



Project Title – A CRM Application to Manage the Services Offered by an Institution.

1. Project Overview

The CRM Application for Managing Services** is designed to streamline and optimize how [Institution Name] manages client interactions, service delivery, and follow-up processes. By implementing a centralized CRM system, the project aims to improve operational efficiency, enhance customer satisfaction, and ensure data accuracy across all service touchpoints. Through automation, real-time analytics, and personalized communication, the application will enable the institution to deliver timely, tailored services while gaining valuable insights into client needs and performance metrics. This solution aligns with long-term goals of improving service quality, increasing efficiency, and fostering stronger relationships with clients, ultimately supporting the institution's growth and long-term success.

2. Objectives

Business Goals:

- **1. Improve Client Engagement:** Enhance communication and interaction with clients by providing a centralized platform for tracking client requests, services, and feedback, aiming to increase customer satisfaction scores by 20% within the first year.
- **2. Increase Operational Efficiency:** Streamline internal processes by automating key workflows such as service scheduling, follow-ups, and reporting, resulting in a 30% reduction in response time for client inquiries.
- **3. Boost Data-Driven Decision Making:** Implement real-time analytics and reporting capabilities to provide actionable insights into service performance, client trends, and operational bottlenecks, with the goal of increasing data utilization by 50% across departments.
- **4. Improve Client Retention:** Use the CRM to manage and track service delivery more effectively, with the aim of increasing client retention rates by 15% over the next 12 months.

Specific Outcomes:

- **1. Centralized CRM Platform:** Development and deployment of a user-friendly CRM system that integrates client data, service history, communication logs, and performance metrics.
- **2. Automation of Key Processes:** Automated workflows for client onboarding, service requests, follow-ups, and feedback collection to reduce manual effort and improve turnaround times.
- **3.** Comprehensive Analytics Dashboard: A real-time reporting system that tracks key performance indicators (KPIs) such as service response time, client satisfaction, and service delivery efficiency.
- **4. Training and Adoption:** Successful training and adoption of the CRM system by all relevant staff, with at least 90% adoption rate within the first six months.







3. Sales force Key Features and Concepts Utilized

1. Salesforce Service Cloud:

The core platform for managing customer service interactions. It allows the institution to track and resolve service requests, manage customer cases, and provide a seamless experience across multiple channels (email, phone, web). This feature will ensure that all service-related data is centralized and easily accessible to customer service teams.

2. Custom Objects and Fields:

Salesforce's flexibility allows for the creation of custom objects tailored to the institution's unique services. These custom objects will track service offerings, client interactions, and performance metrics. Custom fields will capture specific data points related to services, such as service types, client preferences, and satisfaction ratings.

3. Process Builder and Automation:

To streamline workflows, Process Builder will be used to automate common tasks like service request routing, follow-ups, case escalations, and email notifications. This will reduce manual effort, enhance response times, and ensure consistent service delivery across the organization.

4. Salesforce Reports and Dashboards:

Reports and dashboards will be used to analyze and visualize key metrics such as client engagement, service performance, and overall operational efficiency. Real-time data insights will empower decision-makers to take proactive actions, improve service delivery, and enhance customer satisfaction.

5. Salesforce Knowledge Base:

To provide quick and efficient customer support, the **Salesforce Knowledge Base** will be integrated. This feature will house FAQs, troubleshooting guides, and other service-related resources, allowing clients and customer service representatives to resolve issues faster and with greater accuracy.

6. Omni-Channel Support:

Using Omni-Channel, Salesforce will allow seamless communication with clients across multiple channels, including phone, email, chat, and social media. This ensures that clients can engage with the institution through their preferred communication methods, enhancing the overall customer experience.

7. Salesforce Mobile App:

The Salesforce Mobile App will provide service agents and field staff with access to critical client and service data on the go. This will enable teams to manage service requests, track case progress, and respond to clients promptly, regardless of their location.







8. Einstein AI for Predictive Insights:

Salesforce Einstein AI will be utilized to provide predictive insights into service trends, client behaviors, and potential areas for service improvement. This feature will help anticipate client needs, improve resource allocation, and identify opportunities for proactive service enhancements.

9. Integration with External Systems:

Salesforce Connect and APIs will be used to integrate the CRM with external systems such as billing platforms, third-party service tools, or marketing automation systems, providing a unified view of the customer journey and ensuring consistent service delivery.

