Salesforce Virtual Internship Program

SmatrInternz

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

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PROJECT TITLE: A CRM APPLICATION TO HANDLE THE CLIENTS AND THEIR PROPERTY RELATED REQUIREMENTS

1. Project Overview:

This project focuses on the development of a CRM Application for managing clients and their property-related requirements using Salesforce. The application aims to streamline and optimize client interactions, property tracking, and operational workflows. Designed to meet the specific needs of real estate businesses, this solution automates key processes such as capturing customer preferences, managing property listings, and providing tailored recommendations.

The primary challenge addressed by this project is the manual handling of client and property data, which often leads to inefficiencies and inaccuracies. By leveraging Salesforce's robust CRM platform, the project delivers a comprehensive, user-friendly solution that ensures efficient resource management, enhanced customer relationships, and seamless reporting.

Through this project, we will be able to achieve:

- Operational Excellence: Automating routine processes to save time and reduce errors.
- Data-Driven Decision-Making: Providing owners with detailed, real-time insights into client preferences, property status, and transaction trends.
- Scalability and Efficiency: Supporting long-term growth with a flexible, secure, and scalable solution.

2. Objectives :

➤ Business Goals:

1. Streamlined Operations: Automate client and property data management.
2. Enhanced Customer Relationships: Provide personalized insights and service recommendations.
3. Data Security: Implement robust access controls.

➤ Specific Outcomes:

Centralized platform for managing client and property data.

• Real-time dashboards for monitoring key metrics.

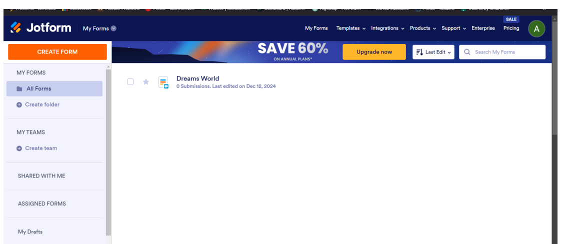
Reduction in manual errors and increased efficiency.

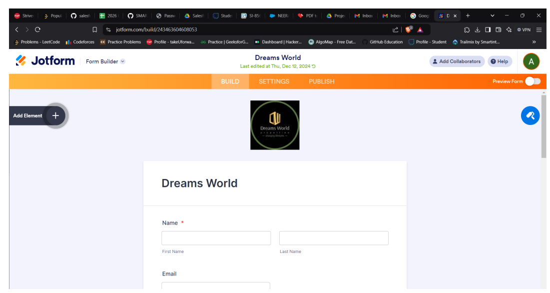
3. Salesforce Key Features and Concepts Utilized :

- salesforce objects
- classes
- process and trigger creation
- sales force app builder
- lightning components
- vscode salesforce integration

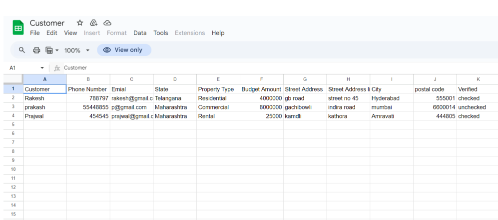
4. Detailed Steps to Solution Design

Create a JotForm and Integrate with Salesforce:
Designed a JotForm to collect customer details and preferences.
■Integrated JotForm with Salesforce to automatically create customer records upon form submission.
STEPS FOLLOWED TO CREATE JOTFORM:
1) Go to any browser and search for jotform. If you donot have an account we need to signup. Then, after signing up, log into it.
2) After login, click on create form and click on start from scratch.
3) Now create a form to get the customer details like Name, Phone, Email, Address, and type of property the customer is interested in.
4) Once the form is created, publish it by clicking on publish.



