

NAAN MUDHALVAN
SALESFORCE DEVELOPER
PROJECT REPORT

On

Crm Application That Helps To Book A Visa Slot

TEAM 1

NM Team ID: NM2023TMID07360

TEAM MEMBERS:

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Project Report on

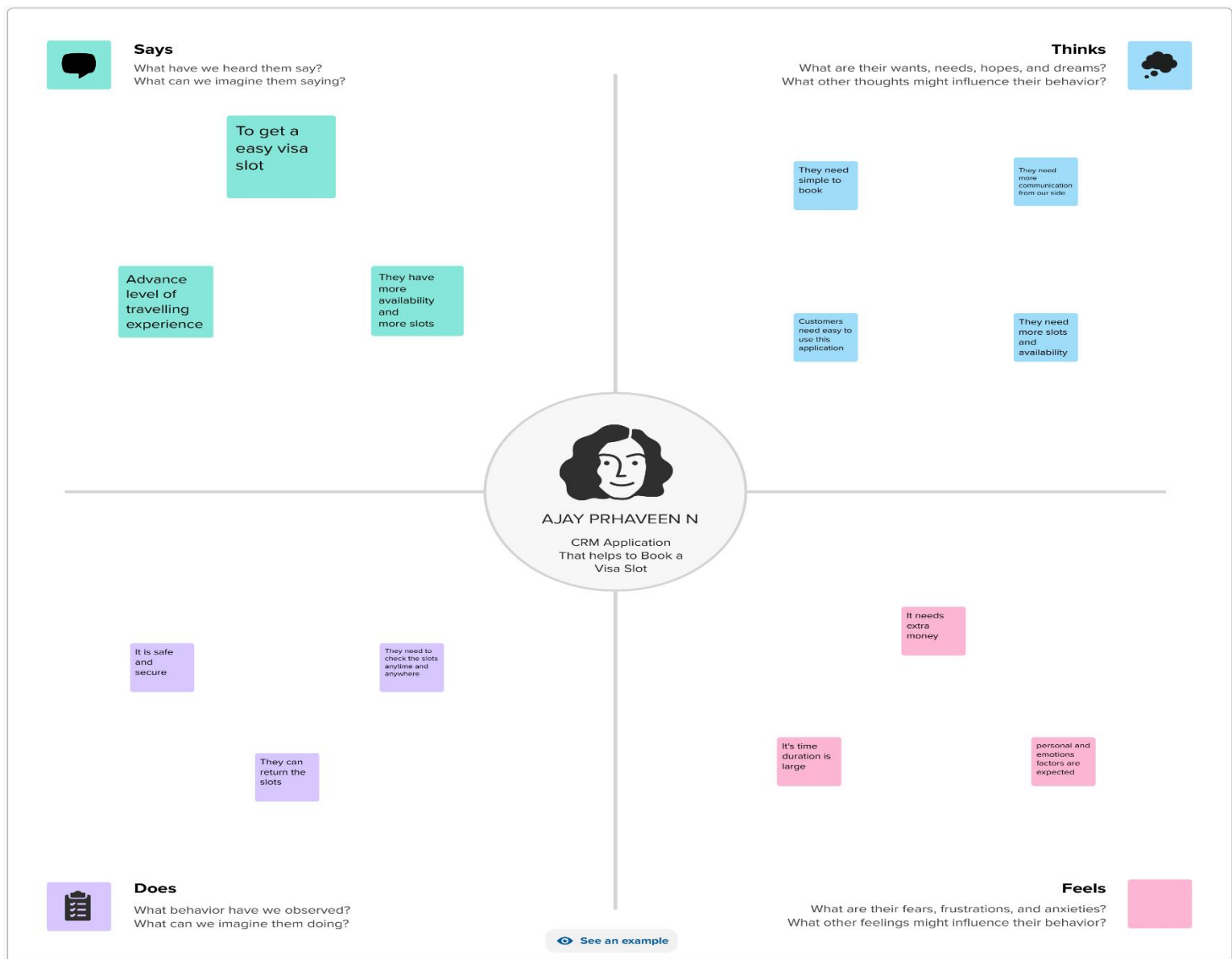
CRM Application That Helps To Book A Visa Slot

Developer

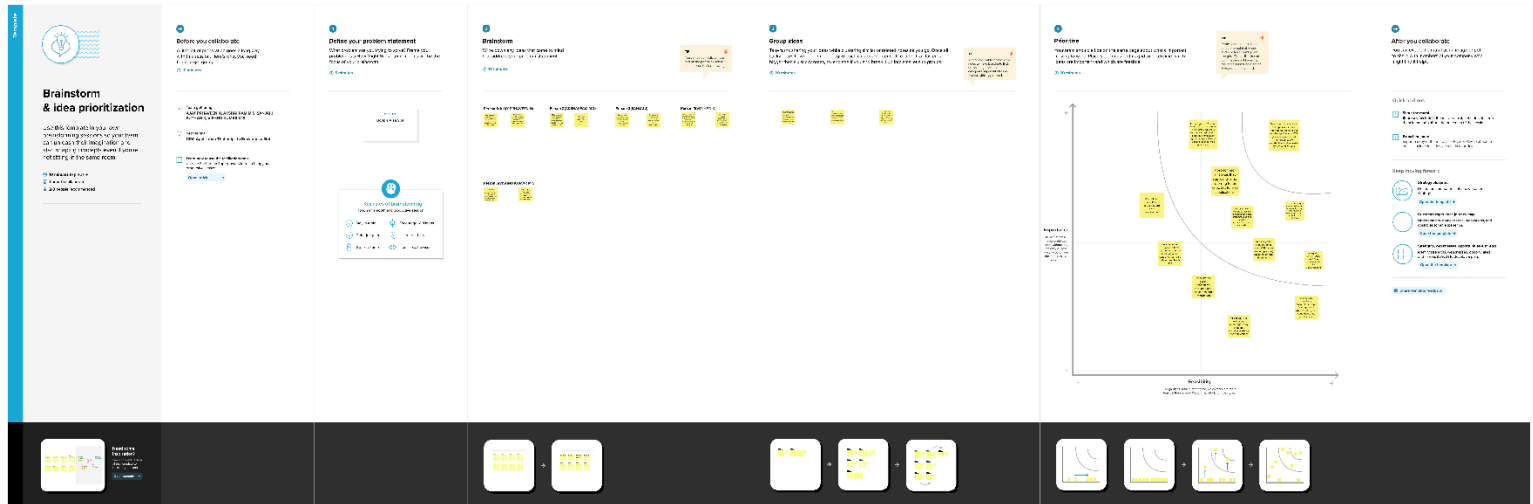
Introduction: A visa slot management project is a system that is used to track and manage the availability of visa slots, which are appointments that are required for certain visa applications. It might be used by a government agency or a visa processing centre to schedule and manage appointments with applicants.

