NAAN MUDHALVAN SKILL DEVELOPMENT PROGRAM

SB 8067 – SALESFORCE DEVELOPER

A SKILL TRAINING REPORT

Submitted by

SUBRAMANIAN R   -   952422104048

in recognition of the completion of the Skill Training course as part of the curriculum during Semester Seven

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE AND ENGINEERING

PSN INSTITUTE OF TECHNOLOGY & SCIENCE,

TIRUNELVELI

ANNA UNIVERSITY : CHENNAI – 600025

NOVEMBER - 2025

ANNA UNIVERSITY : CHENNAI 600025

BONAFIDE CERTIFICATE

This is to certify that this skill training report **"SB 8067 – SALESFORCE DEVELOPER"** is the bonafide work   of   **(Name………………………. & Reg. No…………………………….)** , who have carried out the tasks and project work under my supervision.

SIGNATURE   **SIGNATURE**

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Submitted for the viva voce examination held on ………………………

INTERNAL EXAMINER   **EXTERNAL EXAMINER**

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1. PROJECT DEFINITION

The **Lease Management System** is a comprehensive Salesforce CRM application designed to automate and manage various operations involved in property leasing. The system efficiently maintains tenant and property details, manages lease agreements, monitors lease duration and payments, and automates approval workflows. It ensures that all lease-related activities—such as renewals, terminations, and reminders—are handled accurately and on time. By leveraging Salesforce features like custom objects, validation rules, flows, triggers, and reports, the system improves data accuracy, enhances operational efficiency, and provides real-time insights. This solution is ideal for property owners, real estate agents, and property management firms seeking to streamline their lease processes within a secure and cloud-based environment.

2. ABSTRACT

The real estate and property management industry requires effective lease tracking and management systems to ensure transparency and timely operations. Manual processes or spreadsheet-based methods often result in mismanagement, delays, and data inconsistencies. To overcome these issues, the Lease Management System has been developed using the Salesforce platform, providing a fully automated and scalable cloud solution. The system allows for seamless management of tenants, properties, and lease agreements while integrating workflows for approvals, automated notifications, and reminders. It leverages Salesforce automation tools like Flows, Apex Triggers, Validation Rules, and Scheduled Classes to handle lease renewals, payment alerts, and data validation. The inclusion of reports and dashboards allows administrators to monitor leases, occupancy rates, and property performance in real time. This project demonstrates how Salesforce CRM can be tailored for the property management sector to enhance accuracy, efficiency, and decision-making.

3. OBJECTIVES OF THE PROJECT

- To build a custom Salesforce CRM application for managing property leases.

- To automate tenant, property, and lease agreement tracking using Salesforce tools.

- To implement approval processes for lease creation and renewal.

- To set up automated email alerts for lease expiration and payments.

- To enhance decision-making with reports and dashboards.

- To ensure data accuracy, transparency, and workflow efficiency.

4. SOFTWARE REQUIREMENTS

Platform

- Salesforce CRM (Cloud-based)

Software Tools

- Salesforce Developer Console
- Visual Studio Code with Salesforce CLI
- Salesforce Setup and App Builder
- Web Browser (Google Chrome / Microsoft Edge)
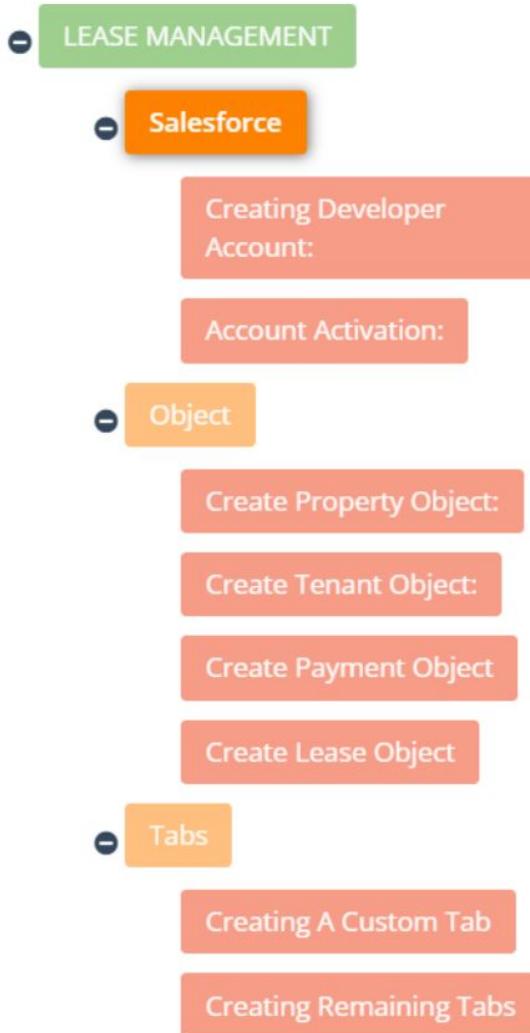
Operating System

