

A Project Report
On
CRM Application that helps to Book a Visa Slot-(DEV)

Submitted In accordance with the requirement for the degree of

BACHELOR OF TECHNOLOGY

Submitted by:

KUNAPAREDDY YASASWINI DEVI (218X1A1220)

NISSANKARARAO VENKATA TARUN (218X1A1265)

GOLI VENKATA RAMANJI (218X1A1210)

TADIBOINA VENKATA SURENDRA GOPAL (218X1A1239)



DEPARTMENT OF INFORMATION TECHNOLOGY

**KALLAM HARANADHAREDDY INSTITUTE OF TECHNOLOGY
(AUTONOMOUS)**

Approved by (AICTE, New Delhi; Permanently Affiliated to JNTU KAKINADA)

Accredited by NAAC with an 'A' Grade

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Project overview

The Salesforce CRM-based Visa Slot Management System is a comprehensive solution designed to streamline the visa appointment booking process for both applicants and processing agencies. Built on Salesforce's robust CRM platform, this system allows applicants to register, view available visa slots, and book appointments with ease. It provides automated notifications and reminders via email and SMS, ensuring applicants stay informed about their bookings. The system integrates with payment gateways for secure fee transactions and leverages Salesforce's security features to protect applicant data. By centralizing data and automating key processes, the solution improves operational efficiency, enhances communication, and provides real-time insights, ensuring a seamless visa booking experience for all users.

Objectives

- Automate Visa Slot Booking:**

Automate the process of visa slot booking and management to reduce manual intervention, providing a more efficient and convenient system for both applicants and visa processing agencies.

- Improve Customer Experience:**

Provide applicants with an intuitive, easy-to-use platform for booking visa slots, ensuring timely notifications, reminders, and a seamless booking experience across devices.

- Track Appointment Status:**

Provide real-time updates on the status of visa applications.

- Manage User Data Securely:**

Store applicant details safely and ensure compliance with data protection regulations.

Methodology

- Requirements Gathering:**

Conducted surveys and discussions with visa applicants, embassy officials, and agencies to understand their needs.

- **System Design:**
Designed a CRM-based solution with modules for appointment booking, tracking, and communication.
- **Implementation:**
Developed and tested the application using CRM features such as automated workflows, notifications, dashboards, and reports.
- **Deployment:**
Rolled out the application for public use, ensuring scalability and user accessibility.

Salesforce Key Features And Concepts Utilized

Key Features:

- Salesforce User Registration & Profile Management
- Custom Visa Slot Availability Tracking
- Booking Management via Salesforce
- Automated Notifications & Reminders
- Payment Integration via Salesforce
- Admin Dashboard & Custom Reports

Concepts Utilized:

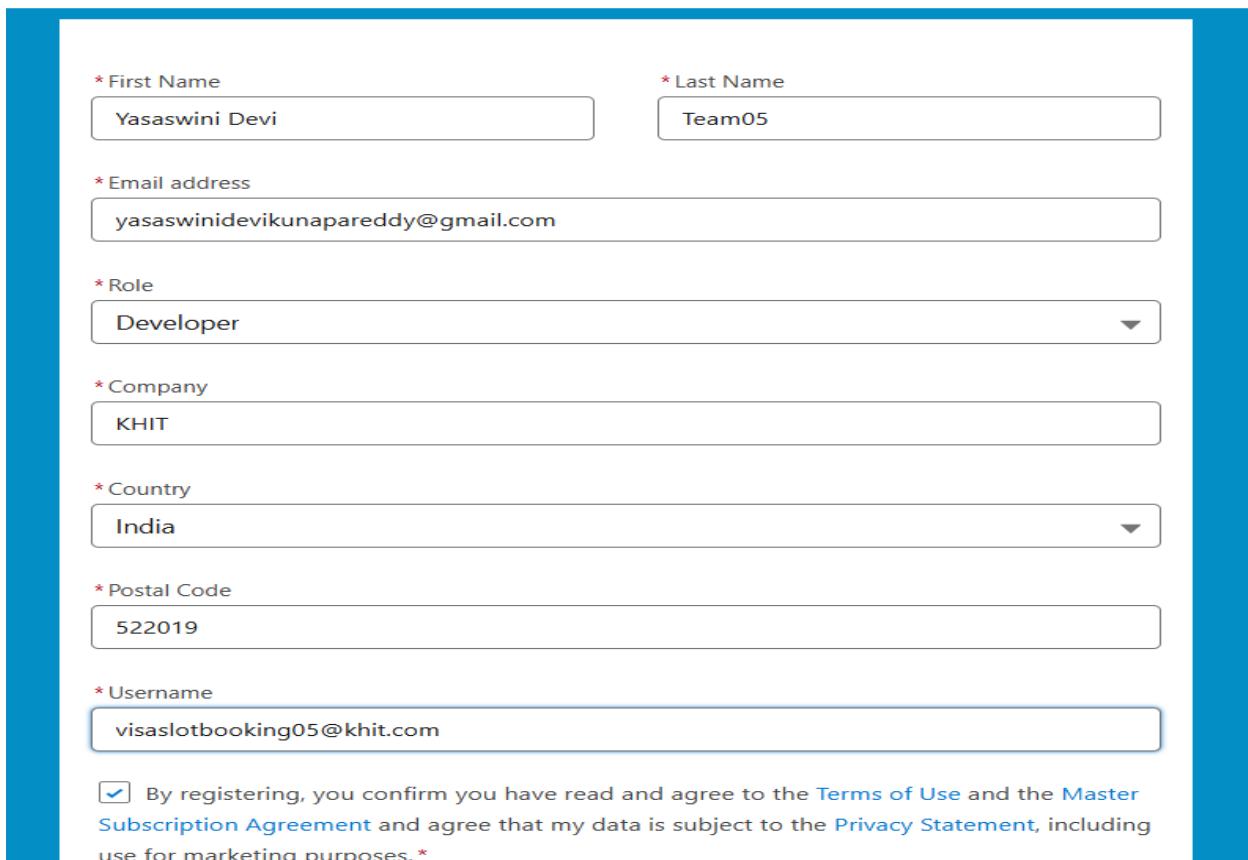
- Custom Objects and Fields – Created objects for Customers, Orders, Transactions, and added custom fields to store relevant data.
- Lightning App – Developed a custom Lightning App for easy navigation and a streamlined user experience.
- Tabs – Configured tabs for quick access to Customers, Orders, and Reports.
- Global Picklist – Standardized values across multiple objects (e.g., Order Status: Pending, Shipped, Delivered).
- Page Layouts – Customized layouts to display relevant fields and sections based on user roles.

- Record Types – Created different record types for Customer Accounts, Order Categories, and other business cases.
- User Adoption – the process of customers or new users getting used to a product or service, it makes a task, ordering food or creating an account, easy.
- Reports and Dashboards – Implemented Salesforce Flows to automate processes such as order approvals and follow-up emails.
- Apex Triggers – enable you to perform custom actions before or after changes to Salesforce records, such as insertions, updates, or deletions

Detailed Steps to Solution Design

Creating Developer Account:

Creating a salesforce developer org for <https://developer.salesforce.com/signup>.



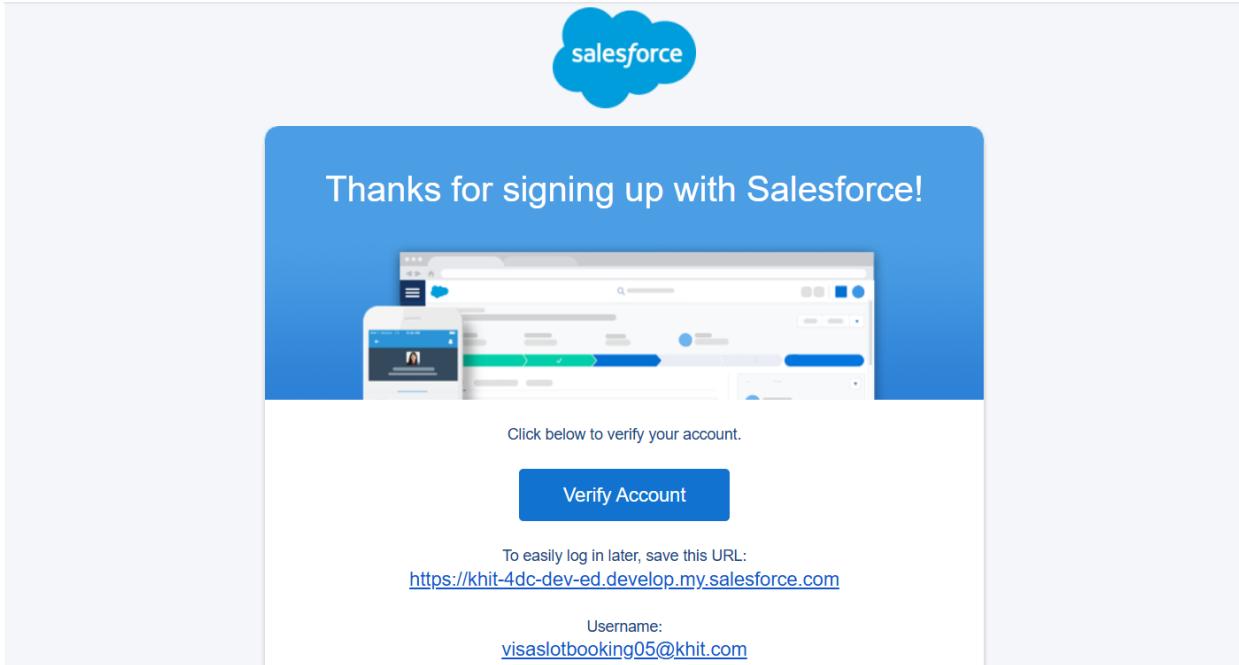
The screenshot shows a registration form for a Salesforce developer account. The fields filled in are:

- * First Name: Yasaswini Devi
- * Last Name: Team05
- * Email address: yasaswinidevikunapareddy@gmail.com
- * Role: Developer
- * Company: KHIT
- * Country: India
- * Postal Code: 522019
- * Username: visaslotbooking05@khit.com

At the bottom, there is a checkbox checked, indicating agreement to the Terms of Use and Master Subscription Agreement, and a note about data privacy and marketing purposes.