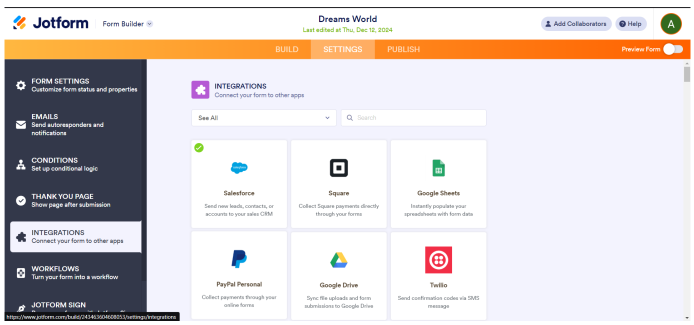


Create Objects from Spreadsheet:
Imported data from a spreadsheet to create custom objects such as Customer and Property.
STEPS FOLLOWED TO CREATE OBJECTS:
1) Go to your object manager in salesforce and click on create object from spreadsheet.
2) Then, we need to click on the link to get the spreadsheet.
3) For Customer, click on the Customer link. Similarly, for Property, we need to click on Property Link
4) After downloading, upload the file, map the fields, and upload to create an object.
CUSTOMER OBJECT CREATION

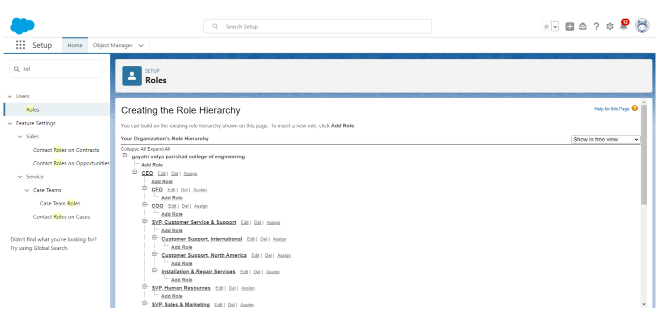


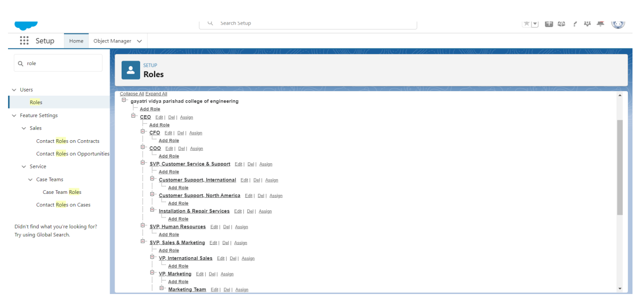
Customer	Phone Number	Emial	State	Property Type	Budget Amount	Street Address	Street Address li	City	postal code	Verified
Rakesh	788797	rakesh@gmail.c	Telangana	Residential	4000000	gb road	street no 45	Hyderabad	555001	checked
prakash	55448855	p@gmail.com	Maharashtra	Commercial	8000000	gachibowli	indira road	mumbai	6600014	unchecked
Prajwal	454545	prajwal@gmail.c	Maharashtra	Rental	25000	kamdli	kathora	Amravati	444805	checked

Integrate JotForm with Salesforce Platform:
Enabled seamless data flow between the frontend (JotForm) and backend (Salesforce).
STEPS FOLLOWED TO INTEGRATE:
1) On the Jotform Platform, Click on Integration and choose Salesforce.
2) Click on User Integration and choose "Add to From".
3) Select the Org with which you want to Integrate your jotform with.
4) Select an Action - Create a record,
Select a Salesforce Object:
Customer
5) Map Each and every field on the Object with the fields on the form and "Save Action".
6) Then "Save the Integration and click on Finish.



Roles and Hierarchy
Created roles and defined a hierarchy for streamlined user access and management:
1. Sales Representative: Added a new role just below this level.
2. Steps:
1. Navigated to Setup > Roles.
ii. Clicked on Expand All to view the hierarchy.
iii. Added a new role under the Sales Representative to define reporting relationships.
iv. Assigned the role to users based on their organizational positions





Property Details App

Purpose: A dedicated app for managing property data, enabling seamless data entry, retrieval, and approval processes for sales representatives and managers.

Steps to Access:

Open the App Launcher (grid icon in the top-left corner).

Search for and open the Property Details App.

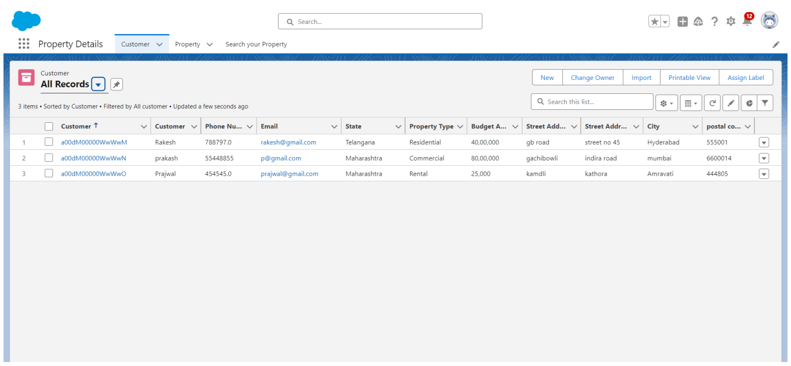
Use predefined Lightning Pages to:

View and edit property details.

