

NAAN MUDHALVAN- SALESFORCE REPORT

CRM APPLICATION TO HANDLE THE CLIENTS AND THEIR PROPERTY RELATED REQUIREMENTS .

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CRM APPLICATION TO HANDLE THE CLIENTS AND THEIR PROPERTY RELATED REQUIREMENTS

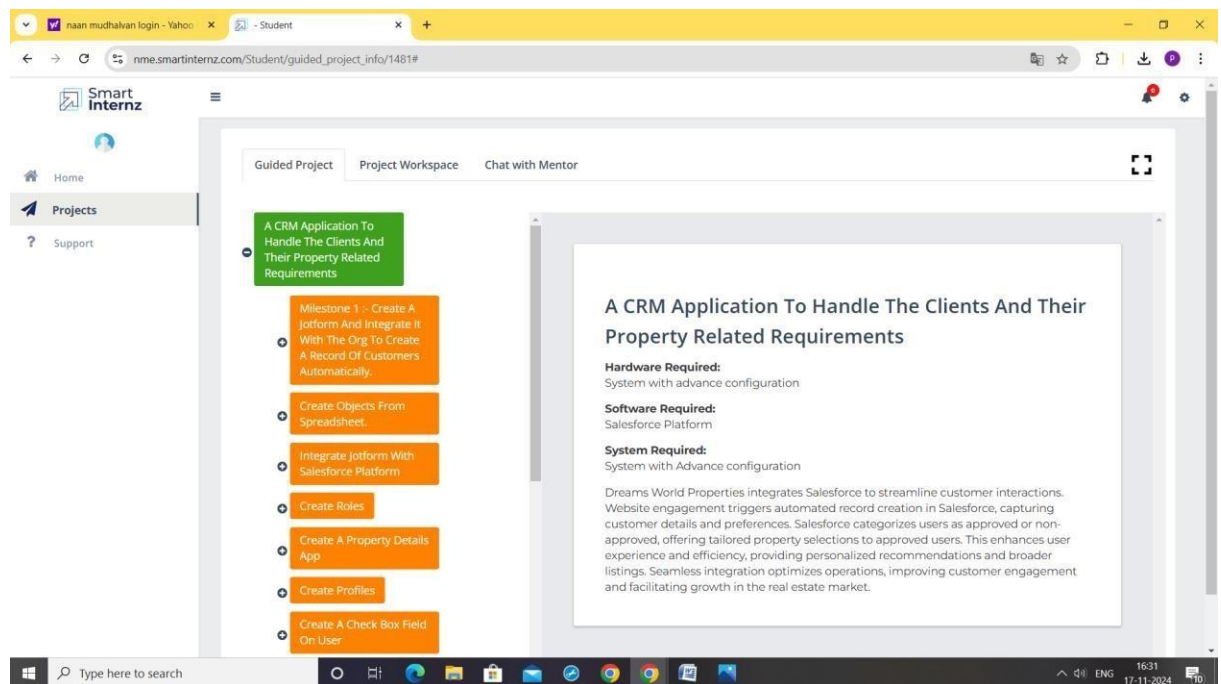
1. PROJECT OVERVIEW:

This project focuses on developing a CRM application using Salesforce, enhanced with JotForm integration, to manage clients and their property-related requirements. The solution streamlines client interactions, centralizes property data, and automates workflows. JotForm is utilized for collecting client data through customizable forms, which integrate seamlessly into Salesforce to ensure accurate and efficient data processing.

2. PROJECT OBJECTIVES:

- Centralized Data Management.
- Workflow Automation.
- Seamless Data Collection via JotForm.
- Enhanced Client Interaction.
- Scalability and Security.
- Enhance customer satisfaction through efficient data collection and communication.

FIGURE1:



3.KEY FEATURES AND CONCEPTS:

- **Apex Triggers:** Automated logic to synchronize account data, ensuring accuracy in client details and property preferences.
- **Custom Objects and Fields:** Designed for client and property data storage and management.
- **JotForm Integration:** Enabled efficient data collection through user-friendly forms, directly populating Salesforce records.
- **Process Builder and Workflows:** Automated property matching and email notifications based on data received from JotForm.
- **Process Builder:** Designed workflows to match properties to client requirements automatically.
- **Reports and Dashboards:** Provided actionable insights on property trends and client activities.
- **Role-Based Access Controls:** Ensured data security and privacy.

4.DETAILED STEPS TO SOLUTION DESIGN:

- **Custom Object Creation:** Created objects for clients, properties, and transactions with appropriate fields.
- **Integration with JotForm:** Linked JotForm to Salesforce for automatic client data import.
- **Workflow Automation:** Developed workflows using Process Builder to match properties with client requirements and send alerts.
- **UI Customization:** Designed user-friendly layouts and Lightning components form an aging data efficiently.
- **Security Implementation:** Applied profiles, roles, and sharing rules to protect sensitive client and property data.
- **Testing:** Conducted unit, system, and user acceptance testing to valid a workflows and integrations.

5.TESTING AND VALIDATION:

- **Unit Testing:** Verified individual components like Apex triggers and workflows.
- **System Testing:** Ensured seamless integration of JotForm and Salesforce workflows.
- **User Acceptance Testing (UAT):** Gathered feedback from test users to refine the system.
- **Performance Testing:** Ensured scalability under increased client and property data loads.

6.KEY SCENARIOS ADDRESSED BY JOTFORM AND SALESFORCE INTEGRATION:

- **Efficient Client Management:** Centralized client profiles with detailed property preferences and interaction.
- **Automated Property Matching:** Leveraged automation to match client requirements with suitable properties instantly.
- **Real-Time Updates:** Enabled clients to receive updates on property availability and transaction status.
- **Streamlined Data Collection:** Used JotForm for error-free and efficient data input directly into Salesforce.
- **Insights and Analytics:** Dashboards offered key metrics like property availability trends and client activity.

7.STEP BY STEP PROCESS EXPLANATION:

STEP 1: CREATE A JOTFORM AND INTEGRATE IT WITH A ORG TO CREATE A RECORD OF CUSTOMERS AUTOMATICALLY

Client wants a form for the customers to get the details directly into the salesforce so that the admins can create a user in the org.

FIGURE2:

The screenshot displays the Jotform Form Builder interface. The browser's address bar shows the URL `jotform.com/build/243153828082053`. The form titled "Form" is centered on a light purple background. It includes the following fields: "Name" (with "First Name" and "Last Name" sub-labels), "Email", "Phone Number", a "Which type of Property are you looking for?" section with radio buttons for "RESIDENTIAL", "COMMERCIAL", and "RENTAL", a "Budget Amount" field, and an "Address" section with "Street Address", "City", "State", and "Postal Code" sub-labels. A green "Submit" button is at the bottom of the form. The Jotform logo and "Form Builder" text are visible at the bottom of the form area.