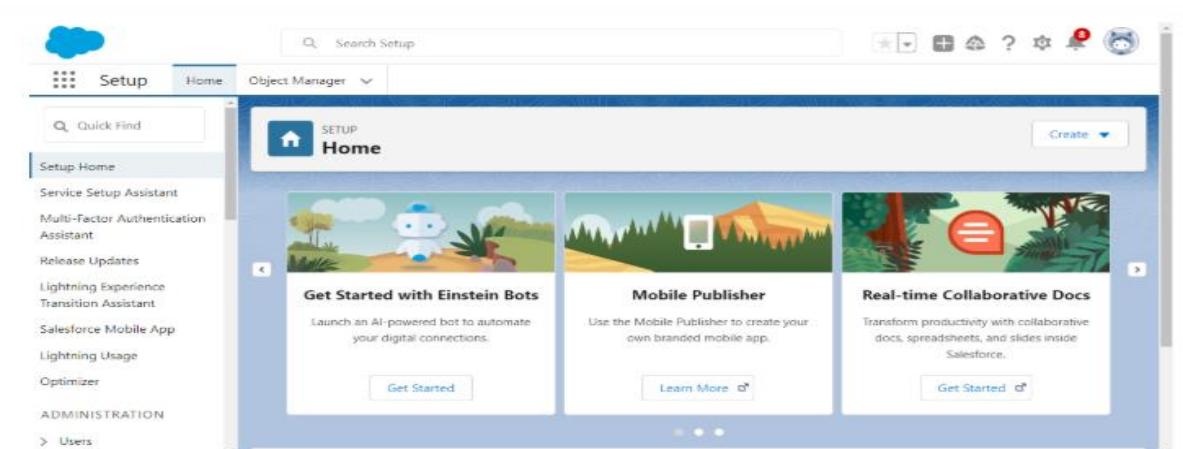
Account Activation

After creation we have got accepted mail to verify the account.



After clicking on the verify account, We have to set a password for the org and use it of the project.

After successfully login to the account, Then you will redirect to your salesforce setup page.



Object Creations

What Is an Object?

Salesforce objects are database tables that permit you to store data that is specific to an organization. What are the types of Salesforce objects.

They are two types of objects:

1. Standard Objects.

2. Custom Objects.

Standard Objects:

Standard objects are pre-defined by Salesforce and form the core foundation of the CRM system. These objects are designed to store common business data that organizations typically use in sales, marketing, and customer support processes. Examples include Accounts, which represent companies or organizations, Contacts, which store details of individuals associated with accounts, and Opportunities, which track potential sales deals. Standard objects also include Leads (potential customers) and Cases (customer service issues).

Custom Objects:

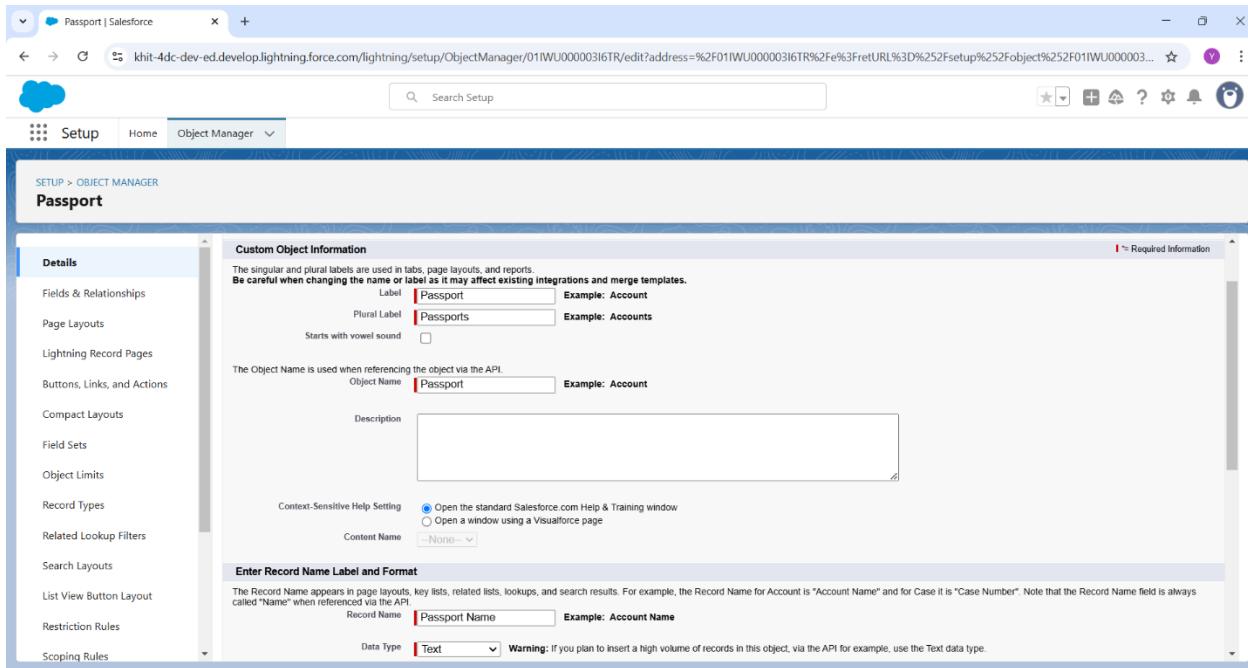
Custom objects, on the other hand, are user-defined objects created to store data specific to an organization's unique needs. While standard objects cover general CRM use cases, businesses often require additional fields and objects to manage industry-specific processes. For instance, a hospital might create a custom object called Patient__c to track patient records, while a construction company may use Project__c to manage project details. Custom objects come with their own fields, relationships, page layouts, and security settings, allowing businesses to tailor Salesforce to their workflows.

Creation of Passport Object:

To create a passport object we should go to setup in a salesforce org.

Follow the steps below to create a custom object in Salesforce:

1. From the Setup page, click on 'Object Manager'.
2. Click on 'Create'.
3. Click on 'Custom Object'.
4. Enter the label name: Passport.
5. Enter the plural label name: Passports.
6. Enter the Record Name Label and Format:
 - Record Name: Passport Number
 - Data Type: Text
7. Enable 'Allow Reports'.
8. Enable 'Allow Search'.
9. Click 'Save' to complete the process.

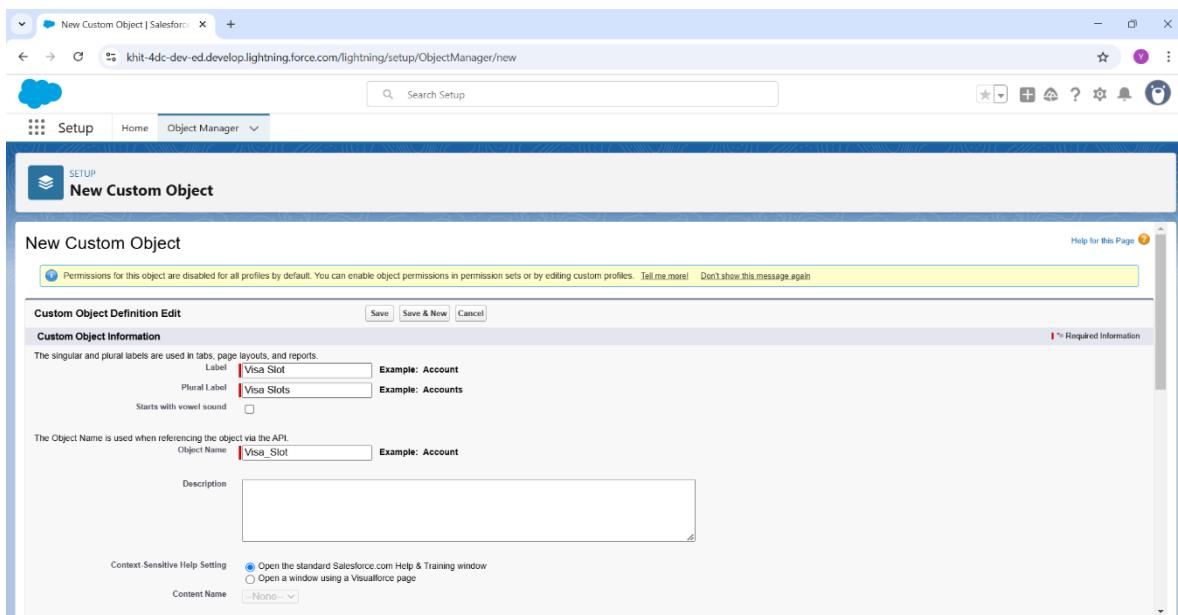


Creation of Visa Slot Object:

To create a visa slot object we should go to setup in a salesforce org.

Follow the steps below to create a custom object in Salesforce:

1. From the Setup page, click on 'Object Manager'.
2. Click on 'Create'.
3. Click on 'Custom Object'.
4. Enter the label name: Visa Slot.
5. Enter the plural label name: Visa Slots.
6. Enter the Record Name Label and Format:
 - Record Name: Visa Slot Number
 - Data Type: Auto Number
 - Display Format: V-{00000}
 - Starting Number: 1
7. Enable 'Allow Reports'.
8. Enable 'Allow Search'.
9. Click 'Save' to complete the process.



Creation Payment Object:

To create a payment object we have to follow this steps

1. From the Setup page, click on 'Object Manager'.
2. Click on 'Create'.
3. Click on 'Custom Object'.
4. Enter the label name: Payment.
5. Enter the plural label name: Payments.
6. Enter the Record Name Label and Format:
 - Record Name: Transaction Id
 - Data Type: Auto Number
 - Display Format: TId-{00000}
 - Starting Number: 1
7. Enable 'Allow Reports'.
8. Enable 'Allow Search'.
9. Click 'Save' to complete the process.

The screenshot shows the 'New Custom Object' page in the Salesforce Setup interface. The URL in the browser is khit-4dc-dev-ed.lightning.force.com/lightning/setup/ObjectManager/new. The page title is 'New Custom Object'. At the top, there's a message: 'Permissions for this object are disabled for all profiles by default. You can enable object permissions in permission sets or by editing custom profiles.' Below this, the 'Custom Object Information' section is active. It contains fields for 'Label' (Payment) and 'Plural Label' (Payments), both with examples. A note says 'Starts with vowel sound' with an unchecked checkbox. The 'Object Name' field is set to 'Payment' with an example of 'Account'. There's a 'Description' text area which is currently empty. At the bottom, there are 'Context-Sensitive Help Setting' options (radio buttons for standard help or Visualforce page) and a 'Content Name' dropdown set to 'None'. Navigation buttons at the top include 'Save', 'Save & New', and 'Cancel'.

TABS

Tab: A tab is like a user interface that used to build records for objects and to view the records in the objects.

