



# **SALESFORCE NAAN MUDHALVAN**



*Beyond Knowledge*

## **PROJECT REPORT**

*Submitted By*

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*in partial fulfilment for the award of the  
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*in*

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**KNOWLEDGE INSTITUTE OF TECHNOLOGY,  
SALEM-637504**

## **BONAFIDE CERTIFICATE**

Certified that this project report titled “-CRM APPLICATION THAT HELPS TO BOOK A VISA SLOT” is the Bonafide work of “DHANUSHYAD(611220244004), PRIYADHARSHINI P (611220244031), SHAMYUKTHA P (611220244036), SRIJANANI JS (611220244041)” who carried out the project work under my supervision.

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## ACKNOWLEDGEMENT

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At this pleasing moment of having successfully completed our project, we wish to convey our sincere thanks and gratitude to our beloved president **Mr. C. Balakrishnan**, who has provided all the facilities to us. We would like to convey our sincere thanks to our beloved Principal **Dr. PSS. Srinivasan**, for forwarding us to do our project and offering adequate duration in completing our project.

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With deep sense of gratitude, we extend our earnest and sincere thanks to our SPOC **Mr. T. Karthikeyan**, Assistant Professor, Department of Computer Science and Engineering for his guidance and encouragement during this project.

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# 1.INTRODUCTION

Salesforce, a leading cloud-based Customer Relationship Management (CRM) platform, is a pivotal tool for organizations to manage customer data, optimize sales processes, and elevate customer interactions. Its multifaceted features include Sales Cloud, which enhances sales management through lead tracking, opportunity management, and seamless email integration. Service Cloud focuses on exceptional customer support, featuring case management, knowledge base development, and multi-channel support. Marketing Cloud empowers businesses with marketing automation, email campaigns, social media engagement, and in-depth analytics. Salesforce's hallmark is its customizability, allowing businesses to tailor the platform to meet specific requirements, while robust integration capabilities facilitate seamless connections with other business applications.

The platform equips businesses with powerful reporting and analytics tools, enabling data-driven decisions and insightful, customized reports and dashboards. Salesforce ensures mobile accessibility, enabling users to stay connected and productive while on the move. A paramount emphasis on data security and compliance guarantees data protection and privacy. Whether you're a small start-up or a large enterprise, Salesforce offers scalability to accommodate your evolving needs.

Through Salesforce, organizations foster improved customer relationships, increased sales efficiency, and superior customer support. It empowers businesses to make data-driven decisions, streamline operations, and create impactful, targeted marketing campaigns. This introduction encapsulates Salesforce's capabilities and benefits, offering a concise overview for your project document, allowing for a better understanding of how the platform can contribute to your specific project goals.

## 2.PROJECT SPECIFICATIONS

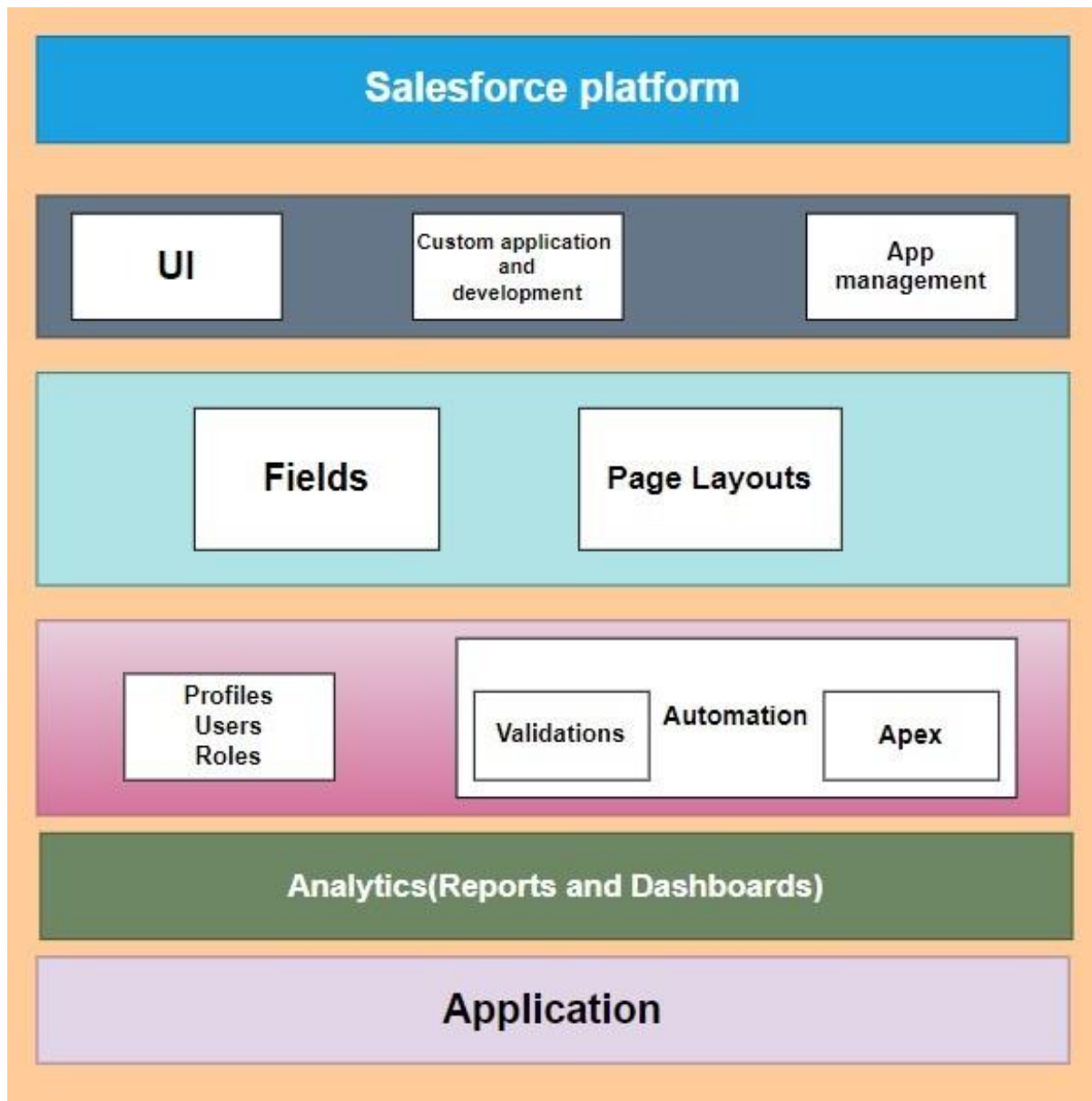
**2.1 Project Goal** A CRM (Customer Relationship Management) application integrated into Salesforce, specifically designed to facilitate the booking of visa slots, can greatly streamline the operations of travel and visa processing companies. The primary goal of a CRM application designed to help book visa slots is to enhance the efficiency and effectiveness of the visa application process. Simplify and expedite the visa slot booking process for applicants, making it easy for them to select suitable time slots based on their preferences. Provide real-time information on slot availability across various consulates and embassies, ensuring applicants have up-to-date access to available appointments.

### 2.2 Project Scope

- **Creation of Developer Account (Milestone 1):** To create a developer account for the Visa Slot Booking CRM application, visit the platform's website, select "Developer Account," and follow the registration process by providing essential information.
- **Object Creation (Milestone 2):** In the CRM application, object creation involves defining data structures for key elements like "Visa Applications" or "Appointments" to organize and manage essential booking and application information.
- **Tabs Creation (Milestone 3):** Tabs in the CRM application offer quick access to essential features, such as "Appointments," "Payments," and "Support," streamlining navigation for efficient visa slot booking and management.
- **Relationship Between Objects (Milestone 4):** Relations between objects in the CRM application link data, enabling connections like "Visa Applications" to "Applicants," ensuring seamless tracking of applicants' visa-related information and interactions.

