1: Creating Field In 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 “Number”.
4. Click on Next
5. Fill the above as following:
  - Field Label: Capacity
  - Length : 18
  - Field Name : gets auto generated
  - Click on Next ? Next --> Save and new.

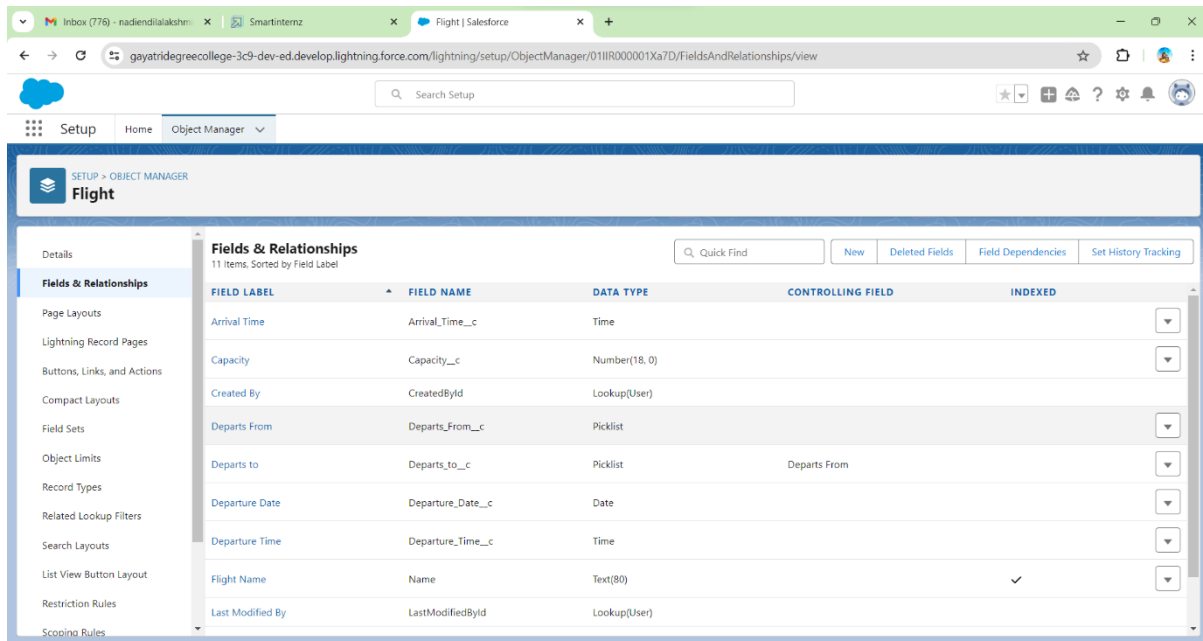
### Activity 2: Creating Picklist Field On Flight Object.