Tabs basically categorize into 4 different sections-

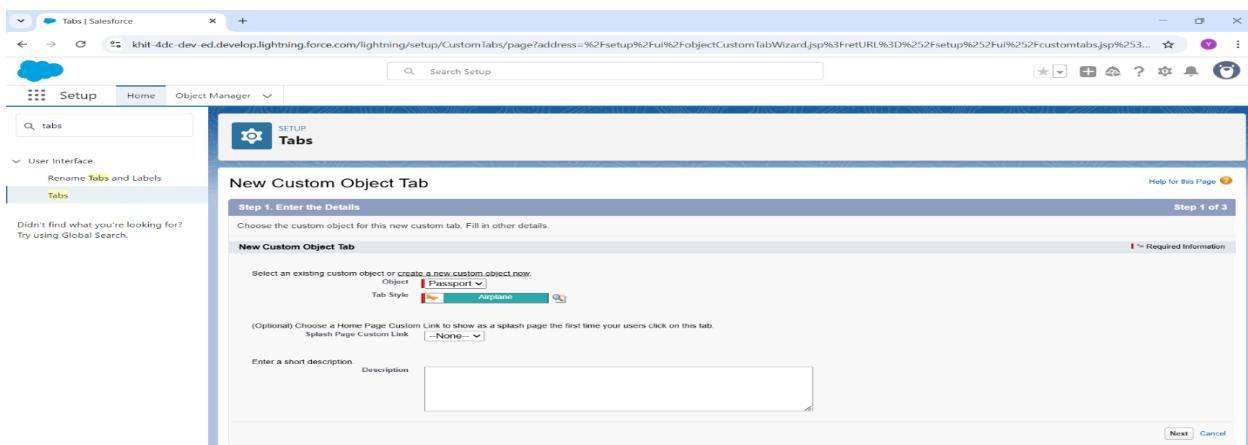
1. Standard Object Tabs
2. Custom Object Tabs
3. Web Tabs
4. Visualforce Tabs

Creating a Custom Tab:

Custom Tab for Passport Object:

Follow the steps below to create a custom tab for the Passport object in Salesforce:

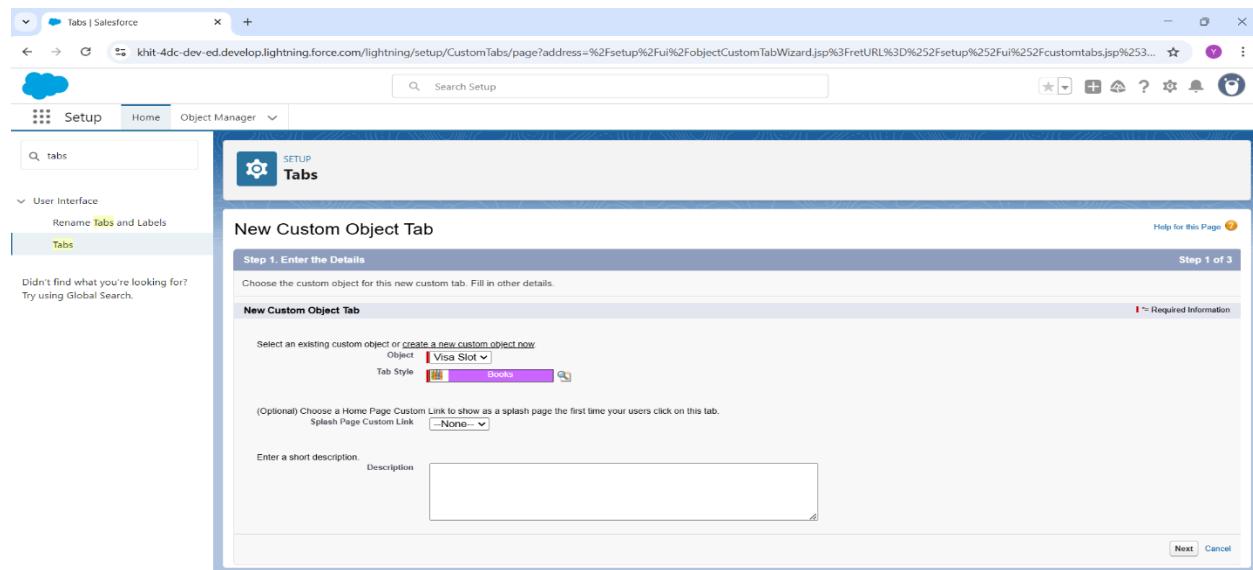
1. Go to the Setup page.
2. Type 'Tabs' in the Quick Find bar and click on 'Tabs'.
3. Under 'Custom Object Tabs', click on 'New'.
4. Select the Object: Passport.
5. Select the Tab Style.
6. Leave all default values.
7. Click Next, Next.
8. Click 'Save' to complete the process.



Custom Tab for Visa Slot Object:

Follow the steps below to create a custom tab for the Visa Slot object in Salesforce:

1. Go to the Setup page.
2. Type 'Tabs' in the Quick Find bar and click on 'Tabs'.
3. Under 'Custom Object Tabs', click on 'New'.
4. Select the Object: Visa Slot.
5. Select the Tab Style.
6. Leave all default values.
7. Click Next, Next.
8. Click 'Save' to complete the process.

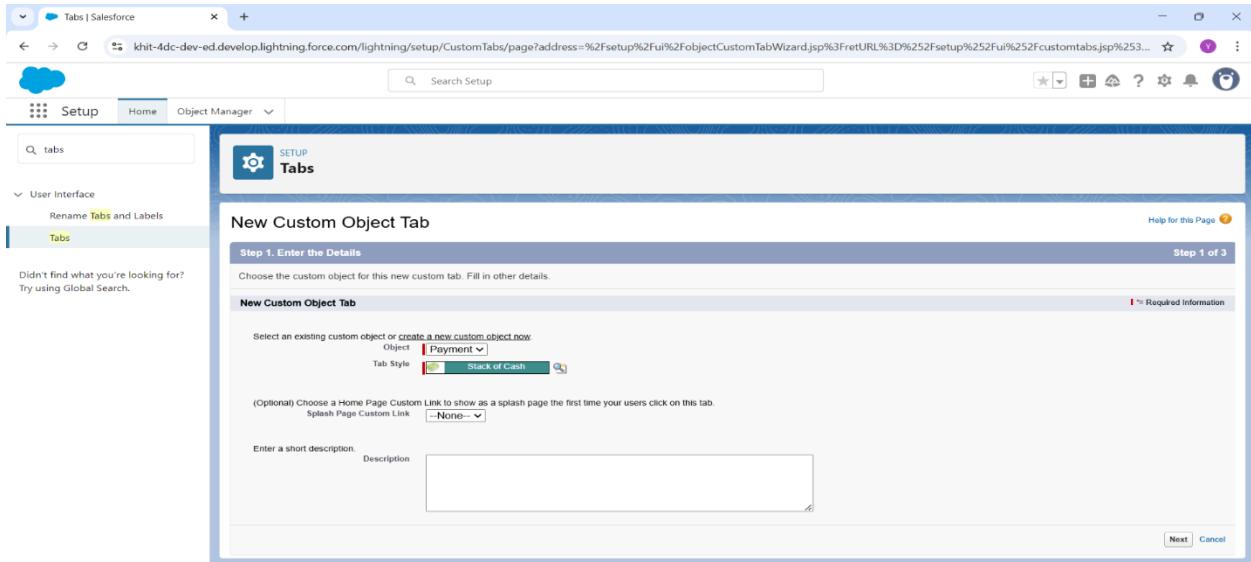


Custom Tab for Payment Object:

Follow the steps below to create a custom tab for the Payment object in Salesforce:

1. Go to the Setup page.
2. Type 'Tabs' in the Quick Find bar and click on 'Tabs'.
3. Under 'Custom Object Tabs', click on 'New'.
4. Select the Object: Payment.
5. Select the Tab Style.

6. Leave all default values.
7. Click Next, Next.
8. Click 'Save' to complete the process.



Relationships

Relationships Between Two Objects

Relationship in Salesforce is a 2-way association between 2 objects. Using relationships, we can link objects with each other and we can make connections and display data about other related objects. Primarily there are two types of relationships:

Master detail relationship: A master-detail relationship defines the relationship between the parent and the child. The master table defines the parent relation and the detail defines the child relation. If the master table is deleted then the child record data is also deleted

Look up relationship: Lookup Relationship in Salesforce links two objects together but has no effect on deletion or security.

Creation of Relationship Between Visa Slot and Passport

1. From the Setup page, click on 'Object Manager'.
2. Search and select Visa Slot object.
3. Select Fields & Relations and then click 'New'.
4. Datatype: Master-detail Relationship

5. Related To: Passport
6. Field Label: Passport Number
7. Field Name: Passport_Number
8. Child Relationship: Visa_Slots

The left screenshot shows the 'Fields & Relationships' section of the Setup page for the 'Visa Slot' object. It lists various relationship types like Cascading, Master-Detail, and Lookup Relationship. The 'Master-Detail Relationship' section is expanded, showing options for 'Create New Object' and 'Create Existing Object'. The right screenshot shows the 'New Relationship' wizard step 2, titled 'Step 2. Choose the related object'. It lists 'Related To' objects, with 'Passport' selected.

Fields

When we talk about Salesforce, Fields represent the data stored in the columns of a relational database. It can also hold any valuable information that you require for a specific object. Hence, the overall searching, deletion, and editing of the records become simpler and quicker.

Types of Fields

1. Standard Fields
2. Custom Fields

Standard Fields:

As the name suggests, the Standard Fields are the predefined fields in Salesforce that perform a standard task. The main point is that you can't simply delete a Standard Field until it is a non-required standard field. Otherwise, users have the option to delete them at any point from the application freely. Moreover, we have some fields that you will find common in every Salesforce application. They are,

>>Created By >>Owner >>Last Modified >> Field Made During object Creation

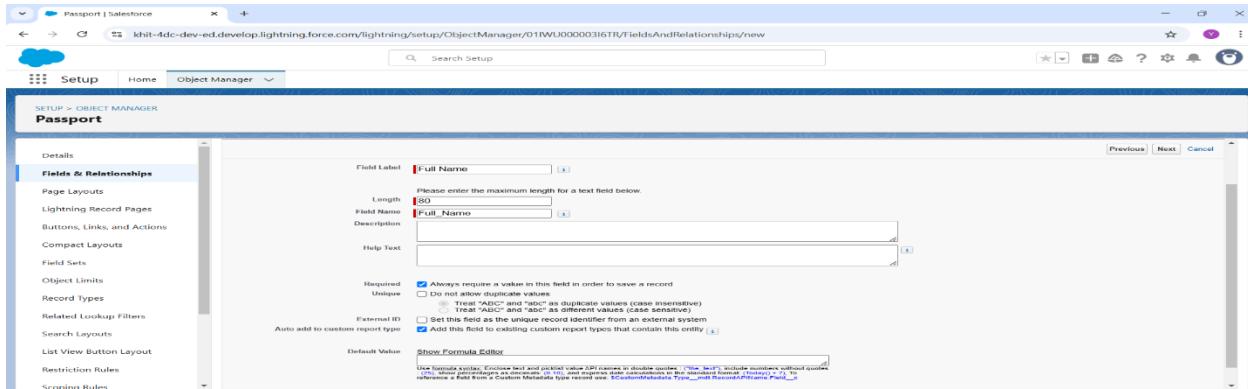
Custom Fields:

On the other side of the coin, Custom Fields are highly flexible, and users can change them according to requirements. Moreover, each organizer or company can use them if necessary. It means you need not always include them in the records, unlike Standard fields. Hence, the final decision depends on the user, and he can add/remove Custom Fields of any given form.