PROBLEM DEFINING AND DESIGN THINKING

1. Empathy map



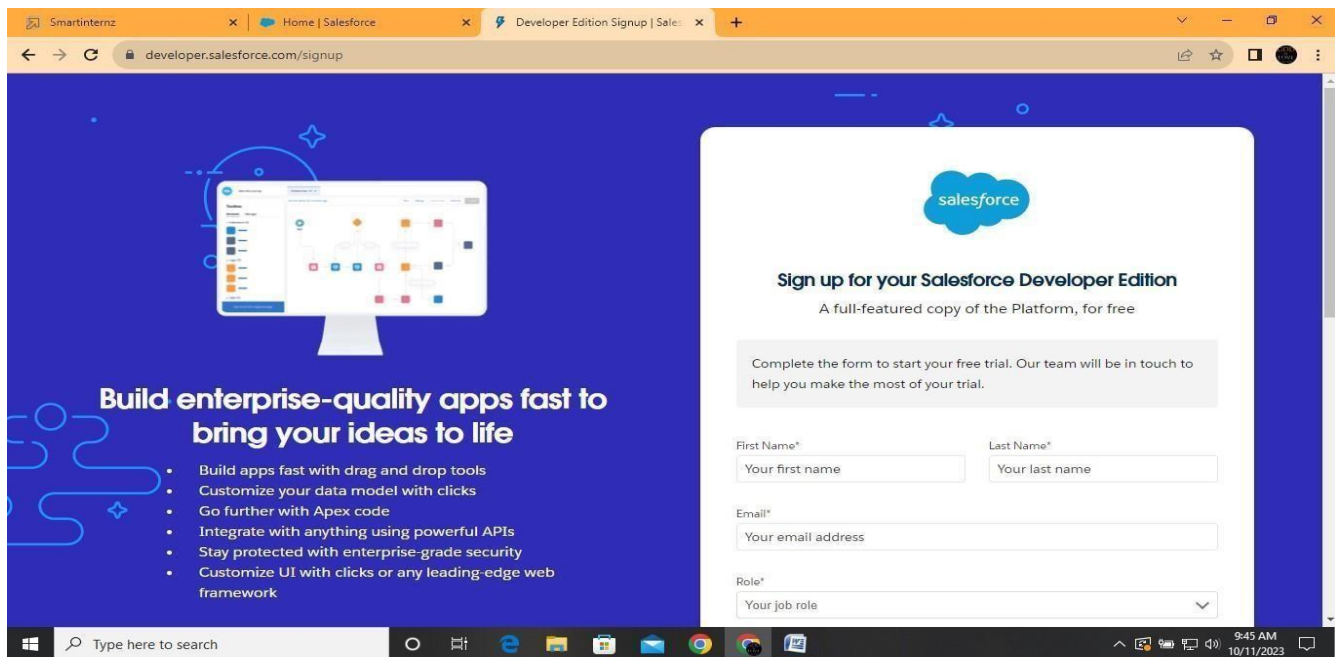
2. Ideation and Brainstorming map



Brainstorming Link: [https://drive.google.com/file/d/1wwNK- 3N EkU1irr oE1UAG06I Nw-Ov/view?usp=drive link](https://drive.google.com/file/d/1wwNK-3NEkU1irr_oE1UAG06INw-Ov/view?usp=drive_link)

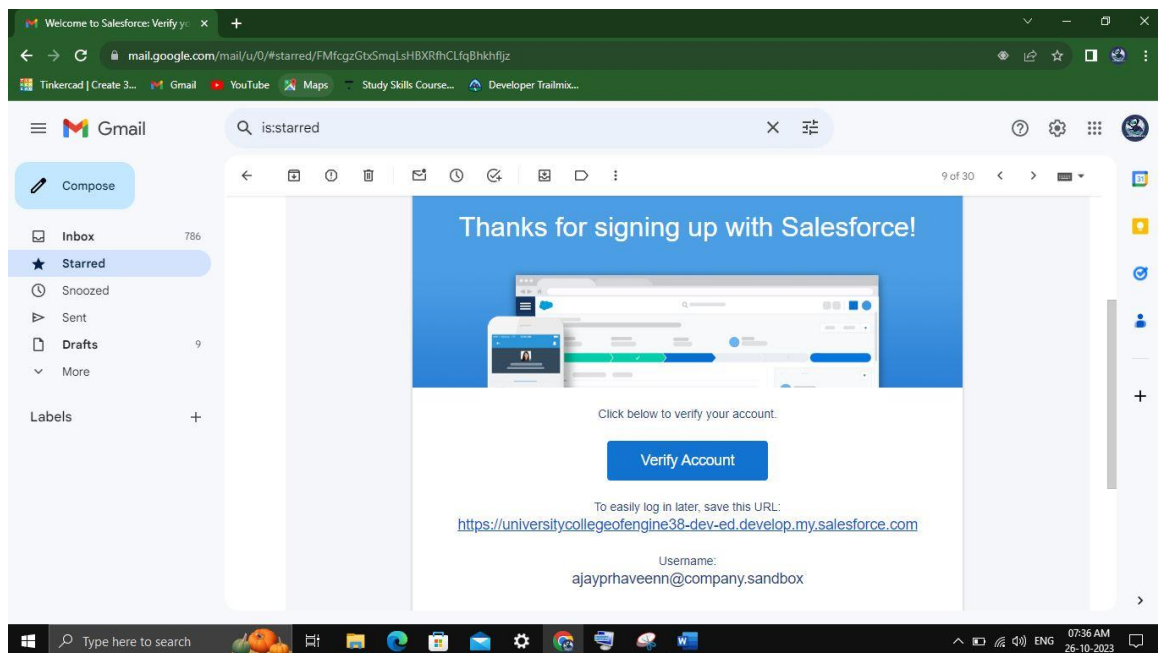
Milestone – 01: Create a Developer Org

1. Go to developers.salesforce.com/
2. Click on sign up.
3. On the sign up form, enter the following details :
 - a. First name & Last name – **AJAY PRHAVEEN N**
 - b. Email – **ajayprhaveenn@gmail.com**
 - c. Role : **Developer**
 - d. Company : **UNIVERSITY COLLEGE OF ENGINEERING, NAGERCOIL**
 - e. County : **India**
 - f. Postal Code : **629004**
 - g. Username : **ajayprhaveenn@company.sandbox**

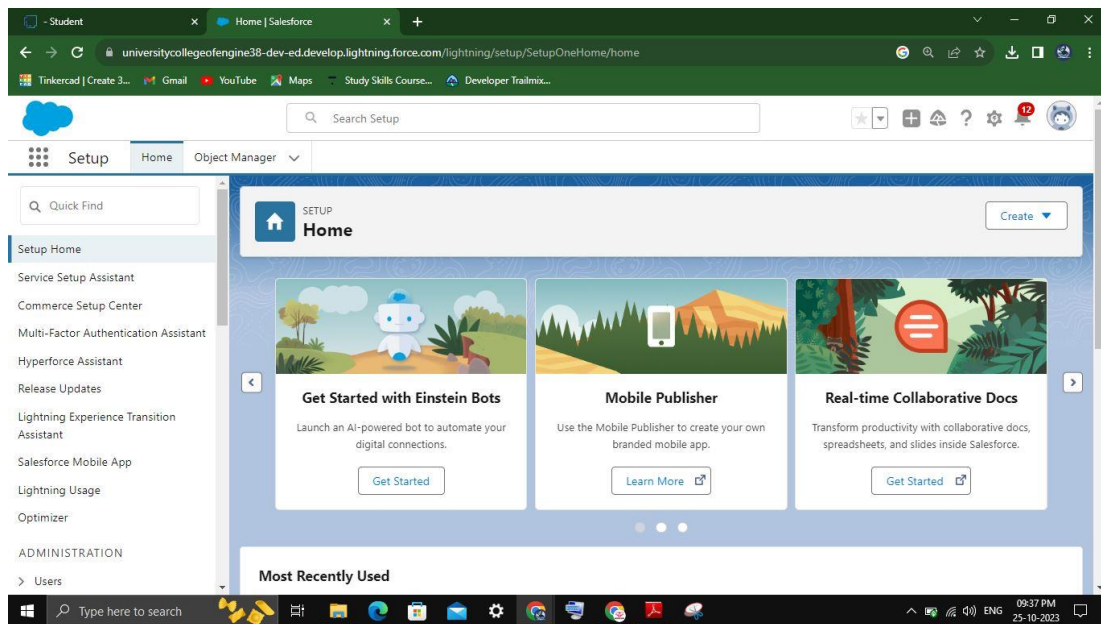


Account Activation

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, as



1. Login To Your Salesforce Account
2. Go to salesforce.com and click on login.
3. Enter the username and password that you just created. After login this is the home page which you will see.