Access custom components for data entry (e.g., Property Form).

Review reports and dashboards showing property trends, approvals, and sales.

Assign access to the app to specific roles like Sales Executive or Manager.



Purpose of Creating Profiles

Profiles in Salesforce control what users can see and do in the system. By creating custom profiles for "Customer" and "Manager," we define specific permissions and access tailored to their roles:

Customer Profile: Allows customers to view only their property details without access to other data.

Manager Profile: Grants managers higher access to modify property and customer details, ensuring they can oversee and manage the data effectively.

Steps to Create Profiles

1. Customer Profile

Purpose: To allow users with the "Customer" role to view and access only property details, ensuring restricted access to sensitive data.

Steps to Create:
1. Navigate to Setup in Salesforce.
2. In the Quick Find box, search for and select Profiles.
3. Locate the Salesforce Platform User profile and click Clone.
4. Name the new profile Customer.
5. Custom App Settings:
Uncheck all custom objects except Property Details.
6. Standard Object Permissions:
Remove all permissions (Read, Create, Edit, Delete) for standard objects.
7. Custom Object Permissions:
■Uncheck all permissions except:
Read
View All for the Property object.
8. Save the profile.
2. Manager Profile
Purpose: To enable users with the "Manager" role to modify both property and customer details, ensuring managerial control over key data.
Steps to Create:
1. Navigate to Setup in Salesforce.
2. In the Quick Find box, search for and select Profiles.
3. Locate the Salesforce Platform User profile and click Clone.
4. Name the new profile Manager.
5. Custom App Settings:
■Uncheck all custom objects except Property Details.
6. Standard Object Permissions:
■Remove all permissions (Read, Create, Edit, Delete) for standard objects.
7. Custom Object Permissions:
■Uncheck all permissions except:
Modify All for the Property and Customer objects.
8. Save the profile

Purpose of Users in Salesforce

Users in Salesforce represent individuals who log into the system. Each user is assigned a role, profile, and license to control their data access, permissions, and functionality within the organization.

Steps to Create Users

User 1: Sales Executive

Purpose: Represents a system administrator with access to manage all data and configurations.

1. Go to Setup > Administration > Users > New User.
2. Enter Last Name: Executive, select Role: Sales Executive, and License: Salesforce.
3. Assign Profile: System Administrator and click Save.

User 2: Manager

Purpose: Manages sales operations and oversees data for their team.

1. Go to Setup > Administration > Users > New User.
2. Enter Last Name: Manager, select Role: Sales Manager, and License: Salesforce Platform.
3. Assign Profile: Manager and click Save.

User 3: Customer (Unverified)

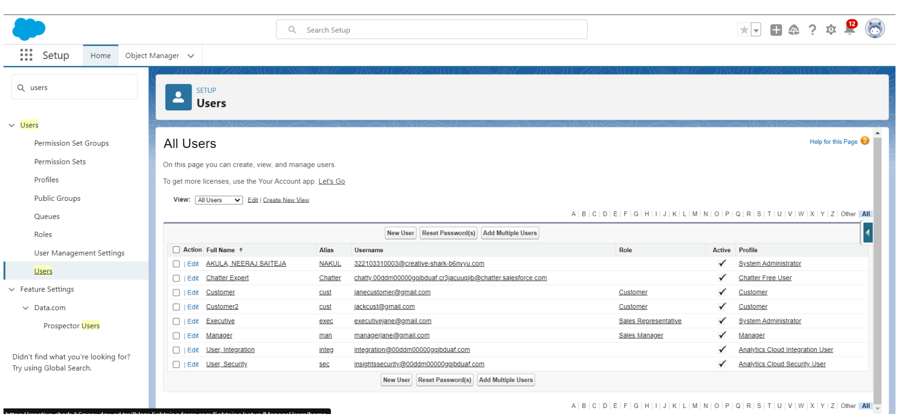
Purpose: Represents a customer with limited access to property-related data.