Creation of fields for the Passport object

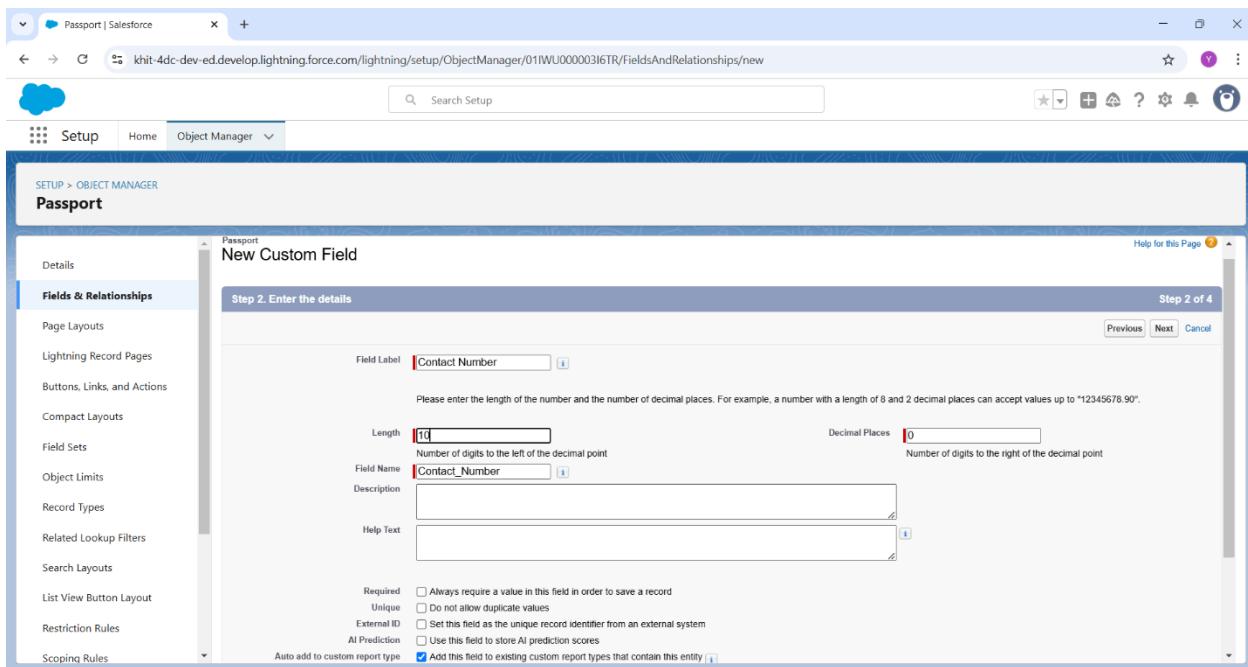
Field: Full Name

1. Go to the Setup page.
2. Click on 'Object Manager'.
3. Type the object name 'Passport' in the search bar.
4. Click on 'Fields & Relationships'.
5. Click on 'New'.
6. Select the Data Type as 'Text'.
7. Click 'Next'.
8. Fill in the details as follows:
 - a. Field Label: Full Name
 - b. Field Name: Full_Name
 - c. Length: 80
 - d. Required: Check the checkbox
9. Click 'Next'.
10. Click 'Next' again.
11. Click 'Save & New' to continue adding more fields.



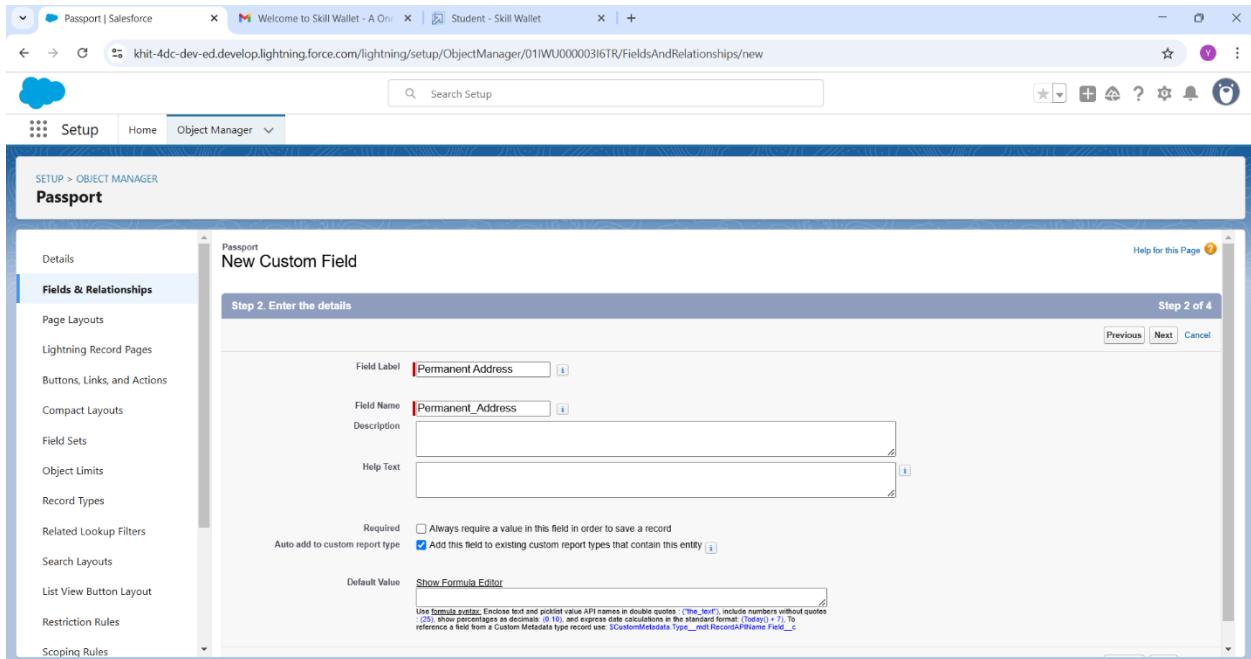
Field: Contact Number

1. Go to the Setup page.
2. Click on 'Object Manager'.
3. Type the object name 'Passport' in the search bar.
4. Click on 'Fields & Relationships'.
5. Click on 'New'.
6. Select the Data Type as 'Number'.
7. Click 'Next'.
8. Click 'Next'.
9. Fill in the details as follows:
 - a. Field Label: Contact Number
 - b. Field Name: Contact_Number
 - c. Length: 10 and Decimal: 0
10. Click 'Next'.
11. Click 'Next' again.
12. Click 'Save & New' to continue adding more fields.



Field: Permanent Address

1. Go to the Setup page.
2. Click on 'Object Manager'.
3. Type the object name 'Passport' in the search bar.
4. Click on 'Fields & Relationships'.
5. Click on 'New'.
6. Select the Data Type as 'Text Area'.
7. Click 'Next'.
8. Fill in the details as follows:
 - a. Field Label: Permanent Address
 - b. Field Name: Permanent_Address
9. Click 'Next'.
10. Click 'Next' again.
11. Click 'Save & New' to continue adding more fields.



Creation of fields for the Visa Slot object

Field: Location

1. Go to the Setup page.
2. Click on 'Object Manager'.
3. Type the object name 'Visa Slot' in the search bar.
4. Click on 'Fields & Relationships'.
5. Click on 'New'.
6. Select the Data Type as 'Text'.
7. Click 'Next'.
8. Fill in the details as follows:
 - a. Field Label: Location
 - b. Field Name: Location
9. Click 'Next'.
10. Click 'Next' again.

11. Click 'Save & New' to continue adding more fields.

The screenshot shows the Salesforce Setup interface for creating a new custom field. The URL in the browser is khit-4dc-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01IWU000003l7HR/FieldsAndRelationships/new. The page title is "Visa Slot | New Custom Field". The left sidebar shows the "Fields & Relationships" section selected. The main form is titled "Step 2. Enter the details" and "Step 2 of 4". The "Field Label" is set to "Location", "Length" is 80, "Field Name" is "Location", and "Help Text" is empty. Under "Required", there is a checkbox for "Always require a value in this field in order to save a record". Under "Unique", there are two radio button options: "Treat 'ABC' and 'abc' as duplicate values (case insensitive)" (selected) and "Treat 'ABC' and 'abc' as different values (case sensitive)". Under "External ID", there is a checkbox for "Set this field as the unique record identifier from an external system". At the bottom, there is a checkbox for "Add this field to existing custom report types that contain this entity".

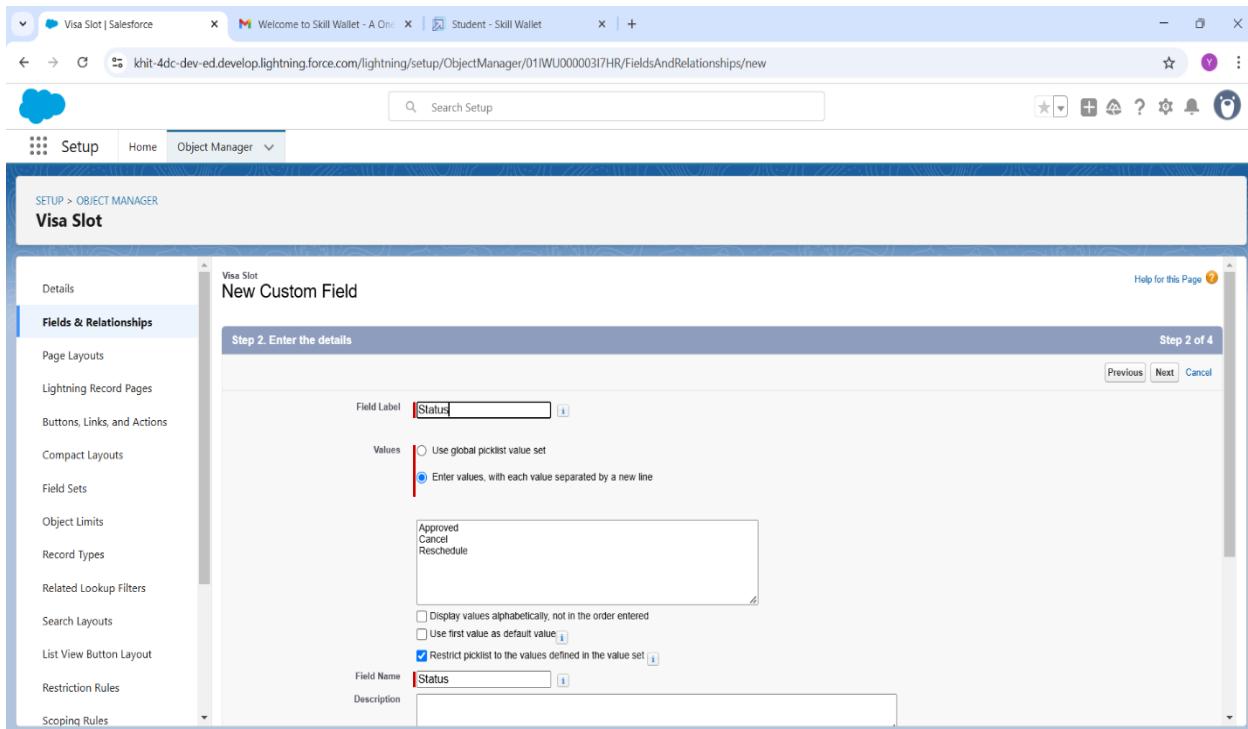
Field: Time

1. Go to the Setup page.
2. Click on 'Object Manager'.
3. Type the object name 'Visa Slot' in the search bar.
4. Click on 'Fields & Relationships'.
5. Click on 'New'.
6. Select the Data Type as 'Date&Time'.
7. Click 'Next'.
8. Fill in the details as follows:
 - a. Field Label: Time
 - b. Field Name: Time
9. Click 'Next'.
10. Click 'Next' again.
11. Click 'Save & New' to continue adding more fields.

