# A CRM Application to Handle the Clients and their property Related Requirements

## **Project Overview**

The CRM solution for Dreams World Properties utilizes Salesforce to streamline client management and improve property recommendation processes. By connecting Salesforce to the website, the CRM system automatically captures client interactions and preferences, enabling a smooth data flow. Customers are categorized into approved and non-approved groups, allowing Dreams World Properties to deliver customized property listings and tailored recommendations for each client segment. This efficient system enhances user experience while optimizing operations, helping the team engage more effectively with clients and expand their real estate offerings as the business scales.

### **Definitions**

**Customer Relationship Management (CRM):** A strategic approach, supported by technology and processes, that businesses use to oversee and analyze customer interactions and data throughout their lifecycle. The main goals of CRM are to strengthen customer relationships, increase retention, and drive sales growth.

**Salesforce:** A leading CRM platform known for its robust features in sales, customer service, marketing, and data analytics.

# **Objective of the CRM Application**

The CRM Application aims to establish a unified platform that optimizes client relationship management and property-related needs for real estate businesses. The primary objectives include:

- 1. **Client Management:** To maintain a centralized database for client information, including contact details, preferences, and interaction history, enabling timely and personalized client engagement.
- 2. **Property Management:** To streamline the management of property listings with comprehensive descriptions, pricing, availability, and documentation, supporting efficient tracking and updates.
- 3. **Lead Tracking:** To integrate tools for monitoring and managing leads, ensuring potential clients receive proper follow-up and guidance through the sales process.
- 4. **Task Automation**: To streamline routine tasks like scheduling meetings, sending reminders, and producing reports, allowing team members to concentrate on more strategic activities.

- 5. **Reporting and Analytics**: To incorporate analytical tools for creating reports on sales metrics, client engagement, and property trends, supporting data-informed decision-making.
- 6. **User-Friendly Interface**: To ensure the application is easy to navigate and user-friendly, enabling quick adoption and effective use without the need for extensive training.
- 7. **Integration Capabilities**: To allow smooth integration with existing tools and platforms (e.g., email, calendars, and marketing systems) for a unified workflow.

## Salesforce Key Features and Concepts Utilized

Lightning Web Component (LWC): A modern framework for building reusable, interactive web interfaces in Salesforce. Built on native web standards, LWC enables developers to create high-performance, scalable components using advanced web technologies such as custom elements, templates, shadow DOM, modules, and ECMAScript (JavaScript), enhancing the user experience in Salesforce applications.

**Apex:** A robust, object-oriented programming language that allows developers to manage flow control and transactions within the Salesforce platform. Similar to Java, Apex is used to add sophisticated business logic to events such as button clicks, record updates, and Visualforce pages. Its tight integration with Salesforce enables the customization and automation of processes within the Salesforce cloud environment.

**Approval Process:** This is an automated workflow in Salesforce that enables records (e.g., leads, opportunities, contracts, or custom objects) to be submitted for approval according to set criteria. It simplifies workflows by routing records to specified approvers and ensures important decisions are reviewed and authorized by designated personnel. The approval process establishes the steps, actions, and logic that a record must follow to be approved.

**Flows:** Salesforce Flows are versatile automation tools that allow for the automation of complex business processes without the need for code. Part of the Salesforce Flow Builder, they enable users to design processes visually and automate tasks such as updating records, creating records, deleting records, and sending emails, based on user input, data, or specific events.

# **Detailed Steps to Solution Design**

## **Develop a JotForm and Integrate with Salesforce for Automatic Customer Record Creation:**

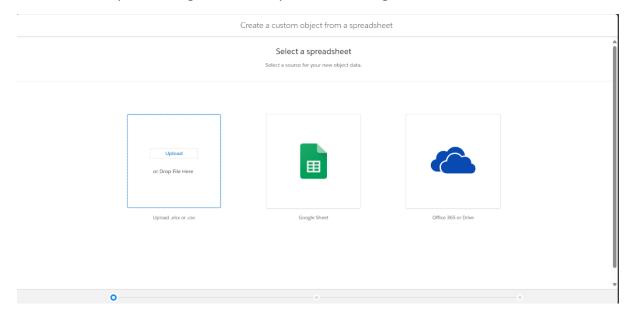
A custom form was created to gather key customer information, including Name, Phone, Email, Address, and Property Type, which directly links to Salesforce. This integration automates new customer record creation, allowing administrators to manage clients more efficiently. By simplifying data entry and accurately capturing customer preferences, the form enables Dreams World Properties to quickly provide personalized property recommendations, enhancing the customer experience and optimizing operational workflows.