- Windows 10 or higher / macOS

Database

- Salesforce Cloud Database (Custom Objects & Relationships)

5. MODULES IN THE SYSTEM

- LEASE MANAGEMENT
  - Salesforce
    - Creating Developer Account:
    - Account Activation:
  - Object
    - Create Property Object:
    - Create Tenant Object:
    - Create Payment Object
    - Create Lease Object
  - Tabs
    - Creating A Custom Tab
    - Creating Remaining Tabs

- **The Lightning App**
  - Create A Lightning App
- **Fields**
  - Creation Of Fields For The Property Object
  - Creation Of Fields For The Tenant Object
  - Creation Of Fields For The Lease Object
  - Creation Of Fields For The Payment For Tenant Object
  - Creation Of Lookup Fields
- **Validation Rule**
  - To Create A Validation Rule To An Lease Object

- **Email Templates**
  - Create Email Template For Tenant Leaving
  - Create Email Template For Leave Approved
  - Create Email Template For Rejection For Leave
  - Create Email Template For Monthly Payment
 - Create Email Template For Successful Payment
- **Approval Process**
  - Create Approval Process For Check For Vacant
  - Initial Submission Action:
  - Final Approval Action
  - Final Rejection Action
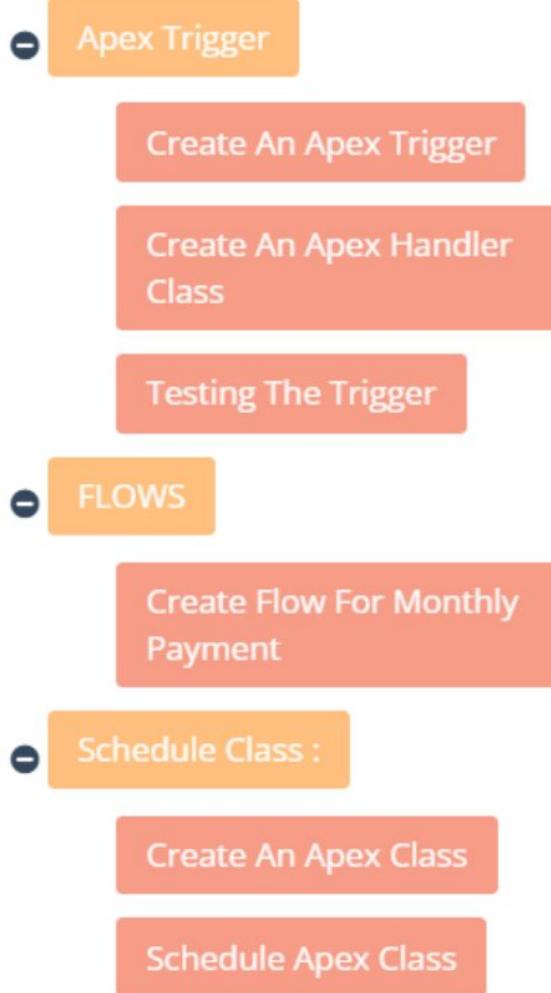
Apex Trigger

Create An Apex Trigger

Create An Apex Handler Class

Testing The Trigger

FLOWS

Create Flow For Monthly Payment

Schedule Class :

Create An Apex Class

Schedule Apex Class

Tenant Management

Maintains tenant records including name, contact number, email address, and property details. Tracks tenant history, lease start and end dates, and payment information to ensure proper management of all active tenants.

Property Management

Stores detailed information of each property such as property name, address, type, rent amount, and occupancy status. Helps property managers easily track which properties are leased, vacant, or under maintenance.

Lease Agreement Management

Manages all lease-related records including agreement start and end dates, payment schedules, lease duration, and renewal details. Ensures that each lease agreement is properly approved and linked to the respective tenant and property.

Incident Management

Handles incidents or issues related to properties and tenants. Prevents deletion of tenant records if they are linked to any active incidents, ensuring data consistency and accountability.

Approval Process

Automates the lease approval and renewal process. Lease requests are automatically routed to managers for review, ensuring a smooth workflow and eliminating manual approvals.

Email Templates

Sends automated notifications and updates to tenants and property managers about lease approvals, renewals, and payment reminders through predefined email templates.