Milestone – 02: objects creation

Object – Passport

1. Click on the gear icon and then select Setup
2. Click on the object manager tab just beside the home tab
3. After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object
4. On the Custom Object Definition page, create the object as follows:
5. Label: **Passport**
6. Plural Label: Passports
7. Record Name: Passport Number
8. Check the Allow Reports checkbox
9. Check the Allow Search checkbox
10. Click Save

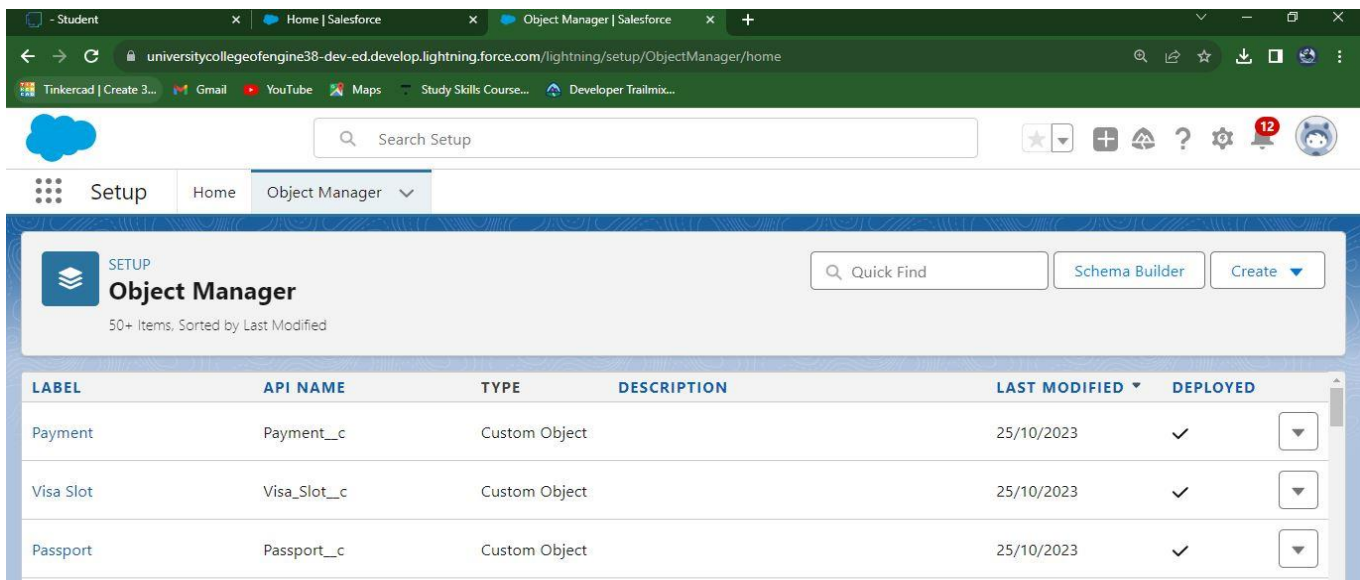
Object – Visa slot

1. Click on the gear icon and then select Setup.
2. Click on the object manager tab just beside the home tab.
3. After the above steps, have a look on the extreme right you will find a Create Drop down click on that and select Custom Object

4. On the Custom Object Definition page, create the object as follows:
5. Label: Visa Slot
6. Plural Label: **Visa Slots**
7. Record Name: **Visa Slot Number**(Auto Number)
8. Check the Allow Reports checkbox
9. Check the Allow Search checkbox
10. Click Save.

Object – Payment

1. Click on the gear icon and then select Setup.
2. Click on the **object manager** tab just beside the home tab.
3. After the above steps, have a look on the extreme right you will find a Create Drop down click on that and select Custom Object.
4. On the Custom Object Definition page, create the object as follows:
5. Label: **Payment**
6. Plural Label: **Payments**
7. Record Name: **Transaction Id** (Auto Number)
8. Check the Allow Reports check box
9. Check the Allow Search check box
10. Click Save



The screenshot shows the Salesforce Object Manager interface. The browser address bar indicates the URL: `universitycollegeofengine38-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/home`. The page header includes a search bar labeled "Search Setup" and navigation tabs for "Setup", "Home", and "Object Manager". The main content area displays a table of custom objects.

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Payment	Payment__c	Custom Object		25/10/2023	✓
Visa Slot	Visa_Slot__c	Custom Object		25/10/2023	✓
Passport	Passport__c	Custom Object		25/10/2023	✓

Milestone – 03: Creation of Tabs

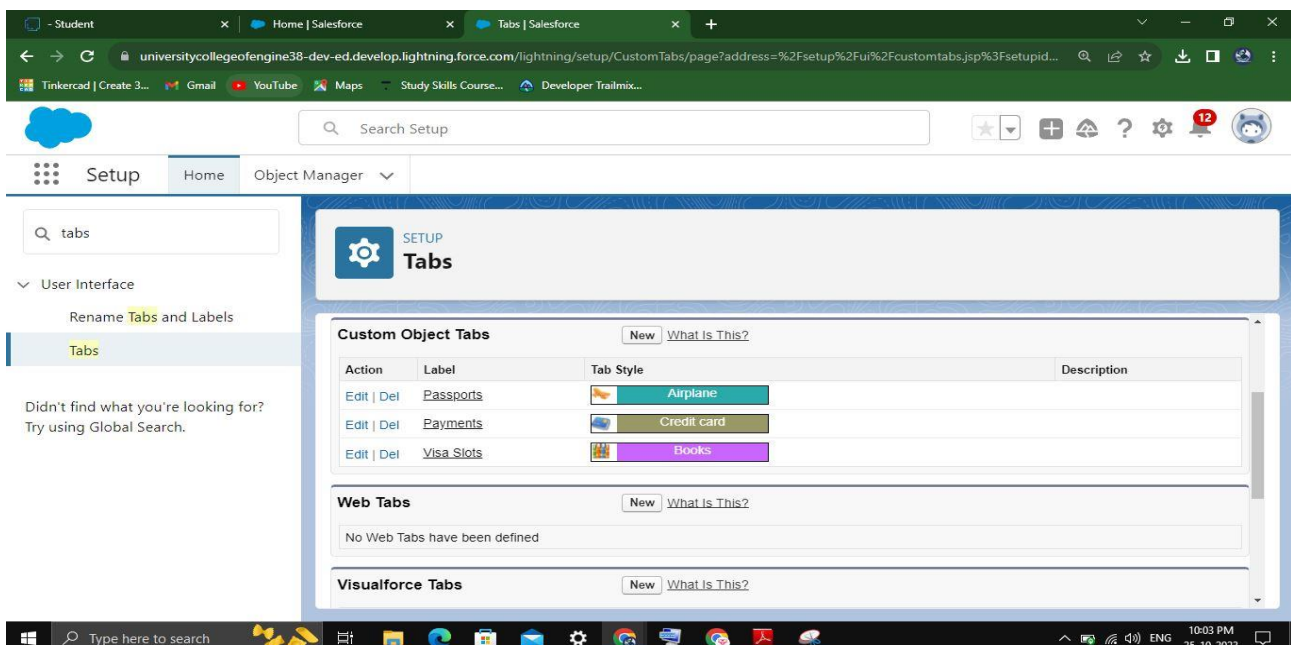
Tab- Passport Object

1. Navigate to setup and home
2. Enter Tabs in Quick Find Box and select Tabs
3. Under Custom Object Tabs, click New
4. For Object, select **Passport**
5. For Tab Style, select any icon
6. Leave all defaults as is. Click Next, Next, and Save **Tab – visa slot**