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

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



### Activity 3: Creating Departure Date On Booking Object

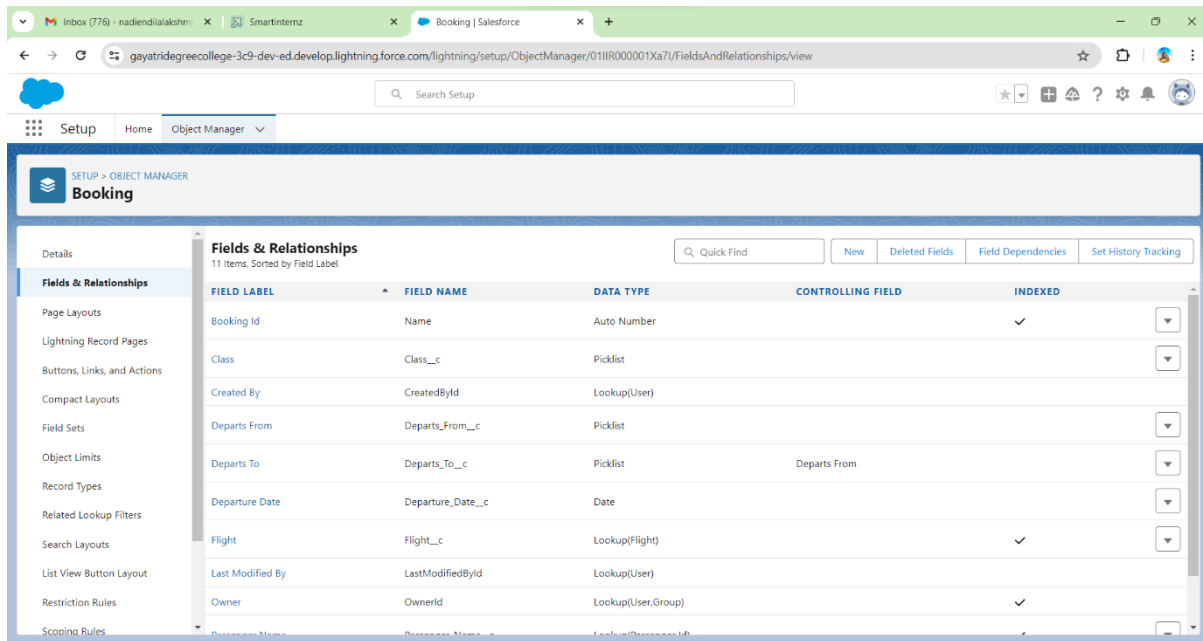
1. Go to setup ? click on Object Manager ? type object name(Booking) in quick find bar? click on the object.
2. Now click on “Fields & Relationships” ? New.
3. Select Data type as “Date” and click Next.
4. Click on Next.
5. Fill the above as following:
  - a. Field Label:Departure Date.
  - b. Field Name : gets auto generated.
  - c. Click on Next --> Next --> Save and new.

### Activity 4: Creating Lookup Relationship Between Flight And Booking

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.



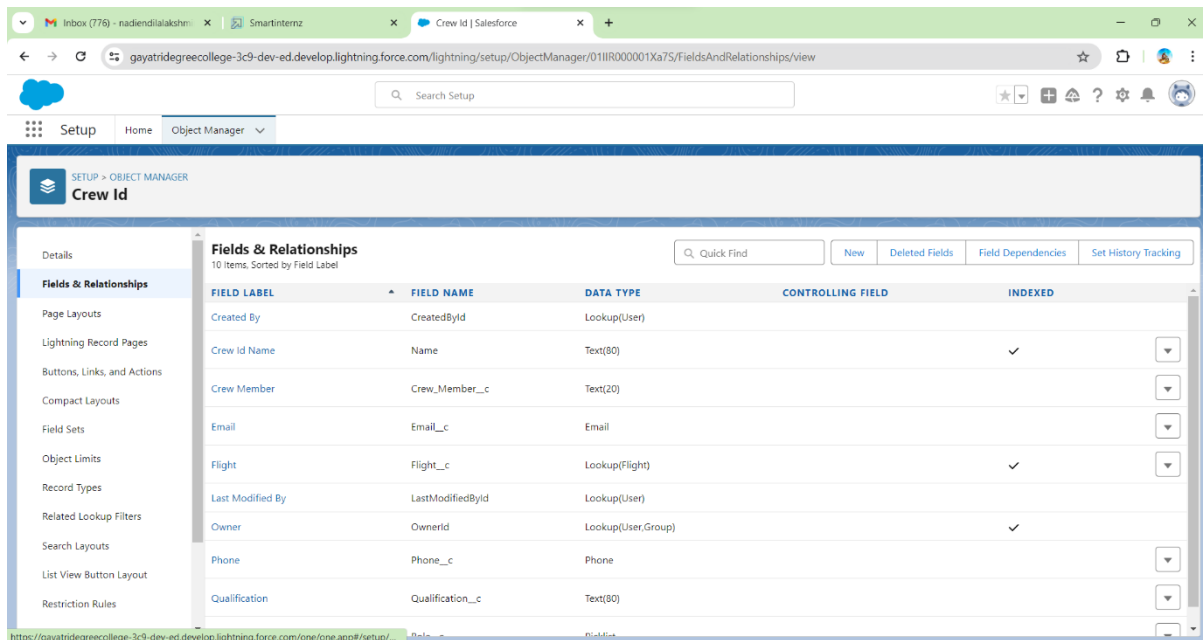
## Activity 5: Creating Remaining Fields