The screenshot shows the Salesforce Setup interface for creating a new custom field. The page title is "Visa Slot | Object Manager". The left sidebar shows various setup categories like Page Layouts, Lightning Record Pages, etc. The main content area is titled "New Custom Field" under "Step 2. Enter the details". The "Field Label" is set to "Time" and the "Field Name" is also "Time". There are empty "Description" and "Help Text" fields. Under "Required", there is an unchecked checkbox "Always require a value in this field in order to save a record". Below it, there is a checked checkbox "Add this field to existing custom report types that contains this entity". A "Default Value" section is present with a "Show Formula Editor" button. A note at the bottom explains formula syntax. The top right of the screen shows standard browser controls and a status bar indicating the URL is "khit-4dc-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01IWU000003I7HR/FieldsAndRelationships/new".

Field: Status

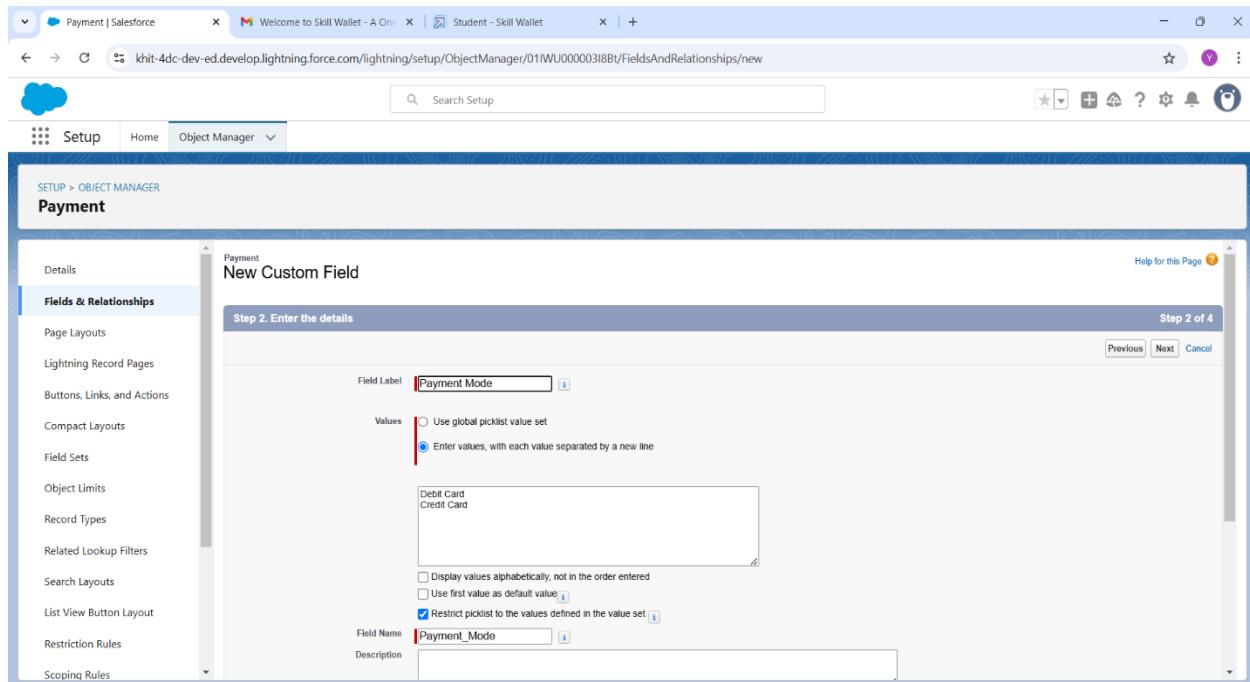
1. Go to the Setup page.
2. Click on 'Object Manager'.
3. Type the object name 'Visa Slot' in the search bar.
4. Click on 'Fields & Relationships'.
5. Click on 'New'.
6. Select the Data Type as 'Picklist'.
7. Click 'Next'.
8. Fill in the details as follows:
 - a. Field Label: Status
 - b. Field Name: Status
 - c. Select enter values, with each value separated by a new line
9. Click 'Next'.
10. Click 'Next' again.
11. Click 'Save & New' to continue adding more fields.



Creation of fields for the Payment object

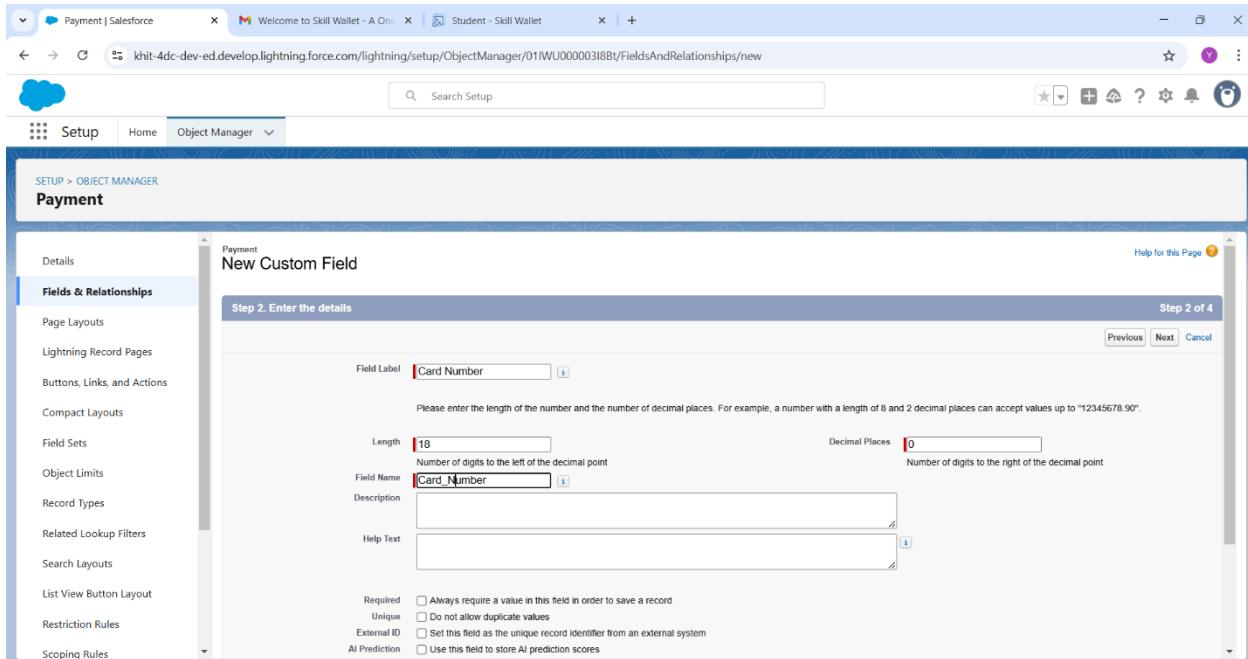
Field: Payment Mode

1. Go to the Setup page.
2. Click on 'Object Manager'.
3. Type the object name 'Payment' in the search bar.
4. Click on 'Fields & Relationships'.
5. Click on 'New'.
6. Select the Data Type as 'Picklist'.
7. Click 'Next'.
8. Fill in the details as follows:
 - a. Field Label: Payment Mode
 - b. Field Name: Payment_Mode
 - c. Select enter values, with each value separated by a new line
9. Click 'Next'.
10. Click 'Next' again.
11. Click 'Save & New' to continue adding more fields.



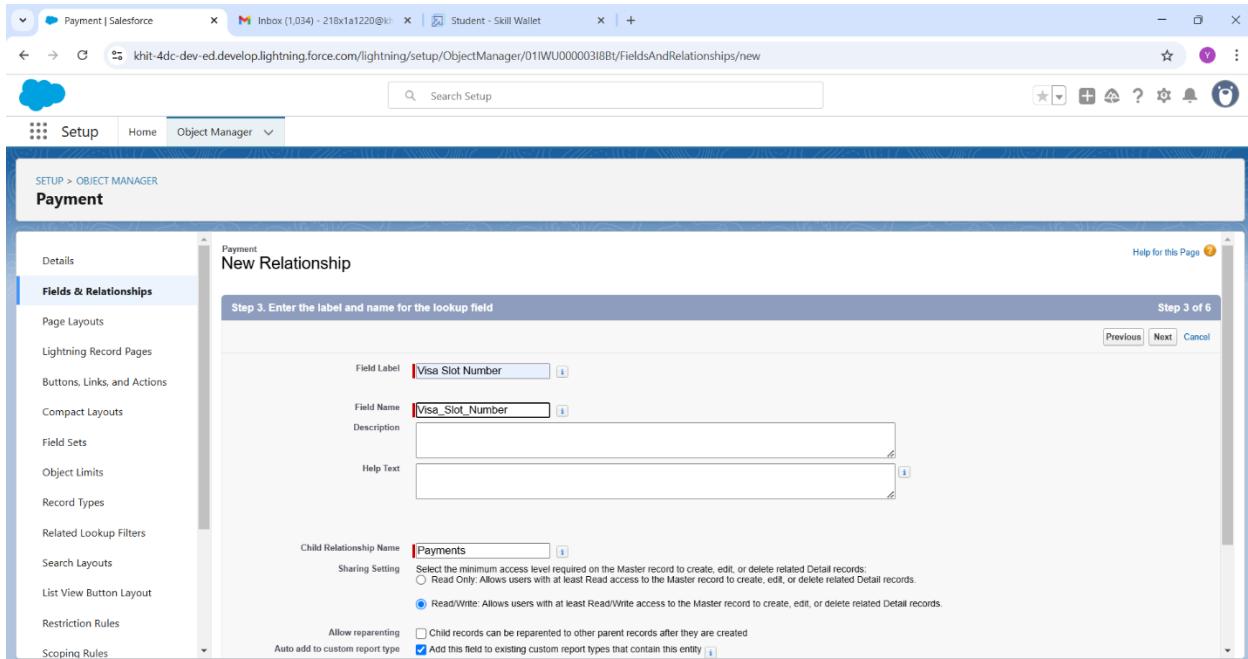
Field: Card Number

1. Go to the Setup page.
2. Click on 'Object Manager'.
3. Type the object name 'Payment' in the search bar.
4. Click on 'Fields & Relationships'.
5. Click on 'New'.
6. Select the Data Type as 'Number'.
7. Click 'Next'.
8. Fill in the details as follows:
 - a. Field Label: Card Number
 - b. Field Name: Card_Number
 - c. Consider any length
9. Click 'Next'.
10. Click 'Next' again.
11. Click 'Save & New' to continue adding more fields.