1. Navigate to setup and enter Tabs in Quick Find and select Tabs. Under Custom Object Tabs, click New.
2. For Object, select **Visa Slot**.
3. For Tab Style, select any icon.
4. Leave all defaults as is. Click Next, Next, and Save

Tab – payment object

1. Navigate to setup and enter Tabs in Quick Find and select Tabs Under Custom Object Tabs, click New
2. For Object, select **Payment**
3. For Tab Style, select any icon
4. Leave all defaults as is. Click Next, Next, and Save



Milestone -04 : Relationships Between Two Objects

Relationship Creation

1. Fields Creation: **Passport Number**
2. Navigate to setup
3. Click on Object Manager and search and select Visa Slot object
4. Select Fields & Relations and click New.
5. Select Data Type: **Master-Detail**, next.
6. Related to: **Passport**, next.
7. Label: **Passport Number**
8. Child Relationship Name: Visa Slot, next.
9. Next, next and save.

The screenshot shows the Salesforce Setup interface for the 'Passport' object. The 'Fields & Relationships' section is active, displaying a table of fields. The table has columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed. The fields listed are: Contact Number (Number(10, 0)), Created By (Lookup(User)), Full Name (Text(80)), Last Modified By (Lookup(User)), Owner (Lookup(User, Group)), Passport Number (Text(80)), and Permanent Address (Text Area(255)). The 'Passport Number' field is highlighted in blue.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Contact Number	Contact_Number__c	Number(10, 0)		
Created By	CreatedById	Lookup(User)		
Full Name	Full_Name__c	Text(80)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User, Group)		✓
Passport Number	Name	Text(80)		✓
Permanent Address	Permanent_Address__c	Text Area(255)		

Milestone – 05 : Field creation

1. Field Name: Data Type
2. Full Name: Text
3. Contact Number: Number

4. Passport Number: Text

5. Permanent Address: Text

Field creation: Full Name

1. Navigate to Setup
2. Click the Object Manager next to Home Tab
3. Type Passport in Quick Find and Select it
4. Click on Fields and Relationships
5. Click New
6. Select Data Type: Text, click on next
7. Field Label: Full Name
8. Length: Max 80
9. Check always requires a value to save this record
10. Click next
11. Next, Save or Save & New (if further new field will be create)

Field Creation-Contact Number

1. Navigate to Setup
2. Click the Object Manager next to Home Tab
3. Type Passport in Quick Find and Select it
4. Click on Fields and Relationships
5. Click New
6. Select Data Type: Number, click on next
7. Field Label: Contact Number
8. Length: 10 and Decimal 0, click on next
9. Next, Save.

Field Creation- Permanent Address

1. Navigate to Setup
2. Click the Object Manager next to Home Tab

3. Type Passport in Quick Find and Select it
4. Click on Fields and Relationships
5. Click New
6. Select Data Type: Text Area, click on next
7. Field Label: Permanent Address
8. Next, next and save

The screenshot shows the Salesforce Setup interface for the 'Passport' object. The 'Fields & Relationships' section is active, displaying a list of 7 fields. The fields are sorted by Field Label. The table below represents the data shown in the screenshot.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Contact Number	Contact_Number__c	Number(10, 0)		
Created By	CreatedById	Lookup(User)		
Full Name	Full_Name__c	Text(80)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User, Group)		✓
Passport Number	Name	Text(80)		✓
Permanent Address	Permanent_Address__c	Text Area(255)		

Fields Available On Custom Object: Visa

Slot Field Name	Data Type
Location	: Text
Time	: Date & Time
Visa Slot Number	: Auto Number (Use in Record Name)
Passport Number	: Master-Detail
Status	: picklist Field

Creation Status

1. Click on Object Manager, search and select Visa Slot
2. Click Fields & Relationships and click on new.
3. Chose on picklist, next.
4. Label: Status
5. NOTE- select enter value, with each value separated by new line
6. Values: Approved
7. Cancel Reschedule
8. Next, next and save.

The screenshot shows the Salesforce Setup interface for the 'Visa Slot' object. The 'Fields & Relationships' section is active, displaying a table of fields. The table has columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed. The fields listed are: Created By (Lookup(User)), Last Modified By (Lookup(User)), Location (Text(10)), Passport Number (Master-Detail(Passport)), Status (Picklist), Time (Date/Time), Visa Slot number (Auto Number), and Visa Slot Number (Auto Number). The 'Status' field is highlighted in blue.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Location	Location__c	Text(10)		
Passport Number	Passport_Number__c	Master-Detail(Passport)		✓
Status	Status__c	Picklist		
Time	Time__c	Date/Time		
Visa Slot number	Visa_Slot_number__c	Auto Number		
Visa Slot Number	Name	Auto Number		✓

Field Available on Custom Object: Payment

Field Name	Data Type
Payment Mode	Picklist (Values- Debit Card, Credit Card)
Card Number	Number
Transaction Id	Auto Number (Used in Record Name)
Visa Slot Number	Master-Detail
Cancel Transaction	Text

universitycollegeofengine38-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/0115g000004jn43/FieldsAndRelationships/view

Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER
Payment

Details

Fields & Relationships
7 Items, Sorted by Field Label

Quick Find New Deleted Fields Field Dependencies Set History Tracking

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Cancel Transaction	Cancel_Transaction__c	Text(10)		
Card Number	Card_Number__c	Number(18, 0)		
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Payment Mode	Payment_Mode__c	Picklist		
Transaction Id	Name	Auto Number		✓
Visa Slot number	Visa_Slot_number__c	Master-Detail(Visa Slot)		✓

Milestone - 06 : Apps

Apps in Salesforce are a group of tabs that help the application function by working together as a unit. It has a name, a logo, and a particular set of tabs. The simplest app usually has just two tabs.

