A CRM Application To Manage The Services Offered By Institution

By

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Project Title: A CRM Application to Manage the Services offered by an Institution

1.Project Overview

This project involves the design and implementation of ServiceConnect, a robust Customer Relationship Management (CRM) solution built on the Salesforce platform. It aims to address key challenges encountered by EduConsultPro Institute in managing its service lifecycle—from handling initial inquiries to service enrollment, ongoing support, and post-service engagement. The objective is to establish a centralized, efficient, and scalable system that enhances operational workflows, facilitates effective communication, and delivers actionable insights. By achieving these goals, the solution will improve both customer and staff experiences, drive service excellence, and support EduConsultPro Institute's long-term growth.

2.Objectives

Business Goals:

- **Enhance Student Onboarding**: Streamline the application process for a smooth experience.

- **Optimize Appointment Scheduling**: Implement a user-friendly system to minimize scheduling conflicts.

- **Improve Communication & Collaboration**: Enable seamless information sharing between stakeholders.

- **Boost Operational Efficiency**: Automate tasks, reduce manual entry, and minimize errors.

- **Data-Driven Decision Making**: Gather data on trends and performance for informed decisions.

- **Increase Student Enrollment and Retention**: Create a positive student experience to foster engagement.

- **Scalability and Future Growth**: Provide an adaptable solution for evolving institutional needs.

Specific Outcomes

- **Functional Salesforce CRM Application**: A fully functional CRM system named "EduConsultPro."

- **Custom Objects**: Defined custom objects such as Course, Consultant, Student, Appointment, Registration, etc., with their respective fields.

- **Multi-Stage Screen Flows**: Streamlined processes for student application, appointment scheduling, and case management.

- **Apex Triggers**: Automated workflows for welcome case creation, appointment confirmations, and data validation.

- **User-Friendly Interface**: Lightning App interface with custom dashboards for intuitive navigation.

- **Appointment Approval Process**: Simplified and intuitive process with notification mechanisms.

- **Comprehensive Testing**: Includes unit testing, user acceptance testing, and successful deployment.

- **Ongoing Maintenance and Support**: Provision for regular updates and issue resolution.

- **Detailed Documentation**: Covers data models, UI design, logic implementation, testing strategies, and user training.

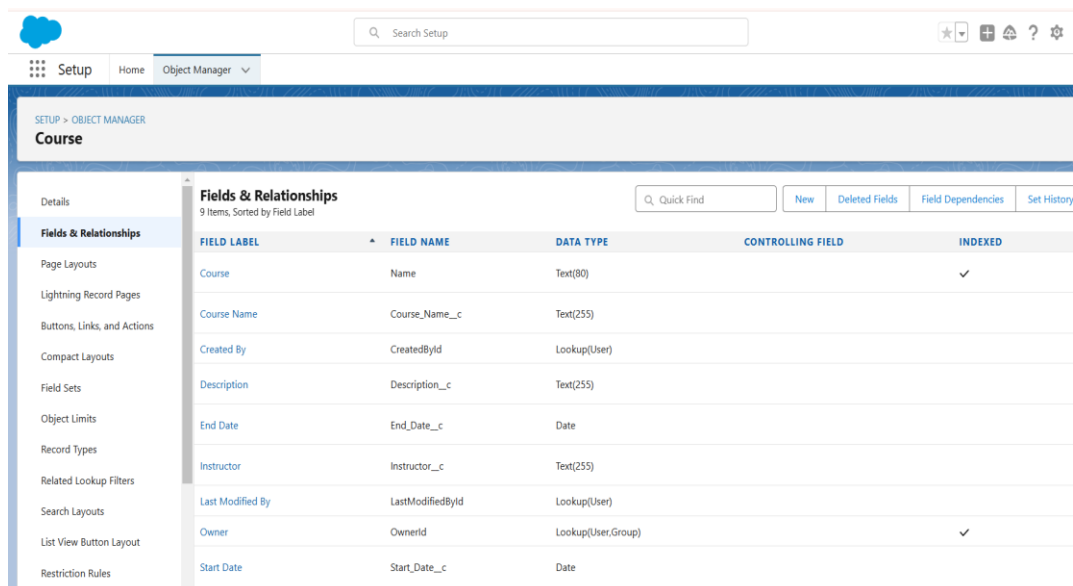**3.Salesforce Key Features and Concepts Utilized**

- **Custom Objects & Fields**: Representing the institution's data model.

