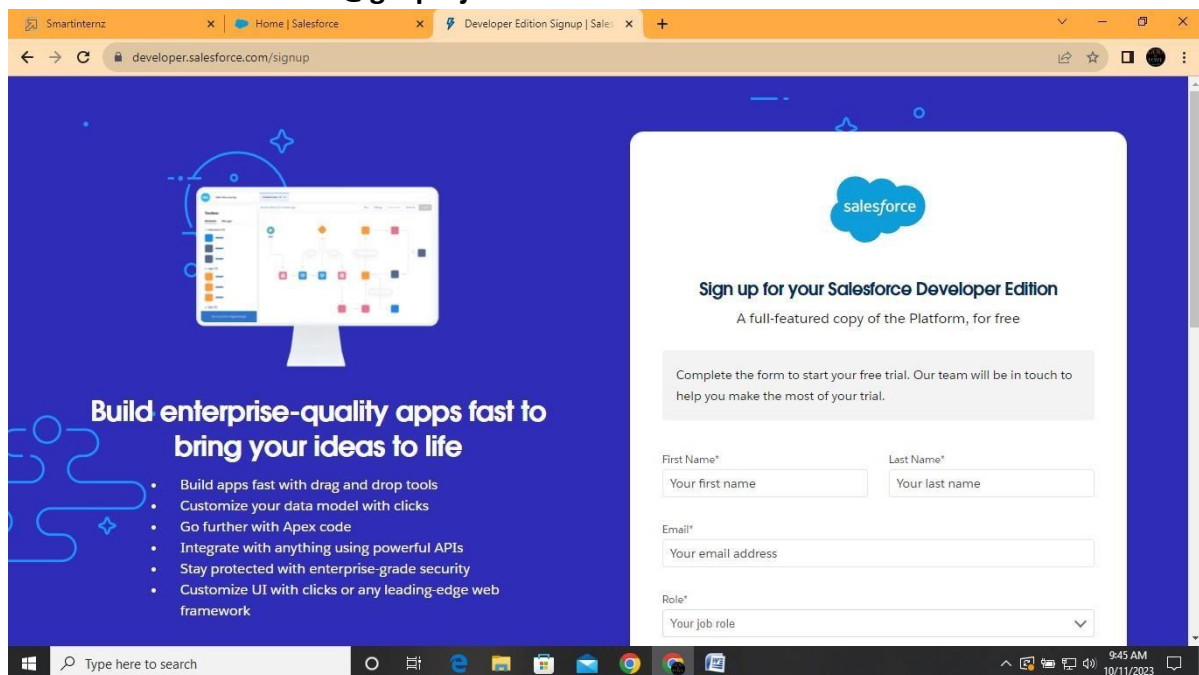


Project Report on
CRM Application That Helps To Book A Visa Slot
Developer - (Short-Term)

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 center to schedule and manage appointments with applicants.

