



A CRM Application to Manage the Services offered by an Institution

By, ANVITA SURARAPU

322103310224@gvpce.ac.in



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

Objective: The primary goal of this project is to develop a Salesforce-based Customer Relationship Management (CRM) application tailored to the specific needs of EduConsultPro. The application will streamline service management, improve customer interactions, and enhance the overall operational efficiency of the institution.

Key Features of the CRM Application for EduConsultPro:

1. Service Management:

- Manage the range of services offered (e.g., course counseling, career planning, admissions assistance).
- Track service availability and assign resources to different services dynamically.

2. Lead and Contact Management:

- Capture and manage leads generated from inquiries or marketing campaigns.
- Maintain a detailed database of student and parent contacts, including interaction history.

3. Case and Issue Tracking:

- Provide support ticketing for addressing client or student concerns.
- Allow tracking and resolution of service-related issues.

4. Scheduling and Appointments:

- Enable booking and management of appointments for counseling or consultations.
- Calendar integrations for both counselors and students.

5. Automation of Tasks:

- Automate follow-ups with leads and current clients through email, SMS, or in-app notifications.
- Workflow rules to reduce manual overhead (e.g., reminders for deadlines or payments).

Business Goals:

- Enhance Student Onboarding: Streamline the application process for a smooth experience.
- Optimize Appointment Scheduling: User-friendly system minimizing scheduling conflicts.
- Improve Communication & Collaboration: 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: Positive student experience fostering engagement.
- Scalability and Future Growth: Adaptable solution for evolving institutional needs.

Specific Outcomes:

- Functional Salesforce CRM application named "EduConsultPro."
- Custom objects (Course, Consultant, Student, Appointment, Registration,etc.) with defined fields.
- Multi-stage screen flows for student application, appointment scheduling, and case management.
- Apex triggers for welcome case creation, appointment confirmations, and data validation.
- User-friendly Lightning App interface with custom dashboards for easy navigation.
- Intuitive appointment approval process with notifications.
- Comprehensive testing (unit and user acceptance) and deployment.
- Ongoing maintenance and support.
- Detailed documentation (data models, UI, logic, testing, training).

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.

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

The screenshot shows the Salesforce setup interface for creating a new object. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main area displays the 'Course' object details. On the left, a sidebar lists various configuration tabs: Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, and Restriction Rules. The main 'Details' section contains two columns: 'Fields & Relationships' and 'Page Layouts'. Under 'Fields & Relationships', the 'API Name' is set to 'Course__c', 'Custom' is checked, and 'Singular Label' and 'Plural Label' are both set to 'Course'. Under 'Page Layouts', there are sections for 'Enable Reports', 'Track Activities', 'Track Field History', 'Deployment Status' (set to 'Deployed'), and 'Help Settings' (set to 'Standard salesforce.com Help Window'). At the bottom right of the main area are 'Edit' and 'Delete' buttons.

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.

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Student	Student__c	Custom Object		03/01/2025	✓

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Appointment - Appointment	Appointment_Appointment__c	Custom Object		03/01/2025	✓

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Consultant	Consultant__c	Custom Object		03/01/2025	✓

Create Relationship Among the Objects:

Lookup relationships were established between the objects to connect related data:

- Appointment to Student (Student lookup on Appointment object)
- Appointment to Consultant (Consultant lookup on Appointment object)
- A custom object, "Registration," was created to store student and course details. Lookup relationships were added:
 1. Registration to Student
 2. Registration to Course
 - A lookup relationship was also established between Student and Case objects

Fields & Relationships		FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Fields & Relationships	Appointment - Appointment	Appointment - Appointment	Name	Text(80)		✓
	Page Layouts	Appointment Date/Time	Appointment_DateTime__c	Number(18, 0)		▼
	Lightning Record Pages	Appointment No	Appointment_No__c	Number(18, 0)		▼
	Buttons, Links, and Actions	Consultant	Consultant__c	Lookup(Consultant)		✓
	Compact Layouts	Consultant Name	Consultant_Name__c	Text(100)		▼
	Field Sets	Created By	CreatedBy	Lookup(User)		▼
	Object Limits	Last Modified By	LastModifiedBy	Lookup/User		▼
	Record Types					▼
Related Lookup Filters					▼	

Configure The Case Object

The standard Case object was configured to include custom picklist values:

- Type Field: 'Immigration' and 'Visa Application' values added.
- Status Field: 'Open' and 'In-Progress' values added. (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.