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>	Text Phone Number Date Date Date Picklist : Values as below <div>             India              China              USA              Canada              Mexico              Australia              South Korea              North Korea              Germany           </div>
2	Booking	<ol style="list-style-type: none"> <li>1. Passenger Name</li> <li>2. Departs From</li> <li>3. Departs To</li> <li>4. Travellers</li> </ol>	Lookup relationship with Passenger Picklist : Values are same as Activity 3 Picklist : Values are same as Activity 3 Picklist : Values as below <div>             Adult              Child              Infant           </div>

		5. Class	Picklist : Values as below <div>           Economy            Business            First Class         </div>
3	Flight	1. Departs to 2. PNR Number 3. Departure Date 4. Departure Time 5. Arrival Time	Picklist : Values are same as Activity 3 Number Date Time Time
4	Crew	1. Flight 2. Crew Member 3. Phone 4. Email 5. Qualification 6. Role	Lookup relationship with Flight Text(20) Phone Email Text Picklist: Values as below <div>           Pilot            Co-Pilot            Flight Attendants            Air Hosts            Air Hostesses            Air Stewards            Air Stewardesses            On-Board Chefs         </div>

The screenshot shows the Salesforce Lightning Setup interface for the 'Passenger Id' object. The left sidebar contains a navigation menu with options: Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, Restriction Rules, and Scoping Rules. The main content area is titled 'Fields & Relationships' and shows 11 items sorted by Field Label. A table lists the fields with columns: FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields are: Created By (CreatedById, Lookup(User)), Date of Birth (Date\_of\_Birth\_\_c, Date), Last Modified By (LastModifiedById, Lookup(User)), Name (Name\_\_c, Text(80)), Nationality (Nationality\_\_c, Picklist), Owner (OwnerId, Lookup(User.Group), checked), Passenger Id Name (Name, Text(80), checked), Passport Expiry Date (Passport\_Expiry\_Date\_\_c, Date), and Passport Issue Date (Passport\_Issue\_Date\_\_c, Date). At the bottom, there is a partial view of the 'Passport Number' field.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Date of Birth	Date_of_Birth__c	Date		
Last Modified By	LastModifiedById	Lookup(User)		
Name	Name__c	Text(80)		
Nationality	Nationality__c	Picklist		
Owner	OwnerId	Lookup(User.Group)		✓
Passenger Id Name	Name	Text(80)		✓
Passport Expiry Date	Passport_Expiry_Date__c	Date		
Passport Issue Date	Passport_Issue_Date__c	Date		
Passport Number	Passport_Number__c	Number(18, 0)		



## Activity 6: Creating Field Dependencies

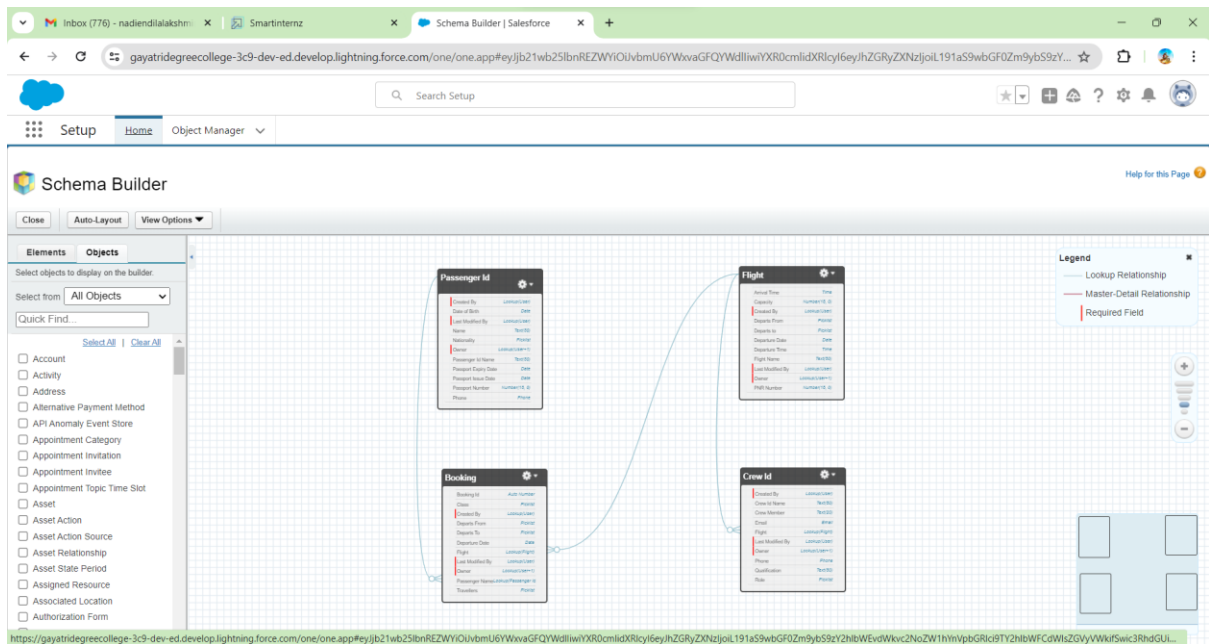
1. Go to object manager --> select the object (flight) --> click fields & relationships --> click "Field Dependencies".
2. Click "New" under Field Dependencies.
3. Select "Departs From" for Controlling Field.
4. Select "Departs to" for Dependent Field and click Continue.
5. While pressing CTRL button 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

