Salesforce Project: Smart Property Portal – Real Estate Customer Engagement & Lead Conversion

Phase 5: Apex Programming (Developer)

Goal: Add advanced logic for property management, lead conversion, and deal automation.

1. Apex Classes & Services
- Create PropertyService class to handle property availability checks.
- Create LeadConversionService to automate custom conversion logic.

2. Apex Triggers
- Trigger on Property__c:
 • Prevent duplicate properties with same Location + Name.
 • Auto-update Property Status to 'Sold' once related Opportunity is Closed Won.

- Trigger on Lead:
 • Auto-populate Interested Property into Opportunity during Lead Conversion.

3. SOQL & SOSL Usage
- Query available properties: SELECT Id, Name, Status FROM Property__c WHERE Status = 'Available'.
- SOSL for quick search on properties by name, location.

4. Batch, Queueable & Scheduled Apex
- Batch Apex: Update expired property listings every night.
- Queueable Apex: Run async processes like mass updating site visit reminders.
- Scheduled Apex: Daily email summary to managers with list of site visits & hot leads.

5. Future Methods & Callouts
- Use Future methods for integrating with external property valuation APIs.
- Callout example: Fetch live property price data from external API.

6. Exception Handling & Test Classes
- Handle errors gracefully (e.g., invalid property updates).
- Write unit tests for triggers, classes (minimum 75% code coverage).

Outcome of Phase 5: Salesforce is enhanced with custom logic to manage property lifecycle, automate lead conversion, and integrate with external systems when required.

Phase 6: User Interface Development

Goal: Build a user-friendly interface for agents, managers, and customers.

1. Lightning App Builder
- Create 'Smart Property Portal' Lightning App.
- Add key tabs: Properties, Site Visits, Leads, Opportunities, Campaigns.

2. Record Pages & Tabs
- Property Record Page: Show property details, related site visits, and related opportunities.
- Site Visit Record Page: Show linked property & customer.
- Add tabs for Properties, Leads, Campaigns in the app navigation.

3. Utility Bar & Quick Actions
- Add utility bar actions: 'New Property', 'Schedule Site Visit'.
- Quick Actions on Lead: 'Convert to Opportunity with Property'.

4. Lightning Web Components (LWC)
- Property Search Component:
  • Search by price, location, type.
  • Display results in a datatable.

- Site Visit Scheduler:
  • Calendar picker for date.
  • Auto-assigns agent.

- Deal Conversion Wizard:
  • Guided flow for Lead → Opportunity → Deal.

5. Branding & Mobile Experience
- Apply custom branding (logos, colors) for portal.
- Ensure mobile layouts are optimized (Compact Layouts).

Outcome of Phase 6: Agents and managers get an intuitive Salesforce interface, while customers interact with a simple property portal.

Phase 7: Integration & External Access
 Goal: Connect Salesforce with external systems and allow customers to engage via portal.

1. Web-to-Lead & Web-to-Case
- Capture customer inquiries directly from property portal/website forms.
- Leads auto-created in Salesforce.

2. Named Credentials & REST API Integration
- Store secure credentials for external property APIs.
- Example: Fetch real-time property valuations from government or private API.

3. Messaging Integration

- Integrate with WhatsApp or SMS providers for sending property updates.
- Send auto-reminders for site visits.

4. Experience Cloud Portal

- Build 'Smart Property Portal' site for customers.
- Features:
  • Browse property listings.
  • Register & login.
  • Submit inquiries, track status.
  • Schedule site visits.

5. Event-Driven Integrations

- Use Platform Events to notify external systems when property is sold.
- Use Change Data Capture to sync updates with external CRM/ERP.

6. Security & Access

- Setup Guest User profile for portal browsing.
- Use Sharing Sets for community users to access their own records.
- Enforce IP restrictions and login policies for internal users.

Outcome of Phase 7: Customers can interact via portal, leads flow seamlessly into Salesforce, and integrations provide real-time property data and communication.