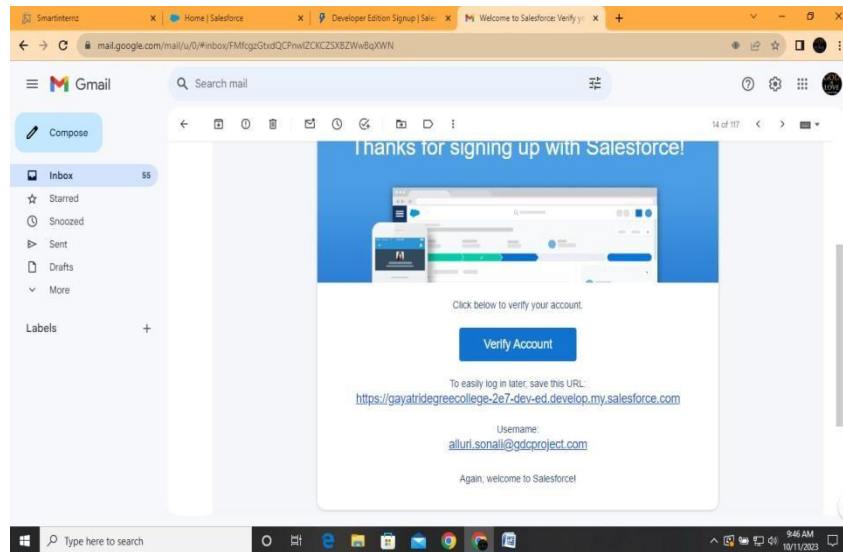
Milestone – 01: Create a Developer Org

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 – **ALLURI & SONALI**
 - b. Email – **alluri.sonali@gmail.com**
 - c. Role : **Developer**
 - d. Company : **GAYATRI DEGREE COLLEGE - TIRUPATI**
 - e. County : **India**
 - f. Postal Code : **517501**
 - g. Username : **alluri.sonali@gdcproject.com**

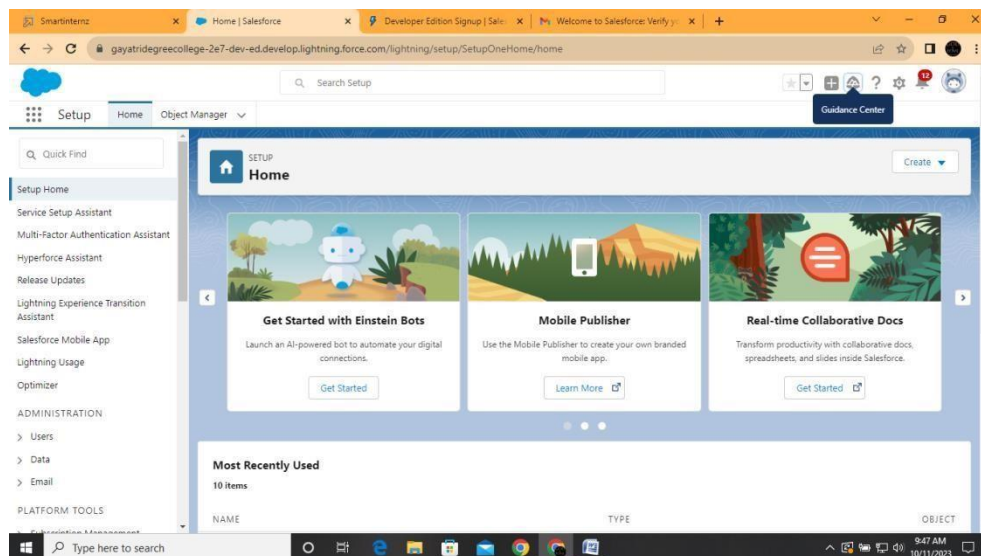


Account Activation

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. 3.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. At the top, there's a navigation bar with tabs for Setup, Home, and Object Manager. Below this, the 'Object Manager' section is active, displaying a list of custom objects. The table has columns for LABEL, API NAME, TYPE, DESCRIPTION, LAST MODIFIED, and DEPLOYED. Three objects are listed: Payment (API NAME: Payment_c, TYPE: Custom Object, LAST MODIFIED: 10/10/2023), Passport (API NAME: Passport_c, TYPE: Custom Object, LAST MODIFIED: 08/10/2023), and Visa Slot (API NAME: Visa_Slot_c, TYPE: Custom Object, LAST MODIFIED: 08/10/2023). All objects are marked as 'DEPLOYED' with a checkmark.

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Payment	Payment_c	Custom Object		10/10/2023	✓
Passport	Passport_c	Custom Object		08/10/2023	✓
Visa Slot	Visa_Slot_c	Custom Object		08/10/2023	✓