1. Go to Setup > Administration > Users > New User.
2. Enter Last Name: Customer, select Role: Customer, and License: Salesforce Platform.
3. Assign Profile: Customer, ensure the Verified checkbox is Unchecked, click save.

User 4: Customer2 (Verified)

Purpose: Represents a verified customer with access to view approved property details.

1. Go to Setup > Administration > Users > New User.
2. Enter Last Name: Customer2, select Role: Customer, and License: Salesforce Platform.
3. Assign Profile: Customer, ensure the Verified checkbox is Checked, and click Save.



Property Approval Process

Purpose: The Property Approval process ensures that property records are reviewed and approved based on their verification status. It streamlines decision-making by automating approval routing and updating the verification status of properties.

Steps to Create the Property Approval Process:

1. Create Approval Process:

Navigate to Setup Process Automation Approval Processes.

■Select the Property object and create a new approval process. Name it Property Approval.

2. Set Criteria for Approval:

Criteria 1: Location is not blank.

■Criteria 2: Verified equals false.

3. Click Next.

4. Define Approver and Record Editability:

Under Next Automated Approver Determined By, select Manager.

■For Record Editability, select Administrators or the currently assigned approver can edit records during the approval process.

5. Initial Submitters:

■Add Property Owner and Sales Manager as initial submitters.

■Click Save.

6. Add Approval Step - Executive Approval:

Name the step Executive Approval and set it to include all records.

Select Sales Executive as the approver.

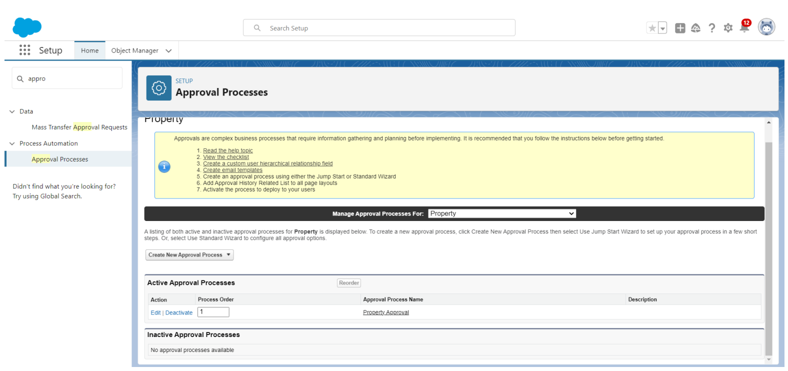
7. Field Updates:

■Add two field updates:

• Verified Property: Update the Verified field to True.

a UnVerified Property: Update the Verified field to False.

8. Activate the process and save



What is a Trigger in Salesforce?

A trigger in Salesforce is a piece of automation that executes specific actions when certain events occur, such as when a record is created, updated, or deleted. Triggers are essential for enforcing business logic, automating workflows, and ensuring data consistency.

In this case, a Record-Triggered Flow acts as a declarative alternative to programmatic triggers, enabling automated submission of records for approval without writing code.

Purpose of the Flow:

This Record-Triggered Flow automatically submits property records for approval as soon as they are created, streamlining the approval process and eliminating the need for manual intervention.

Steps to Create the Record-Triggered Flow:

1. Create a New Record-Triggered Flow:

From Setup, search for Flows and click on New Flow.

■Select Record-Triggered Flow as the flow type.

2. Configure Trigger Details:

■Object: Select Property.

Trigger the flow when: Choose A record is created.

3. Set Entry Conditions:

■Leave the Entry Conditions as None, so the flow triggers for all newly created Property records.

4. Add an Action to Submit for Approval:

Click on the + (Add Element) and select Action.