Reports & Dashboards

Displays summarized insights on lease status, upcoming renewals, payment dues, and property occupancy. Dashboards provide a visual overview of performance for quick decision-making.

Automation & Workflows

Implements automated processes using Flows, Apex Triggers, Validation Rules, and Scheduled Classes to maintain data accuracy, automate notifications, and streamline lease management operations.

6. IMPLEMENTATION DETAILS

The Lease Management System was developed using Salesforce features step by step.

Custom Objects Created

- Property
- Tenant
- Lease Agreement
- Incident
- Payment Record

Relationships were created between Property, Tenant, and Lease objects to link records correctly.

Fields

Different types of fields like Text, Number, Currency, Date, and Picklist were created to store lease information such as rent amount, start date, and end date.

Validation Rules

Rules were added to make sure data is correct.
For example:

- The lease end date must be after the start date.
- Tenants linked to active incidents cannot be deleted.
- Rent amount cannot be blank.

Automation

- **Flows:** Update lease status automatically based on the end date.
- **Trigger:** Stop tenant deletion if linked to active incidents.
- **Scheduled Class:** Send renewal reminders before lease expiry.
- **Approval Process:** Get manager approval for new lease records.

Profiles & Roles

Roles like Property Manager, Lease Officer, and Admin were created.
Access was controlled using Profiles and Permission Sets.

Reports & Dashboards
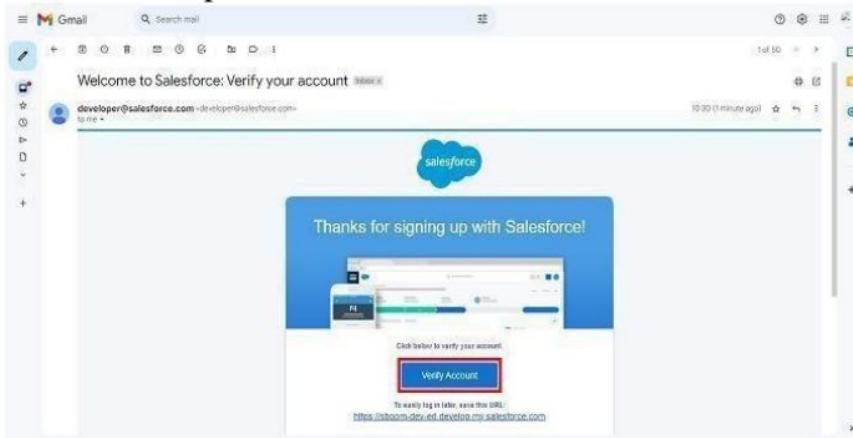
Reports were created to show active and expired leases.
Dashboards display property status and lease performance clearly.

Security
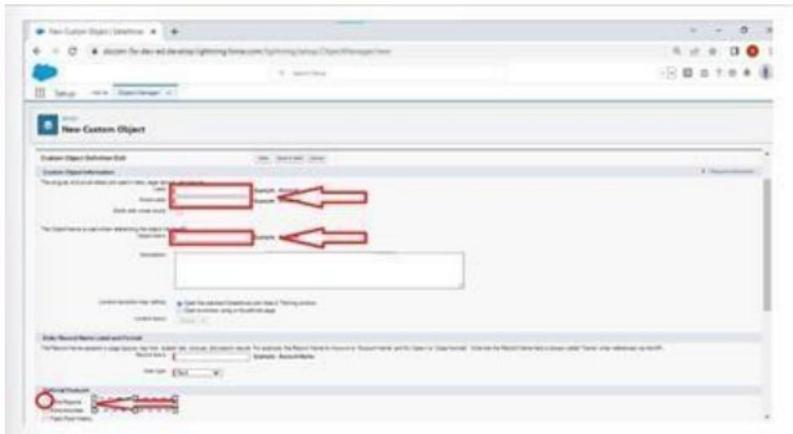
Data is protected using role-based access and field-level security to keep tenant and lease information safe.