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(Passenger, Booking, Flight & Crew) in a quick box and select them.



## Milestone – 06:- 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)

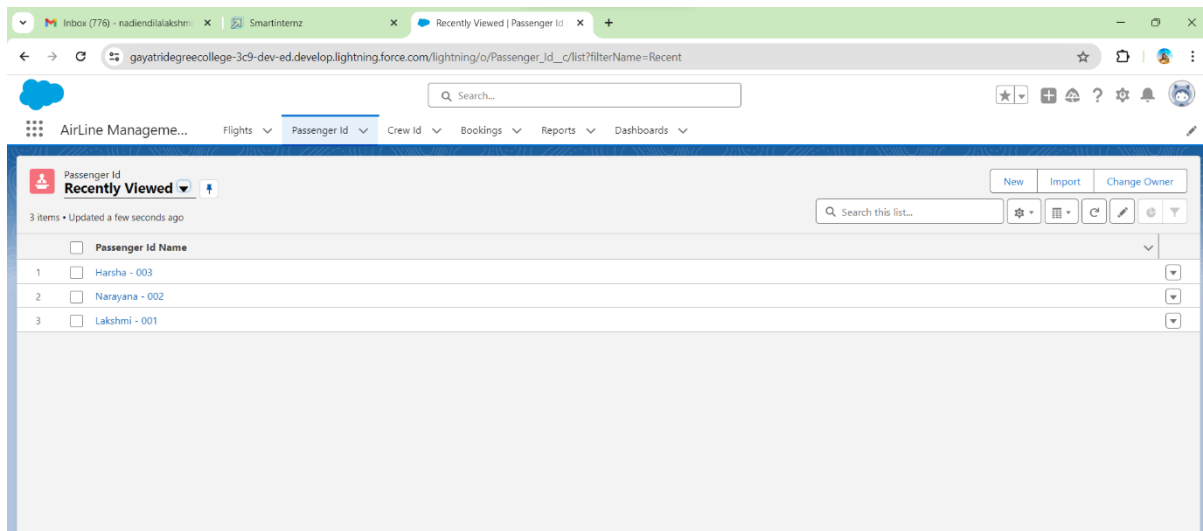
1. Click on App Launcher on the left side of the screen.
2. Search AirLine Management System & click on it.
3. Click on the Passenger Tab.
4. Click on any record name. you can see the details of the Passenger.