- **Field Creation (Milestone 5):** Field creation in the CRM application involves defining data attributes like "Appointment Date" or "Payment Status" to store and manage crucial information for visa slot booking and processing.
- **Apps (Milestone 6):** In the CRM application, "APPS" refers to the software's mobile applications, allowing users to access and manage visa slot booking and related tasks on their mobile devices for convenience..
- **Users (Milestone 7):** In the CRM application, a "User" refers to individuals who interact with the system, including applicants booking visa slots and administrative staff managing the process..
- **User Adoption (Milestone 8):** "User adoption" in the CRM application refers to the degree to which individuals successfully integrate and regularly use the system for booking visa slots, indicating its effectiveness..
- **What are Reports? (Milestone 9):** Reports are data summaries in the CRM application, presenting key insights into visa slot booking processes, helping administrators analyze trends and performance.
- **Dashboards (Milestone 10):** Dashboards in the CRM application are visual data displays, providing at-a-glance insights on visa slot booking metrics, enhancing decision-making and operational efficiency.
- In summary, the CRM application for visa slot booking streamlines the entire process. It efficiently manages user data, from the creation of objects and fields to the use of tabs for navigation. The relationship between objects ensures seamless tracking, while reports and dashboards offer essential insights. User adoption and mobile apps enhance accessibility, making this CRM system a comprehensive solution for efficient and user-friendly visa slot booking and management.

## 2.3 Technical Requirements





## 2.4 Functional Requirements

- **User Registration:** Users can create accounts with personal information for access to visa slot booking.
- **Login and Authentication:** Secure login mechanisms with password protection and multi-factor authentication.
- **Real-Time Slot Availability:** Constantly updated slot availability information from consulates and embassies.
- **Booking Slots:** Users can select and reserve visa appointment slots based on preferences.
- **Automated Notifications:** Automated email and SMS notifications for appointment confirmations, reminders, and updates.
- **Document Upload:** Capability to upload, view, and manage visa application documents.
- **Payment Integration:** Integration with secure payment gateways for online payment of visa fees.
- **User Profile Management:** Users can update and maintain their profiles with ease.
- **Slot Cancellation and Rescheduling:** Users can cancel and reschedule appointments as needed.
- **Reporting and Analytics:** Creation of comprehensive reports and data analytics for performance evaluation.
- **Admin Dashboard:** An admin panel to manage users, appointments, and system settings.

- **Integrated Support Chat:** A live chat system for real-time user assistance and issue resolution.
- **Data Security Measures:** Implementation of robust data encryption and security features.
- **Compliance with Data Protection Regulations:** Ensuring adherence to data privacy laws and regulations.
- **Efficient Slot Allocation:** Allocation of slots without overbooking or underutilizing consulate resources.
- **User Feedback Gathering:** Collection of user feedback and reviews for continuous improvement.
- **Multi-Language Support:** Support for multiple languages to cater to a diverse user base.
- **Support Ticket System:** A ticketing system for users to log and track support requests.
- **Payment Status Tracking:** Users can track the status of their payment for visa application fees.
- **User Training Materials:** Availability of training materials and user guides for effective usage.
- **Customizable Data Fields:** The ability to customize and add data fields to capture specific information.
- **Audit Trail Logging:** A record of all actions and changes for transparency and accountability.
- **User Notifications:** Email or SMS notifications to keep users informed about visa application status.

### 3.PREPARATION DATA MODELING

#### Objects:

Objects are database tables that permit you to store data that is specific to an organization. Salesforce objects are of two types:

- 1) Standard objects.
- 2) Custom objects.

Object	Passport	Visa Slot	Payment
<b>Fields</b>	Full Name (Text)	Location (Text)	Payment Mode (Picklist)
<b>Fields</b>	Contact Number (Number)	Time (Data&Time)	CardNumber (Number)
<b>Fields</b>	PassportNumber (Text)	Visa Slot Number (Auto Number)	Transaction ID (Auto Number)
<b>Fields</b>	Permanent address (Text area)	Passport number (Master details)	Visa Slot Number (Master details)
<b>Fields</b>		Status(Picklist)	Cancel Transaction (Check Box)

## 1)Creation Of Custom Object Passport:

For this Book My Visa Slot we need to create 3 objects

Passport, Visa Slot and

Payment. The below steps will assist you in creating those objects.

1. Click on the gear icon and then select Setup
2. Click on the object manager tab just beside the home tab

After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object

3. On the Custom Object Definition page, create the object as follows:

4. Label: Passport
5. Plural Label: Passports
6. Record Name: Passport Number
7. Check the Allow Reports checkbox
8. Check the Allow Search checkbox
9. Click Save.

The screenshot shows the Salesforce 'Edit Custom Object' page for 'Passport'. The left sidebar contains navigation links like 'Quick Find / Search...', 'Lightning Experience Transition Assistant', 'Salesforce Mobile Quick Start', and 'Home'. The main content area is titled 'Custom Object Definition Edit' and includes a 'Save' button. Below this, the 'Custom Object Information' section contains fields for 'Label' (Passport), 'Plural Label' (Passports), 'Object Name' (Passport), and 'Description'. There are also checkboxes for 'Starts with vowel sound' and 'Context-Sensitive Help Setting'. At the bottom, the 'Enter Record Name Label and Format' section shows 'Record Name' as 'Passport Number' and 'Example' as 'Account Name'.

**Enter Record Name Label and Format**

The Record Name appears in page layouts, key lists, related lists, lookups, and search results. For example, the Record Name for Account is "Account Name" and for Case it is "Case Number". Note that the Record Name field is always called "Name" when referenced via the API.

Record Name:  Example: Account Name

Data Type:

**Optional Features**

- ☒ Allow Reports
- ☐ Allow Activities
- ☐ Track Field History
- ☐ Allow in Chatter Groups
- ☐ Enable Licensing [x](#)

**Object Classification**

When these settings are enabled, this object is classified as an Enterprise Application object. When these settings are disabled, this object is classified as a Light Application object. [Learn more.](#)

- ☒ Allow Sharing
- ☒ Allow Bulk API Access
- ☒ Allow Streaming API Access

**Deployment Status** [What is this?](#)

☐ In Development

☒ Deployed

**Search Status**

When this setting is enabled, your users can find records of this object type when they search. [Learn more.](#)

☒ Allow Search

## 2)Creation Of Custom 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

On the Custom Object Definition page, create the object as follows:

4. Label: Visa Slot
5. Plural Label: Visa Slots
- 6.Record Name: Visa Slot Number(Auto Number)
- 7.Check the Allow Reports checkbox
- 8.Check the Allow Search checkbox,Click Save.

The screenshot shows the 'Edit Custom Object' page for 'Visa Slot'. The left sidebar contains navigation links: 'Quick Find / Search...', 'Expand All / Collapse All', 'Lightning Experience Transition Assistant', 'Salesforce Mobile Quick Start', 'Home', and 'Administer' (with sub-links like Release Updates, Manage Users, etc.). The main content area is titled 'Edit Custom Object Visa Slot' and includes a 'Custom Object Definition Edit' section with 'Save', 'Save & New', and 'Cancel' buttons. Below this is the 'Custom Object Information' section, which includes fields for 'Label' (Visa Slot), 'Plural Label' (Visa Slots), 'Object Name' (Visa\_Slot), and a 'Description' text area. It also has 'Context-Sensitive Help Setting' (radio buttons for standard Salesforce help or Visualforce page) and 'Content Name' (a dropdown menu). The 'Enter Record Name Label and Format' section at the bottom shows the 'Record Name' as 'Visa Slot Number(Auto Num)'.

The screenshot shows the 'Optional Features' and 'Object Classification' settings for a custom object. The left sidebar lists various administration tasks under 'Data Management', 'Build', and 'Develop'. The main content area has a 'Data Type' dropdown set to 'Text'. The 'Optional Features' section includes checkboxes for 'Allow Reports' (checked), 'Allow Activities' (unchecked), 'Track Field History' (unchecked), 'Allow in Chatter Groups' (unchecked), and 'Enable Licensing' (unchecked). The 'Object Classification' section explains that enabling these settings classifies the object as an Enterprise Application object. The 'Deployment Status' section has radio buttons for 'In Development' (unchecked) and 'Deployed' (checked). The 'Search Status' section has a checkbox for 'Allow Search' (checked). At the bottom are 'Save', 'Save & New', and 'Cancel' buttons.