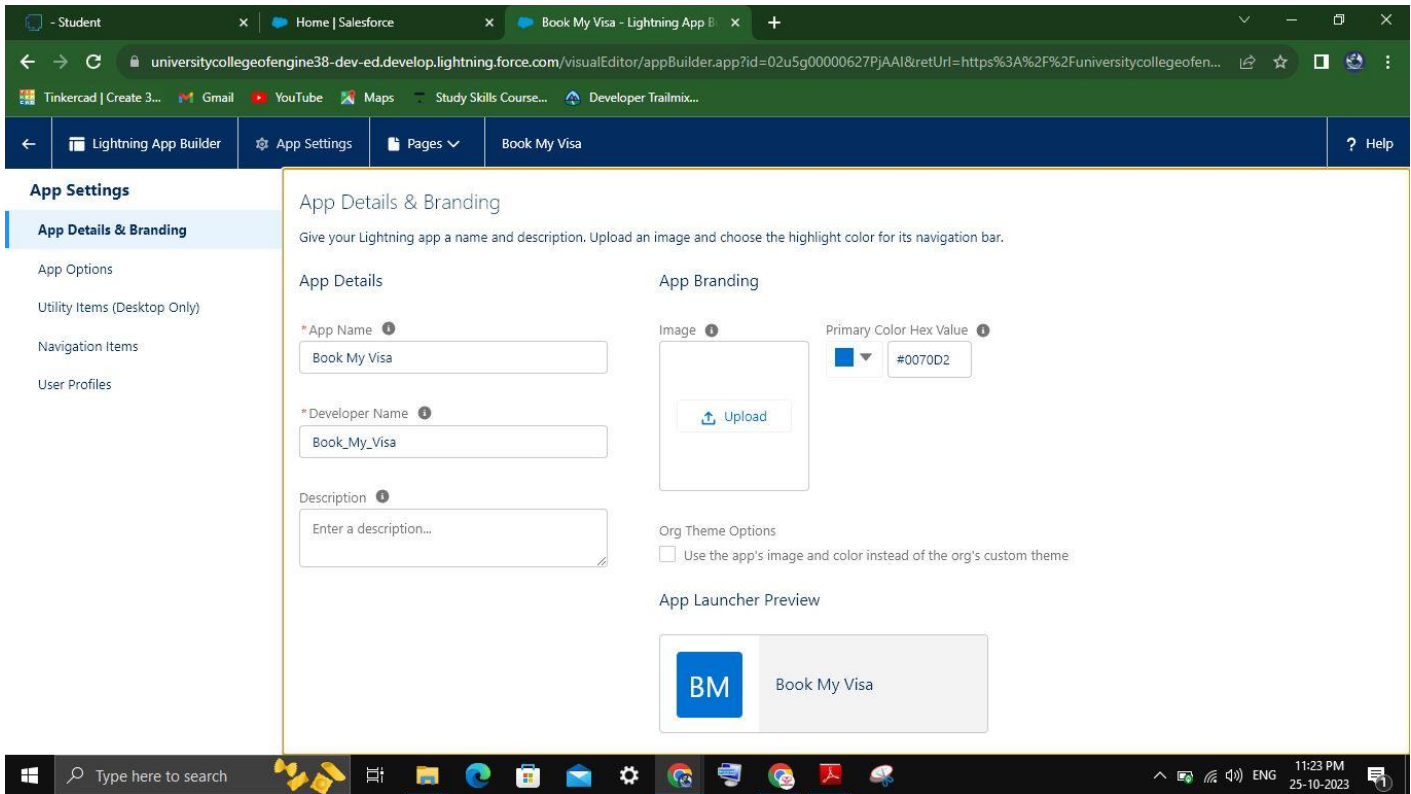
There are two types of Salesforce Applications:

- Standard Apps
- Custom Apps

Creation of App

- Click on setup and go to home page.
- In Quick Find Box search and select App Manager.
- Click: New Lightning App.
- App Name: Book My Visa and click on next.
- Navigate System: Standard Navigation Support Form Factor: Desktop and Phone Click next, next

6. Move Objects from available items to selected items. (Passport, Visa Slot, Payment).
7. Add System Administrator profile, available profile to selected profile.
8. Save & Finish



Milestone-07 : User

Creation of User

1. Navigate to setup
2. In Quick Find box select and search: User
3. Click: New user
4. Give First and Last Name
5. Enter your email in the email field
6. Enter user name, it must be unique

7. User license: salesforce platform

8. In the profile field: Standard user profile

9. Check, generate new password and notify user immediately

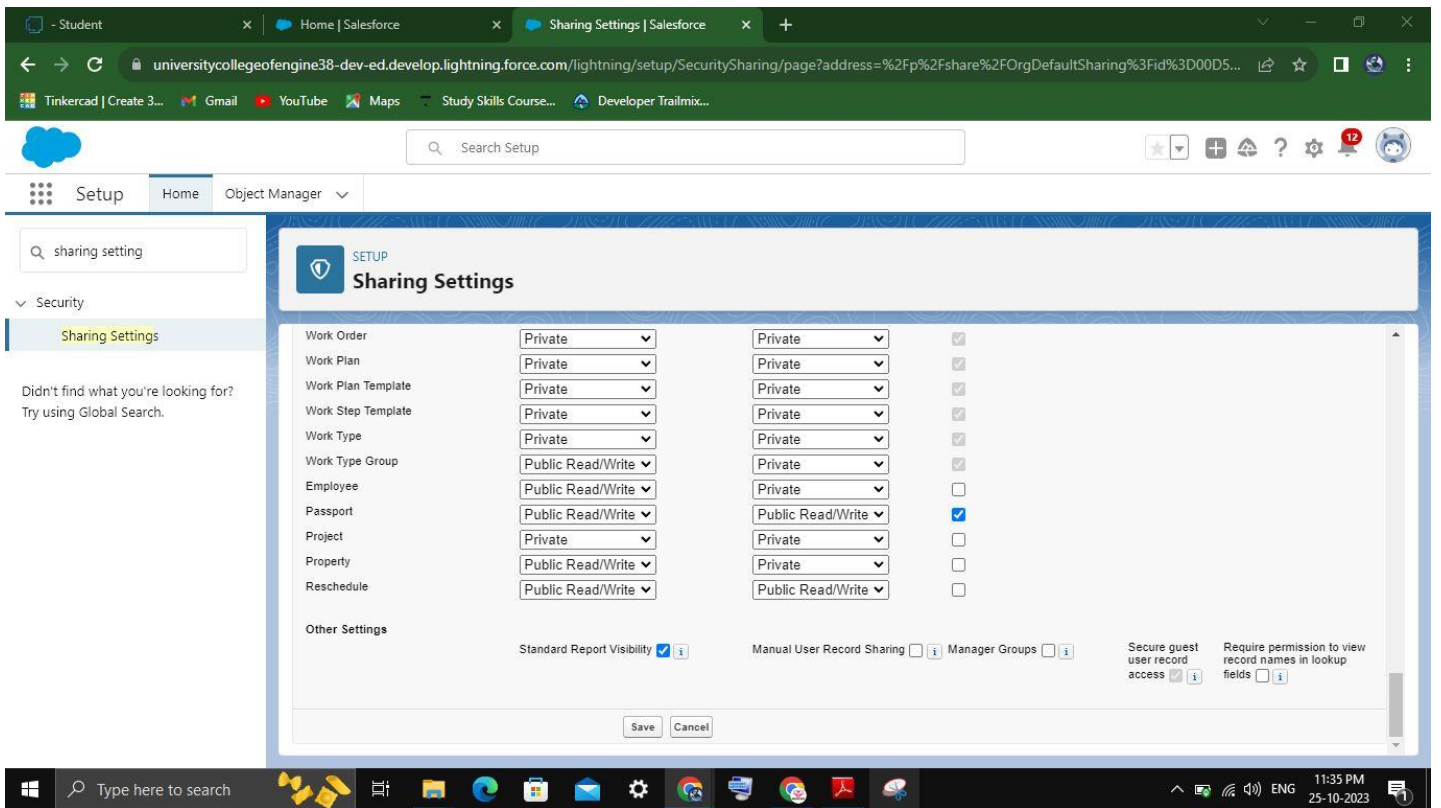
10. Save

The screenshot shows the Salesforce Setup interface. The left sidebar contains a search bar with 'user' and a list of navigation items: Users, Permission Set Groups, Permission Sets, Profiles, Public Groups, Queues, Roles, User Management Settings, and Users. The main content area is titled 'Users' and shows a list of users. The table has columns for Action, Full Name, Alias, Username, Role, Active, and Profile. The users listed are:

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/> Edit	Brown, Courtney	cbrow	ajayorhaveennbrown@apblue052419.com	Manager	✓	Standard Platform User
<input type="checkbox"/> Edit	Chatter Expert	Chatter	chatty.00d5g00000kpxuiear.o6nxvncip0i4@chatter.salesforce.com		✓	Chatter Free User
<input type="checkbox"/> Edit	dsfdfsdf fdgd	questadm	nagarajanc1234questadmin@gmail.com		<input type="checkbox"/>	System Administrator
<input type="checkbox"/> Edit	questadm	questadm	nagarajanc74@gmail.com		<input type="checkbox"/>	System Administrator
<input type="checkbox"/> Edit	N. AJAY PRHAVEEN	AN	ajayorhaveenn@company.sandbox		✓	System Administrator
<input type="checkbox"/> Edit	N. AJAY PRHAVEEN	an	ajayorhaveenn@gmail.com		✓	Standard Platform User
<input type="checkbox"/> Edit	User Integration	integ	integration@00d5g00000kpxuiear.com		✓	Analytics Cloud Integration User
<input type="checkbox"/> Edit	User Security	sec	insightsecurity@00d5g00000kpxuiear.com		✓	Analytics Cloud Security User
<input type="checkbox"/> Edit	Wheeler, Allison	awhee	ajayorhaveennawheeler@apblue052419.com	VP, North American Sales	✓	Standard Platform User

Organization Wide Defaults Settings

1. Steps of OWD settings:
2. Navigate setup in Quick Find search bar
3. Type Sharing Setting and Select it.
4. Edit: Organization Wide Defaults.
5. Scroll down list and select Passport object and change the default external Access to Public Read/Write.
6. Save.



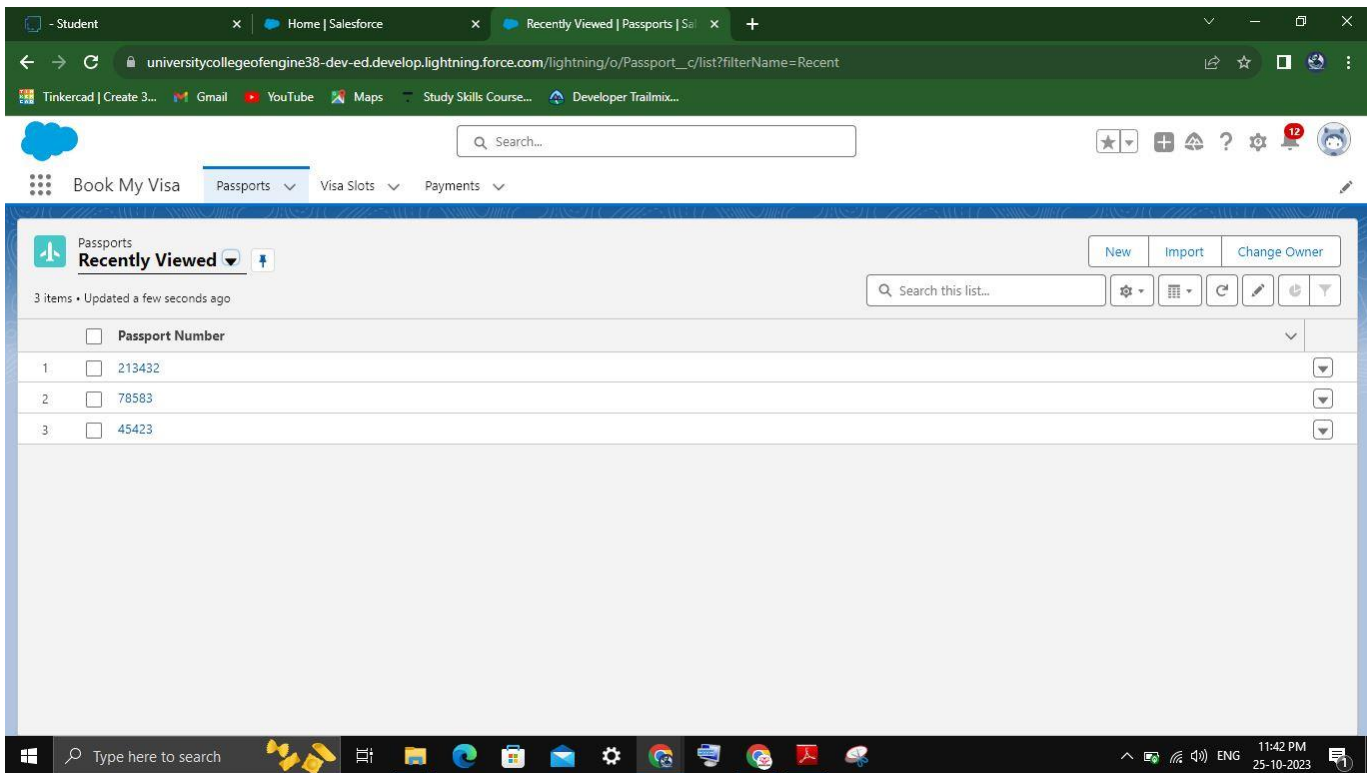
Milestone - 08 : User Adoption

Create Record- Passport

1. Click on App Launcher on left side of screen.
2. Search Book My Visa App & click on it.
3. Click on Passport tab.
4. Click new button
5. Fill all Passport record details.
6. Click on Save Button.