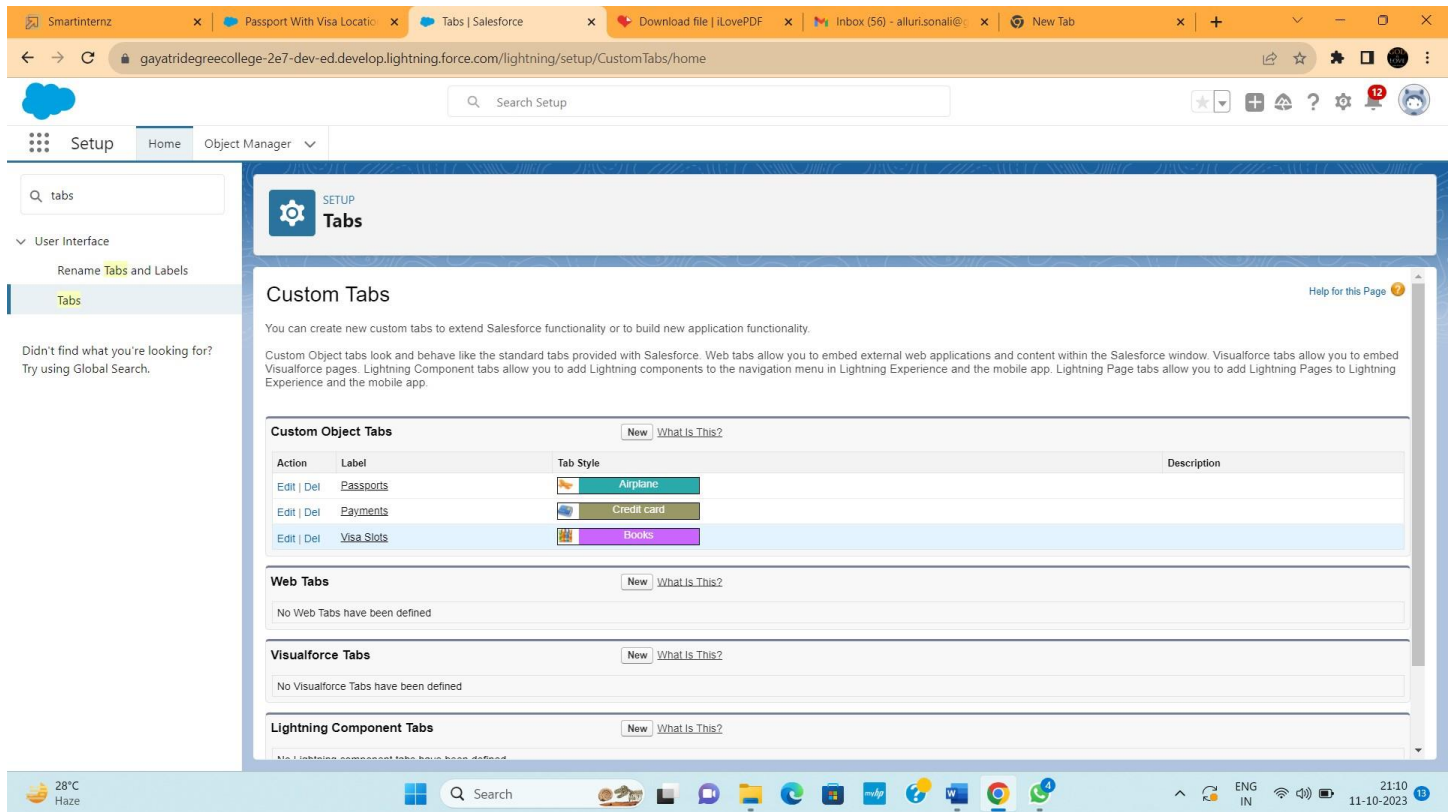
Milestone – 03: Creation of Tabs

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

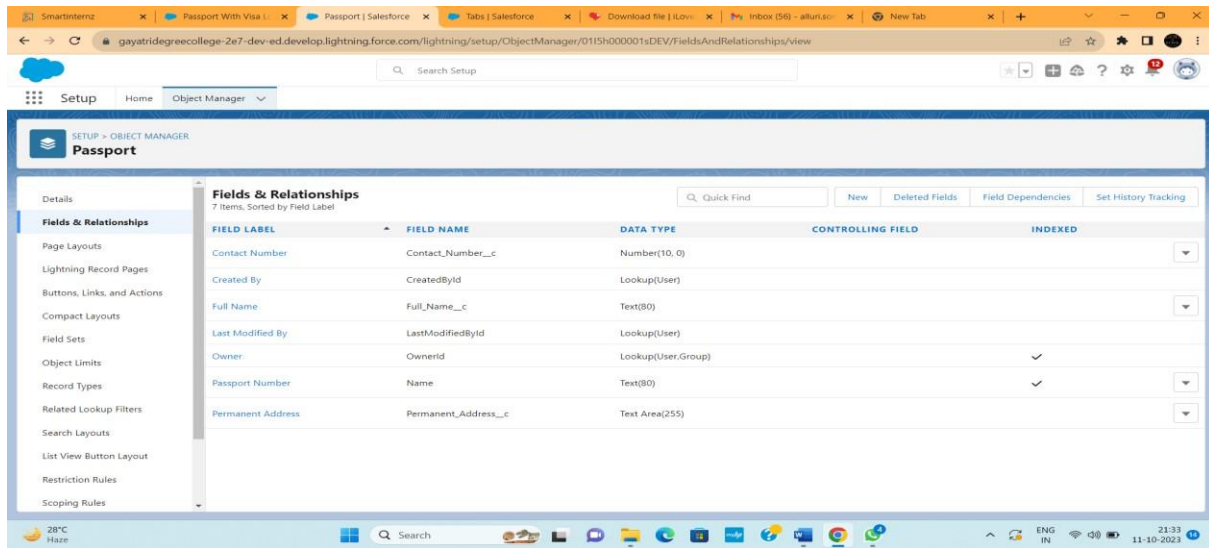
1. Navigate to setup and enter Tabs in Quick Find and select Tabs Under Custom Object Tabs, click New
2. For Object, select **Payment**
3. For Tab Style, select any icon
4. Leave all defaults as is. Click Next, Next, and Save



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.



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. The browser address bar indicates the URL: `gayatridegreecollege-2e7-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/0115h000001sDEV/FieldsAndRelationships/view`. The page title is "SETUP > OBJECT MANAGER Passport". The left sidebar shows a navigation menu with "Fields & Relationships" selected. The main content area displays a table of fields for the "Passport" object, sorted by Field Label. The table has columns: FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are: Contact Number, Created By, Full Name, Last Modified By, Owner, Passport Number, and Permanent Address.