### 3)Create Of Custom 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 'Edit Custom Object' page for a custom object named 'Payment'. The page is divided into a left sidebar and a main content area. The sidebar includes a search bar, 'Lightning Experience Transition Assistant', 'Salesforce Mobile Quick Start', and a navigation menu with 'Home' and 'Administer' sections. The main content area is titled 'Custom Object Definition Edit' and contains several sections: 'Custom Object Information' with fields for Label ('Payment'), Plural Label ('Payments'), and Object Name ('Payment'); 'Enter Record Name Label and Format' with a Record Name field set to 'Transaction Id (Auto Number)'; and 'Context-Sensitive Help Setting' with radio buttons for 'Open the standard Salesforce.com Help & Training window' (selected) and 'Open a window using a Visualforce page'. At the bottom, there is a 'Data Type' dropdown set to 'Text'.

This screenshot shows the 'Optional Features' and 'Deployment Status' sections of the 'Custom Object Definition Edit' page. The 'Optional Features' section includes checkboxes for 'Allow Reports' (checked), 'Allow Activities', 'Track Field History', 'Allow in Chatter Groups', and 'Enable Licensing'. The 'Object Classification' section explains that the object is classified as an Enterprise Application object when certain settings are enabled. The 'Deployment Status' section has radio buttons for 'In Development' and 'Deployed' (selected). The 'Search Status' section includes a checkbox for 'Allow Search' (checked). At the bottom, there are 'Save', 'Save & New', and 'Cancel' buttons.

## 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 sections1.

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

### 1)Creation of Custom Tab- Passport Object:

Navigate to setup and home

1. Enter Tabs in Quick Find Box and select Tabs
2. Under Custom Object Tabs, click New
3. For Object, select Passport
4. For Tab Style, select any icon
5. Leave all defaults as is. Click Next, Next, and Save

The screenshot shows the Salesforce 'Edit Custom Object Tab' page for the 'Passports' object. The page is titled 'Edit Custom Object Tab: Passports' and includes a 'Help for this Page' link. Below the title, it says 'Fill in the fields below to define the custom tab.' The main section is 'Custom Tab Definition Edit' with a 'Custom Object Tab Information' sub-section. This section contains a table with the following information:

Tab Label	Object	Tab Style
Passports	Passport	Diamond

Below the table, there is an optional section for 'Choose a Home Page Custom Link to show as a splash page the first time your users click on this tab.' The 'Splash Page Custom Link' is set to '--None--'. There is also a field for 'Enter a short description' with a text area labeled 'Description'. At the bottom right, there are 'Save' and 'Cancel' buttons.



## 2)Creation Of Custom Tab- Visa Slot Object:

Navigate to setup and enter Tabs in Quick Find and select Tabs. Under Custom Object Tabs, click New.

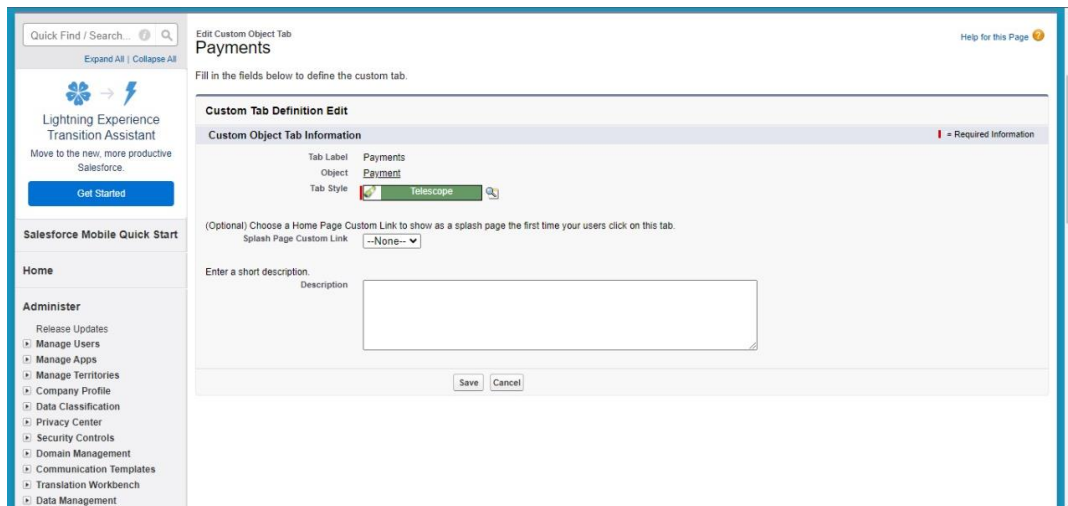
1. For Object, select Visa Slot.
2. For Tab Style, select any icon.
3. Leave all defaults as is. Click Next, Next, and Save.

The screenshot shows the Salesforce 'Edit Custom Object Tab' page for the 'Visa Slots' object. The page is titled 'Edit Custom Object Tab: Visa Slots' and includes a 'Quick Find / Search' bar at the top left. The left sidebar contains navigation links for 'Lightning Experience Transition Assistant', 'Salesforce Mobile Quick Start', 'Home', and 'Administer'. The main content area is titled 'Custom Tab Definition Edit' and contains a 'Custom Object Tab Information' section. This section includes fields for 'Tab Label' (Visa Slots), 'Object' (Visa Slot), and 'Tab Style' (Map). Below these fields is an optional section for 'Choose a Home Page Custom Link to show as a splash page the first time your users click on this tab', with a dropdown menu set to '--None--'. There is also a 'Description' field. At the bottom of the form are 'Save' and 'Cancel' buttons.

## 3)Creation Of Custom Tab- Payment Object

Navigate to setup and enter Tabs in Quick Find and select Tabs Under Custom Object Tabs, click New

1. For Object, select Payment
2. For Tab Style, select any icon
3. Leave all defaults as is. Click Next, Next, and Save



## Relationship B/W 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:

1) 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

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

To Create a Master-Detail relationship between Passport and Visa Slot Objects.

### 1)Relationship Creation:

Fields Creation: Passport Number

Navigate to setup

1. Click on Object Manager and search and select Visa Slot object
2. Select Fields & Relations and click New.
3. Select Data Type: Master-Detail, next.

4. Related to: Passport, next.

5. Label: Passport Number

6. Child Relationship Name: Visa Slot, next.

7. Next, next and save.

This screenshot shows the 'Custom Field Definition Edit' page for a field named 'Passport Number'. The page is divided into several sections:

- Field Information:** Contains fields for 'Field Label' (Passport Number), 'Field Name' (Passport\_Number), 'Description', and 'Help Text'. It also includes dropdowns for 'Data Owner' (User), 'Field Usage' (--None--), and 'Data Sensitivity Level' (--None--). A 'Compliance Categorization' section shows a list of categories (PII, HIPAA, GDPR, PCI) with arrows to move them between 'Available' and 'Chosen' lists.
- Master-Detail Options:** Includes 'Related To' (Passport), 'Child Relationship Name' (Visa Slots), and 'Related List Label' (Visa Slots). It also has a 'Sharing Setting' section with radio buttons for 'Read Only' and 'Read/Write'.

This screenshot shows the same 'Custom Field Definition Edit' page for 'Passport Number', but with additional sections visible at the bottom:

- Master-Detail Options:** This section is expanded, showing the 'Related To' (Passport), 'Child Relationship Name' (Visa Slots), and 'Related List Label' (Visa Slots) fields. It also includes a 'Sharing Setting' section with radio buttons for 'Read Only' and 'Read/Write'.
- Lookup Filter:** A section titled 'Optionally, create a filter to limit the records available to users in the lookup field. Tell me more!' with a link to 'Show Filter Settings'.