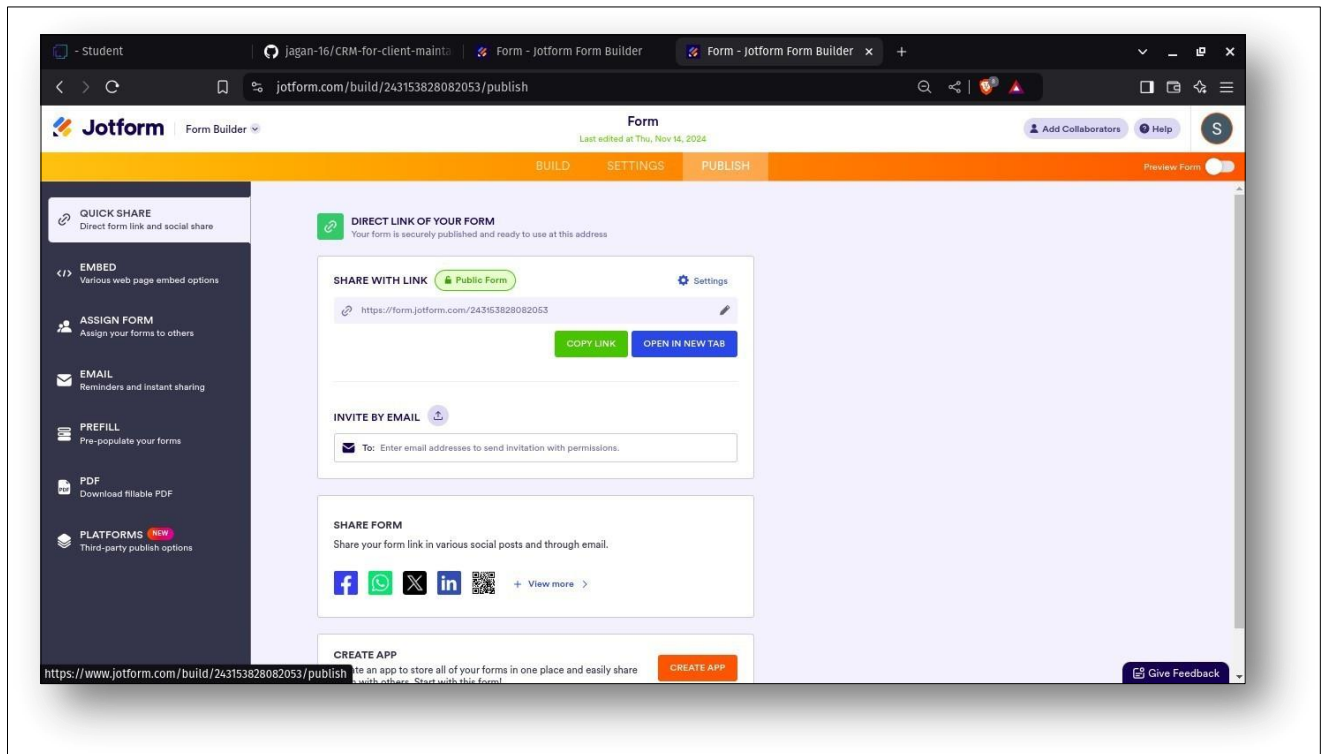
FIGURE3:

The screenshot shows the Jotform Form Builder interface with the "Integrations" settings for Salesforce. The browser's address bar shows the URL `jotform.com/build/243153828082053/settings/integrations`. The left sidebar contains a menu with options: "FORM SETTINGS", "EMAILS", "CONDITIONS", "THANK YOU PAGE", "INTEGRATIONS" (highlighted), "WORKFLOWS/ Formerly Approvals", "JOTFORM SIGN", and "MOBILE NOTIFICATIONS". The main content area is titled "SALESFORCE" and "Select a Salesforce Object", with "Customer" selected. Below this, the "Create a record" section shows a mapping of form fields to Salesforce fields. The mapping is as follows:

Object Fields	Form
Name	Name
City	Address - City
Budget Amount	Budget Amount
Property Type	Which type of Property are you lookin...
Street Address	Address - Street Address
Verified	Submission ID
Email	Email
State	Address - State

A "Give Feedback" button is located at the bottom right of the interface.

FIGURE4:



STEP2:CREATE OBJECTS FROM SPREADSHEET.

Directly Creating Objects from Spreadsheet in Salesforce.

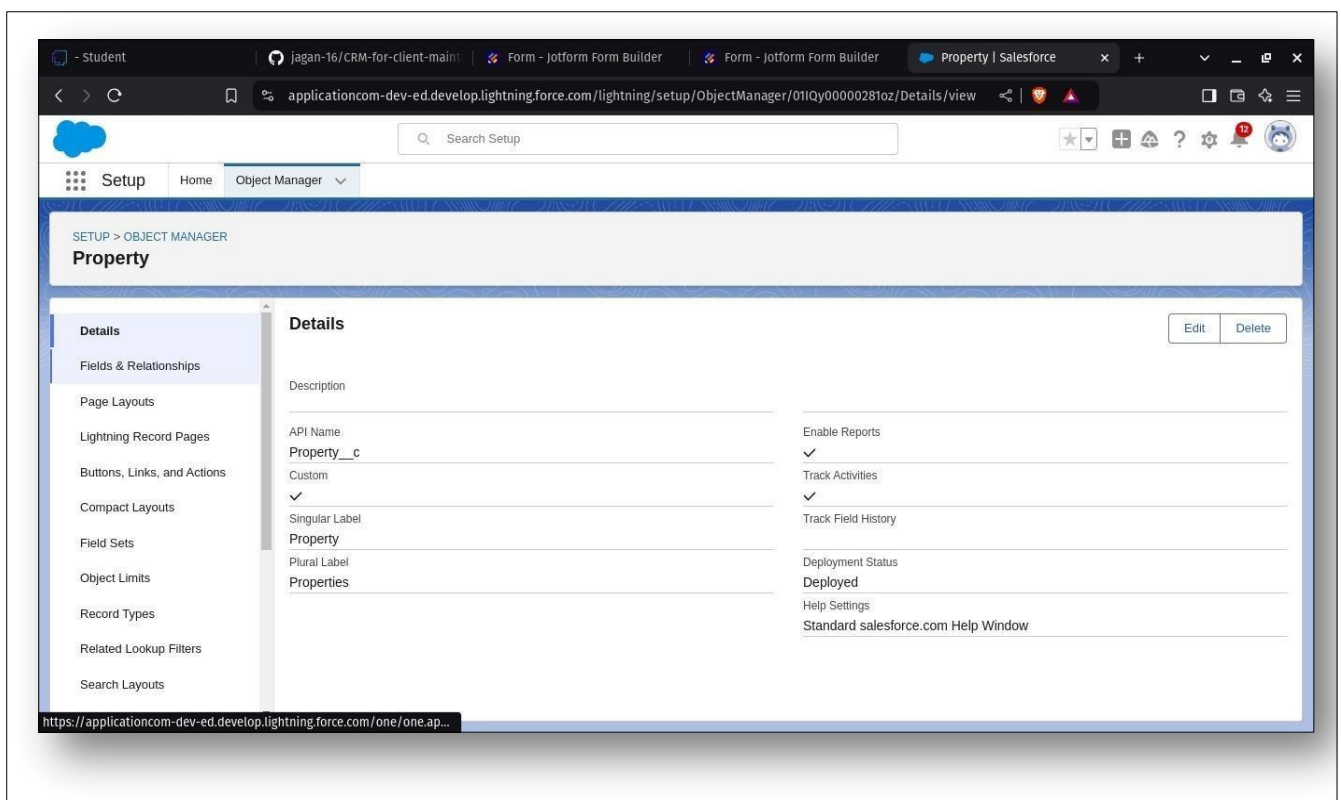
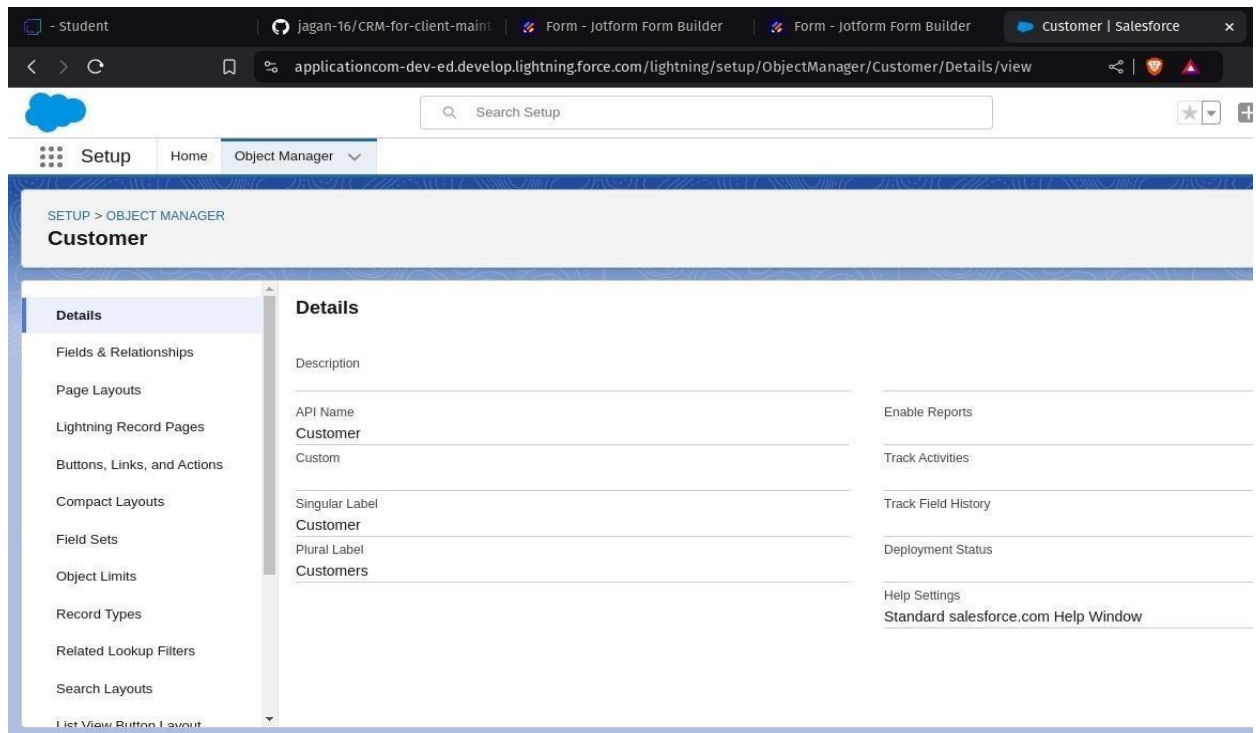
Create Customer object