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' custom object. The 'Fields & Relationships' section is active, displaying a table of fields. The table has the following columns: FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedBy	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

The screenshot shows the Salesforce Setup interface for the 'Payment' custom 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: Cancel Transaction (Text(10)), Card Number (Number(18, 0)), Created By (Lookup(User)), Last Modified By (Lookup(User)), Payment Mode (Picklist), Transaction Id (Auto Number), and Visa Slot Number (Master-Detail(Visa Slot)).

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.

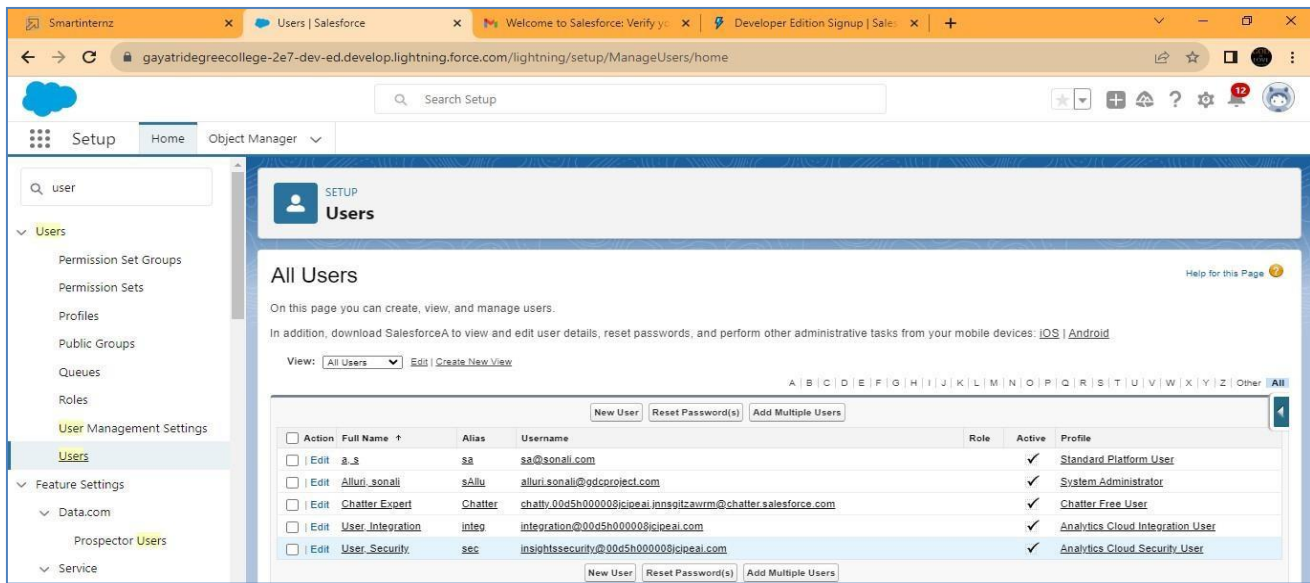
4. App Name: Book My Visa and click on next.
5. Navigate System: Standard Navigation Support Form Factor: Desktop and Phone Click next, next
6. Move Objects from available items to selected items. (Passport, Visa Slot, Payment).
7. Add System Administrator profile, available profile to selected profile.
8. Save & Finish