## **Field Creation:**

This milestone explains about Field Creation.

### **1)Fields Available On Custom Object: Passport:**

Field Name Data Type

Full Name Text

Contact Number Number

Passport Number Text

Permanent Address Text

### **2) Field Creation: Full Name**

Field Creation: Full Name: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)

The top screenshot shows the 'Custom Field Definition Edit' page for a field named 'Full Name'. The 'Field Information' section includes fields for 'Field Label' (Full Name), 'Field Name' (Full\_Name), 'Description', 'Help Text', 'Data Owner' (User), 'Field Usage' (--None--), 'Data Sensitivity Level' (--None--), and 'Compliance Categorization' (Available: PII, HIPAA, GDPR, PCI). The 'General Options' section includes 'Required' (checked), 'Unique' (unchecked), 'External ID' (unchecked), and 'Default Value' (Show Formula Editor). The 'Text Options' section shows 'Length' (70).

The bottom screenshot shows the 'Custom Field Definition Edit' page for a field named 'Full Name'. The 'Field Information' section includes fields for 'Field Label' (Full Name), 'Field Name' (Full\_Name), 'Description', 'Help Text', 'Data Owner' (User), 'Field Usage' (--None--), 'Data Sensitivity Level' (--None--), and 'Compliance Categorization' (Available: PII, HIPAA, GDPR, PCI). The 'General Options' section includes 'Required' (checked), 'Unique' (unchecked), 'External ID' (unchecked), and 'Default Value' (Show Formula Editor). The 'Text Options' section shows 'Length' (70).

### 3)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:
9. Next, Save
- 10 and Decimal 0, click

on next


The first screenshot shows the 'Custom Field Definition Edit' page for a field named 'Contact Number'. The page is titled 'Edit Passport Custom Field Contact Number'. The 'Field Information' section includes fields for 'Field Label' (Contact Number), 'Field Name' (Contact\_Number), 'Description', 'Help Text', 'Data Owner' (User), 'Field Usage' (None), 'Data Sensitivity Level' (None), and 'Compliance Categorization' (Available: PII, HIPAA, GDPR, PCI; Chosen: ). The 'General Options' section includes checkboxes for 'Required', 'Unique', 'External ID', 'AI Prediction', and 'Default Value'. The 'Number Options' section includes fields for 'Length' (18) and 'Decimal Places' (0). The second screenshot shows the same page with the 'Field Label' changed to 'Permanent Address' and the 'Field Name' changed to 'Permanent\_Address'. The 'Field Information' section also includes a 'Data Type' dropdown set to 'Number'. The 'General Options' section includes a 'Show Formula Editor' link. The 'Number Options' section includes a 'Length' field set to 18 and a 'Decimal Places' field set to 0.

## 4)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

Quick Find / Search...  

Expand All | Collapse All


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Salesforce Mobile Quick Start

Home

Administer

- Release Updates
- Manage Users
- Manage Apps
- Manage Territories
- Company Profile
- Data Classification
- Privacy Center
- Security Controls
- Domain Management
- Communication Templates
- Translation Workbench
- Data Management

Edit Passport Custom Field  
**Permanent Address** 

Custom Field Definition Edit [Change Field Type](#) [Save](#) [Cancel](#)


**Field Information** ! Required Information

Field Label  Data Type

Field Name

Description

Help Text

Data Owner  

Field Usage

Data Sensitivity Level

Compliance Categorization

Available	Chosen
PII	
HIPAA	
GDPR	
PCI	

**General Options**

Required ☐ Always require a value in this field in order to save a record

Default Value [Show Formula Editor](#)

Use formula syntax: Enclose text and picklist value API names in double quotes : ("the\_text"). Include numbers without quotes : (25), show percentages as decimals : (0.10), and express date calculations in the standard format : (Today() + 7). To reference a field from a Custom Metadata type record use: \$CustomMetadata.Type\_\_mdt.RecordAPIName.Field\_\_c

Salesforce

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- Communication Templates
- Translation Workbench
- Data Management
- Mobile Administration
- Desktop Administration
- Outlook Integration and Sync
- Gmail Integration and Sync
- Email Administration
- Google Apps
- Analytics
- Tableau
- Data.com Administration

Description

Help Text

Data Owner  

Field Usage

Data Sensitivity Level

Compliance Categorization

Available	Chosen
PII	
HIPAA	
GDPR	
PCI	

**General Options**

Required ☐ Always require a value in this field in order to save a record

Default Value [Show Formula Editor](#)

Use formula syntax: Enclose text and picklist value API names in double quotes : ("the\_text"). Include numbers without quotes : (25), show percentages as decimals : (0.10), and express date calculations in the standard format : (Today() + 7). To reference a field from a Custom Metadata type record use: \$CustomMetadata.Type\_\_mdt.RecordAPIName.Field\_\_c

[Change Field Type](#) [Save](#) [Cancel](#)

## 5)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

Quick Find / Search...

Expand All | Collapse All

Lightning Experience  
Transition Assistant

Move to the new, more productive  
Salesforce.

Get Started

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Edit Visa Slot Custom Field

Status

Help for this Page

Custom Field Definition Edit

Change Field Type

Promote to Global Value Set

Save

Cancel

Field Information

Field Label

Status

Field Name

Status

Description

Help Text

Data Owner

User

Field Usage

--None--

Data Sensitivity Level

--None--

Compliance Categorization

Available

PII

HIPAA

GDPR

PCI

Chosen

General Options

Required

☐ Always require a value in this field in order to save a record

Default Value

Show Formula Editor

Use formula syntax: Enclose text and picklist value API names in double quotes ("the\_text"). Include numbers without quotes (25), show percentages as decimals (0.10), and express date calculations in the standard format: (Today() + 7). To reference a field from a Custom Metadata type record use: \$CustomMetadata.Type\_\_mdt.RecordAPIName.Field\_\_c

Administer

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Mobile Administration

Desktop Administration

Outlook Integration and Sync

Gmail Integration and Sync

Email Administration

Google Apps

Analytics

Tableau

Data.com Administration

Build

Customize

Create

Apps

Custom Labels

Interaction Log Layouts

Objects

Compliance Categorization

Available

PII

HIPAA

GDPR

PCI

Chosen

General Options

Required

☐ Always require a value in this field in order to save a record

Default Value

Show Formula Editor

Use formula syntax: Enclose text and picklist value API names in double quotes ("the\_text"). Include numbers without quotes (25), show percentages as decimals (0.10), and express date calculations in the standard format: (Today() + 7). To reference a field from a Custom Metadata type record use: \$CustomMetadata.Type\_\_mdt.RecordAPIName.Field\_\_c

Picklist Options

☒ Restrict picklist to the values defined in the value set

Change Field Type

Promote to Global Value Set

Save

Cancel



## **6)Fields 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

### **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:

- 1) Standard Apps
- 2) Custom Apps

### **1)Creation Of App:**

Click on setup and go to home page.

1. In Quick Find Box search and select App Manager.
2. Click: New Lightning App.
3. App Name: Book My Visa and click on next.
4. Navigate System: Standard Navigation Support  
Form Factor: Desktop and Phone Click next, next
5. Move Objects from available items to selected items. (Passport, Visa Slot, Payment).

6. Add System Administrator profile, available profile to selected profile.

## Save & Finish

App Settings

App Details & Branding

App Options

Utility Items (Desktop Only)

Navigation Items

User Profiles

App Details & Branding

Give your Lightning app a name and description. Upload an image and choose the highlight color for its navigation bar.

App Details

\* App Name ⓘ

Book My Visa

\* Developer Name ⓘ

Book\_My\_Visa

Description ⓘ

Enter a description...