- **Relationships (Lookup & Master-Detail)**: Linking related data between objects.

- **Lightning App Builder**: Creating a tailored and intuitive user interface.

- **Screen Flows**: Automating complex processes with user input screens and conditional logic.

- **Apex Triggers & Classes**: Enforcing business logic, data validation, and bulkification.

- **Approval Processes**: Managing authorization workflows with notifications.

- **Standard Objects (e.g., Case)**: Handling student inquiries and support.

- **Email Templates & Alerts**: Standardized communication for various events.

4.Detailed Steps to Solution Design

Create Objects From Spreadsheet

- **Create Course Object**: A custom object named "Course" was created using the data provided in the 'Course' spreadsheet. This involved mapping the spreadsheet columns to the Salesforce fields in the Course object.

- **Create Remaining Objects**: Similar to the Course object, custom objects were created for Consultant, Student, Appointment, and Registration using the provided spreadsheets. Field mapping ensured data integrity during the import process.

Create Relationship Among the Objects

- **Lookup Relationships**:

  - **Appointment to Student**: A Student lookup field was added to the Appointment object to connect student records.

  - **Appointment to Consultant**: A Consultant lookup field was added to the Appointment object to link consultant records.

- o **Registration Object**: A custom object "Registration" was created to store student and course details. Lookup relationships were added:

  - ▪ Registration to Student

  - ▪ Registration to Course

- o **Student to Case**: A lookup relationship was established between the Student and Case objects to enable connection of support cases with student records.
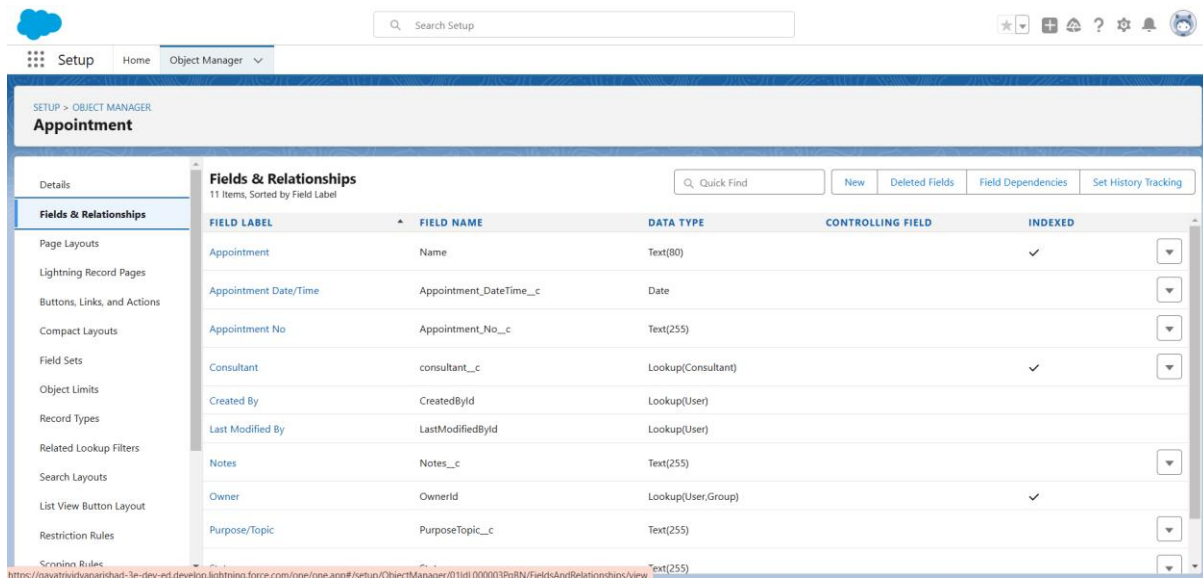
Configure the Case Object

- **Custom Picklist Values**:

  - o **Type Field**: Added 'Immigration' and 'Visa Application' values.

  - o **Status Field**: Added 'Open' and 'In-Progress' values. (Consider adding 'Closed' or similar for completeness).