4. Detailed Steps to Solution Design

1. Data Model Design

The data model will be the foundation of the CRM application, ensuring that all necessary information related to clients, services, and service interactions is properly structured and easily accessible.

Key Data Entities:

• Client Object:

- Fields: Client Name, Contact Information, Account Type, Service History, Feedback Score, Preferred Service Method.
- Relationships: One-to-many relationship with Services (each client can request multiple services).

• Service Object:

- Fields: Service Type, Service Description, Service Status, Assigned Team, Service Date, Service Priority.
- Relationships: Many-to-one relationship with Clients (each service is tied to a specific client), one-to-many relationship with Cases (each service can generate multiple cases for follow-up).

• Case Object:

- Fields: Case Type (Request, Issue, Feedback), Case Status, Date Opened, Resolution Date, Assigned Agent, Client Communication.
- Relationships: Many-to-one with both Clients and Services, one-to-many with Comments (internal notes or client interactions).

• User Object:

- Fields: User Name, Role, Team, Availability, Service History, Client Interaction Metrics
- Relationships: One-to-many with Cases (users are assigned multiple cases).

Relationships Overview:

• Client \rightarrow Services \rightarrow Cases \rightarrow Feedback

This hierarchy allows the institution to track every client's request, the services they received, the cases created for each service, and the feedback collected from clients.

Data Model Diagram:

(Screenshot: Diagram showing the relationships between Client, Service, Case, and Feedback objects)

2. User Interface (UI) Design

The user interface will be designed to be intuitive and user-friendly, providing seamless access to essential service management tasks while ensuring a positive user experience.







Key UI Components:

- Dashboard:
 - Widgets for Key Metrics: Display KPIs like open cases, average response time, client satisfaction, and service delivery stats.
 - **Quick Links**: Access to key actions such as creating a new service request, viewing recent cases, or generating reports.

Screenshot: Mock-up of a Salesforce Dashboard displaying widgets and action links.

- Client Profile Page:
 - **Client Overview**: Basic client information such as name, contact details, account type, and preferred service methods.
 - **Service History**: A list of past services rendered, including status, completion dates, and feedback scores.
 - Case Management: Section showing open and closed cases for the client, with status updates and priority flags.

Screenshot: Mock-up of a detailed Client Profile page with tabs for Overview, Service History, and Case Management.

- Service Request Form:
 - **Fields for Service Details**: Type, Description, Priority, Requested Date, and Assigned Team.
 - **Client Selection**: Drop-down menu to link the service request to an existing client or create a new one.

Screenshot: Mock-up of the Service Request form within Salesforce, showcasing fields for service details.

- Case Management Page:
 - Case Overview: Displays case type, status, assigned agent, and resolution timelines.
 - **Comment Section**: Allows agents to add notes and client communications for tracking purposes.
 - **Escalation/Resolution Options**: Buttons for escalating or resolving the case, with automated status updates and notifications.

Screenshot: Case Management page showing case status, comments, and action buttons.

3. Business Logic & Automation

Business logic and automation will streamline workflows, reduce manual work, and ensure consistent service delivery. Below are key processes to be automated:

Process 1: Service Request Creation

- **Trigger:** When a service request is submitted via the portal or customer service.
- Logic:
 - Automatically assign the service request to the appropriate team based on the service type (e.g., tech support, general inquiry).
 - Send an automated email to the client confirming the service request and estimated resolution time.

Automation Tool: Process Builder or **Flow Builder** to handle routing and notifications.

Process 2: Case Escalation

- **Trigger:** When a case is open for more than 48 hours without resolution.
- Logic:
 - Automatically escalate the case to a senior agent and notify the client about the delay.
 - If not resolved within 72 hours, create a task for a manager to review.

Automation Tool: Workflow Rules for automatic case escalation and email notifications.







Process 3: Service Completion Notification

- Trigger: When a service has been completed and marked as "Resolved."
- Logic:
 - Send a notification email to the client, requesting feedback on their service experience.
 - Update client satisfaction scores based on feedback and log this in the client profile.

Automation Tool: Flow Builder to handle post-service actions and client feedback prompts.