### 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.



## Milestone – 07:- Profiles

### Activity 1: General Admin Profile

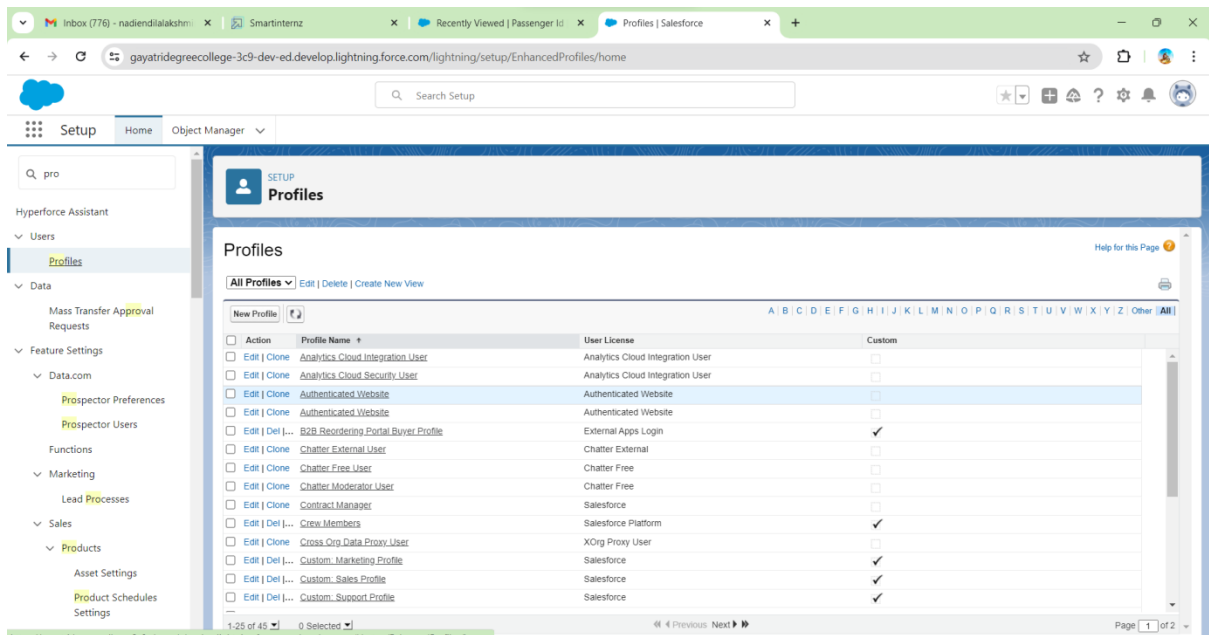
1. Go to setup --> type profiles in quick find box --> click on profiles --> clone the desired profile (Standard Platform User)-->enter profile name (General Admin)-> Save.
2. While still on the profile page, then click Edit.
3. Scroll down to Custom Object Permissions and Give access permissions for read, create and edit on Passenger, and booking objects.
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 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 – 08:-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.
3. Give Label as “Senior Admin” and Role name gets auto populated. Check to whom this role (Senior Admin) reports. Then click on Save.
4. Refer the below diagram to understand which role reports to which role.

### 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 – 09:-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
10. 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.

The screenshot shows the Salesforce Setup page for 'Active Users'. The sidebar on the left contains a search bar and a list of navigation options: Users, Permission Set Groups, Permission Sets, Profiles, Public Groups, Queues, Roles, User Management Settings, and Feature Settings. The main content area is titled 'Active Users' and includes a sub-header 'On this page you can create, view, and manage users. To get more licenses, use the Your Account app. Let's Go'. Below this, there is a 'View' dropdown set to 'Active Users' and a 'Create New User' link. The table below lists the active users:

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/> Edit	Chatter Expert	Chatter	chatter.00d0000001u7ee2ay.rsl6bta1cti@chatter.salesforce.com		✓	Chatter Free User
<input type="checkbox"/> Edit	Lakshmi naravana_Nadella	NLaka	nadella_lakshmi_naravana@qdcproject		✓	System Administrator
<input type="checkbox"/> Edit	Mikaelson_Kale	kmika	mikaelson123dsc@gmail.com	Crew Member	✓	Crew Members
<input type="checkbox"/> Edit	Mikaelson_Kol	kmika	mikaelson12wo@gmail.com	General Admin	✓	General Admin
<input type="checkbox"/> Edit	Mikaelson_Mail	mika	mikaelson1vixnm@gmail.com	Management Admin	✓	Management Admin
<input type="checkbox"/> Edit	Mikaelson_Niklaus	nmika	mikaelson1kmd@gmail.com	Senior Admin	✓	Senior Admin
<input type="checkbox"/> Edit	User_Integration	integ	integration@00d0000001u7ee2ay.com		✓	Analytics Cloud Integration User
<input type="checkbox"/> Edit	User_Security	sec	insightsecurity@00d0000001u7ee2ay.com		✓	Analytics Cloud Security User