Create a Lightning App

A Lightning App named "EduConsultPro" was created. This app included tabs for Home, Students, Courses, Consultants, Appointments, Registrations, and Cases, providing users with a centralized location to access all functionalities. The app was made available to the System Administrator profile.

Create a Screen Flow for Student Admission Application Process

- **Add Screen Element (Student Info)**: A screen element was added to collect student information. This element displayed fields from the Student object. A record variable resource, StudentRecordRes, was created.

- **Create Student Record Using Create Element**: A create element, "Create Student Record," was added to create a new Student record using the data collected from the "Student Info" screen.

- **Add Screen Element (Course Screen)**: This screen allows students to select a course (IELTS, GRE, GMAT, Duolingo, TOEFL) from a picklist. Choice variables were created for each course option.

- **Add Decision Element (Selecting Course)**: A decision element checks the selected course from the "Course Screen" and routes the flow based on the selection. Outcomes were defined for each course option (e.g., "Selected IELTS").

- **Add Get Record Element**: For each course outcome, a Get Record element retrieves the corresponding Course record based on the selected course name.

- **Create Registration Record Using Create Records Element**: A create element creates a Registration record, linking the newly created Student record and the retrieved Course record. This was done for each course outcome path.

- **Create Email Text Template Variables for Email Body and Subject**:
    - StuRegistrationEmailTextTempBody for the email body content.
    - StuRegistrationEmailTextTempSub for the email subject.

- **Add an Action Element (Send Email to Student)**: An email alert action was added to send a registration confirmation email to the student. It utilizes the email templates created in the previous step.

- **Add Screen Element (Success Screen)**: A final screen displays a success message to the student.
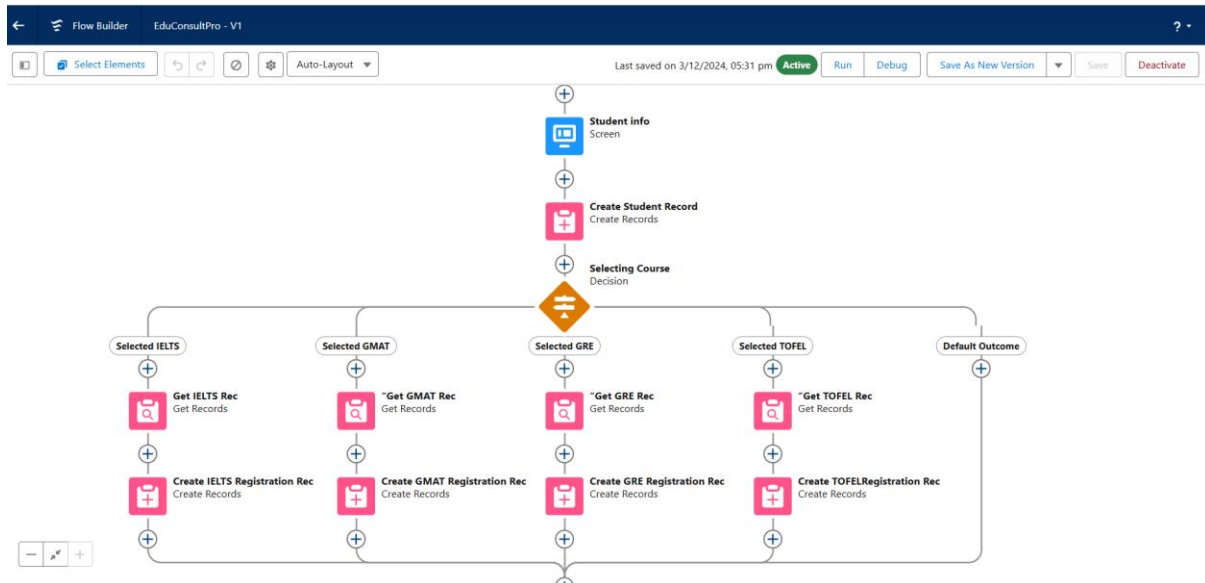
Create a ScreenFlow to Combine All Flows in One Place

This ScreenFlow serves as a master flow that integrates multiple subflows, offering users a centralized and seamless experience for both new student admission and existing student appointment booking processes.