4. Reporting & Analytics

To ensure that the institution can track the effectiveness of service management, real-time reports and dashboards will be implemented.

Key Reports:

- **Service Performance Report**: Tracks service request volume, response time, resolution time, and client satisfaction scores.
- Case Resolution Report: Displays average time to resolve cases, percentage of escalations, and case closure rates.
- Client Retention Metrics: Measures client repeat business, retention rates, and satisfaction trends

Dashboard:

- A real-time dashboard with visual graphs for key service metrics, including:
 - Number of open vs. closed service requests.
 - Average resolution time.
 - Client feedback trends.

Screenshot: Mock-up of a report showing the service performance metrics and visualizations of open cases, client satisfaction, etc.

5. Testing & Validation

Once the design is completed, comprehensive testing will be carried out to ensure that all processes work as expected:

- Unit Testing: Test each individual process (e.g., service request creation, case escalation).
- **Integration Testing**: Ensure that the CRM integrates seamlessly with other institution systems (e.g., email service, third-party databases).
- User Acceptance Testing (UAT): Verify that the user interface meets the needs of different teams (agents, managers, clients).

6. Deployment & User Training

- **Deployment**: The solution will be deployed in phases, starting with a pilot group of users and expanding across the institution once feedback is gathered.
- **Training**: Staff will receive training on how to use the new CRM features effectively, with specific sessions for customer service agents, managers, and administrators.





5. Testing and Validation

1. Unit Testing (Apex Classes, Triggers)

Unit testing ensures that the underlying logic, such as Apex classes and triggers, functions as expected. In Salesforce, unit tests are essential for ensuring the integrity of business logic, especially for custom development, before deploying the solution to production.

Approach:

• Test Coverage Requirement:

• Salesforce requires that at least 75% of Apex code is covered by tests before deploying to a production environment. However, it is best practice to aim for 100% test coverage to ensure robust functionality and code quality.

• Apex Classes:

- **Test Setup**: Create mock records for the objects being manipulated (e.g., Client, Service, Case).
- **Test Cases**: For each Apex class, we'll write specific test cases that validate the logic. For example:
 - Test if the service is correctly assigned to the appropriate team based on the service type.
 - Test if a client's feedback is being correctly recorded and associated with the service.
- **Assertions**: After executing the class, use assertions to check that the data changes are correct (e.g., verifying that a service request's status updates after a specific trigger is fired).

Example Test Case for Apex Class:

- Test the logic for automatically assigning a service request to the appropriate support team based on the service type (e.g., technical support or customer service).
 - Create a Service record with a predefined service type (e.g., "Technical Support").
 - Execute the class and verify if the system assigns the correct support team to the Service record.

Apex Triggers:

• **Trigger Testing**: For triggers, such as those that run when a Service or Case is







created or updated, test to ensure the trigger fires at the correct time and performs the intended action (e.g., updating related records, sending notifications).

- Test Scenarios:
 - A trigger to auto-create a case when a service request is logged.
 - A trigger to send an email notification when a case is closed or escalated.

Example Test Case for Trigger:

- When a new Service record is created, the trigger should automatically create a related Case object and assign it to the appropriate agent.
 - Create a test service record.
 - Assert that a Case record is created with the correct service details and assigned to the correct agent.
- **Mock Data**: Use @isTest annotation in test methods to generate mock data that simulates real-world scenarios. This allows testing the logic without affecting real data.

```
@isTest
private class ServiceRequestTest {
    @isTest static void testServiceAssignment() {
        // Create mock data for Client and Service
        Account client = new Account(Name='Test Client');
        insert client;

        Service__c serviceRequest = new Service__c(Client__c=client.Id,
        Service_Type__c='Technical Support');
        insert serviceRequest;

        // Execute the logic (trigger or class method)
        Test.startTest();
        serviceRequest = [SELECT Id, Assigned_Team__c FROM Service__c WHERE Id = :serviceRequest.Id];
        Test.stopTest();
```





```
// Assert that the service is assigned to the correct team
System.assertEquals('Technical Support Team', serviceRequest.Assigned_Team__c);
}
```

Best Practices for Unit Testing:

- Mock Data: Always create test records (mock data) instead of relying on existing data.
- **Bulk Testing**: Ensure that tests cover bulk scenarios, especially for triggers (e.g., handling 200 records in one operation).
- **Governor Limits**: Salesforce has strict governor limits (e.g., the number of records you can insert or update in a single transaction). Make sure your tests account for this by running bulk tests.
- Edge Cases: Test for edge cases, such as missing data, null values, or invalid input.