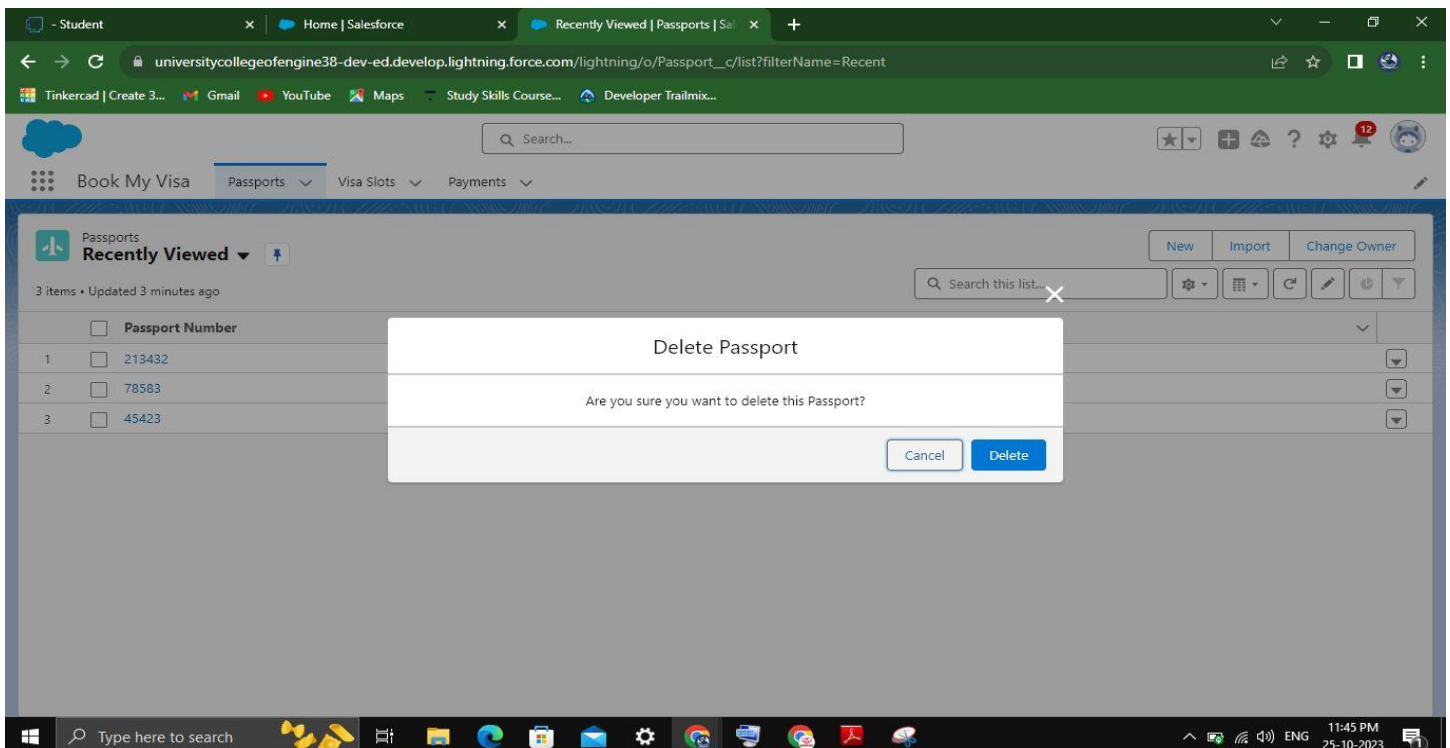
View Record- Passport

1. Click on App Launcher on left side of screen.
2. Search Book My Visa & click on it.
3. Click on Passport Tab.
4. Click on any record name. you can see the details of the Driver



Delete Records- Passport

1. Click on App Launcher on left side of screen.
2. Search Book My Visa & click on it.
3. Click on Passport Tab.
4. Click on Arrow at right hand side on that Particular record.
5. Click delete and delete again.



Milestone - 09 : Reports

Creation Of Report

1. Click on App Launcher left side on the screen, Search and select: Report
2. Click Report- select New Report
3. Select Report Type: Passport with Visa Slot Number
4. Click on Start Report button
5. Below the Outline pane- In the Group Row select: Location
6. In Group Column select- Passport: Passport Number
7. In Column select: Visa Slot Number
8. Now navigate to Filter pane available next to Outline pane and ensure in the show me section: All Passport is selected
9. In Passport Created date: All Time.
10. Give the Label: **Passport with Visa Location**
11. Save & Run for saving the Report, Save. **View**

Report

1. Click on App Launcher on left side of screen.
2. Search Book My Visa App & click on it.
3. Click on Reports Tab.
4. Click on Passport with Visa Location and see reports.

The screenshot displays the Salesforce Reports interface. At the top, there's a navigation bar with tabs for 'Book My Visa', 'Passports', 'Visa Slots', 'Payments', and 'Passport with Visa Location'. Below this, the 'Reports' section is visible, showing a list of recent reports. The table has columns for Report Name, Description, Folder, Created By, Created On, and Subscribed. Two reports are listed: 'Passport with Visa Location' and 'Sample Flow Report: Screen Flows'.

Report Name	Description	Folder	Created By	Created On	Subscribed
Passport with Visa Location		Private Reports	AJAY PRHAVEEN N	25/10/2023, 11:53 pm	
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	25/9/2023, 5:40 pm	

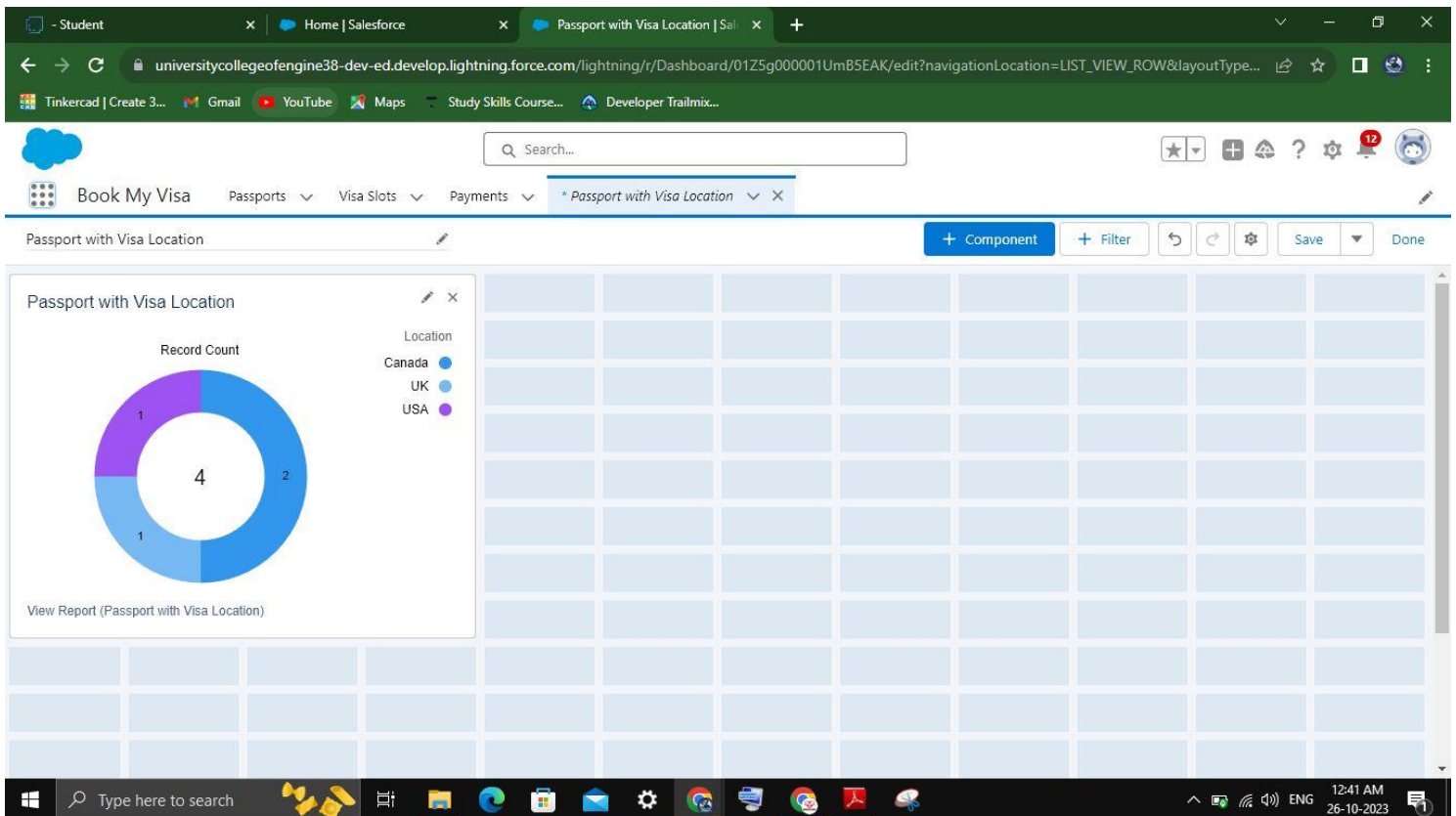
Milestone - 10 : Dashboards

Creation Of Dashboard

1. Click on the App launcher left on screen and search for dashboards.
2. Select New Dashboard
3. Name the Dashboard: **Passport With Visa Location**
4. Select Create option
5. Click on Add Component
6. Select Passport with Visa Locations
7. Click Select
8. Select the Donut Chart to display a section
9. Value: Record count
10. Sliced By: **Location**
11. Leave the default values
12. Click on Add
13. Save the Dashboard and Done

View Dashboard

1. Click on App Launcher on left side of screen.
2. Search Book My Visa & click on it.
3. Click on Dashboard Tab.
4. Click on Passport with Visa Location see graph view of records