App Name ↑	Developer Name	Description	Last Modified D...	App...	Vi...
3 App Launcher	AppLauncher	App Launcher tabs	03/01/2025, 10:10 am	Classic	✓
4 Bolt Solutions	LightningBolt	Discover and manage business solutions designed for your industry.	03/01/2025, 10:10 am	Lightning	✓
5 Community	Community	Salesforce CRM Communities	03/01/2025, 10:10 am	Classic	✓
6 Content	Content	Salesforce CRM Content	03/01/2025, 10:10 am	Classic	✓
7 Data Manager	DataManager	Use Data Manager to view limits, monitor usage, and manage recipes.	03/01/2025, 10:10 am	Lightning	✓
8 Digital Experiences	SalesforceCMS	Manage content and media for all of your sites.	03/01/2025, 10:10 am	Lightning	✓
9 EduConsultPro	EduConsultPro		06/01/2025, 11:23 pm	Lightning	✓
10 Lightning Usage App	LightningUsageApp	View Adoption and Usage Metrics for Lightning Experience	03/01/2025, 10:10 am	Lightning	✓
11 Marketing CRM Classic	Marketing	Track sales and marketing efforts with CRM objects.	03/01/2025, 10:10 am	Classic	✓
12 Platform	Platform	The fundamental Lightning Platform	03/01/2025, 10:10 am	Classic	✓
13 Queue Management	QueueManagement	Create and manage queues for your business.	03/01/2025, 10:10 am	Lightning	✓
14 Sales	Sales	The world's most popular sales force automation (SFA) solution	03/01/2025, 10:10 am	Classic	✓
15 Sales	LightningSales	Manage your sales process with accounts, leads, opportunities, and...	06/01/2025, 11:23 pm	Lightning	✓

Create A ScreenFlow 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, "CreateStudent 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, GMA T, 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.

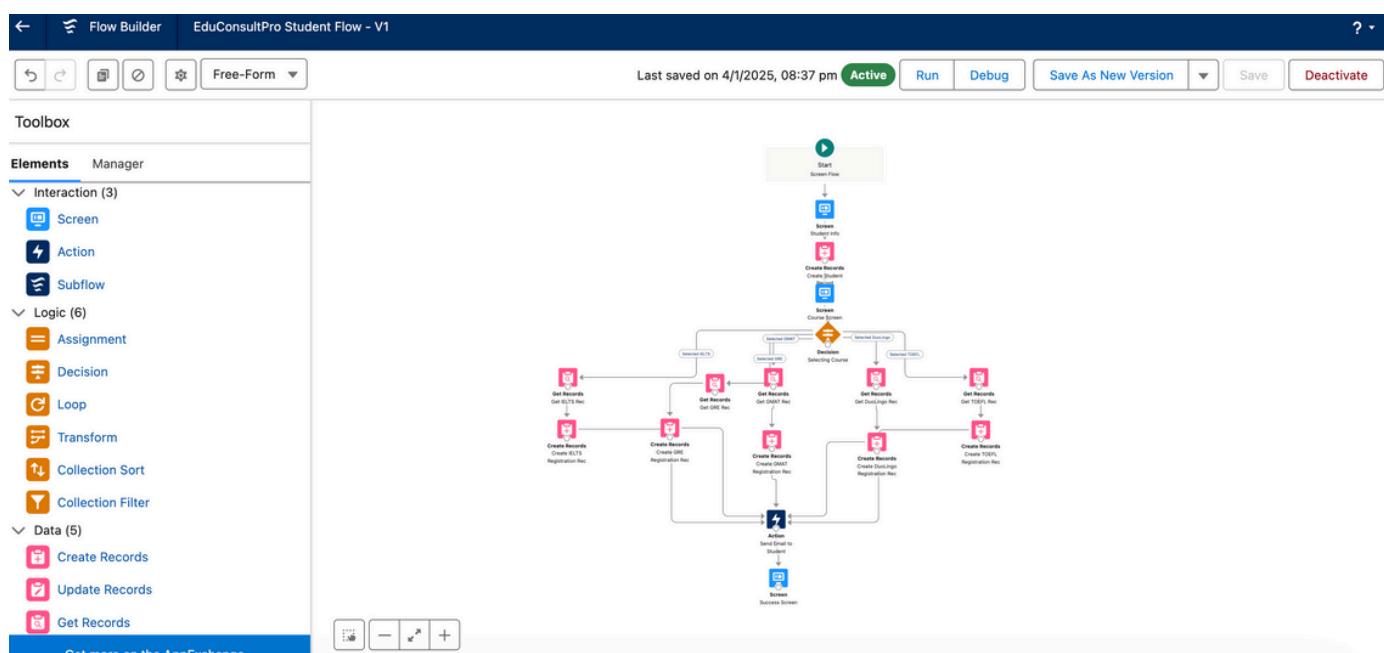
- Create Email Text Template Variables For Email Body And Subject:**