Link to the form: https://form.jotform.com/243015395174051

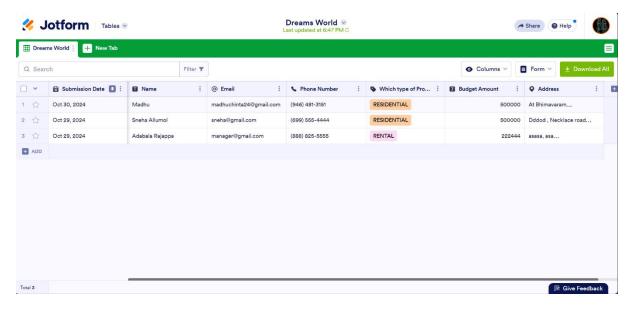
#### Preview of the form:

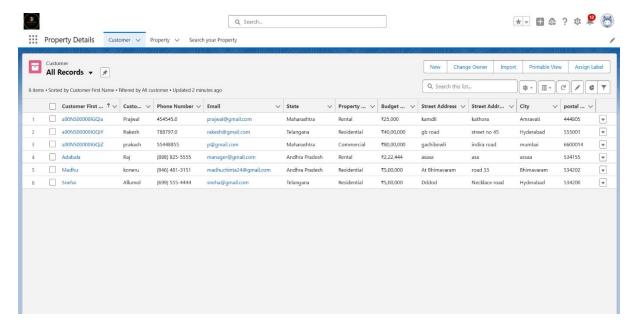


**2.** Importing Customer Records from a Spreadsheet into Salesforce: Using Salesforce's Data Import Wizard, customer records were created directly from a spreadsheet. Fields such as Name, Phone, and Email were mapped to ensure accurate data transfer. This streamlined approach expedited data entry, allowing for the rapid and precise setup of multiple customer records, thereby enhancing the efficiency of client management.



**3. JotForm Integration with Salesforce**: JotForm was integrated with the Salesforce platform to enhance data collection and streamline CRM workflows. This setup enables submissions from JotForm to automatically create or update records in Salesforce by mapping fields like Name, Phone, Email, and Property Type directly to corresponding Salesforce fields. Real-time data synchronization minimizes manual entry, allowing for quicker response times to customer inquiries.

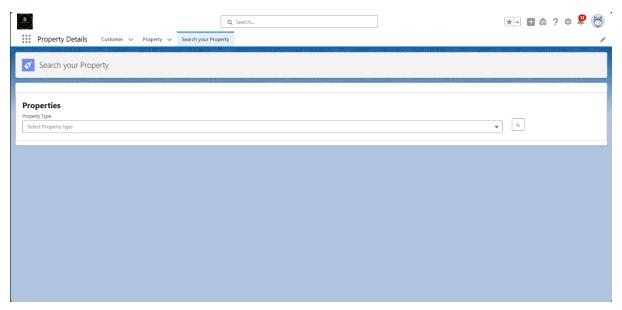




- **4. Develop a Property Details App**: A custom Lightning app, called *Property Details*, was built in Salesforce to streamline access to client and property data. Configured through the App Manager in Salesforce Setup, this Lightning app incorporates both Customer and Property objects, providing team members with an organized, intuitive interface that enhances efficiency in managing customer information and property details on a unified platform.
- **5. Establish User Roles and Profiles**: Necessary user roles, profiles, and permissions were created to ensure secure access and proper authorization across the system.
- **6. Implement an Approval Process for Property Records**: An approval workflow was developed for the Property object to standardize the review of property records. This process allows users to submit property records for approval, enabling designated approvers to review, approve, or reject submissions based on set criteria. Automated notifications inform users of submission statuses, and all actions are logged for full transparency, fostering accountability and efficient property record management.
- 7. Create a Record trigger flow to submit the Approval Process Automatically:



**8. Create a LWC Component:** A custom Lightning Web Component (LWC) was developed to control property visibility based on customer verification status. This component ensures that only verified customers can view verified properties, while restricting non-verified customers to non-verified listings. Deployed on the "Search Your Property" page, the LWC enhances the user experience by dynamically filtering properties based on customer status. This implementation not only strengthens security but also improves user engagement by allowing customers to interact only with properties they are eligible to access.