2. User Interface (UI) Testing

• UI testing ensures that the front-end components, such as forms, dashboards, and client profiles, work seamlessly and provide a positive user experience. Since Salesforce applications are typically accessed through a web browser, UI testing will ensure that the application is responsive, user-friendly, and free of visual or functional errors.

Approach:

- **Manual Testing**: Manual testing will be used to verify that the application meets user expectations and business requirements. Key areas of focus will include:
- **User Navigation**: Ensure that users can easily navigate through different sections of the CRM, such as the Client Profile, Service Request, and Case Management pages.
- **Forms and Input Validation**: Verify that forms for submitting service requests or creating cases are intuitive and that proper validation occurs when users enter data (e.g., required fields, correct field formats).
- **User Permissions**: Test different user profiles (e.g., agents, managers) to ensure that permissions and visibility are correctly configured.
- **Responsiveness**: Verify that the UI is responsive and functions correctly on different devices, including desktops, tablets, and mobile devices.
- Automated UI Testing: If the project scope allows for automation, tools like Selenium or Provar (a Salesforce-specific testing tool) can be used to automate UI testing in Salesforce. Automated tests will focus on:
- **Login Process**: Ensuring that users can log in with valid credentials and are redirected to the correct page.





- **Field Interaction**: Testing the behavior of fields (e.g., dropdowns, text boxes) and ensuring that data is correctly displayed and updated.
- **UI Consistency**: Verifying that elements like buttons, labels, and navigation menus are correctly placed and functional.

Test Scenarios for UI Testing:

- Client Profile Page: Verify that clicking on a client name opens the correct client profile page, displaying accurate information such as service history, case status, and client feedback.
- **Service Request Form**: Ensure that all fields are displayed correctly, required fields are marked, and that the form submits without errors.
- **Dashboard Widgets**: Ensure that dashboard widgets correctly display key metrics (e.g., open service requests, case resolution time) and update in real-time.
- Case Management Page: Verify that users can view, update, and resolve cases. Ensure the case status changes based on user actions (e.g., from "Open" to "Resolved").
- Cross-Browser Testing: Since Salesforce can be accessed through different browsers, cross-browser testing should be conducted to ensure compatibility (e.g., Chrome, Firefox, Safari, Edge). Verify that the UI looks consistent and functions correctly across these browsers.

Example of Manual Test Case for UI:

Test Case Name: Verify Service Request Form Submission

Pre-condition: User is logged in and on the "Create Service Request" page.

Steps:

- Enter a valid client name.
- Select a service type from the dropdown list.
- Fill in the required service description.
- Submit the form.

Expected Outcome:

- The form submits successfully, and the user is redirected to the service details page.
- A confirmation message is displayed, and the service request appears in the system.
- **Pass/Fail Criteria**: Pass if the form is submitted correctly and the service appears in the CRM. Fail if there are any errors or if the form submission does not work as expected.

3. Final Validation:







- **Integration Testing**: Ensure that the CRM ntegrates properly with other systems, such as email notifications, reporting tools, or third-party APIs.
- User Acceptance Testing (UAT): Conduct UAT with actual users (customer service agents, managers) to ensure the application meets business requirements and user expectations.
- **Regression Testing**: After any updates or bug fixes, conduct regression testing to ensure that new changes do not break existing functionality.

6. Key Scenarios Addressed by Salesforce in the Implementation Project

1. Client Onboarding and Profile Management

Scenario:

When a new client is onboarded, the institution needs a centralized system to capture and manage key client details, including contact information, service preferences, and historical interactions. Salesforce provides the ability to easily create and manage **Client Profiles**.

Salesforce Features:

- Account and Contact Objects: Salesforce allows for the creation of detailed client records, linking them to individual contacts, accounts, and opportunities.
- **Custom Fields**: Custom fields for tracking specific client preferences, service history, and feedback can be added to the **Account** and **Contact** objects to ensure all relevant data is captured.
- Client Segmentation: Using custom tags or categories, clients can be segmented based on service types, account type, or any other classification.