App Branding

Image ⓘ

Upload

Primary Color Hex Value ⓘ

#0070D2

Org Theme Options

☐ Use the app's image and color instead of the org's custom theme

App Launcher Preview

BM

Book My Visa

← Lightning App Builder

⚙ App Settings

📄 Pages ▾

Book My Visa

ⓘ Help

App Settings

App Details & Branding

App Options

Utility Items (Desktop Only)

Navigation Items

User Profiles

App Options

Navigation and Form Factor ⓘ

\* Navigation Style

☒ Standard navigation

☐ Console navigation

\* Supported Form Factors

☒ Desktop and phone

☐ Desktop

☐ Phone

Setup and Personalization ⓘ

Setup Experience

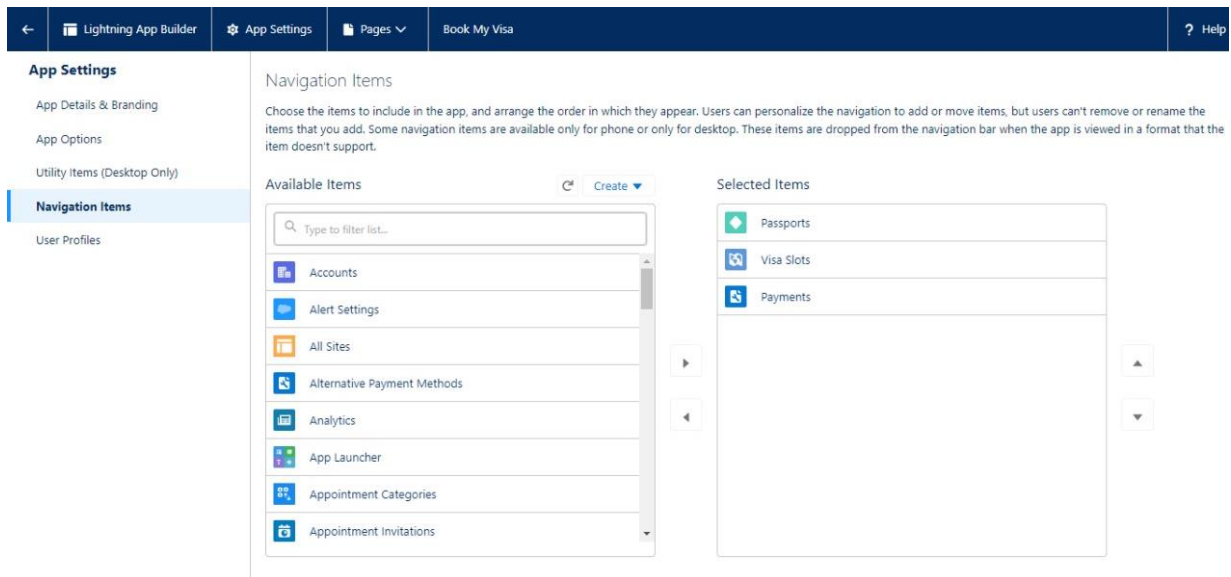
☒ Setup (full set of Setup options)

☐ Service Setup

App Personalization Settings

☐ Disable end user personalization of nav items in this app

☐ Disable temporary tabs for items outside of this app



## User:

A user is anyone who logs in to Salesforce. Users are employees at your company, such as sales reps, managers, and IT specialists, who need access to the company's records. Every user in Salesforce has a user account.

NOTE- As Salesforce license can only be used by 2 Users at a time in Dev Org, so If you don't find Salesforce license then deactivate a user who has Salesforce license or change the license type from Salesforce to any other

### 1)Creation Of User:

Navigate to setup

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

6. User license: salesforce platform
7. In the profile field: Standard user profile
8. Check, Generate new password and notify user immediately
9. Save

The screenshot shows the 'User Edit' page for 'User A' in Salesforce. The left sidebar contains navigation links for 'Lightning Experience Transition Assistant', 'Salesforce Mobile Quick Start', 'Home', and 'Administer' (with sub-links like 'Release Updates', 'Manage Users', 'Users', 'Mass Email Users', 'Roles', 'Permission Sets', etc.). The main content area is titled 'User Edit' and includes 'Save', 'Save & New', and 'Cancel' buttons. Below this is the 'General Information' section, which is divided into two columns. The left column contains fields for 'First Name' (User), 'Last Name' (A), 'Alias' (ua), 'Email' (usera@gmail.com), 'Username' (!@gmail.com), 'Nickname' (User1696243377396991145), 'Title' (Records), 'Company' (ZORA), 'Department' (Computer science), and 'Division' (A). The right column contains fields for 'Role' (CEO), 'User License' (Salesforce Integration), 'Profile' (Salesforce API Only System Integrations), 'Active' (checked), 'Marketing User' (unchecked), 'Offline User' (unchecked), 'Knowledge User' (unchecked), 'Flow User' (unchecked), 'Service Cloud User' (unchecked), 'Site.com Contributor User' (unchecked), 'Site.com Publisher User' (unchecked), 'WDC User' (unchecked), 'Data.com User Type' (--None--), 'Data.com Monthly Addition Limit' (300), 'Accessibility Mode (Classic Only)' (unchecked), 'High-Contrast Palette on Charts' (unchecked), 'Load Lightning Pages While Scrolling' (checked), 'Debug Mode' (unchecked), and 'Salesforce CRM Content User' (checked). A red bar at the top right of the form indicates 'Required Information'.

The screenshot shows the 'Single Sign On Information' page in Salesforce. The left sidebar contains navigation links for 'Develop' (with sub-links like 'Lightning Bolt', 'Schema Builder', 'Lightning App Builder', etc.), 'Deploy' (with sub-links like 'Deployment Settings', 'Deployment Status'), and 'Monitor' (with sub-links like 'System Overview', 'Optimizer', 'Imports', etc.). The main content area is titled 'Single Sign On Information' and includes a 'Federation ID' field. Below this is the 'Locale Settings' section, which contains fields for 'Time Zone' ((GMT+05:30) India Standard Time (Asia/Kolkata)), 'Locale' (English (India)), and 'Language' (English). Below this is the 'Approver Settings' section, which contains fields for 'Delegated Approver', 'Manager', and 'Receive Approval Request Emails' (Only if I am an approver). There is a checkbox for 'Generate new password and notify user immediately' which is checked. At the bottom of the form are 'Save', 'Save & New', and 'Cancel' buttons.

## **OWD: Organization Wide Defaults Settings:**

OWD settings determine the baseline level of access for all records of an object. This 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.

OWD can never grant users more access than they have through their object permission.

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

1. Public read/write/transfer (Only available for Leads and Cases)
2. Public read/write
3. Public read only
4. Private

Steps of OWD settings:

Navigate setup in Quick Find search bar

1. Type Sharing Setting and Select it.
2. Edit: Organization Wide Defaults.
3. Scroll down list and select Passport...

Case Escalations	Service Contract	Private	Private	<input checked="" type="checkbox"/>
Entitlement Processes	Service Resource	Public Read/Write	Private	<input checked="" type="checkbox"/>
API Usage Notifications	Service Territory	Public Read/Write	Private	<input checked="" type="checkbox"/>
Mass Emails	Shift	Private	Private	<input checked="" type="checkbox"/>
Email Snapshots	Streaming Channel	Public Read/Write	Private	<input checked="" type="checkbox"/>
Jobs	Waitlist	Private	Private	<input checked="" type="checkbox"/>
Logs	Web Cart Document	Private	Private	<input checked="" type="checkbox"/>
	Work Order	Private	Private	<input checked="" type="checkbox"/>
	Work Plan	Private	Private	<input checked="" type="checkbox"/>
	Work Plan Template	Private	Private	<input checked="" type="checkbox"/>
	Work Step Template	Private	Private	<input checked="" type="checkbox"/>
	Work Type	Private	Private	<input checked="" type="checkbox"/>
	Work Type Group	Public Read/Write	Private	<input checked="" type="checkbox"/>
	Book	Public Read/Write	Private	<input checked="" type="checkbox"/>
	Child object	Public Read/Write	Private	<input checked="" type="checkbox"/>
	college	Public Read/Write	Private	<input checked="" type="checkbox"/>
	Passport	Public Read/Write	Public Read/Write	<input checked="" type="checkbox"/>
	Payment	Public Read/Write	Private	<input checked="" type="checkbox"/>
	Research Proposal	Public Read/Write	Private	<input checked="" type="checkbox"/>
	Student	Public Read/Write	Private	<input checked="" type="checkbox"/>