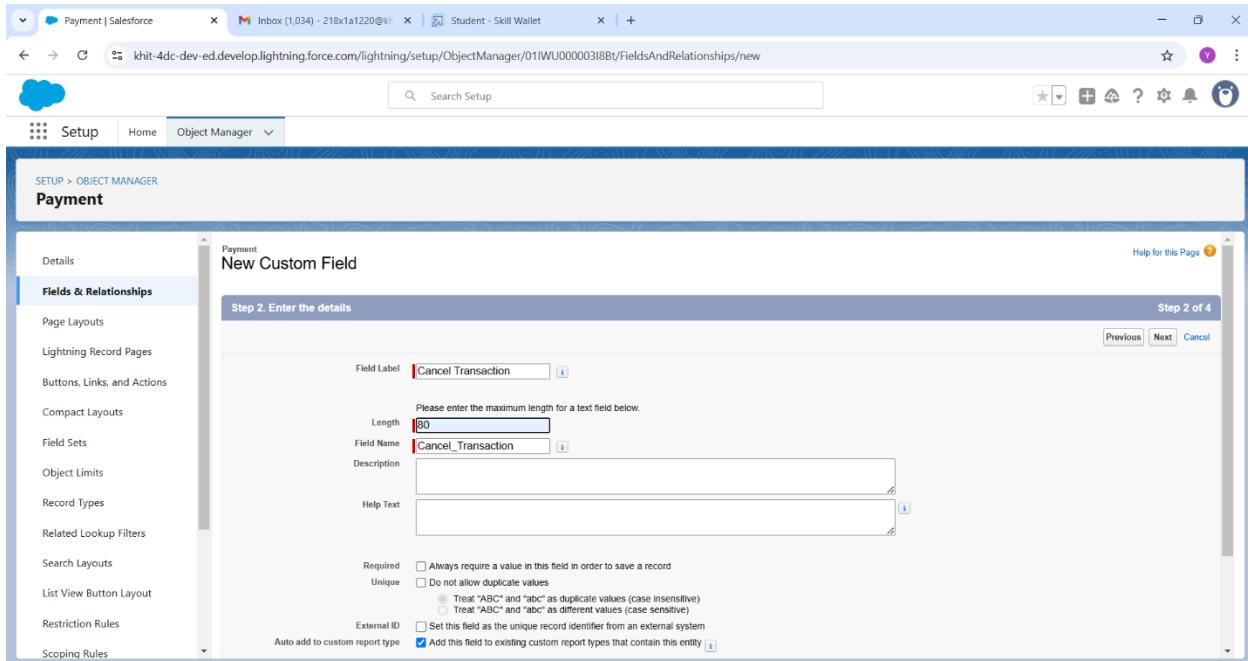
Field: Visa Slot Number

1. Go to the Setup page.
2. Click on 'Object Manager'.
3. Type the object name 'Payment' in the search bar.
4. Click on 'Fields & Relationships'.
5. Click on 'New'.
6. Select the Data Type as 'Master-Detail'.
7. Click 'Next'.
8. Related To: Visa Slot
9. Fill in the details as follows:
 - a. Field Label: Visa Slot Number
 - b. Field Name: Visa_Slot_Number
10. Click 'Next'.
11. Click 'Next' again.
12. Click 'Save & New' to continue adding more fields.



Field: Cancel Transaction

1. Go to the Setup page.
2. Click on 'Object Manager'.
3. Type the object name 'Payment' in the search bar.
4. Click on 'Fields & Relationships'.
5. Click on 'New'.
6. Select the Data Type as 'Text'.
7. Click 'Next'.
8. Fill in the details as follows:
 - a. Field Label: Cancel Transaction
 - b. Field Name: Cancel_Transaction
 - c. Consider any length
9. Click 'Next'.
10. Click 'Next' again.
11. Click 'Save & New' to continue adding more fields.



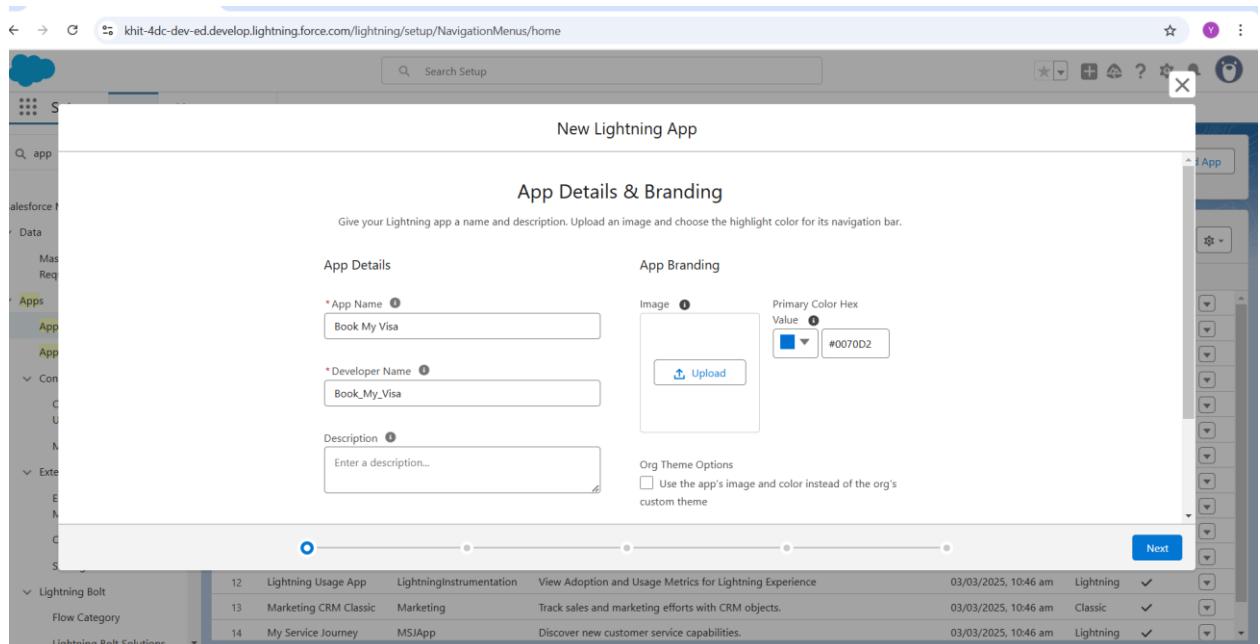
The Lightning App

An app is a collection of items that work together to serve a particular function. In Lightning Experience, Lightning apps gives users access to sets of objects, tabs, and other items all in one convenient bundle in the navigation bar.

Lightning apps let you brand your apps with a custom color and logo. You can even include a utility bar and Lightning page tabs in your Lightning app. Members of your org can work more efficiently by easily switching between apps.

Creation of Book My Visa App

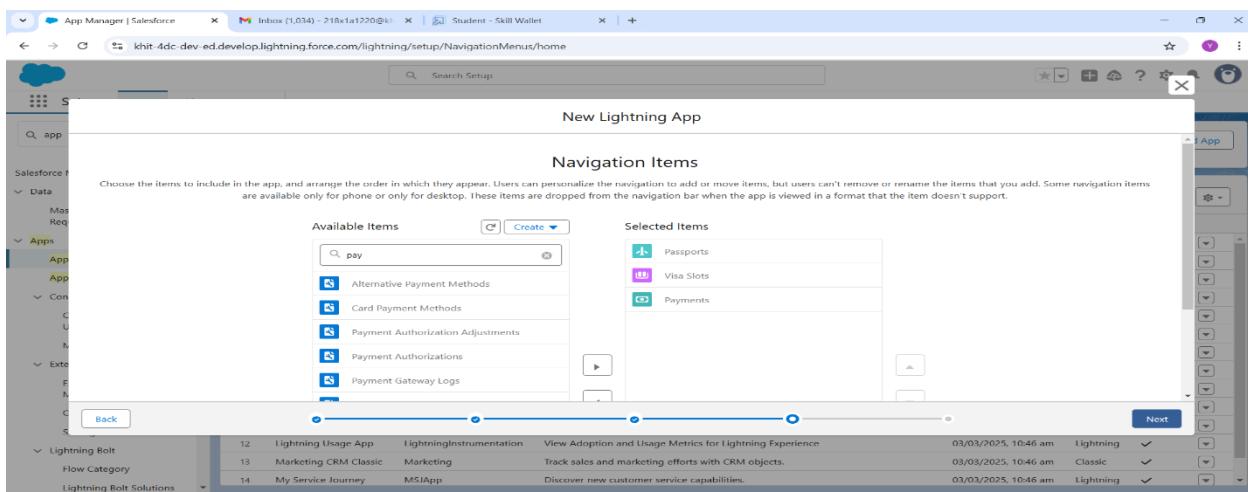
1. Search for 'App Manager' in the Quick Find bar and select 'App Manager'.
2. Click on 'New Lightning App'.
3. Fill in the app details and branding as follows:
 - App Name: Book My Visa
 - Developer Name: Book_My_Visa
 - Primary Colour Hex Value: Keep as default



4. Click 'Next'.
5. On the 'App Options' page
 - a. Navigate System: Standard Navigation

b. Support Form Factor: Desktop and Phone

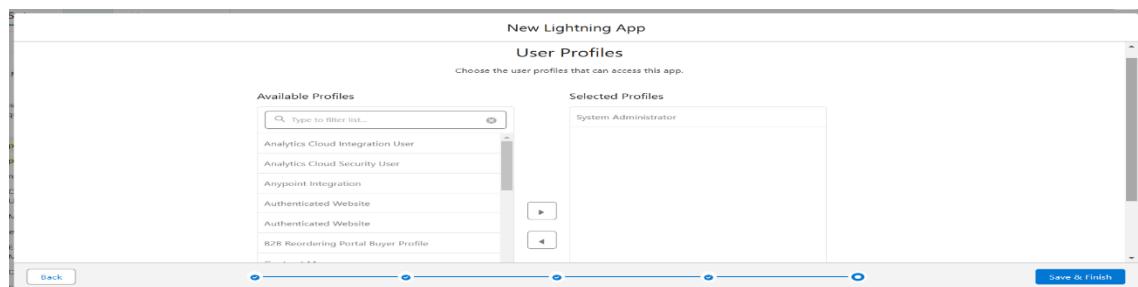
6. Click 'Next'.
7. On the 'Utility Items' page, keep it as default.
8. Click 'Next'.
9. To Add Navigation Items:
 - Search for the items (Passport, Visa Slot, Payment) in the search bar.
 - Move the selected items using the arrow button.
 - Click 'Next'.