Steps:

1. **Add Screen Element (Welcome Screen):**

    o **Purpose:** To greet users and provide an overview of the available options.

    o **Details:**

        ▪ **Header:** "Welcome to EduConsultPro!"

        ▪ **Body:** "Please follow the steps to proceed. Select an option based on whether you are a new or existing student."

2. **Add Screen Element (Existing or New Student Confirmation Screen):**

    o **Purpose:** To determine whether the user is an existing or a new student.

    o **Details:**

        ▪ **Question:** "Are you an existing student?"

        ▪ **Options:**

- "Yes, I am an existing student."

- "No, I am a new student."

3. **Add Decision Element (Decision 1):**

   o **Purpose:** To route the flow based on the user's response from the confirmation screen.

   o **Details:**

     - **Outcome 1:** "Existing Student" – If the user selects "Yes, I am an existing student."

     - **Outcome 2:** "New Student" – If the user selects "No, I am a new student."

4. **Add SubFlow Element (Existing Student Flow / New Student Flow):**

   o **Purpose:** To call the appropriate subflow based on the outcome of the decision element.

   o **Details:**

     - **SubFlow 1:** Existing Student Flow – Routes the user to the "Existing Student Appointment Booking Flow."

     - **SubFlow 2:** New Student Flow – Routes the user to the "Student Admission Flow."
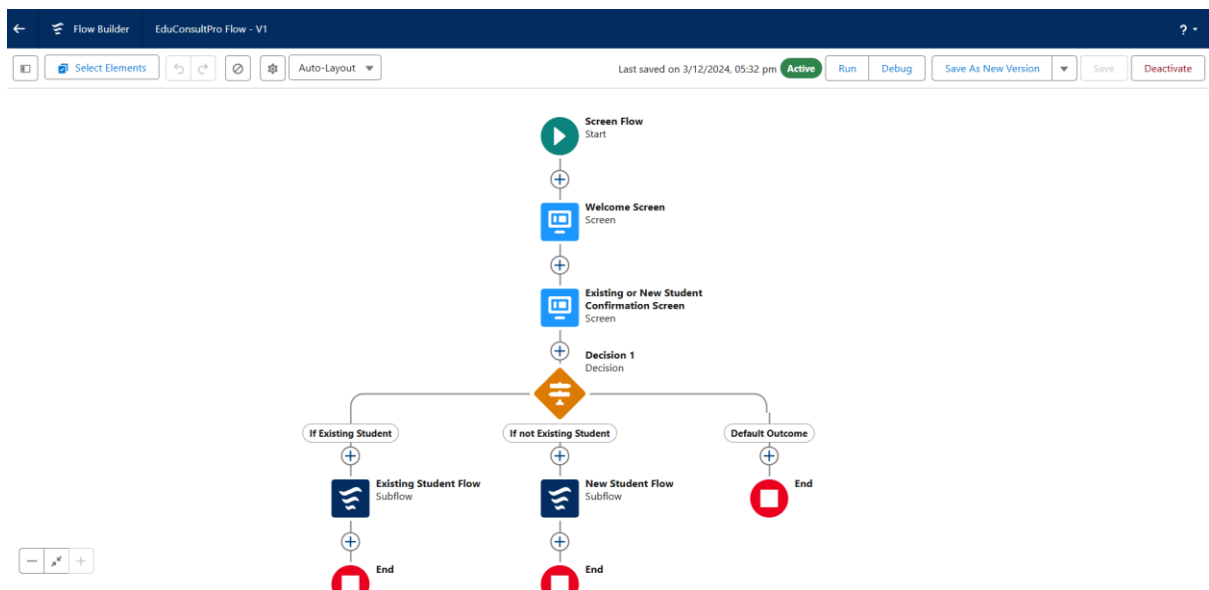
Create a Lightning App Page