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7. OUTPUT SCREENSHOTS

1. Developer Account Creation
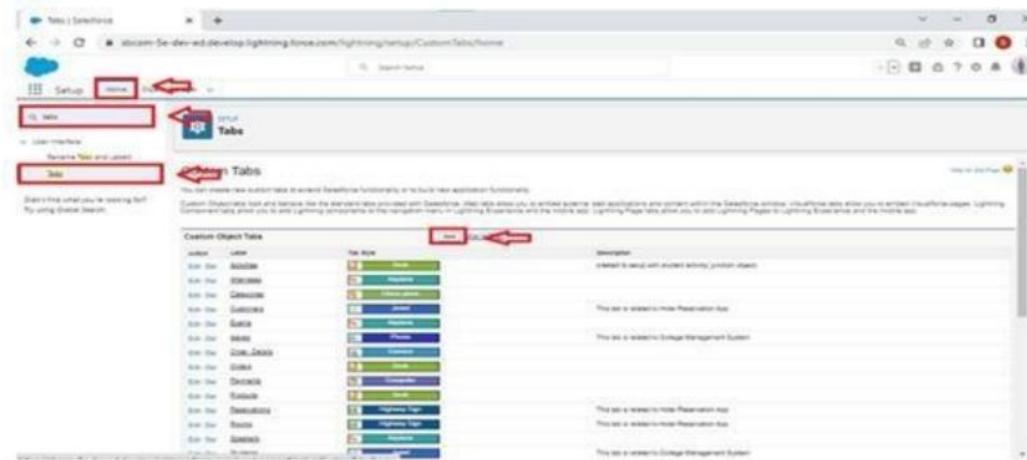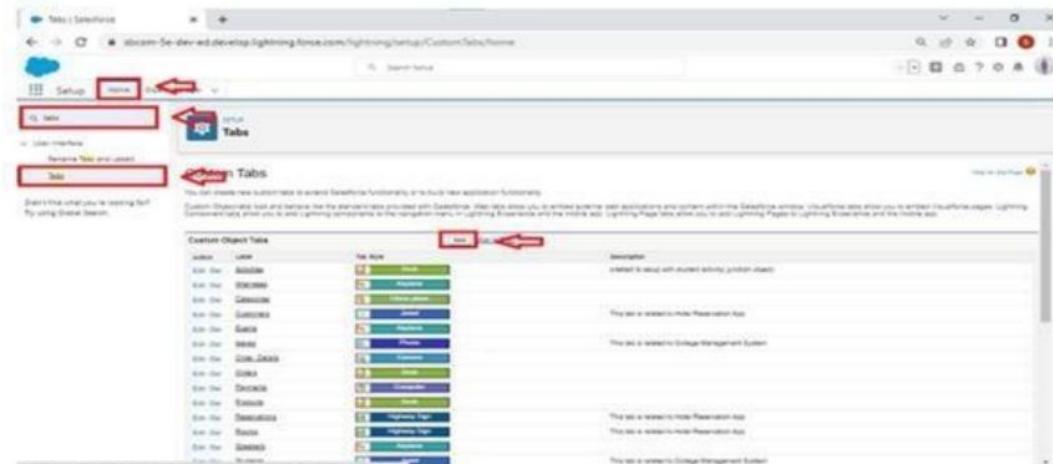
2. Creation of Objects (Property, Tenant, Lease, and Payment)
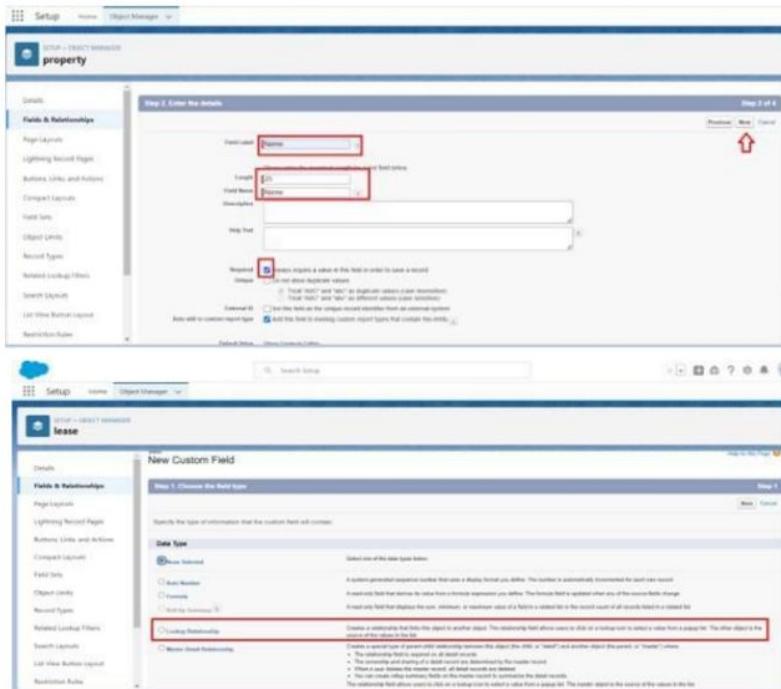
3. Tabs and Lightning App for Lease Management System
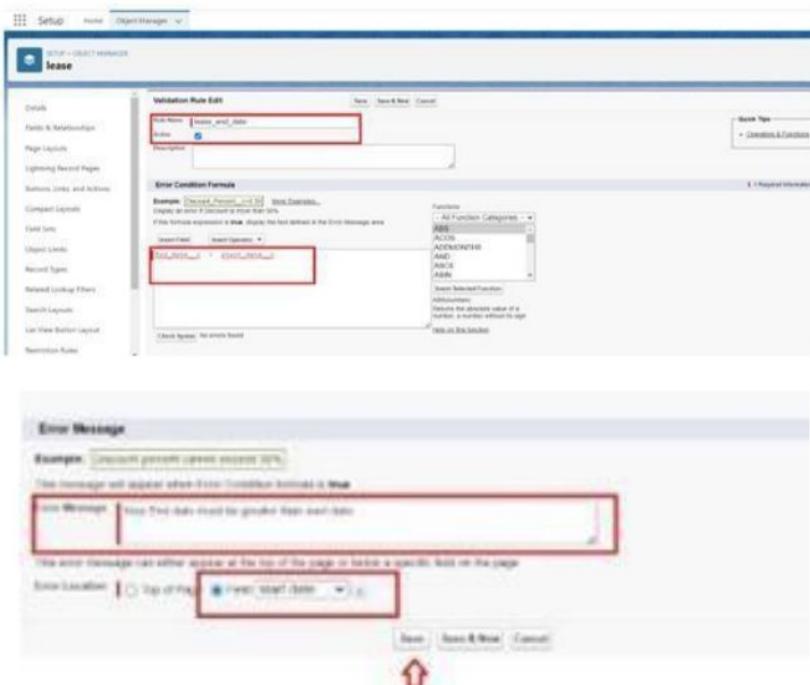
4. Field Creation and Page Layout Customization