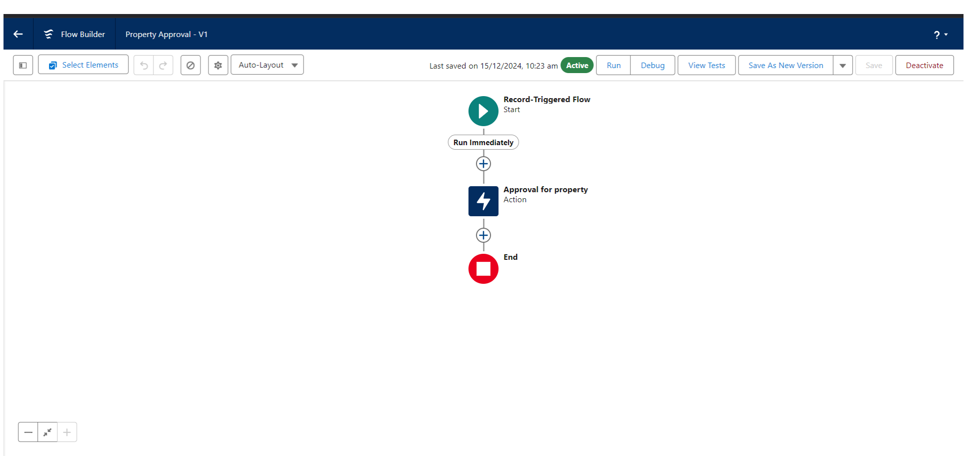
■In the Action Type, search for Submit for Approval.

■Configure the action to automatically submit the record for the appropriate approval process,

■Save the flow.

5. Activate the Flow:

■After configuring the flow, click Save and then Activate to enable it.



What is an App Page in Salesforce?
An App Page in Salesforce is a custom Lightning page designed to display specific information and components tailored to a particular business use case. It can combine standard and custom Lightning components, making it a powerful tool for organizing and presenting data in a user-friendly manner.
Purpose of an App Page:
• To provide a consolidated view of related data, tools, or actions for specific objects or business functions.
• To enhance user productivity by creating a personalized and intuitive interface.
To allow users to interact with records, dashboards, and other resources in a streamlined way.
Steps to Create an App Page:
1. Navigate to the Lightning App Builder:
■From Setup, search for Lightning App Builder and click on it..
■Click on New to create a new Lightning page.
2. Choose the Page Type:
■Select App Page and click Next.
3. Define Page Label:
Enter the label as Search Your Property.
■Click Next.
4. Select Page Layout:
■Choose the layout Header and Left Sidebar.
■Click Done.
5. Customize the Page:
■Add components such as:
• Search Component: To search for property records.
• Record List: To display property records.
D Charts or Dashboards: For visual insights.
■Arrange components in the layout as needed.
6. Save and Activate the Page:
■Click Save.
Click Activate to make the page available.
7. Activate for All Users:
In the Page Activation Settings, select Activate for All Users.
Confirm the activation

What is a Lightning Web Component (LWC)?

LWC is a modern framework for building user interfaces on the Salesforce platform. It uses standard web technologies such as HTML, CSS, and JavaScript, and provides optimized performance. LWCs are used to create reusable components for Salesforce applications.

Steps to create an LWC app:

1) Create an Apex Class and make it aura enabled and name it "PropertHandler_LWC".
2) Create a Lightning Web Component in your VsCode, and (ctrl+shift +P) and click on authorize an org.
3) Enter your login id and password to authorize your org. Then, click (ctrl+shift +P) and Create a lightning Web Component and Name it.