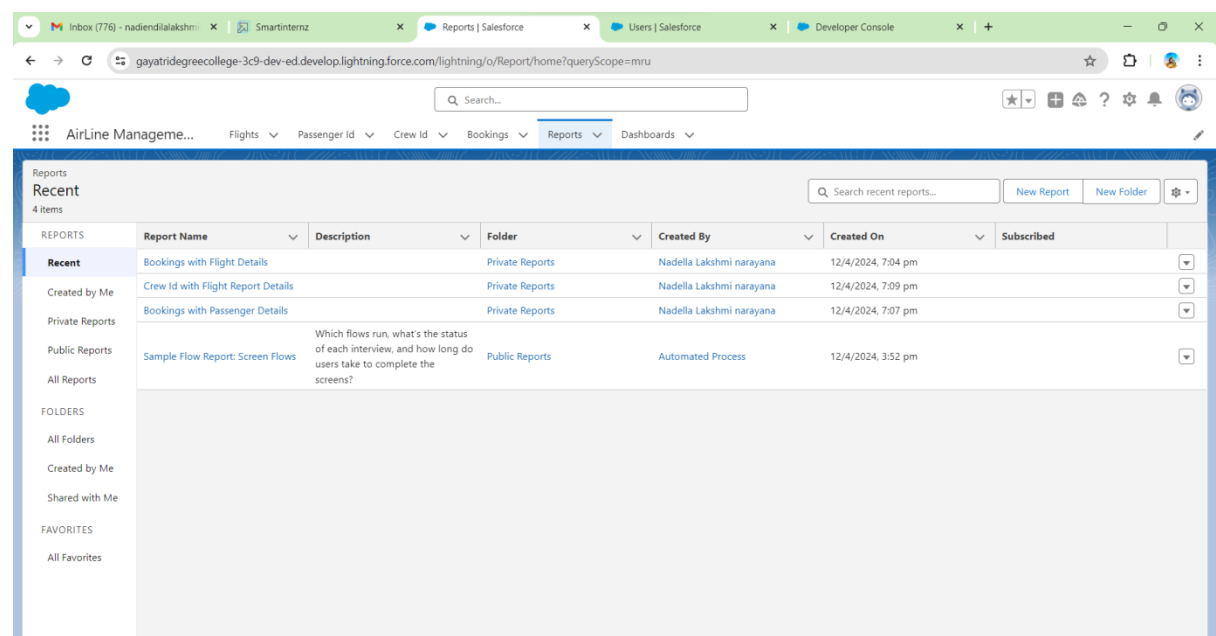
## Milestone – 10:- Reports

### Activity 1:

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.
4. Customize your report
5. 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.
6. Click on save.
7. Save the report as “Bookings with Flight Details”.
8. Click on Save.

### Activity 2:

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



The screenshot shows the Salesforce Reports interface. The top navigation bar includes tabs for 'Inbox (776)', 'Smartinternz', 'Reports | Salesforce', 'Users | Salesforce', and 'Developer Console'. The main header area contains a search bar and navigation links for 'AirLine Manageme...', 'Flights', 'Passenger Id', 'Crew Id', 'Bookings', 'Reports', and 'Dashboards'. The 'Reports' section is active, displaying a list of recent reports. The table has columns for 'Report Name', 'Description', 'Folder', 'Created By', 'Created On', and 'Subscribed'. The reports listed are 'Bookings with Flight Details', 'Crew Id with Flight Report Details', 'Bookings with Passenger Details', and 'Sample Flow Report: Screen Flows'.

REPORTS	Report Name	Description	Folder	Created By	Created On	Subscribed
Recent	Bookings with Flight Details		Private Reports	Nadella Lakshmi narayana	12/4/2024, 7:04 pm	
Created by Me	Crew Id with Flight Report Details		Private Reports	Nadella Lakshmi narayana	12/4/2024, 7:09 pm	
Private Reports	Bookings with Passenger Details		Private Reports	Nadella Lakshmi narayana	12/4/2024, 7:07 pm	
Public Reports	Sample Flow Report: Screen Flows	Which flows run, what's the status of each interview, and how long do users take to complete the screens?	Public Reports	Automated Process	12/4/2024, 3:52 pm	
All Reports						
FOLDERS						
All Folders						
Created by Me						
Shared with Me						
FAVORITES						
All Favorites						