10. Click 'Next' again.

11. To Add User Profiles:

- Search for 'System Administrator' in the search bar.
- Click on the arrow button to add it.
- Click 'Save & Finish' to complete the setup.



User Creation

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. Select Generate new password and notify user immediately and save

The screenshot shows the Salesforce Setup interface with the 'Users' tab selected. On the left, a sidebar lists various user-related settings like Permission Set Groups, Profiles, and Roles. The main area displays the 'New User' creation form. The 'General Information' section contains fields for First Name (Yessu), Last Name (K), Alias (k), Email (yasaswinidevikunapareddy), Username (yessu0@khit.com), and Nickname (User174106747361119704!). The 'Role' dropdown is set to '<None Specified>'. The 'User License' dropdown is set to 'Salesforce Platform'. The 'Profile' dropdown is set to 'Standard Platform User'. The 'Active' checkbox is checked. Other optional checkboxes include 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 (set to 'None'), Data.com Monthly Addition Limit (set to 'Default Limit (300)'), Accessibility Mode (Classic Only), and Link Contract Palette on Charts.

Organization Wide Defaults Settings

OWD settings can be used to give permission to the organization wide and it can be used for restrict the access; we can control the record level access.

Primarily four types of access can be set in Salesforce OWD-

- Public read/write/transfer (Only available for Leads and Cases)
- Public read/write
- Public read only
- Private

Steps of OWD settings

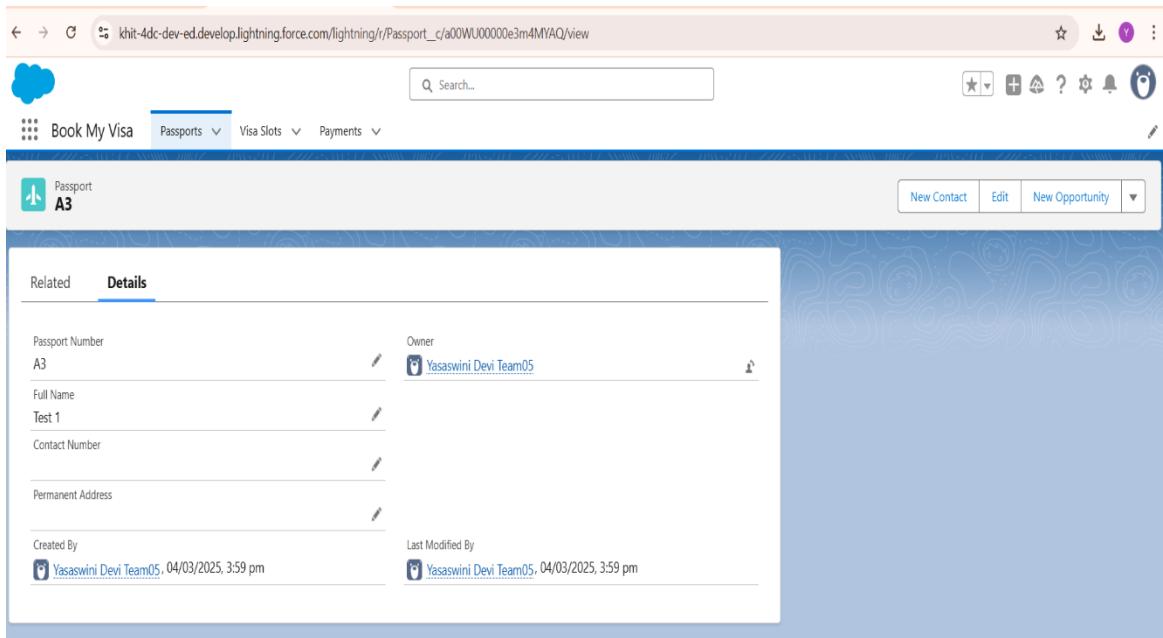
1. Navigate setup in Quick Find search bar
2. Type Sharing Setting and Select it.
3. Edit: Organization Wide Defaults.
4. Scroll down list and select Passport object and change the default external Access to Public Read/Write.
5. Save.

The screenshot shows the 'Sharing Settings' page in the Salesforce Setup. The left sidebar has a 'Sharing' search result highlighted under 'Security'. The main area displays a table of sharing settings for various objects. Most objects have their sharing set to 'Private', except for 'Passport' which is set to 'Public Read/Write'. At the bottom, there are several checkboxes for 'Other Settings' including 'Standard Report Visibility', 'Manual User Record Sharing', 'Manager Groups', 'Secure guest user record access', and 'Require permission to view record names in lookup fields'. There are also 'Save' and 'Cancel' buttons at the bottom.

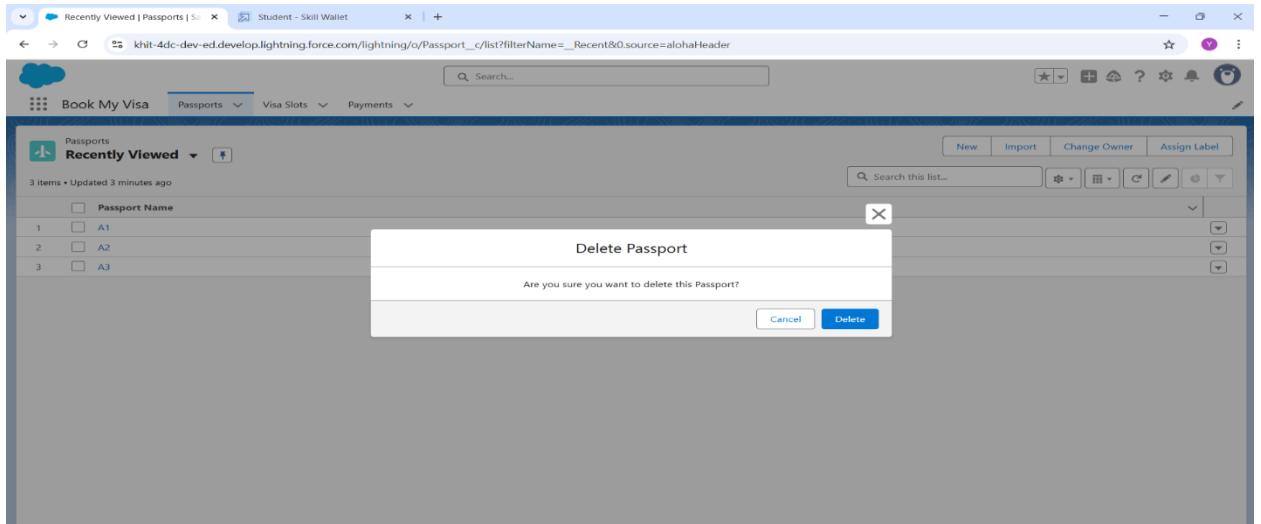
Object	Sharing
Shift	Private
Shipment	Private
Shipping Carrier	Public Read Only
Shipping Carrier Method	Public Read Only
Shipping Configuration Set	Public Read Only
Streaming Channel	Public Read/Write
Tableau Host Mapping	Public Read Only
Walllist	Private
Web Cart Document	Private
Work Order	Private
Work Plan	Private
Work Plan Template	Private
Work Step Template	Private
Work Type	Private
Work Type Group	Public Read/Write
Passport	Public Read/Write

User Adoption

1. Create records on passport object
2. View Records
 - a. Click on App launcher
 - b. Search Book My Visa & click on it
 - c. Click on Passport Tab
 - d. Click on any of the record to view the record



3. Delete Records
 - a. Click on App launcher
 - b. Search Book My Visa & click on it
 - c. Click on Passport Tab
 - d. Click on arrow at right hand side on that particular record you want to delete
 - e. Click delete and delete again



Reports

Reports in Salesforce is a list of records that meet a particular criterion which gives an answer to a particular question. These records are displayed as a table that can be filtered or grouped based on any field.

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.

The screenshot shows the Salesforce Lightning Report Builder interface. The report title is "Passport with Visa Locations". The report details section shows a summary table:

Location	Passport Number	A2	A3	Total
Jaipur	Record Count	1	0	1
Mumbai	Record Count	0	1	1
Total	Record Count	1	1	2

Below the summary table is a "Details" section with two rows:

	Visa Slot Number	Transaction Id
1	V-00001	Tld-00001
2	V-00002	Tld-00002
3		

On the left sidebar, under "Fields", there are sections for "Groups" (with "GROUP ROWS" and "Add group..."), "Location" (with "GROUP COLUMNS" and "Add group..."), and "Columns" (with "Add column..." and "Visa Slot Number" and "Transaction Id").

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 shows the Salesforce Lightning Home page. On the left, there is a sidebar with sections for "Reports", "Recent", "Created by Me", "Private Reports", "Public Reports", "All Reports", "Folders", "All Folders", "Created by Me", "Shared with Me", and "Favorites", "All Favorites".

The main content area displays a table of recent reports:

Report Name	Description	Folder	Created By	Created On	Subscribed
Passport with Visa Locations	Private Reports	Yasaswini Devi Team05	4/3/2025, 4:19 pm		

Dashboards

Dashboards in Salesforce are a graphical representation of Reports. It shows data from source reports as visual components.

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.

Add Widget

Report

Passport with Visa Locations X

Use chart settings from report i

Display As

Value

Record Count

Sliced By

Location

Preview

Passport with Visa Locations

Location	Count
Jaipur	1
Mumbai	1

[View Report \(Passport with Visa Locations\)](#)

Cancel Add

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



Apex Triggers

A trigger is a set of Apex code that runs before or after data manipulation language (DML) events.