The screenshot shows the Salesforce Lightning App Builder interface for an app named 'Book My Visa'. The browser tabs at the top include 'Smartintenz', 'Book My Visa - Lightning App', 'Welcome to Salesforce: Verify y...', and 'Developer Edition Signup | Sale...'. The address bar shows a URL from 'gayatridegreecollege-2e7-dev-ed.develop.lightning.force.com'. The left sidebar contains a navigation menu with 'App Settings' selected, which includes 'App Details & Branding', 'App Options', 'Utility Items (Desktop Only)', 'Navigation Items', and 'User Profiles'. The main content area is titled 'App Details & Branding' and contains two sections: 'App Details' and 'App Branding'. The 'App Details' section has fields for 'App Name' (Book My Visa), 'Developer Name' (Book_My_Visa), and 'Description' (Enter a description...). The 'App Branding' section has an 'Image' upload button, a 'Primary Color Hex Value' dropdown set to '#0070D2', and 'Org Theme Options' with a checkbox 'Use the app's image and color instead of the org's custom theme'. At the bottom, there is an 'App Launcher Preview' showing a blue square icon with 'BM' and a button labeled 'Book My Visa'.

Milestone- 07 : User

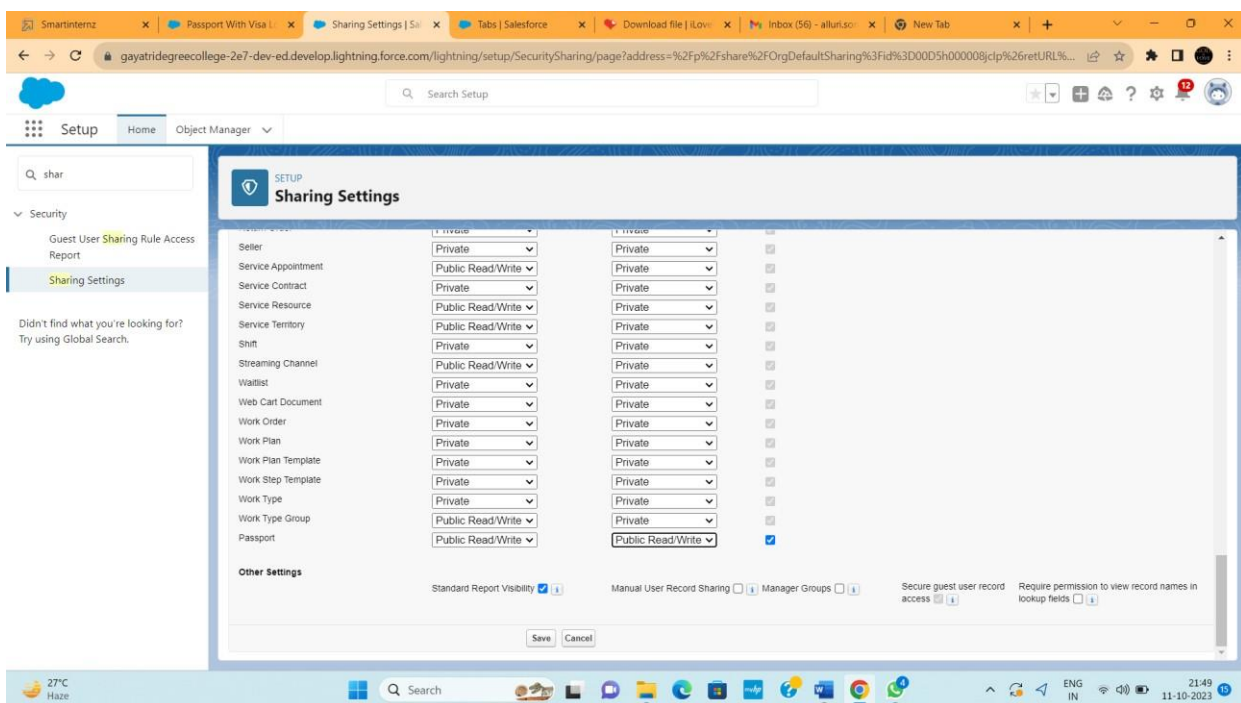
Creation Of User

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



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.



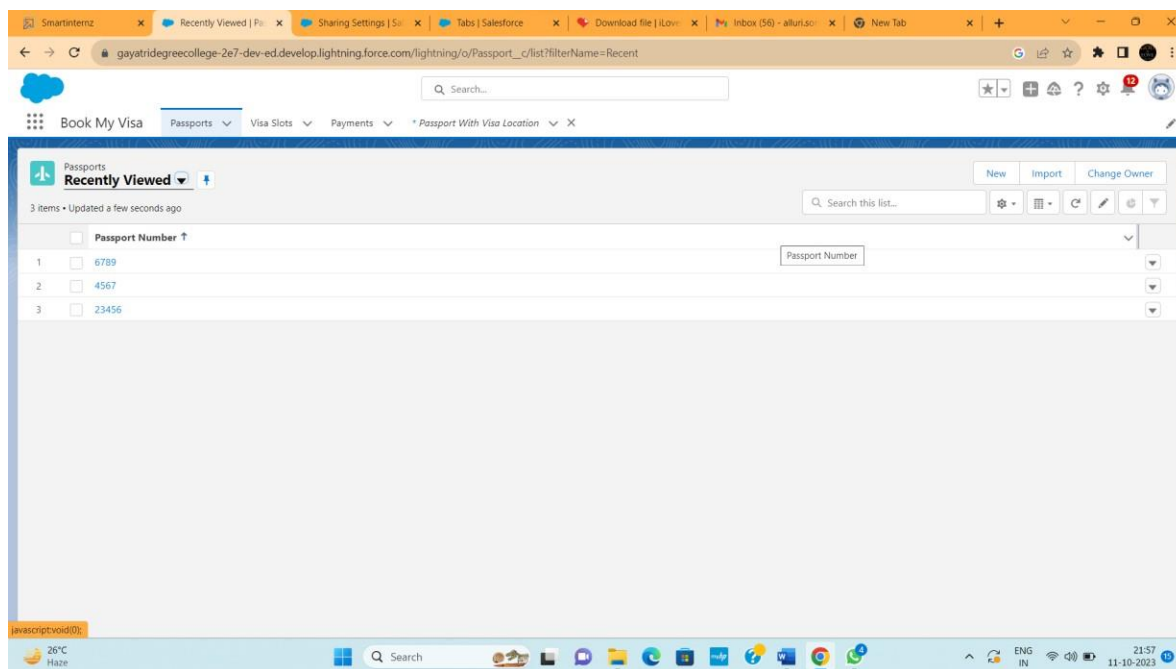
Milestone - 08 : User Adoption

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.