## Milestone – 11:-Dashboards

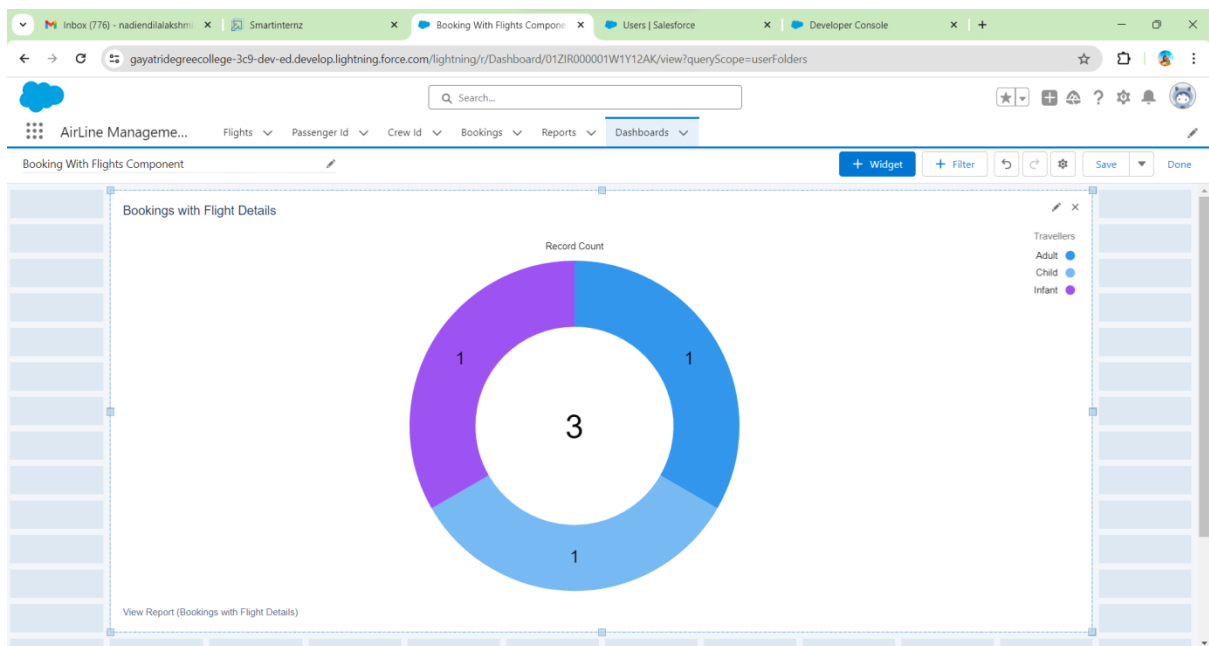
### Activity 1:



1. Go to the app --> click on the Dashboards tabs.
2. Give a Name and click on Create.
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:

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

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. Click ok.