- Go to your object manager and click on create object from spreadsheet.
- Click on the link to get the spreadsheet
- customer
- After downloading, upload the file, map the fields and upload to create an object.

Create Property object

- Follow the same from the customer object to create the Property Object
- Property

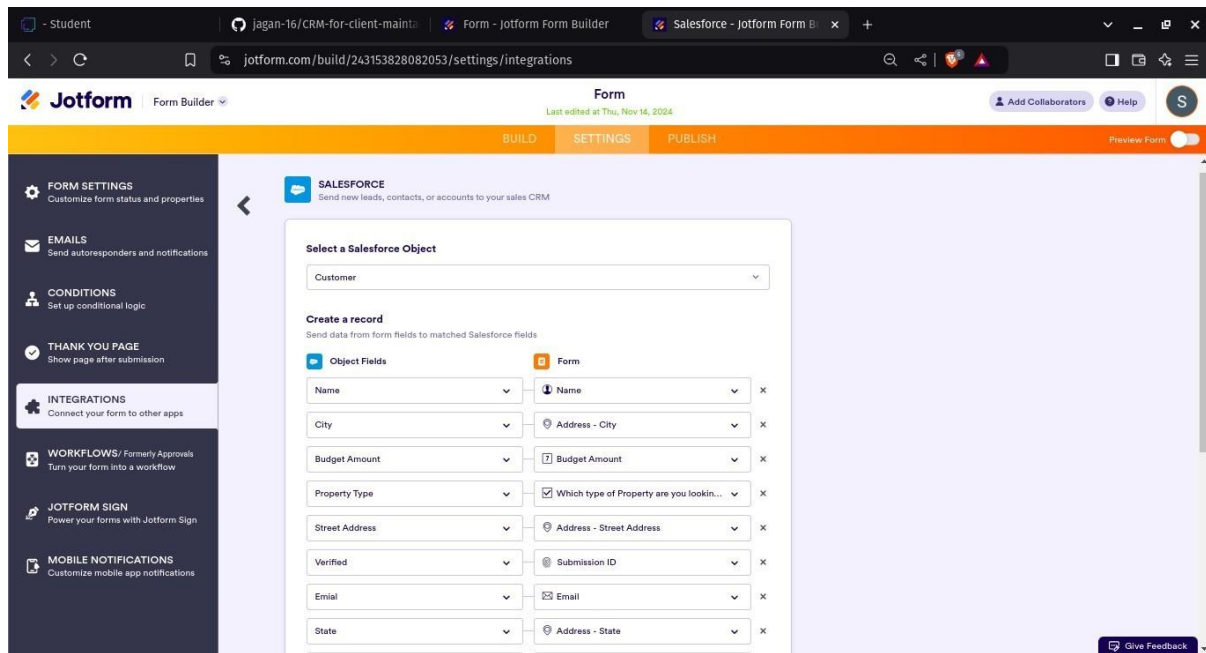
FIGURE 5:



STEP 3: INTEGRATE JOTFORM WITH SALESFORCE PLATFORM

In this Milestone we are going to integrate jotform with Salesforce

FIGURE6:

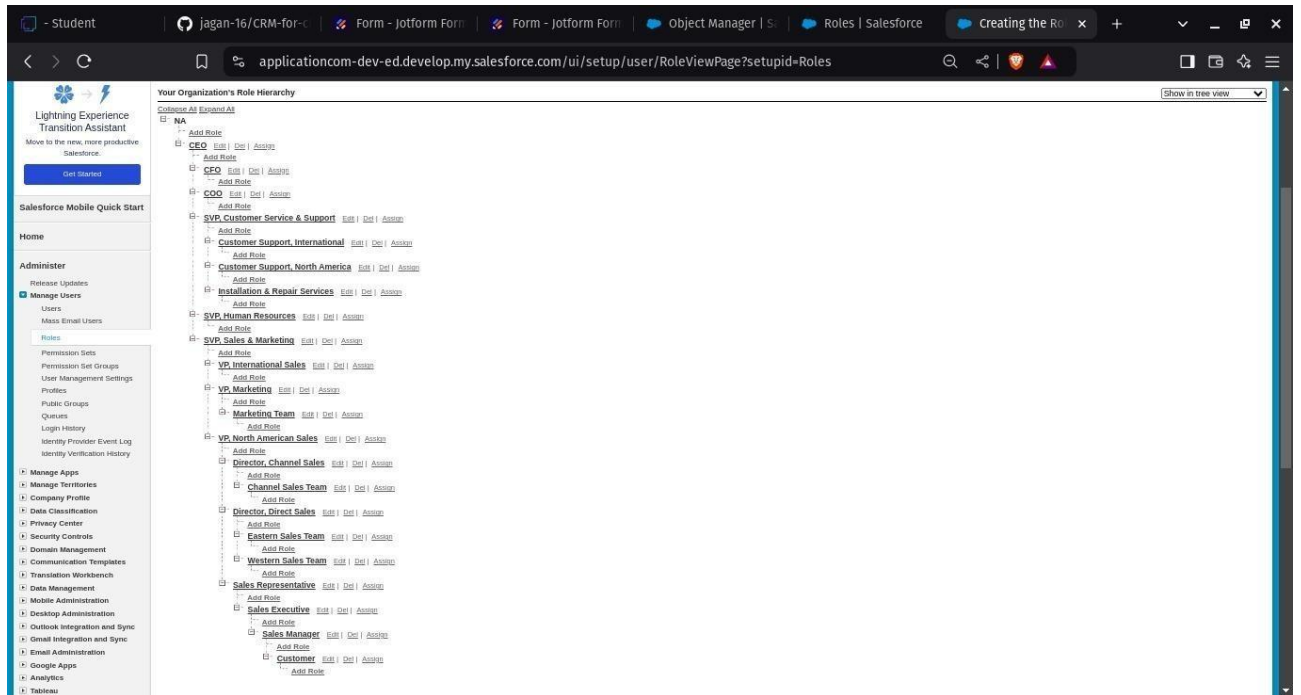


STEP4:CREATE ROLES

Create Roles as per business requirement Steps:

- Go to Setup and Click on Roles, then click on Expand all and Add a Role just below the Sales Representative. * It will use the “System Administrator Profile”.
- Label-Sales Executive
- Reports to -Sales Representative
- Similarly Create a Role Name “Sales Manager” below Sales Executive which reports to Sales Executive, Also Add a Role below SalesManager labeled as “Customer” which reports to SalesManager.