# **Testing and Validation**

Comprehensive testing and validation were performed to ensure that the Lightning Web Component functions correctly and securely. This process confirmed that access controls are properly enforced, allowing users to interact only with the properties they are eligible to view. The thorough testing phase enhances both security and reliability, significantly contributing to an improved overall user experience.

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#### **Key Scenarios Addressed by Salesforce and Project Scope**

The scope of the CRM Application includes the following key areas:

## 1. Target Users:

- Real estate agents and brokers
- Property managers
- Marketing teams
- o Administrative staff

#### 2. Core Features:

- Client Database: A comprehensive database to store and manage client profiles, interaction histories, and preferences.
- Property Listings: A module for creating, managing, and displaying property listings, including features for images, descriptions, and availability status.
- Lead Management: Tools to capture, track, and nurture leads, complete with automated follow-up reminders and task assignments.
- Communication Tools: Integrated messaging and email functionalities to facilitate communication between agents and clients.
- Reporting Dashboard: A dashboard for visualizing key metrics, such as lead conversion rates, sales performance, and client engagement levels.

#### 3. Integration and Compatibility:

- The application is designed to integrate with third-party tools like email services (e.g., Gmail, Outlook), calendar applications, and marketing platforms (e.g., Mailchimp).
- o It will be compatible with both desktop and mobile devices to accommodate users' varying preferences for accessing the application.

## 4. Data Security and Privacy:

- Implementation of robust security measures to safeguard sensitive client information, including data encryption, secure user authentication, and compliance with data protection regulations (e.g., GDPR).
- Features will allow clients to manage their own data privacy settings and consent for communications.

## 5. Customization and Scalability:

 The application will support customization based on the specific needs of different real estate businesses, including adjustable workflows, fields, and user interfaces. 6. **Support and Training:** Provision of user support, including tutorials, documentation, and customer service, to assist users in navigating the application and resolving issues. Training programs to ensure users are well-equipped to utilize all features of the CRM effectively.

#### **Other Tools**

Visual Studio Code (VS Code) is a free, open-source code editor developed by Microsoft, designed for developers and programmers. It supports a wide variety of programming languages, including JavaScript, Python, C++, and many others. One of the key features of VS Code is its rich ecosystem of extensions, which allows users to customize their development environment. These extensions can add new languages, debuggers, themes, and other tools, enhancing productivity and supporting a tailored workflow. The editor is built on a lightweight framework, ensuring it runs smoothly even on less powerful hardware. VS Code also boasts built-in features such as IntelliSense, which provides intelligent code completion based on variable types and function definitions, as well as real-time collaboration through Live Share. Its integrated terminal allows developers to run shell commands directly from the editor, streamlining the development process. Moreover, VS Code is equipped with powerful debugging tools that enable developers to set breakpoints, inspect variables, and navigate through code seamlessly. Its Git integration facilitates version control, allowing users to manage repositories directly within the editor. Overall, Visual Studio Code stands out as a versatile and efficient coding tool, offering a balance between functionality and performance, making it a popular choice among developers of all levels.

#### Conclusion

Salesforce integration with custom Lightning components and approval workflows has significantly enhanced the operational efficiency of Dreams World Properties. By implementing features like automated record creation, verification-based access controls, and an intuitive search interface, the platform improves customer engagement and streamlines property management. Rigorous testing and validation ensure secure and reliable performance, delivering a seamless experience for users. These enhancements prepare Dreams World Properties for sustainable growth in the competitive real estate market while prioritizing customer satisfaction and data integrity.