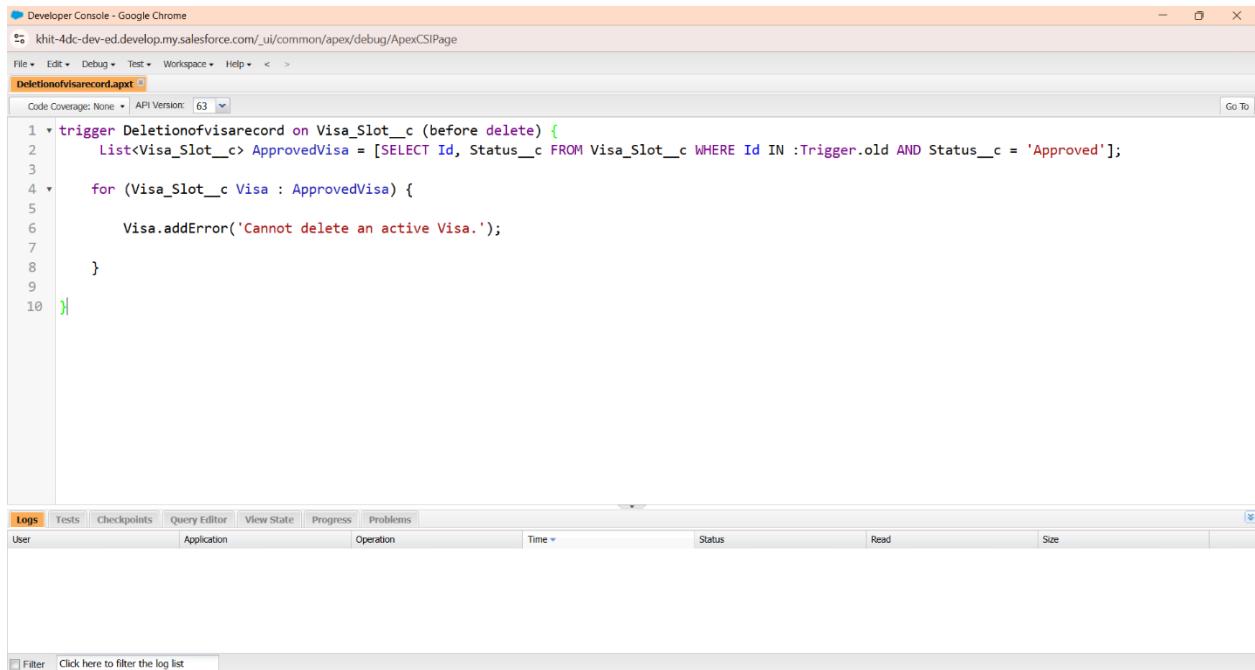
There are two Salesforce Apex trigger types:

Before triggers: These are helpful in cases that require a validation process before accepting a change. They run before any database changes.

After triggers: These are helpful in cases where you need to modify your database records and when the necessary value is stored in other records. They run after any database changes.

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



```
trigger Deletionofvisarecord 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) {
        VisaaddError('Cannot delete an active Visa.');
    }
}
```

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

The screenshot shows the Salesforce Developer Console in Google Chrome. The URL is khit-4dc-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage. The tab title is 'Developer Console - Google Chrome'. The code editor contains the following Apex trigger:

```
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
17             uniqueKeys.add(key);
18
19         }
20     }
}
```

Below the code editor is a log table:

User	Application	Operation	Time	Status	Read	Size
Yasaswini Devi Team05	Browser	/aura	3/5/2025, 11:09:21 AM	Success	Unread	3.1 KB

At the bottom of the log table is a filter bar with the placeholder "Click here to filter the log list".

Testing and Validation

Custom Objects

Visa Applicant: Stores applicant details and visa type information.

Visa Slot: Tracks available appointment slots.

Visa Agent: Manages and assists applicants with booking.

Embassy: Logs embassy details and processing timelines.

Slot Booking: Manages appointment booking details for applicants and agents.

Reports and Dashboards

Slot Availability Report: Displays available slots for booking.

Visa Application Status Report: Tracks application progress.

Booking Efficiency Dashboard: Analyzes successful appointment scheduling.

Automations

Slot Confirmation Notifications: Sends alerts upon successful booking.

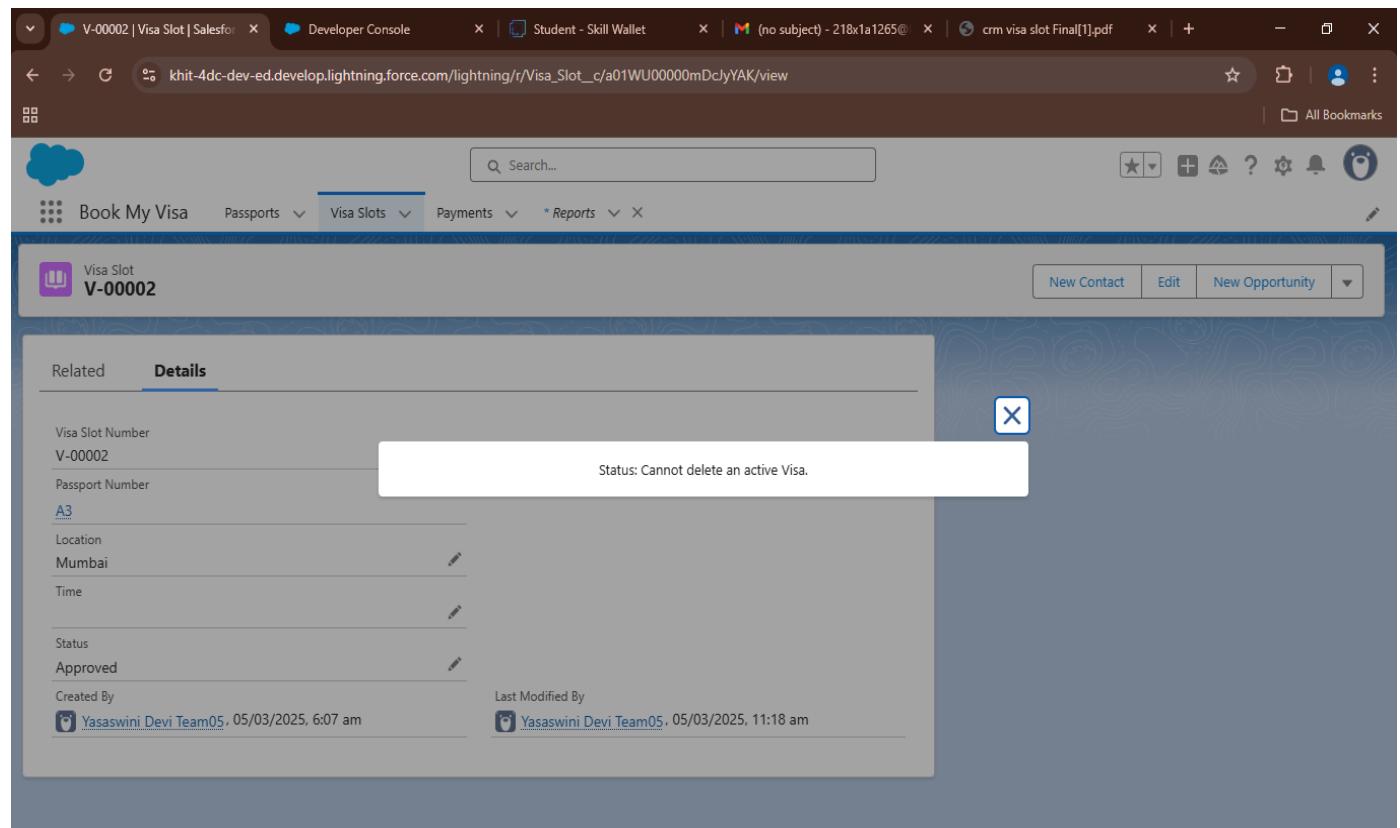
Appointment Reminders: Notifies users about upcoming slots.

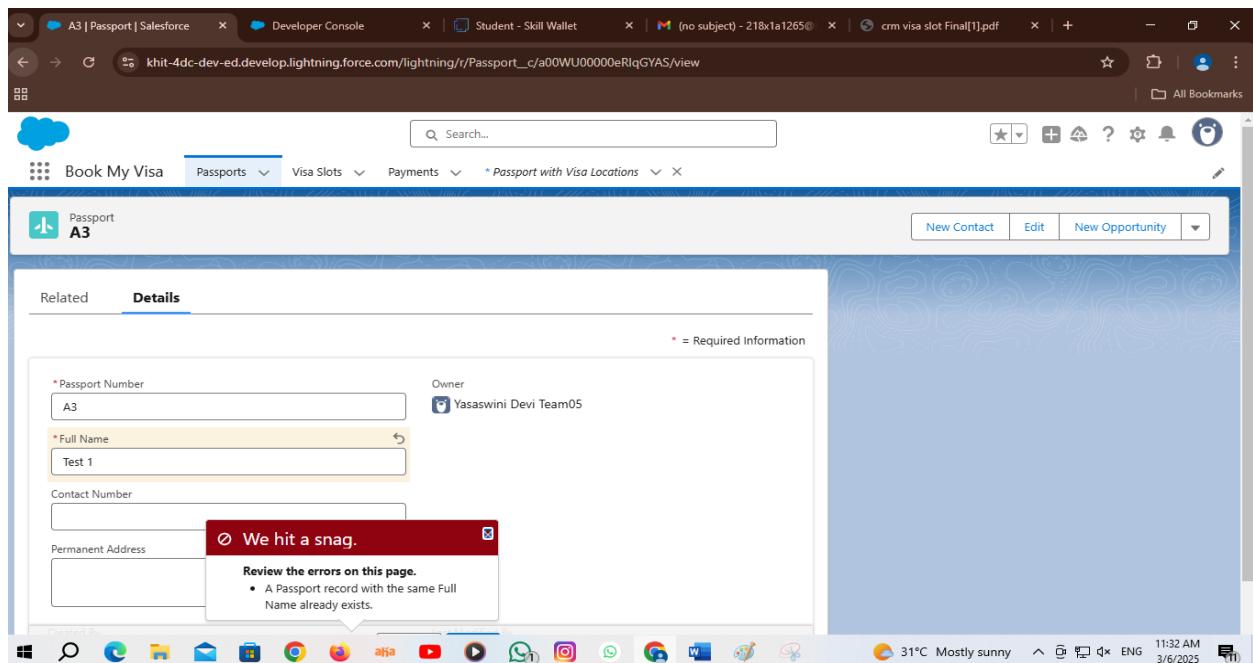
Auto-Assignment of Agents: Assigns visa agents to assist applicants. Outcomes

Efficient Visa Slot Booking: Reduces delays by providing structured appointment management.

Improved User Experience: Enhances applicant satisfaction through better scheduling.

Data-Driven Decision Making: Provides insights on visa processing trends and booking efficiency.





Use Case Scenarios in Daily life

1.Student Visa Application: A student planning to study abroad books a visa appointment through the CRM system, receives reminders, and gets updates on document submission requirements.

2.Business Travel Scheduling: A business professional schedules a visa slot for an urgent work trip, ensuring minimal delays through real-time slot tracking

3.Embasssy workload Management: The system helps embassies manage high volumes of visa applications by optimizing available slots and sending automated updates.

Challenges and Solutions

Challenge: High demand for limited slots

Solution: Implemented automated scheduling & waitlists

Challenge: Real-time slot updates

Solution: Integrated a live booking calender

Challenge: Communication with applicants

Solution: Created automated notifications & reminders

Conclusion

The CRM-based visa slot booking system successfully optimizes the visa application process by providing a structured, automated appointment scheduling system. By leveraging Salesforce CRM, automated notifications, and real-time scheduling, the system streamlines operations, making visa slot booking more efficient and user friendly. The proposed enhancements, including a mobile application and AI-driven analytics, will further improve efficiency and scalability in the future.

Thank You