FIGURE7:

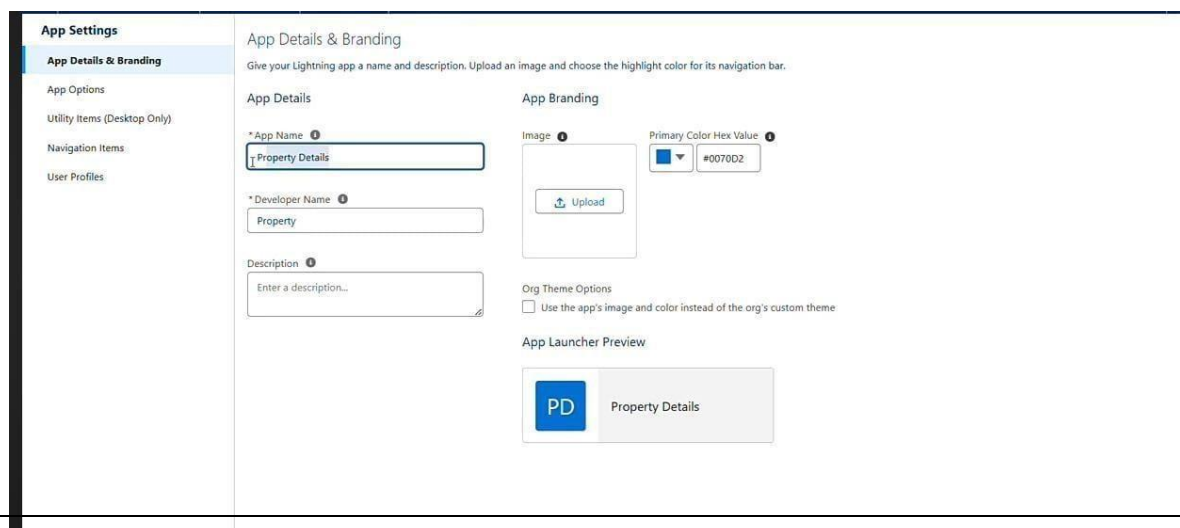


STEP5:CREATE A PROPERTY DETAILS APP

An App where the objects will be displayed Steps:

- From Setup>> Go to App Manager and click on New Lightning App and Name it as “Property Details” and add “Customer” and “Property” Object.
- Click Next >>Next>> Save and Add “System Admin” Profile.

FIGURE8:



STEP6:CREATE PROFILES

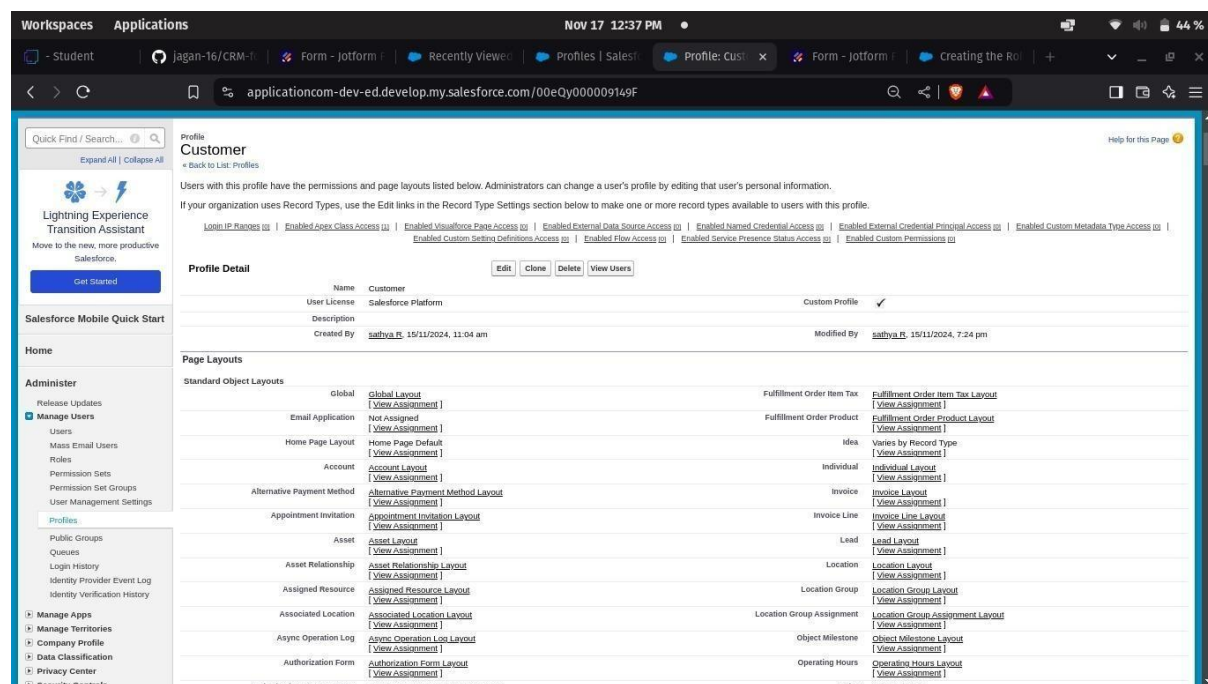
Create profiles as per business requirement

Customer:

Steps:

- From Setup >> Go to Profiles and Clone Salesforce Platform User and Name it “Customer”.
- Uncheck all the Custom Objects and Check only Property Details From Custom App Settings.
- Also Remove all the Standard Object Permissions.

FIGURE9:



Manager:

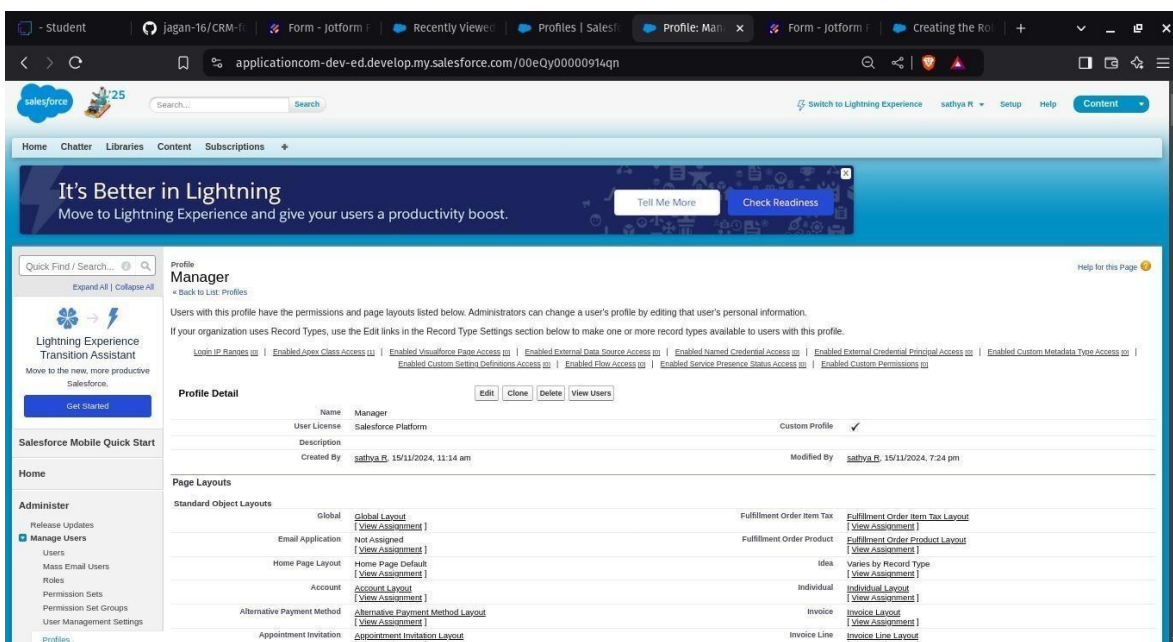
Steps:

1. From Setup>> Go to Profiles and Clone Salesforce Platform User and Name it “Manager”..
2. Uncheck all the Custom Objects and Check only Property Details

From Custom App Settings.