Outcome

A single view of each client, with easy access to all service interactions, enabling personalized communication and efficient onboarding processes.

2. Service Request Creation and Management

Scenario:

When a client submits a service request, it is critical to assign it to the appropriate team or department, track its progress, and keep the client updated. This process should be automated to minimize delays and human error.

Salesforce Features:

- **Service Cloud**: Salesforce's **Service Cloud** is designed to manage customer service interactions. The platform allows teams to track, manage, and resolve service requests in real-time.
- **Service Request Object**: Custom objects can be used to capture details about each service request, including client name, service type, priority, status, and assigned team.
- Automation with Process Builder: Process Builder can be used to automatically route service requests to the appropriate department based on predefined criteria (e.g., service type or priority).







• Omni-Channel Support: Clients can submit service requests through multiple channels (email, web, phone), and Salesforce can route these requests to agents via Omni-Channel based on agent availability and skill sets.

Outcome:

The service request process becomes streamlined and automated, reducing manual work, improving response time, and ensuring that requests are handled by the right team or department.

3. Case Management and Issue Resolution

Scenario:

After a service request is submitted, a case may be created to address specific issues. Tracking and resolving cases in a timely manner is critical for customer satisfaction.

Salesforce Features:

- Case Management: Salesforce provides the Case object to manage customer issues, track case status, assign agents, and monitor resolution progress.
- Automation: Apex Triggers or Flow Builder can be used to automate the creation of cases from service requests, send notifications to clients about case status updates, and escalate cases when they are not resolved within a specific timeframe.
- **Escalation Rules**: Define escalation rules to automatically escalate high-priority cases to senior agents or managers if they are not resolved within a set period.

Outcome:

Customer issues are tracked effectively, ensuring quick resolution and follow-up. Automation helps ensure that cases are routed and escalated based on priority, and clients are kept informed throughout the process.

4. Service Delivery and Status Tracking

Scenario:

Once a service is being delivered, it is important to track its progress and status in real-time. This includes ensuring that deadlines are met, resources are allocated properly, and clients are updated with status reports.

Salesforce Features:

- **Service Delivery Tracking**: Salesforce can be customized to create service milestones, statuses, and completion dates within the service records.
- Task and Milestone Management: Use Tasks and Milestones to break down complex service delivery into smaller, trackable actions, ensuring that each part of the service is completed on time.
- Chatter Collaboration: Chatter can be used for internal collaboration between teams. Service
 agents can leave notes, share updates, and tag other departments to keep everyone informed on the
 progress.

Outcome:

Real-time tracking of service delivery ensures transparency and accountability, helping to meet deadlines and client expectations while improving internal coordination.

5. Client Feedback and Satisfaction Measurement







Scenario:

After the service is completed, gathering client feedback and measuring satisfaction is essential for continuous improvement and client retention.

Salesforce Features:

- **Survey Integration**: Salesforce integrates with survey tools (like **Salesforce Surveys** or third-party platforms like **SurveyMonkey**) to send out post-service feedback surveys.
- **Feedback Capture**: Client feedback can be captured directly in Salesforce and linked to the relevant service or case record.
- **Reports and Dashboards**: Use **Reports** and **Dashboards** to analyze feedback trends, track client satisfaction scores, and identify areas of improvement. For example, tracking which services or agents consistently receive high marks for satisfaction.

Outcome:

By automating the feedback process, the institution can easily monitor client satisfaction and use this data to improve service offerings, team performance, and overall client experience.

6. Client Retention and Loyalty Tracking

Scenario:

The institution wants to track client retention, identify at-risk clients, and offer loyalty programs or targeted services to improve long-term relationships.

Salesforce Features:

- Client 360 View: Salesforce provides a unified 360-degree view of the client, capturing their service history, interactions, feedback, and satisfaction scores, allowing teams to identify trends and potential issues.
- **Reports and Analytics**: Salesforce's reporting tools can identify clients who have not engaged recently, those with high service issues, or those with low satisfaction scores, helping prioritize retention efforts.
- Campaigns and Engagement: Use Salesforce Marketing Cloud or Pardot to create targeted campaigns for at-risk clients, sending personalized offers or loyalty program invitations based on their history.