**Other Settings**
Standard Report Visibility ☒
Manual User Record Sharing ☐
Manager Groups ☐
Secure guest user ☐
Require permission to view record access ☐
Require permission to view record names in lookup fields ☐

Save Cancel

## User Adoption:

This milestone explains about user adoption

### 1)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.

Book My Visa
Passports
Visa Slots
Dashboards

Passports
Recently Viewed

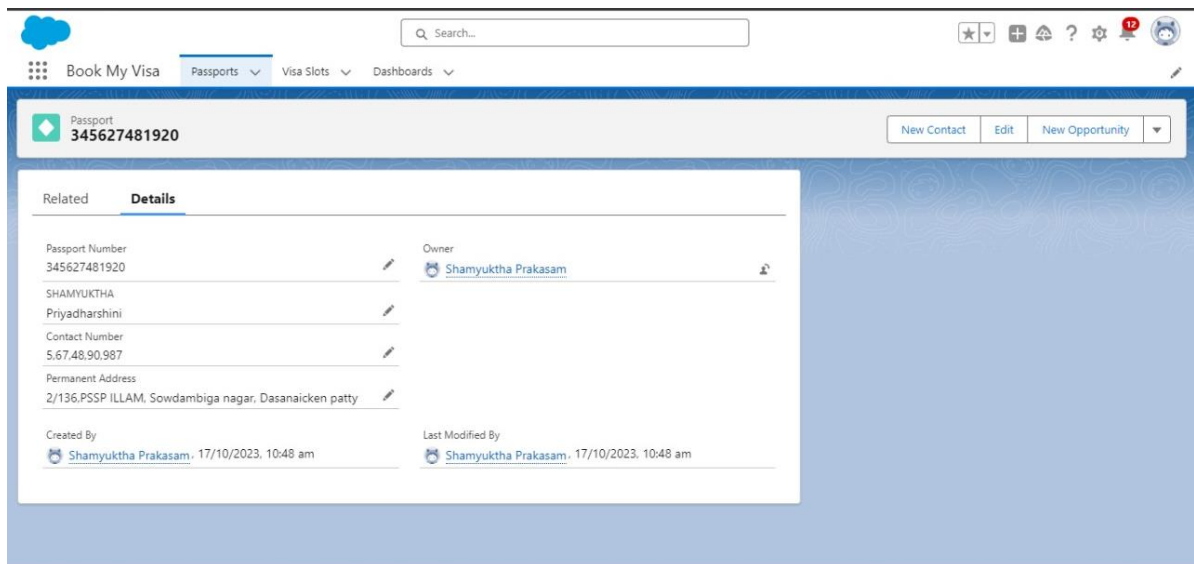
New Import Change Owner

2 items • Updated a few seconds ago

	Passport Number	
1	345627481920	
2	123456789098	

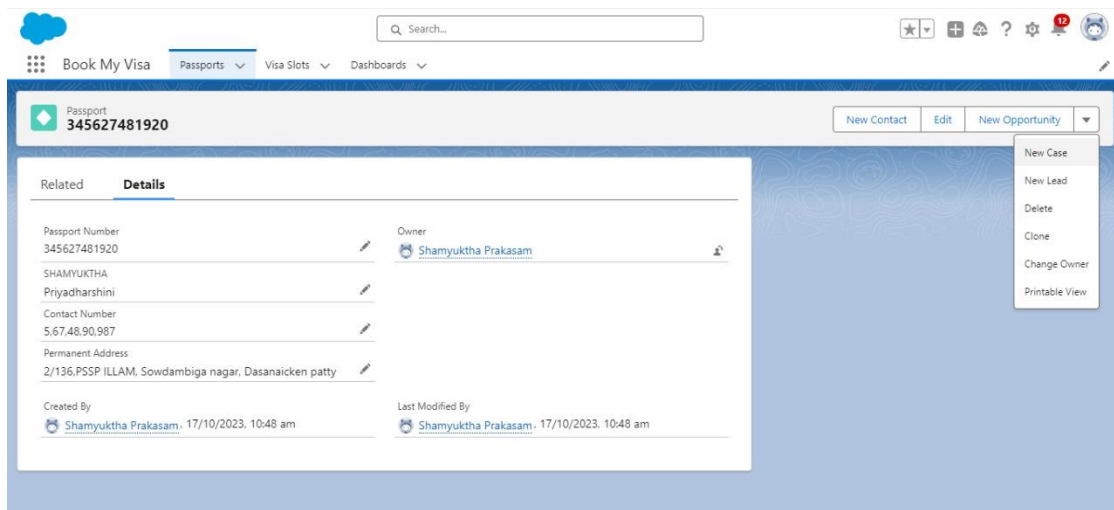
## 2)View Records (Passport):

- 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 any record name. you can see the details of the Driver



## 3)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



## What Are 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.

There are 4 types of report formats in Salesforce:

### 1. Tabular Reports:

This is the most basic report format. It just displays the row of records in a table with a grandtotal. While easy to set up they can't be used to create groups of data or charts and also cannot be used in Dashboards. They are mainly used to generate a simple list or a list with a grand total.

### 2. Summary Reports:

It is the most commonly used type of report. It allows grouping of rows of data, view subtotal, and create charts.

### 3. Matrix Report:



It is the most complex report format. Matrix report summarizes information in a grid format. It allows records to be grouped by both columns and rows. It can also be used to generate dashboards. Charts can be added to this type of report.

#### 4. Joined Reports:

These types of reports let us create different views of data from multiple report types. The data in joined reports are organized in blocks. Each block acts as a sub report with its own fields, columns, sorting, and filtering. They are used to group and show data from multiple report types in different views.

#### Report Type:

Report type determines which set of records will be available in a report. Every report is based on a particular report type. The report type is selected first when we create a report. Every report type has a primary object and one or more related objects. All these objects must be linked together either directly or indirectly.

1. A report type cannot include more than 4 objects.
2. Once a report is created its report type cannot be changed.

There are 2 types of report types:

#### 1. Standard Report Types:

Standard Report Types are automatically included with standard objects and also with custom objects where “Allow Reports” is checked.

Standard report types cannot be customized and automatically include standard and custom fields for each object within the report type. Standard report types get created when an object is created, also when a relationship is created.

Note: Standard report types always have inner joins.

#### 2. Custom Report Types:

Custom report types are reporting templates created to streamline the reporting process. Custom Reports are created by an administrator or User with “Manage

### **Custom:**

Report Types” permission. Custom report types are created when standard report types cannot specify which records will be available on reports.

In custom report types we can specify objects which will be available in a particular report. The primary object must have a relationship with other objects present in a report type either directly or indirectly.

There are 3 types of access levels of folders:

#### **1. Viewer:**

With this access level, users can see the data in a report but cannot make any changes except cloning it into a new report.

#### **2. Editor:**

With this access level, users can view and modify the reports it contains and can also move them to/from any other folders they have access level as Editor or Manager.

#### **3. Manager:**

With this access level, users can do everything Viewers & Editors can do, plus they can also control other user’s access levels to this folder. Also, users with Manager Access levels can delete the report.

## 1)Creation of report:

Note- While creation of report ensures that update preview automatically is selected which is available at the right side of the report page.

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.