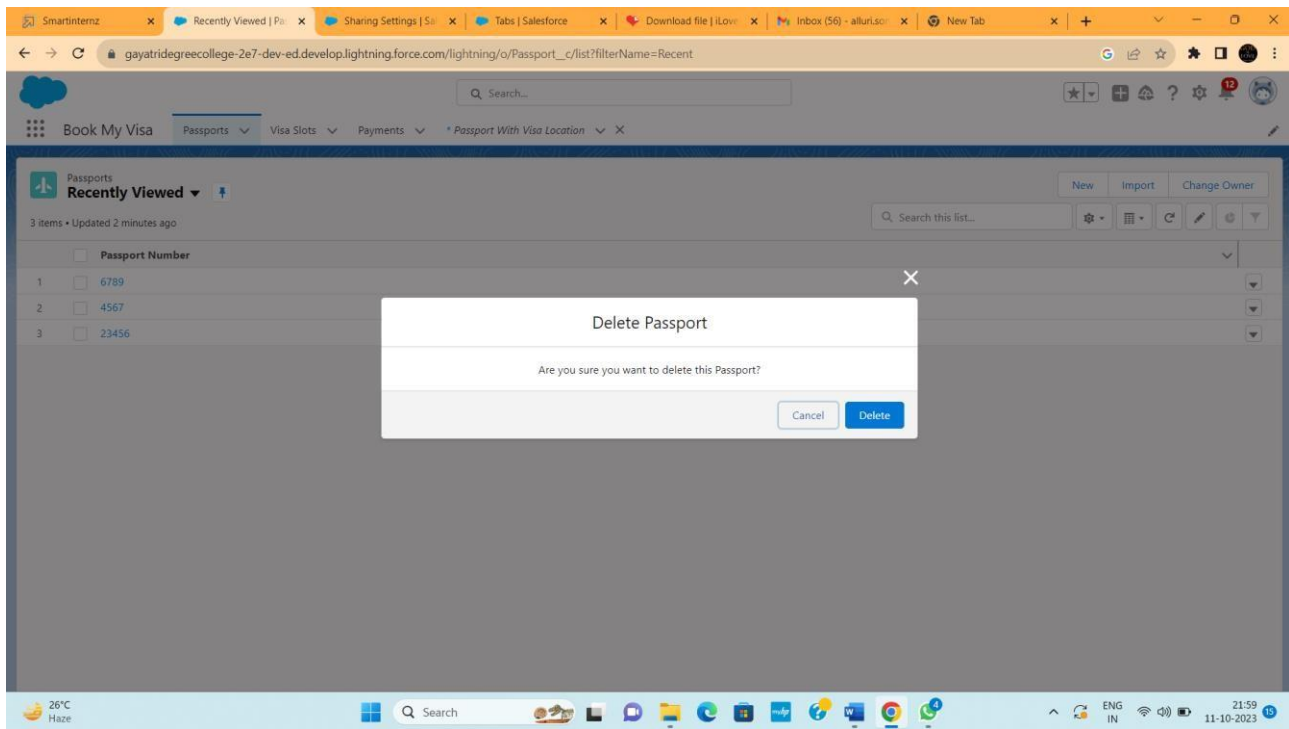
View Record- Passport

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.