A Lightning App Page named "EduConsultPro Home Page" was created as the default Home page for the "Sales" app and assigned to the System Administrator profile. This page integrates the Combined Flow, allowing users to manage new student admissions and existing student appointment bookings seamlessly. Additional components, such as a summary dashboard and quick links to frequently accessed objects (e.g., Students, Courses, Appointments, and Cases), were added to enhance usability. The page was tested to ensure proper functionality and smooth navigation
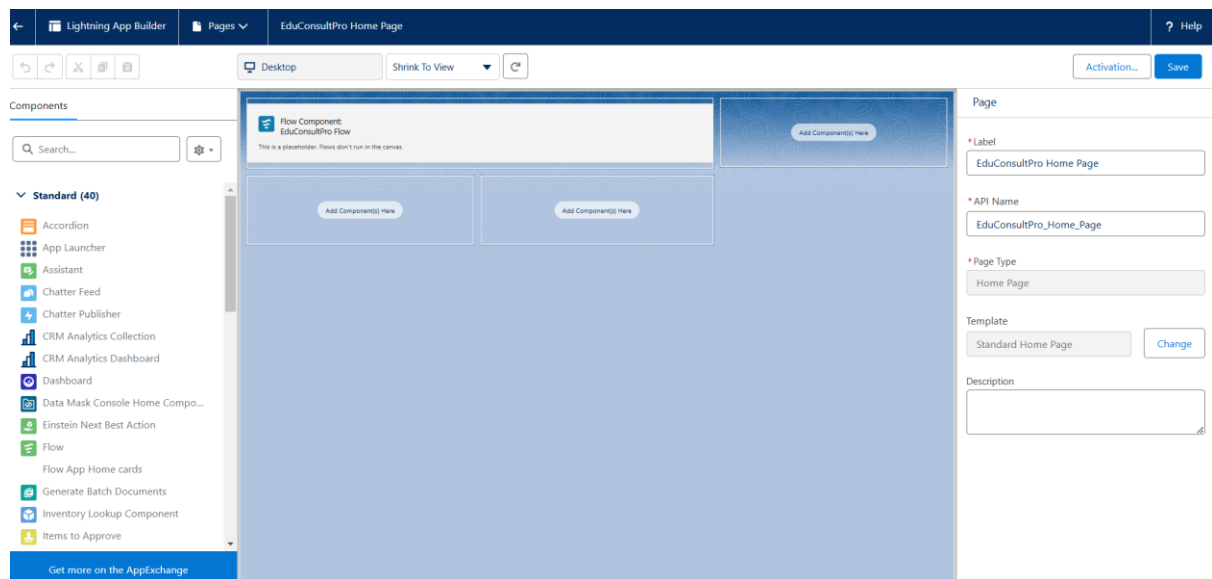
5.Testing and Validation

Comprehensive testing was conducted to ensure the functionality, reliability, and performance of the "EduConsultPro" CRM solution:

- **Unit Testing:** Apex unit tests were implemented for all triggers and classes, achieving high code coverage.

- **Integration Testing:** Verified interactions between custom objects and Salesforce standard functionality to ensure seamless data flow.

- **User Acceptance Testing (UAT):** Real-world testing was carried out by end users to validate usability and effectiveness.

- **Performance Testing:** Assessed system responsiveness and stability under different load conditions to ensure consistent performance.

6.Key Scenarios Addressed by Salesforce in the Implementation Project

The Salesforce implementation effectively addressed critical operational scenarios to enhance the EduConsultPro CRM solution:

- **Multi-Channel Communication:** Enabled personalized communication via email and the platform, ensuring effective engagement with stakeholders.

- **Role-Based Access Control:** Ensured data security and confidentiality by implementing access levels based on user roles.

- **Reporting and Analytics:** Provided real-time monitoring of key metrics and KPIs, supporting data-driven decision-making.

- **Integration with Existing Systems (Future Consideration):** Designed with flexibility to accommodate future integrations for system expansion.

7.Conclusion

The "CRM Application to Manage the Services Offered by an Institution" project successfully delivered a customized Salesforce CRM solution for EduConsultPro Institute, optimizing operations, improving communication, and centralizing key data.

With automated workflows for admissions and appointment scheduling, the CRM reduces manual tasks, minimizes errors, and enhances staff productivity. Automated email notifications ensure students are well-informed throughout their journey, enriching their overall experience.

The centralized data structure empowers EduConsultPro with robust reporting and analytics capabilities, fostering data-driven decisions and continuous improvement. Built on the flexible Salesforce platform, the solution is scalable, enabling EduConsultPro to adapt to future needs while maintaining efficient, student-focused service management.