3. Also Remove all the Standard Object Permissions.
4. Uncheck all the Custom Object Permissions and check only “modify all” from “Property” and “Customer”

FIGURE10:



STEP7:CREATE A CHECKBOX FIELD ON USER

Create Field on the User as per the business requirement.

FIGURE11:

The screenshot shows the Salesforce 'Verified' custom field definition page. The page is titled 'User Custom Field Verified' and includes a 'Back to User Fields' link. The 'Field Information' section displays the following details:

Field Label	Verified	Object Name	User
Field Name	Verified	Data Type	Checkbox
API Name	Verified__c		
Description			
Help Text			
Data Owner			
Field Usage			
Data Sensitivity Level			
Compliance Categorization			
Created By	sathya_R	15/11/2024, 11:29 am	
Modified By	sathya_R	15/11/2024, 11:29 am	

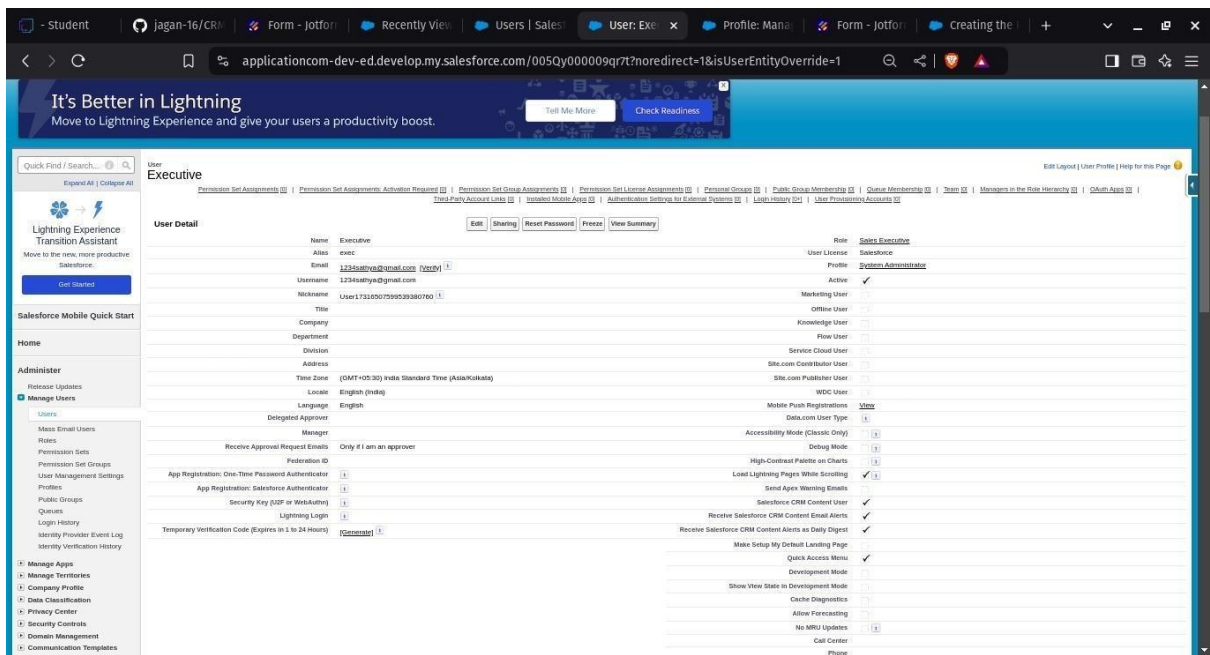
The 'General Options' section shows the 'Default Value' as 'Unchecked'. The 'Validation Rules' section indicates 'No validation rules defined.' and includes a 'New' button to create a rule. The left sidebar contains navigation links for 'Lightning Experience Transition Assistant', 'Salesforce Mobile Quick Start', and 'Administer' (with sub-links like Release Updates, Manage Users, etc.).

STEP8:CREATE USERS

USER1:

- GotoSetup-->Administration--> Users-->NewUser
- LastName- Executive
- Role- SalesExecutive
- License-Salesforce
- Profile - System Administrator
- 6.Save

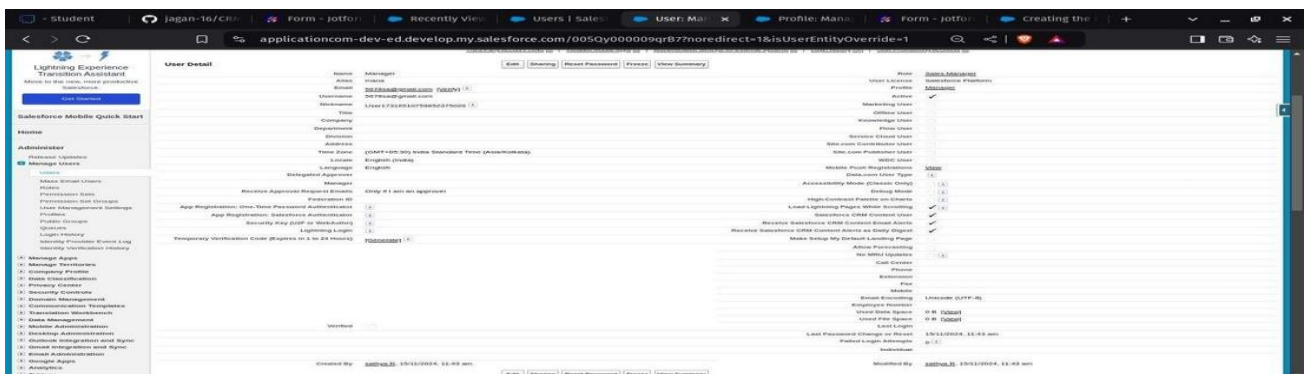
FIGURE12:



USER2:

- GotoSetup>>Administration>>Users>>New User
- LastName>>Manager
- Role>>SalesManager
- License>>Salesforce Platform
- Profile>>Manager
- Save

FIGURE13:



USER3:

- Goto Setup>>Administration>> Users>>New User
- Last Name>> Customer
- Role>> Customer
- License>>Salesforce Platform
- Profile>>Customer
- Make Sure the verified check box is “Unchecked”
- Save