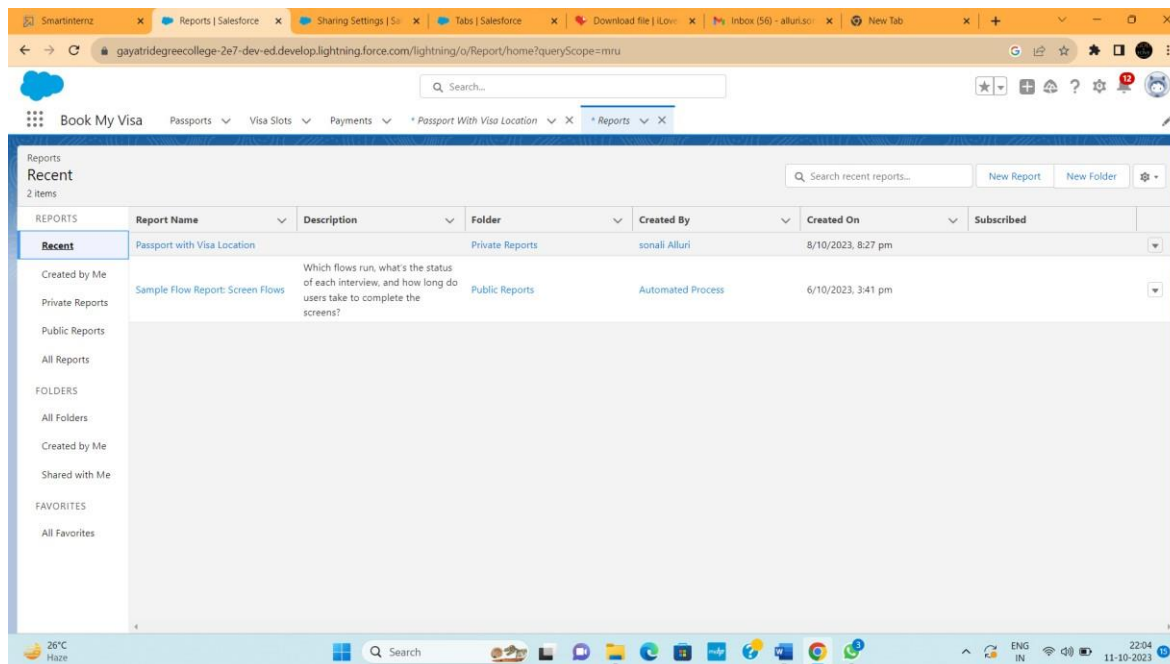
Milestone - 09 : Reports

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.



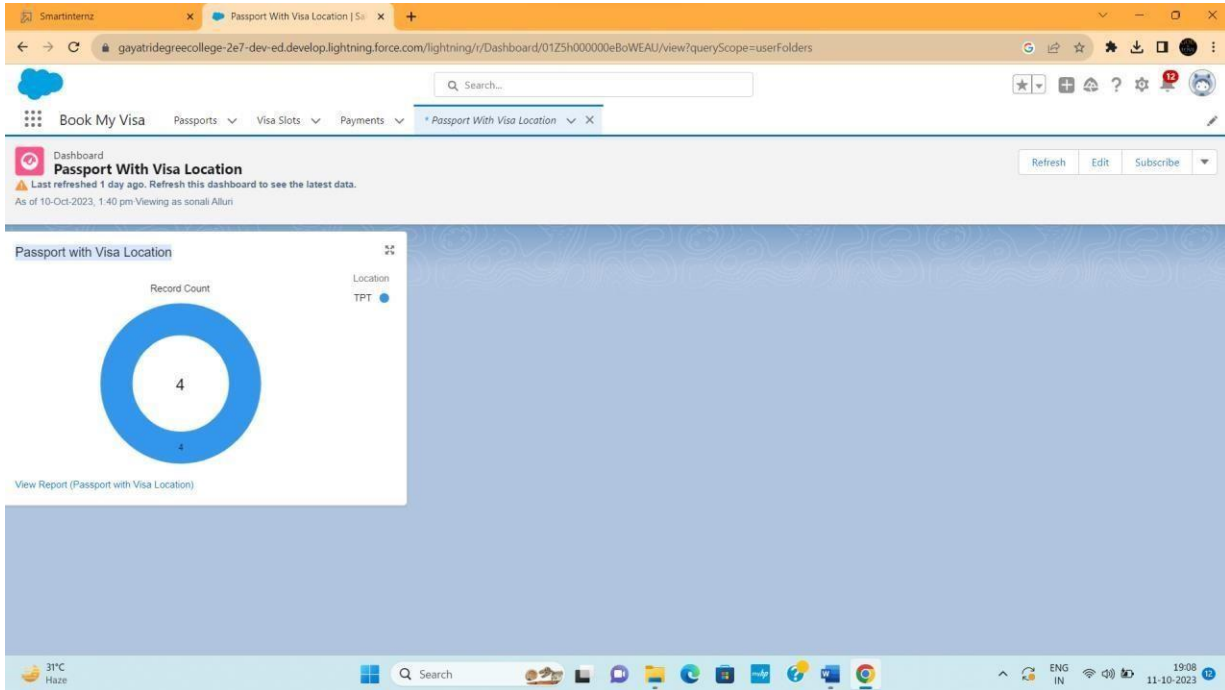
Milestone - 10 : Dashboards

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.');
```

```
    }
```

```
}
```