Outcome:

Improved client retention through data-driven insights and personalized engagement, helping to strengthen relationships and increase lifetime value.

7. Real-Time Performance Tracking and Reporting

Scenario:

Managers need real-time visibility into service performance, including team performance, response times, case resolution times, and client satisfaction metrics.

Salesforce Features:

• Dashboards and Reports: Salesforce provides highly customizable dashboards that display real-







time data, key performance indicators (KPIs), and metrics related to service requests, case resolution, and team performance.

- Einstein Analytics: With Einstein Analytics, managers can gain advanced insights into trends, forecasting, and predictive analytics, helping to proactively manage service operations and make data-driven decisions.
- **Custom Reports**: Custom reports can be created for different roles, including agents, team leads, and management, allowing them to track individual and team-level performance.

Outcome:

Managers and executives have real-time visibility into performance metrics, allowing for informed decision-making, resource allocation, and continuous improvement efforts.

8. Integration with Third-Party Systems

Scenario:

The institution may need to integrate Salesforce with other systems, such as billing software, email marketing platforms, or legacy databases, to create a seamless end-to-end workflow.

Salesforce Features:

- Salesforce Connect: Enables integration with external databases and systems using Salesforce Connect to pull data into Salesforce without having to replicate it.
- **REST/SOAP APIs**: For more complex integrations, Salesforce provides **REST** and **SOAP** APIs to integrate with third-party systems, such as accounting software or customer portals.
- **Middleware**: Use middleware like **MuleSoft** (owned by Salesforce) to facilitate seamless integration with multiple systems, ensuring that data flows smoothly between Salesforce and external applications.

Outcome:

Salesforce's integration capabilities ensure that all systems work together, eliminating data silos and providing a comprehensive view of client and service data.

9. User and Role-Based Permissions

Scenario:

The institution needs to ensure that different users (e.g., agents, managers, administrators) have the correct access and permissions based on their role within the organization.

Salesforce Features:

- Profiles and Permission Sets: Salesforce allows administrators to define Profiles and Permission Sets to control access to records, fields, and actions based on user roles.
- **Role Hierarchy**: The **Role Hierarchy** ensures that managers have access to the data of users beneath them, while still maintaining security and privacy.

Outcome:

Role-based access ensures that users have the right level of access to perform their tasks while maintaining data security and compliance.







7. Conclusion

Summary of Achievements:

This CRM application project, implemented on Salesforce, successfully addresses the key needs of the institution by providing a comprehensive solution for managing services and client relationships. The following achievements were made throughout the project:

Centralized Client Management:

A unified platform was created for managing client profiles, service requests, and case histories. By integrating client data, service histories, and feedback into Salesforce, we've provided the institution with a 360-degree view of each client, improving personalization and the overall customer experience.

Streamlined Service Request and Case Management:

The system automates service request creation and case assignment, ensuring that requests are routed to the appropriate team based on predefined criteria. Automation workflows reduce manual tasks, improving operational efficiency and response times. Cases are tracked from creation to resolution, with built-in escalation rules to ensure high-priority issues are addressed promptly.

Improved Service Delivery Tracking:

By implementing task management, milestones, and status tracking, the solution ensures that services are delivered on time and in accordance with client expectations. Service progress can be easily tracked, and clients are kept informed throughout the process, increasing transparency and satisfaction.

Feedback and Client Satisfaction Management:

Post-service surveys and feedback collection are integrated into the system, allowing the institution to track client satisfaction and identify areas for improvement. This feedback is captured directly in Salesforce and can be analyzed in real-time through dashboards and reports.

Increased Client Retention and Loyalty:

Salesforce's reporting and analytics tools enable the institution to track at-risk clients and target them with retention initiatives. The CRM system helps identify patterns in client behavior, enabling personalized engagement strategies that boost retention and loyalty.

Real-Time Performance Monitoring:

The deployment of real-time dashboards and customizable reports ensures that managers have full visibility into key metrics, such as response times, service request volumes, case resolution times, and client satisfaction. These insights allow for data-driven decision-making and continuous improvement in service operations.

Seamless Integration with External Systems:

The system was successfully integrated with external tools and third-party systems, including email platforms and billing software, ensuring a smooth flow of data across systems and eliminating silos. This integration helps streamline operations and ensures that all relevant data is accessible in one place.