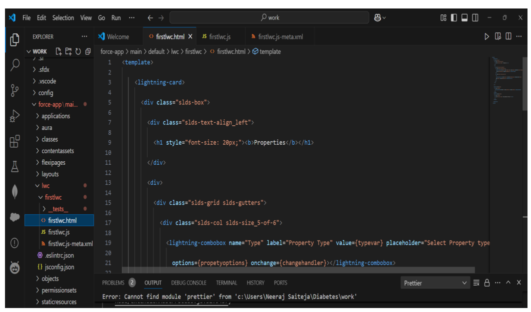
In your Html File Write this code : -

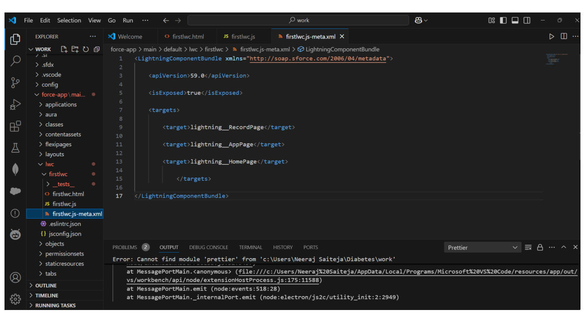
In Your Js File Write this code : -

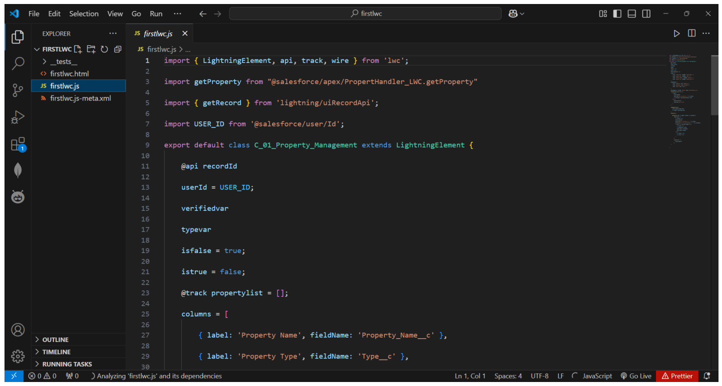
In Your metafile give your targets to deploy the component.

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

code photos :







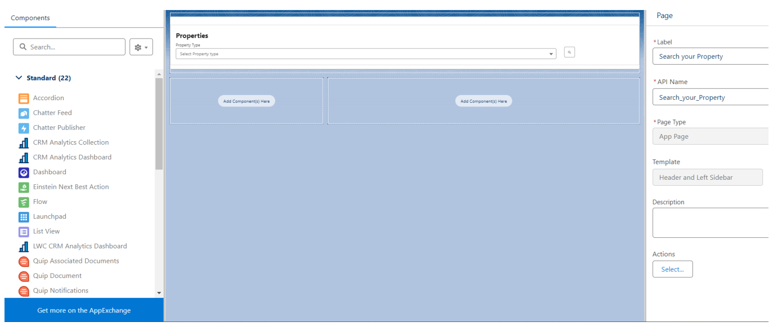
Then drag and drop all the components to app page.

Steps:

1)From Setup >> Go to App Launcher >> Search for Property Details

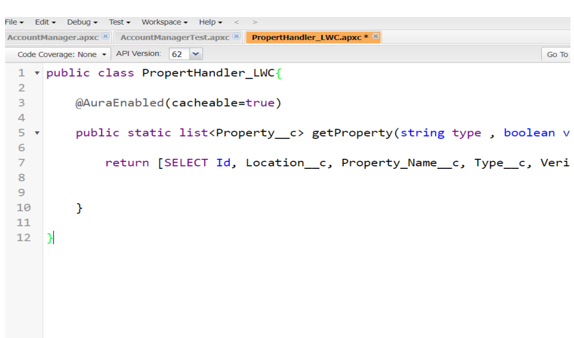
2)On this Page click on gear icon and click on Edit Page

3)Drag the Component to your App Page and Save the Page



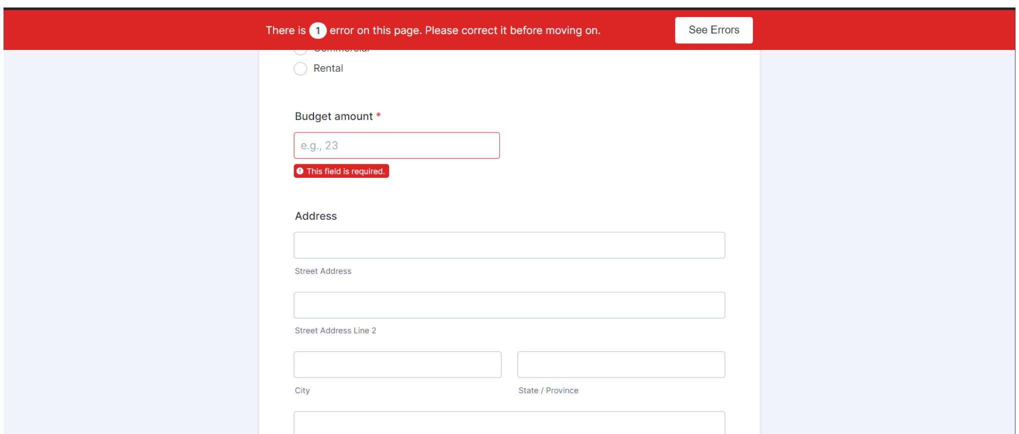
1. From Setup >> Search For Apex Classes >> Click on “Security” behind “PropertyHandler__LWC”.