5. Validation Rules Setup

6. To create email template

Action	Email Template Name ↑	Template Type	Available For Use	Description	Author	Last Modified Date
			New Template			
Edit | Del	Leave approved	Text	✓		sel	10/27/2025
Edit | Del	Leave rejected	Text	✓		sel	10/27/2025

7. To create approval process

SETUP
Approval Processes

What Would You Like To Do Now?

You have just created an approval process. However, you cannot activate this process until you define at least one approval step. Would you like to do that now?

○ Yes, I'd like to create an approval step now.
○ I'll do this later. Take me to the Approval detail page to review what I've just created.
● I'll do this later. Take me back to the listing of all approval processes for this object.

[Go!]

8. To create apex trigger

File ▾ Edit ▾ Debug ▾ Test ▾ Workspace ▾ Help ▾   <   >

test.apxt

Code Coverage: None ▾ | API Version: 59 ▾

```
1  trigger test on Tenant__c (before insert)
2 ▾ {
3 ▾     if(trigger.isInsert && trigger.isBefore){
4          testHandler.preventInsert(trigger.new);
5      }
6  }
```

testHandler.apxc

Code Coverage: None ▾ | API Version: 59 ▾

```
1 ▾ public class testHandler {
2 ▾     public static void preventInsert(List<Tenant__c> newlist) {
3          Set<Id> existingPropertyIds = new Set<Id>();
4 ▾      for (Tenant__c existingTenant : [SELECT Id, Property__c FROM Tenant__c WHERE Property__c != null]) {
5              existingPropertyIds.add(existingTenant.Property__c);
6          }
7
8 ▾      for (Tenant__c newTenant : newlist) {
9
10 ▾         if (newTenant.Property__c != null && existingPropertyIds.contains(newTenant.Property__c)) {
11                 newTenant.addError('A tenant can have only one property');
12             }
13         }
14     }
15 }
```

9. To create flows

10. To create Schedule apex

8. PROJECT COMPLETION

Guided Project	Project Workspace	
Project Title	:	LEASE MANAGEMENT
NM Id	:	59508D03D8F4AD7A217485E49BC1D08C
Industry Mentor(s) Name	:	No Mentor has been assigned
Project Progress		

100%

9. CONCLUSION

The **Lease Management System** developed on Salesforce provides an efficient and automated solution for managing properties, tenants, lease agreements, and payments. It ensures accurate record-keeping, reduces manual errors, and streamlines approval processes. Automation through flows, triggers, and scheduled reminders improves operational efficiency, while reports and dashboards offer real-time insights for better decision-making. Overall, this system enhances transparency, productivity, and control for property managers and tenants alike.