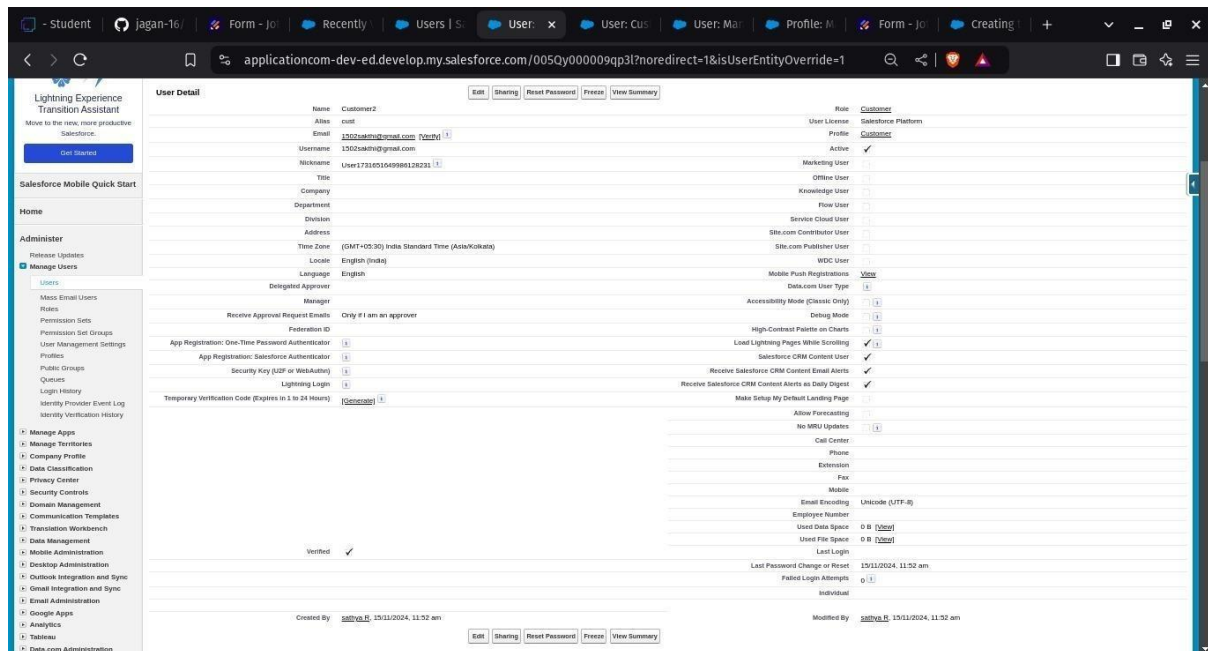
FIGURE:14

The screenshot shows the Salesforce User Detail page for a new user. The user's name is 'Customer', email is '8912sathya@gmail.com', and username is 'User1731014402790589874'. The user is currently 'Not Verified'. The page includes a left sidebar with navigation options like 'Manage Users', 'Manage Apps', and 'Manage Territories'. The main content area displays various user attributes and settings, including 'Rule', 'User License', 'Profile', 'Active', 'Marketing User', 'Offline User', 'Knowledge User', 'Flow User', 'Service Cloud User', 'Site.com Contributor User', 'Site.com Publisher User', 'WDC User', 'Mobile Push Registrations', 'Data.com User Type', 'Accessibilty Mode (Classic Only)', 'Debug Mode', 'High-Contrast Palette on Charts', 'Load Lightning Pages While Scrolling', 'Salesforce CRM Content User', 'Receive Salesforce CRM Content Email Alerts', 'Receive Salesforce CRM Content Alerts as Daily Digest', 'Make Setup My Default Landing Page', 'Allow Forecasting', 'No MRU Updates', 'Call Center', 'Phone', 'Extension', 'Fax', 'Mobile', 'Email Encoding', 'Unicode (UTF-8)', 'Employee Number', 'Used Data Space', 'Used File Space', 'Last Login', 'Last Password Change or Reset', and 'Failed Login Attempts'.

USER4:

- Goto Setup>>Administration>>Users>>New User
- Last Name>>Customer2
- Role>>Customer
- License>>Salesforce Platform
- Profile>>Customer
- Make Sure the verified checkbox is “checked”

FIGURE15:



STEP 9: CREATE AN APPROVAL PROCESS FOR PROPERTY OBJECT

Steps:

- From Setup>>Process Automation>>Approval Process
- Process Name -PropertyA pproval
- Location is not equal to blank
- Verified Equals false.
- Click next and “Next Automated Approver Determined By Select Manager.
- From Record Edit ability Properties>>Click on
- Administrators OR the currently assigned approver can edit records during the approval process.
- From Step 5 Select Fields to Display on Approval Page Layout select Property, Owner, Location,Type.
- Click Next and Select the initial Submit
- Owner>>Property Owner
- Roles>>Sales Manager
- Save
- Add an approval step name “Executive Approval”.
- Specify the Criteria >>All record should enter.

- click next and select the Approver as “ Sales Executive “ and “Save”.
- Add One field Update as “UnVerified Property” Select Object>>Property
- Field to Update >> Verified Field Data Type>>CheckBox
- Select CheckBox Option as “False” Save.
- Add One field Update as “UnVerified Property” Select Object>> Propert Field to Update>>Verified
- Field Data Type >> CheckBox
- Select CheckBox Option as “False”
- Activate the approval process

FIGURE16:

The screenshot displays the Salesforce Lightning Experience interface for the 'Property: Property Approval' process definition. The top navigation bar shows the user is logged in as 'Student' and the current page is 'Approval Process'. The left sidebar contains a 'Salesforce Mobile Quick Start' section with various links. The main content area is titled 'Process Definition Detail' and shows the 'Property Approval' process in 'Draft' status. Below this, there are several sections for defining the process flow:

- Initial Submission Actions:** A table with columns 'Action' and 'Type'. It contains one action: 'Record Lock'.
- Approval Steps:** A table with columns 'Step Number', 'Name', 'Description', 'Status', 'Assigned Approver', and 'Report Role'. It contains one step: 'VP Approval' with a status of 'Draft' and an assigned approver of 'Sales Executive'.
- Final Approval Actions:** A table with columns 'Action' and 'Type'. It contains one action: 'Record Lock'.
- Final Rejection Actions:** A table with columns 'Action' and 'Type'. It contains one action: 'Record Lock'.
- Recall Actions:** A table with columns 'Action' and 'Type'. It contains one action: 'Record Lock'.

The interface also includes a 'Salesforce Mobile Quick Start' section on the left sidebar with various links.

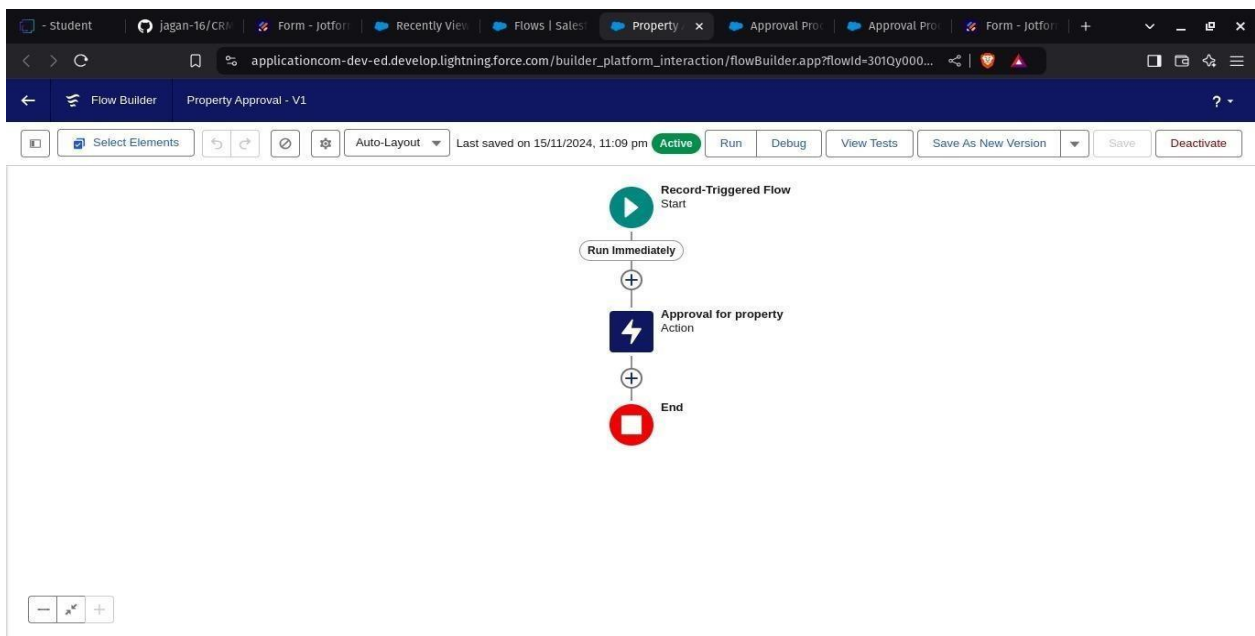
STEP10:CREATE A RECORD TRIGGER FLOW TO SUMBIT THE APPROVAL PROCESS AUTOMATICALLY

A flow that can submit the records directly for approval

Steps:

- From Setup >> Search for Flows >> Click On New and Select “RecordTriggerFlow”.
- Select Object>>Property
- Select “Trigger the flow when >> “A record is created”
- Set Entry Conditions>> “None”
- Add a “Action” >> “Submit for Approval”
- Give Label >> Approval for property
- Record Id>> {!\$Record.Id}
- Done
- Save the Flow and Give label as “Property Approval” and “Activate”.