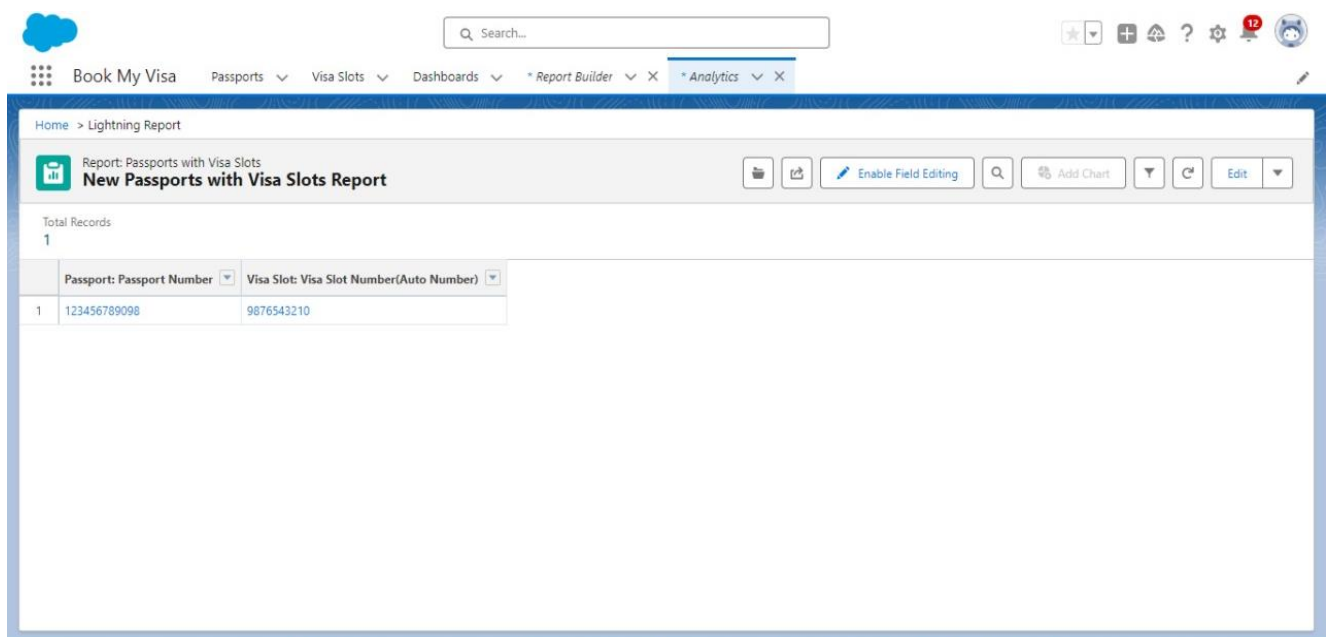
The screenshot shows the Lightning Report interface. At the top, there is a search bar and navigation tabs for 'Book My Visa', 'Passports', 'Visa Slots', 'Dashboards', and 'Analytics'. The 'Analytics' tab is active, showing a report titled 'New Passports with Visa Slots Report'. The report has one record displayed in a table with columns 'Passport: Passport Number' and 'Visa Slot: Visa Slot Number(Auto Number)'. The record shows the passport number 123456789098 and the visa slot number 9876543210.

	Passport: Passport Number	Visa Slot: Visa Slot Number(Auto Number)
1	123456789098	9876543210

## View Report:

### 1)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 'Book My Visa' application interface. At the top, there is a navigation bar with a search bar and several icons. Below the navigation bar, the 'Analytics' tab is selected, showing a report titled 'New Passports with Visa Slots Report'. The report indicates 'Total Records: 1'. A table below the report header contains one record with the following data:

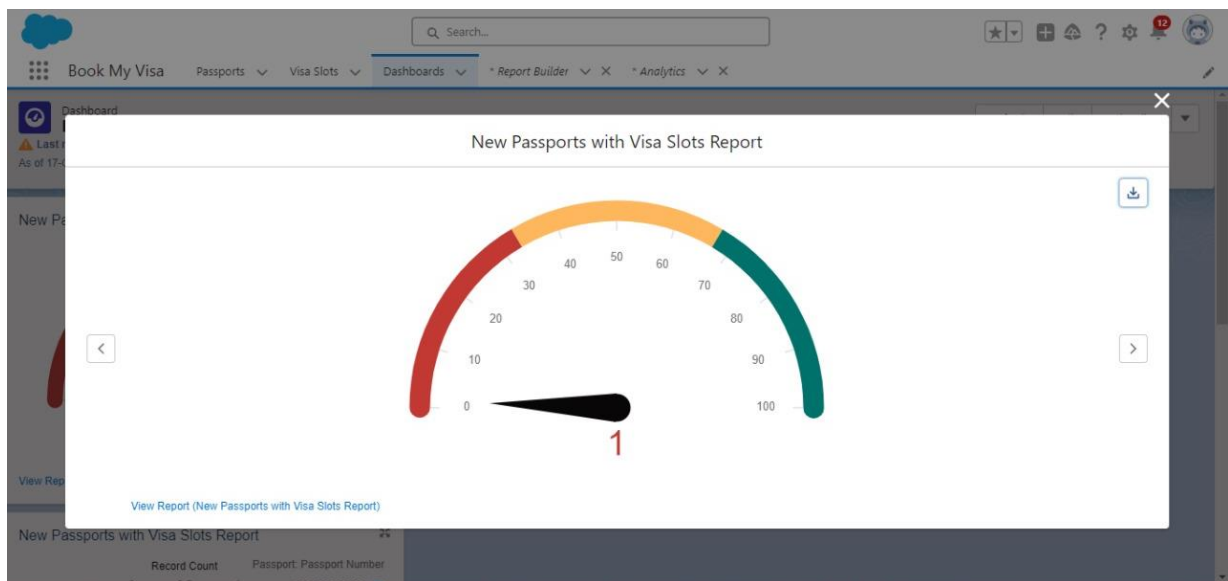
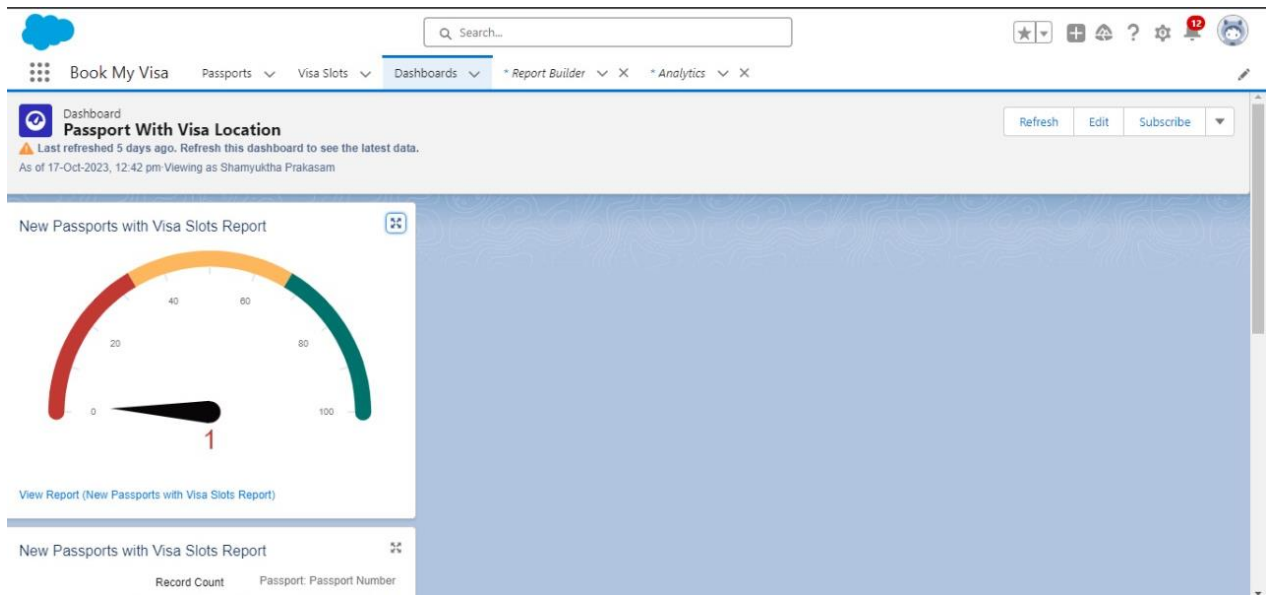
	Passport: Passport Number	Visa Slot: Visa Slot Number(Auto Number)
1	123456789098	9876543210

## **Dashboards:**

Dashboards in Salesforce are a graphical representation of Reports. It shows data from source reports as visual components. These components provide snapshots of key metrics and performance indicators of the organization at a glance. Reports can be displayed in the dashboard like: Horizontal Bar chart, Vertical Bar Chart, Line Chart, Donut Chart, Metric Chart, Stacked Vertical Bar Chart, Stacked Horizontal Bar Chart, etc.