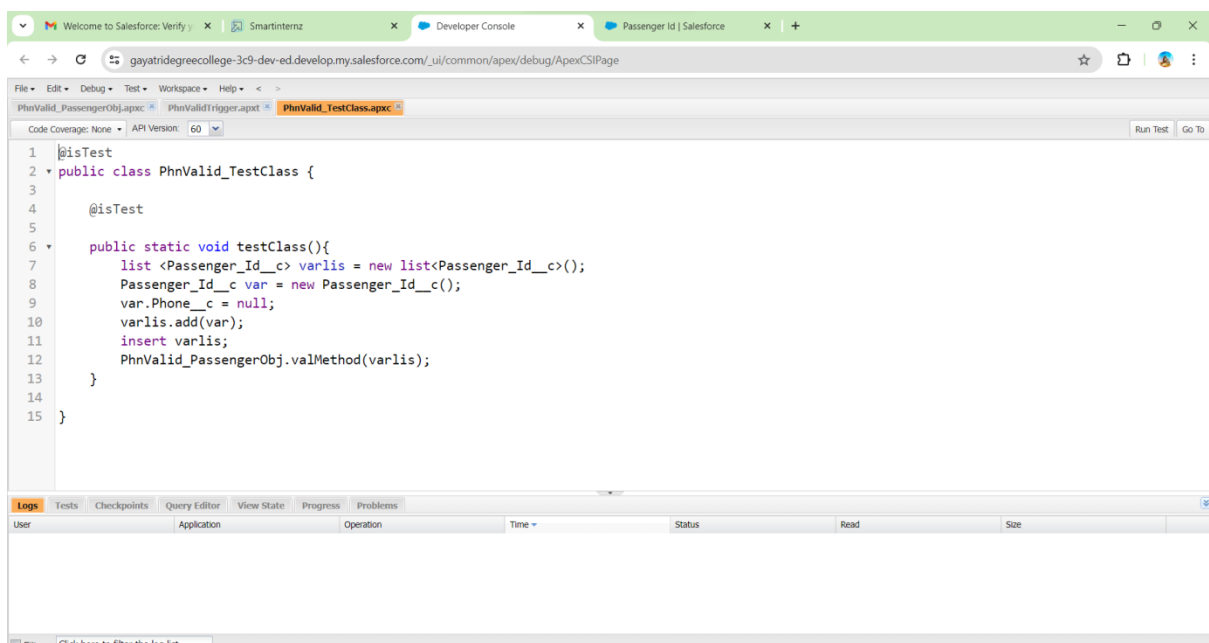
3. Now write the code logic here

4. 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%.



## Milestone – 13:- Flow

### Activity 1 : Creating A Screen Element On Booking Object

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".
  4. Give the label as "Booking Screen", and select "Fields".
  5. Click on the lookup icon in the input field and select "New Resource".
  6. Click on the lookup icon in the input field and select "New Resource".
- Filling the fields as given below:
- API name : bookingObject
  - Datatype : Record
  - Object : Booking
  - Available for input : Checked
  - Available for output: Checked
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:
  11. Click on done and Save.

## 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

4. Map the fields as shown below:
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.

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

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

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

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

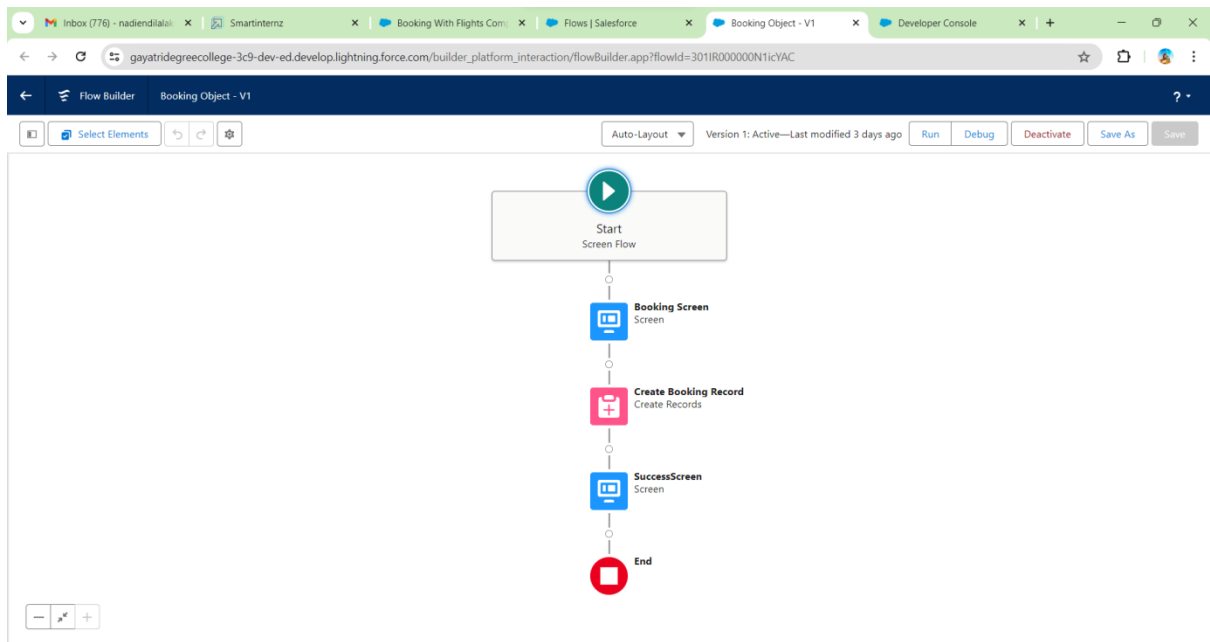
Travellers: {!bookingObject.Travellers\_\_c}

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....!!



# THE END