FIGURE17:



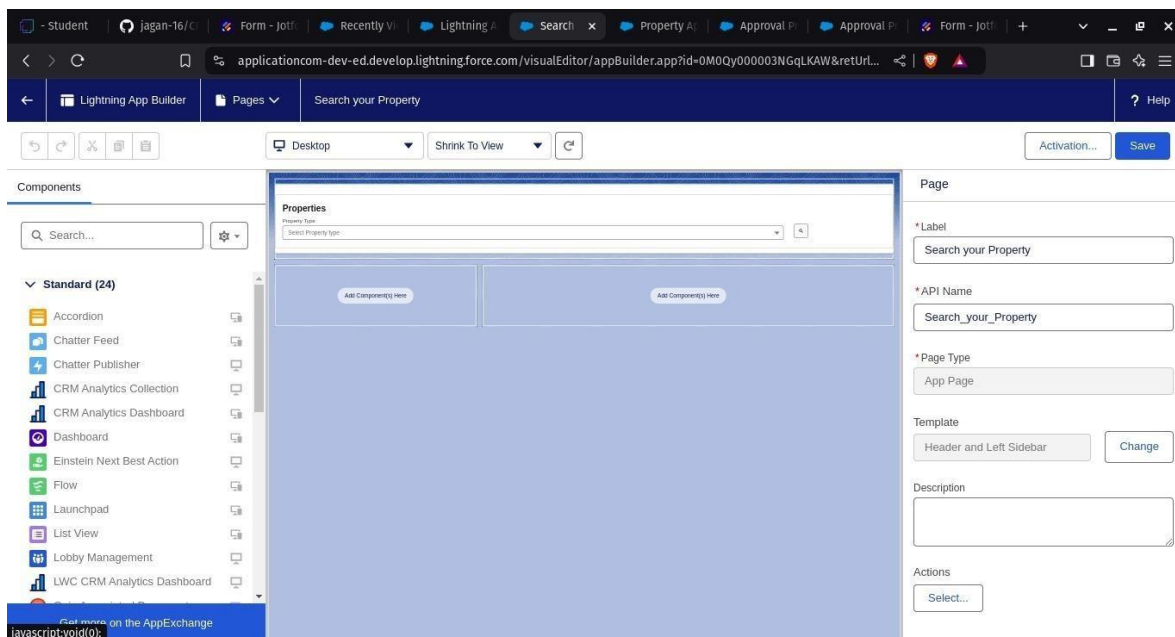
STEP11:CREATE AN APP PAGE

Create an App Page on the Property detailsObject named as “Search Your Property”

STEPS:

- From Setup>>Go to Lightning App Builder>>Click on New>> Select App Page and Click on Next.
- Give Label as “Search your Property” click “Next”.
- Click “header and Left Sidebar” and Click on“Done”.
- Click on “Save” and then click on “Activate”.
- From Page Setting select page activation as “Activate for all Users”.
- From Lightning Experience Click on “Property Details” and click on Add Page.
- Then click on Save.

FIGURE18:



STEP12:CREATE A LWC COMPONENT

Create an LWC Component for the customers so that only verified customers can access the verified properties and non Verified customers can access non verified properties, and deploy it on“Search your Property Page”

STEPS:

1.Create an Apex Class and make it aura enabled and name it
“PropertHandler_LWC”

CODE:

```
public class PropertHandler_LWC{

    @AuraEnabled(cacheable=true)

    public static list<Property__c> getProperty(string type , boolean verified){

        return [SELECT Id, Location__c, Property_Name__c, Type__c, Verified__c FROM Property__c Where
        Type__c =: type AND Verified__c =: verified];

    }

}
```

CODE:HTML

```
<template>

    <lightning-card>
        <div class="slds-box">
            <div class="slds-text-align_left">
                <h1 style="font-size:20px;"><b>Properties</b></h1>
            </div>
            <div>
                <div class="slds-gridslds-gutters">
                    <div class="slds-colslds-size_5-of-6">
                        <lightning-combobox name="Type" label="Property Type" value={ type
var }placeholder="Select Property type"
                        options={property options} on change={ changehandler}></lightning-combobox>
                    </div>
                    <div class="slds-colslds-size_1-of-6">
                        <br>
```

```

        <lightning-button-icon variant="neutral" icon-
name="standard:search" alternative-text="Search"
        label="Search" onclick={handleClick}></lightning-button-icon>
    </div>
</div>
</div>

</div>

```

```

<template if:true={is true}>
    <div class="slds-box">
        <lightning-datatable key-field="id" data={property
list} columns={columns}></lightning-datatable>
    </div>
</template>
<template if:false={is false}>
    <div class="slds-box">
        <div style="font-size:15px;"><b>No properties Are Found!!</b></div>
    </div>
</template>
</lightning-card>
</template>

```

In Your Js File Write this code :

CODE:JS

```

import { LightningElement, api, track, wire } from 'lwc';
import getProperty from
"@salesforce/apex/PropertHandler_LWC.getProperty" import { getRecord }
from 'lightning/uiRecordApi';
import USER_ID from '@salesforce/user/Id';
export default class C_01_Property_Management extends LightningElement
{
    @api recordId
    userId =
    USER_ID;
    verified
    var type;
    var isfalse =
    true;
    is true = false;
    se;
    @track propertylist =

```

```

[];columns=[
    {label:'PropertyName',fieldName:'Property_Namec'},
    {label:'PropertyType',fieldName:'Typec'},
    {label:'PropertyLocation',fieldName:'Locationc'},
    {label:"Propertylink",fieldName:"Property_linkc"}
]
propetyoptions=[
    {label:"Commercial",value:"Commercial"},
    {label:"Residential",value:"Residential"},
    {label:"rental",value:"rental"}

]
@wire(getRecord, { recordId: "$UserId", fields:
['User.Verifiedc'] })recordFunction({ data,error}) {
    if (data)
        { console.log(data
        )
        console.log("This is the User Id --->
"+this.userId);this.verifiedvar=data.fields.Verifiedc.
value;
        } else {
            console.error(error)console.log('th
            isiserror')
        }
    }

changehandler(event)
    { console.log(event.target.value);this.typevar
    =event.target.value;
    }
handleClick(){

    getProperty({ type:this.typevar,verified:this.verifiedvar})
        .then((result)=>
            { this.isfalse =
            true;console.log(res
            ult)
            console.log("This is the User id ---> ' +
            this.userId);console.log("This is the verified values ---> ' +
            this.verifiedvar);if(result !=null&&result.length!= 0) {
                this.istrue =
                true;this.propertylist =
                result;console.log(this.verified
                var);console.log(this.typevar)
            } else {
                this.is false =
                false;
                this.is true=false;
            }
        }
}

```

```

    })
    .catch((error) =>
        { console.log(error)
        })
    }
}
}

```

In Your meta file give your targets to deploy the component.