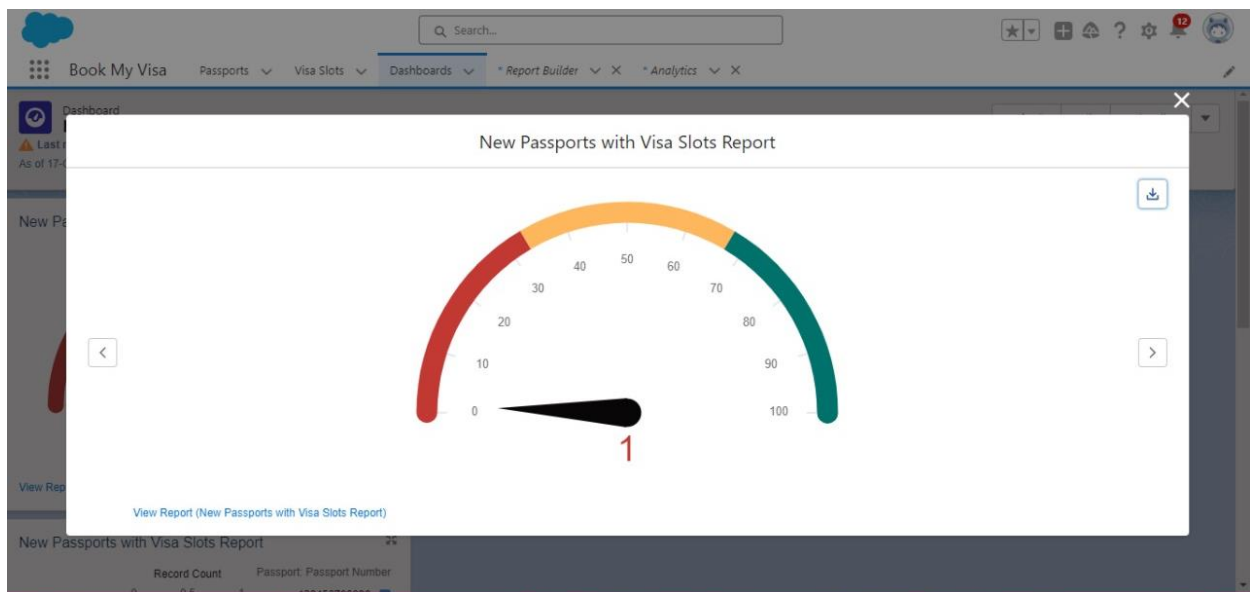
### **1)Creation Of Dashboard**

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



## 2)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:

Apex is a coding language of Salesforce. It can be invoked or started using triggers. A trigger is a set of Apex code that runs before or after data manipulation language (DML) events.

With Apex triggers, you can automate tasks that would otherwise be nearly impossible to accomplish using only the Salesforce user interface. Triggers enable you to create custom scripts that you can implement according to your needs, and the only limitation is your coding skills.

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.

## 1)APEX:

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, Statusc FROM  
Visa_Slotc WHERE Id IN :Trigger.old AND Status__c = 'Approved'];
```

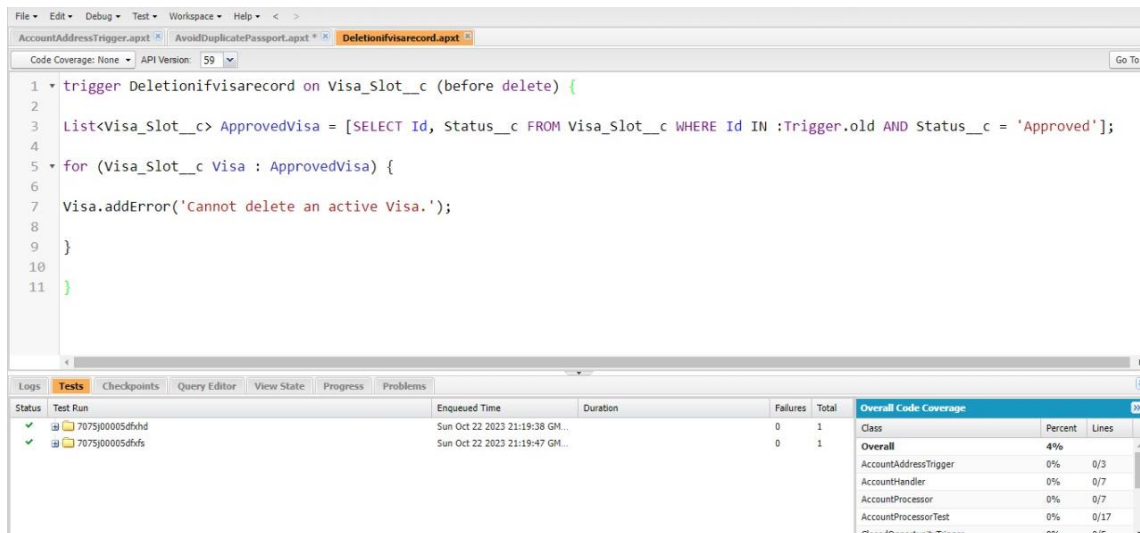
```
for (Visa_Slot__c Visa : ApprovedVisa) {
```

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

```
}
```

```
}
```





## 2)APEX :

- 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.');
```

```

}

}
```

The screenshot shows an IDE with a trigger function and test results. The trigger function is as follows:

```

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 {

```

The test results table is as follows:

Status	Test Run	Enqueued Time	Duration	Failures	Total
✓	7075j00005dfxhd	Sun Oct 22 2023 21:19:38 GM...		0	1
✓	7075j00005dfxfs	Sun Oct 22 2023 21:19:47 GM...		0	1

The overall code coverage table is as follows:

Class	Percent	Lines
Overall	4%	
AccountAddressTrigger	0%	0/3
AccountHandler	0%	0/7
AccountProcessor	0%	0/7
AccountProcessorTest	0%	0/17
ClosedOpportunityTrigger	0%	0/5

The screenshot shows the continuation of the trigger function and test results. The trigger function is as follows:

```

15         } else {
16
17             uniqueKeys.add(key);
18
19         }
20
21     }
22
23     for (Passport__c passport : duplicatePassports) {
24
25         passport.addError('Duplicate record found based on Full Name and Contact Number.');

The test results table is as follows:



| Status | Test Run        | Enqueued Time                  | Duration | Failures | Total |
|--------|-----------------|--------------------------------|----------|----------|-------|
| ✓      | 7075j00005dfxhd | Sun Oct 22 2023 21:19:38 GM... |          | 0        | 1     |
| ✓      | 7075j00005dfxfs | Sun Oct 22 2023 21:19:47 GM... |          | 0        | 1     |



The overall code coverage table is as follows:



| Class                    | Percent | Lines |
|--------------------------|---------|-------|
| Overall                  | 4%      |       |
| AccountAddressTrigger    | 0%      | 0/3   |
| AccountHandler           | 0%      | 0/7   |
| AccountProcessor         | 0%      | 0/7   |
| AccountProcessorTest     | 0%      | 0/17  |
| ClosedOpportunityTrigger | 0%      | 0/5   |


```

## GitHub&project Video doma Link

1.GitHub Link : <https://github.com/Shamyuktha24/Phase1>

## 2.VideoDemoLink:

[https://drive.google.com/file/d/1EMV9NPqQqul2Zd2\\_A84fVbpeM-jHe6uI/view?usp=sharing](https://drive.google.com/file/d/1EMV9NPqQqul2Zd2_A84fVbpeM-jHe6uI/view?usp=sharing)