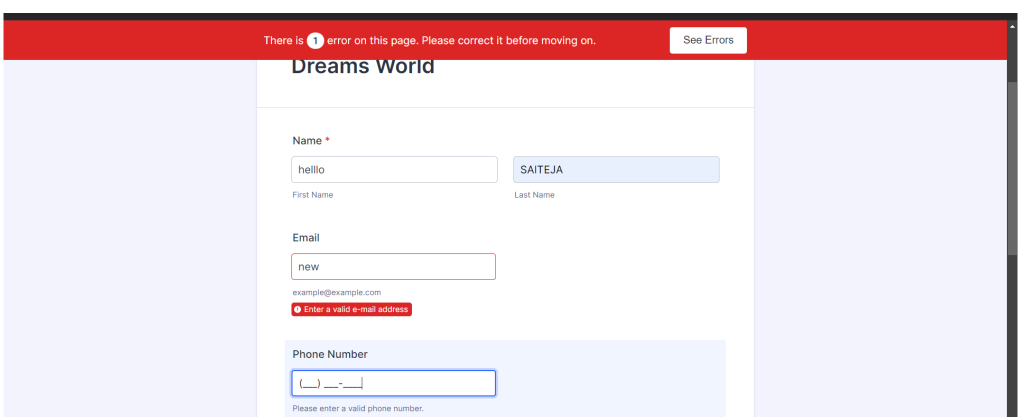
2. From Profiles Add “Manager” and “Customer” and “Save”.



5. Testing and Validation Describe the approach to testing:

Unit Testing:
Apex classes and triggers tested to ensure they handle edge cases and return accurate results.
Achieved >90% code coverage to meet Salesforce standards.
User Interface Testing:
Validated all forms and pages across different browsers and devices.
Ensured consistent user experience and accurate data presentation.
End-to-End Testing:
Simulated real-world scenarios, such as creating customer records, submitting property approvals, and managing property data, to confirm seamless functionality.





6. Key Scenarios Addressed by Salesforce in the Implementation Project

1. Automated Customer Record Creation
Website interactions trigger automated record creation in Salesforce, capturing essential customer details like name, contact information, and property preferences without manual intervention.
2. Customer Categorization and Tailored Experiences
■Salesforce classifies customers as "approved" or "non-approved based on predefined criteria, enabling personalized property recommendations for approved users and broader listings for non-approved users.
3. Streamlined Customer Interaction
■Centralized CRM functionality in Salesforce ensures all customer interactions are tracked and managed efficiently, providing a unified view of customer requirements and history.
4. Dynamic Property Filtering and Recommendations
■By leveraging Lightning Web Components (LWCs) and Apex, Salesforce
offers tailored property options, ensuring customers can easily find listings that match their preferences.
5. Real-Time Data Synchronization
Seamless integration between the website and Salesforce ensures real- time updates, reflecting the latest customer preferences and property availability.
6. Enhanced Customer Engagement
Automated workflows and email notifications keep customers informed about their application status, property recommendations, and upcoming opportunities, fostering better engagernent.
7. Operational Efficiency
■Salesforce optimizes internal operations by automating repetitive tasks, such as data entry and user categorization, reducing the workload for the sales team.
8. Scalability and Growth Enablement
■The scalable architecture supports the addition of new features like predictive analytics, customer feedback tracking, and advanced property recommendation engines to drive business growth.
By addressing these scenarios, Salesforce empowers Dreams World Properties to enhance user experience, streamline operations, and improve overall efficiency in managing customer and property-related requirements.

7. Conclusion Summary of Achievements:

This project successfully implemented a Salesforce-based CRM application to handle client and property-related requirements. The key accomplishments include:

1. Streamlined Operations: Automated workflows for property management, approvals, and notifications, reducing manual efforts and errors.
2. Custom Data Management: Created custom objects and relationships to effectively manage client and property data.
3. Role-Based Access Control: Defined roles, profiles, and hierarchies to ensure secure and efficient data access.
4. Dynamic User Interfaces: Developed Lightning Web Components and app pages to enhance user experience.
5. Automation and Validation: Implemented record-triggered flows, validation rules, and approval processes for seamless operations.
6. Enhanced Decision-Making: Configured reports and dashboards (if applicable) for insights into property trends, customer interactions, and sales performance.

These achievements demonstrate the effectiveness of Salesforce in building scalable, user-friendly, and efficient CRM solutions tailored to business needs.