Milestone – 11: Apex Triggers

Write A Trigger-1

1. Click on Set up Gear at drop down list you can find developer console click on that.
2. At the left side top you can find the option new click on that and then apex trigger.
3. Give the name as **Deletionofvisarecord**
4. And S object has **Visa Object**
5. Scenario - **You cannot delete active visa record**

trigger Deletionifvisarecord on Visa_Slot__c (before delete) {

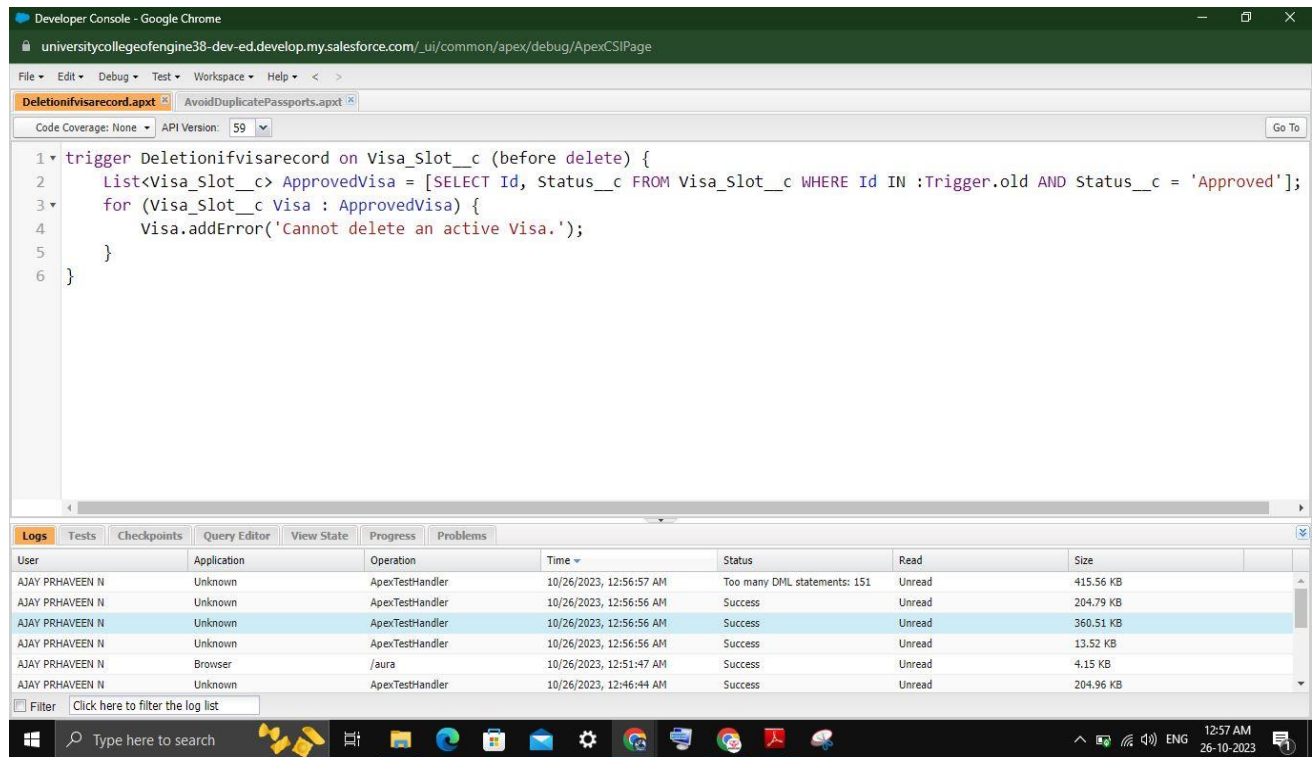
List<Visa_Slot__c> ApprovedVisa = [SELECT Id, Status__c FROM Visa_Slot__c WHERE Id IN :Trigger.old AND Status__c = 'Approved'];

for (Visa_Slot__c Visa : ApprovedVisa) {

Visa.addError('Cannot delete an active Visa.');

}

}



Write A Trigger-2

1. Click on Set up Gear at drop down list you can find developer console click on that.
2. At the left side top you can find the option new click on that and then apex trigger.
3. Give the name as **AvoidDuplicatePassport** 4. And S object has **Passport Object**
5. Scenario - **trigger on the Passport__c object to avoid duplicate records based on the Full Name and Contact Number fields.**

```
trigger AvoidDuplicatePassports on Passport__c (before insert, before update) {
```

```
    Set<String> uniqueKeys = new Set<String>();
```

```
    List<Passport__c> duplicatePassports = new List<Passport__c>();
```

```
    for (Passport__c passport : Trigger.new) {
```

```
        String key = passport.Full_Name__c + '_' + passport.Contact_Number__c;
```

```
        if (uniqueKeys.contains(key)) {
```

```
            duplicatePassports.add(passport);
```

```
        } else {
```

```
            uniqueKeys.add(key);
```

```

    }

}

for (Passport__c passport : duplicatePassports) {

    passport.addError('Duplicate record found based on Full Name and Contact Number.');
```

```

}

}

```

Developer Console - Google Chrome

universitycollegeofengine38-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage

File Edit Debug Test Workspace Help < >

Deletionofvisarecord.apxt AvoidDuplicatePassports.apxt

Code Coverage: None API Version: 59 Go To

```

1 trigger AvoidDuplicatePassports on Passport__c (before insert, before update) {
2
3     Set<String> uniqueKeys = new Set<String>();
4
5     List<Passport__c> duplicatePassports = new List<Passport__c>();
6
7     for (Passport__c passport : Trigger.new) {
8
9         String key = passport.Full_Name__c + '_' + passport.Contact_Number__c;
10
11        if (uniqueKeys.contains(key)) {
12
13            duplicatePassports.add(passport);
14
15        } else {
16

```

Logs Tests Checkpoints Query Editor View State Progress Problems

User	Application	Operation	Time	Status	Read	Size
AJAY PRHAVEEN N	Unknown	ApexTestHandler	10/26/2023, 12:46:44 AM	Success	Unread	360.47 KB
AJAY PRHAVEEN N	Unknown	ApexTestHandler	10/26/2023, 12:46:44 AM	Success	Unread	13.52 KB
AJAY PRHAVEEN N	Unknown	ApexTestHandler	10/26/2023, 12:43:34 AM	Success	Unread	205.54 KB
AJAY PRHAVEEN N	Unknown	ApexTestHandler	10/26/2023, 12:43:34 AM	Success	Unread	360.3 KB
AJAY PRHAVEEN N	Unknown	ApexTestHandler	10/26/2023, 12:43:34 AM	Success	Unread	13.52 KB

Filter Click here to filter the log list

Windows Taskbar: Type here to search, 12:49 AM, 26-10-2023

Project Demo Video

link: https://drive.google.com/file/d/1tUxS61M2Dkzrb_SnEyT0HwkhXgRX_dI7/view?usp=share_link

TEAM ID: NM2023TMID07360

TEAM MEMBERS:

NAME	NM ID
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SANJAI J	A24F5F93E535405A0AA4464CD4374DBD
SUTHAN K	938D9610E799947B6F64BBD5D8F9B650
VISHNU KUMAR M S	81249B93FC03861A54949709126729EA

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SANJAI J: <https://www.salesforce.com/trailblazer/sanjaij>

SUTHAN K: <https://www.salesforce.com/trailblazer/suthank>

VISHNU KUMAR M S: <https://www.salesforce.com/trailblazer/vishnukumarms>

*****THE END*****