CODE:js-meta.xml

```

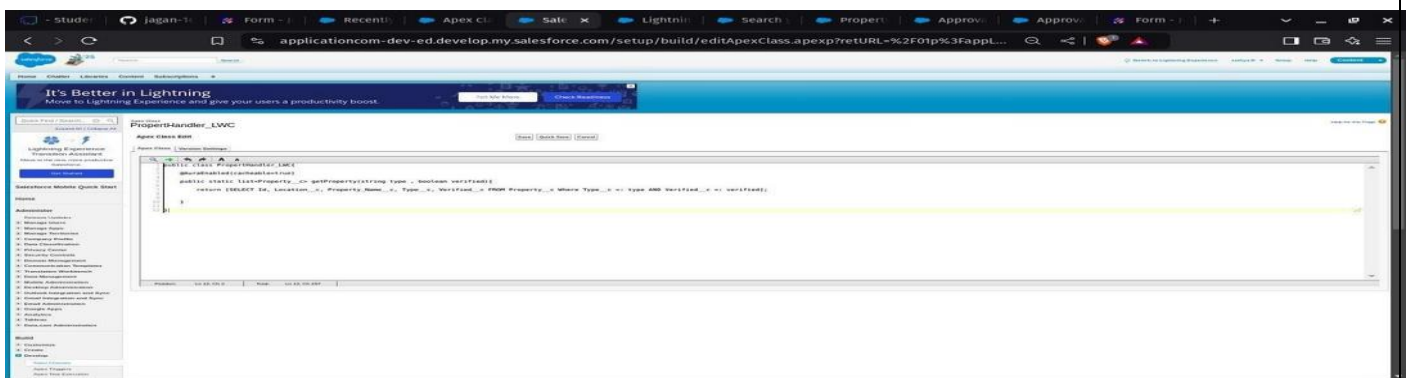
<?xmlversion="1.0"encoding="UTF-8"?>
<LightningComponentBundlexmlns="http://soap.sforce.com/2006/04/metadata">
    <apiVersion>59.0</apiVersion>
    <isExposed>true</isExposed>
    <targets>
        <target>lightningRecordPage</target>
        <target>lightningAppPage</target>
        <target>lightningHomePage</target>

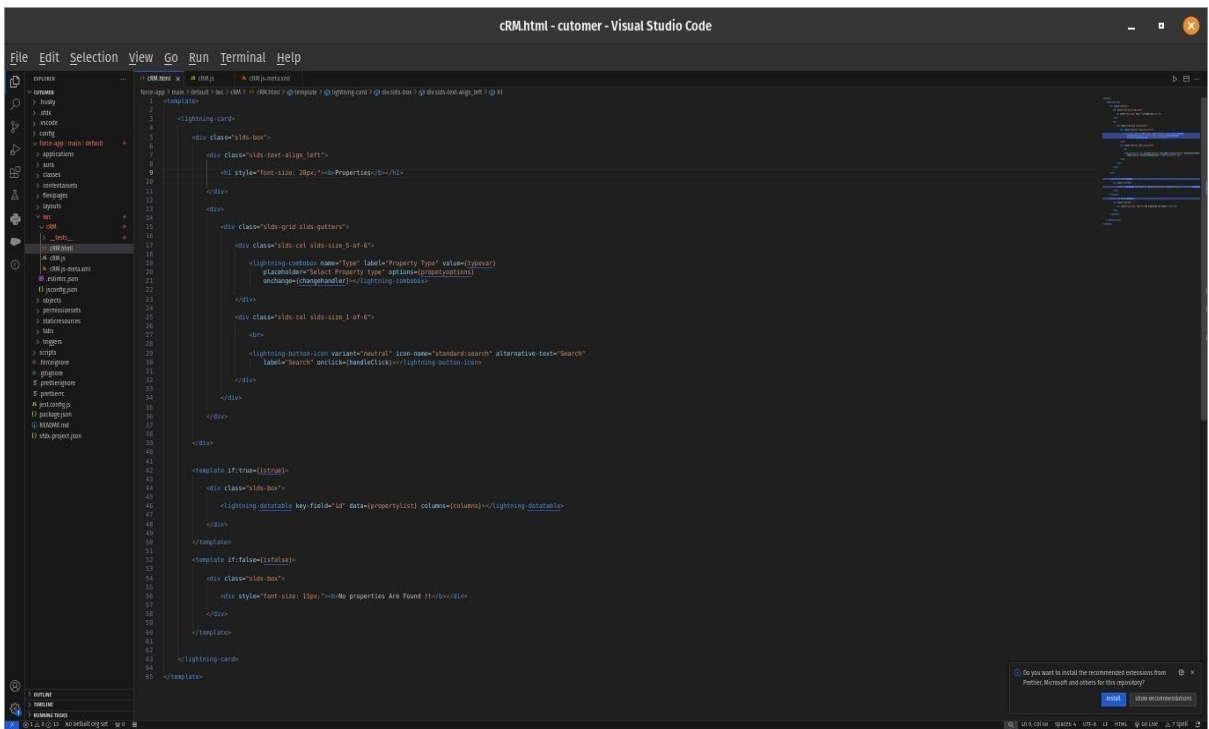
    </targets>
</LightningComponentBundle>

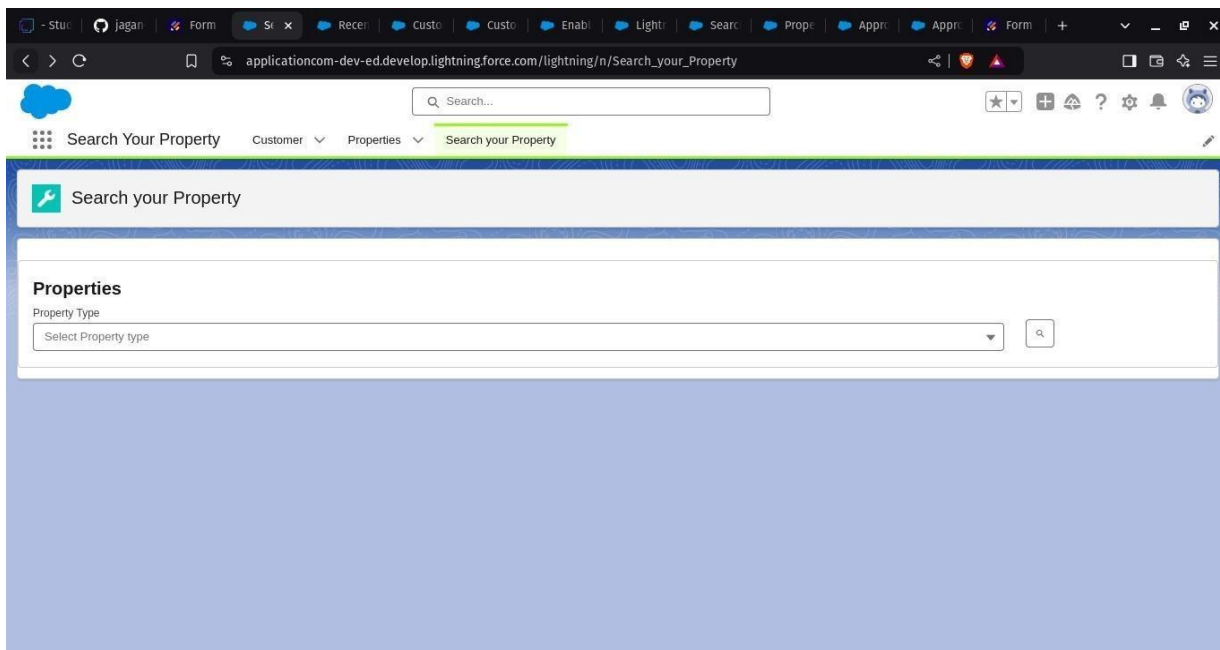
```

After Saving all the three Codes , Right Click and deploy this component to the org.

FIGURE19:







STEP14:GIVE ACCESS OF APEX CLASSES TO PROFILES

The Apex Class has a Security,Enable the security for the profiles that needs to access this class.

STEPS:

- From Setup >> Search For Apex Classes >> Click on “Security” behind “PropertyHandlerLWC”.
- From Profiles Add “Manager” and “Customer” and “Save”.

8. Conclusion

The CRM Property Management System successfully combines Salesforce and JotForm to address the complexities of managing client and property-related workflows. By centralizing data, automating processes, and enhancing communication, this solution has improved operational efficiency and client satisfaction. It is scalable, secure, and tailored for future business growth, making it an ideal tool for property management enterprises.