Two text template resources were created:

- 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 Users

- **User:** A new user with the Standard Platform User profile was created.
- **Configure The User Settings:** The new user was assigned a manager in their user settings, essential for the approval process

Action	Full Name	Alias	Username	Role	Active	Profile
Edit	Adanna_Diva	gadan	test_diva_pas_4w8jybi5wik.lszqrgsbkxxpx_3gi8ofovzwns.tphag12kwzqj@gypce.ac.in		<input type="checkbox"/>	UMS User
Edit	Chatter Expert	Chatter	chatty.00dwu00000fc7222ad.liuph4l9piol@chatter.salesforce.com		<input checked="" type="checkbox"/>	Chatter Free User
Edit Login	Concepción Morales, María	mconc	m_c_morales.no.reply.10.07068458291328.bjsbfjiwxqlb.zw70gk6bbwzc@gypce.ac.in	Research Team	<input checked="" type="checkbox"/>	Research Users
Edit Login	Consultant	cons	consconsultant@example.consultant@example.com		<input checked="" type="checkbox"/>	Standard Platform User
Edit Login	Ellington_Amelia	aelli	amelia.ellington.1.46kxcp9eoohh.d6cvpdcluo4wh.ll2fmsgelgf@gypce.ac.in		<input checked="" type="checkbox"/>	Standard Platform User
Edit Login	Figueroa_Jose	jfigu	j_figueroa.no.reply.22.69314487405014.upvvroqlq6ui.ir7cjarhoh6y@gypce.ac.in	Research Manager	<input checked="" type="checkbox"/>	Research Manager
Edit	Oliveira_Leonardo	mconc	l_oliveira.no.reply.5.919560845016536.4ctvlijxxup4.jd2axkt4pgq5@gypce.ac.in	Research Team	<input type="checkbox"/>	Research Users
Edit	Surarapu_Anvita	ASura	anvitash@gypce.ac.in	SF Admin	<input checked="" type="checkbox"/>	System Administrator
Edit	User_Integration	integ	integration@00dwu00000fc7222ad.com		<input checked="" type="checkbox"/>	Analytics Cloud Integration User
Edit	User_Security	sec	insightssecurity@00dwu00000fc7222ad.com		<input checked="" type="checkbox"/>	Analytics Cloud Security User

Create An Approval Process For Property Object (Should be Appointment Object)

- **Create An Email Template:** Email templates were created for Submission, Approval, and Rejection stages of the Appointment approval process.

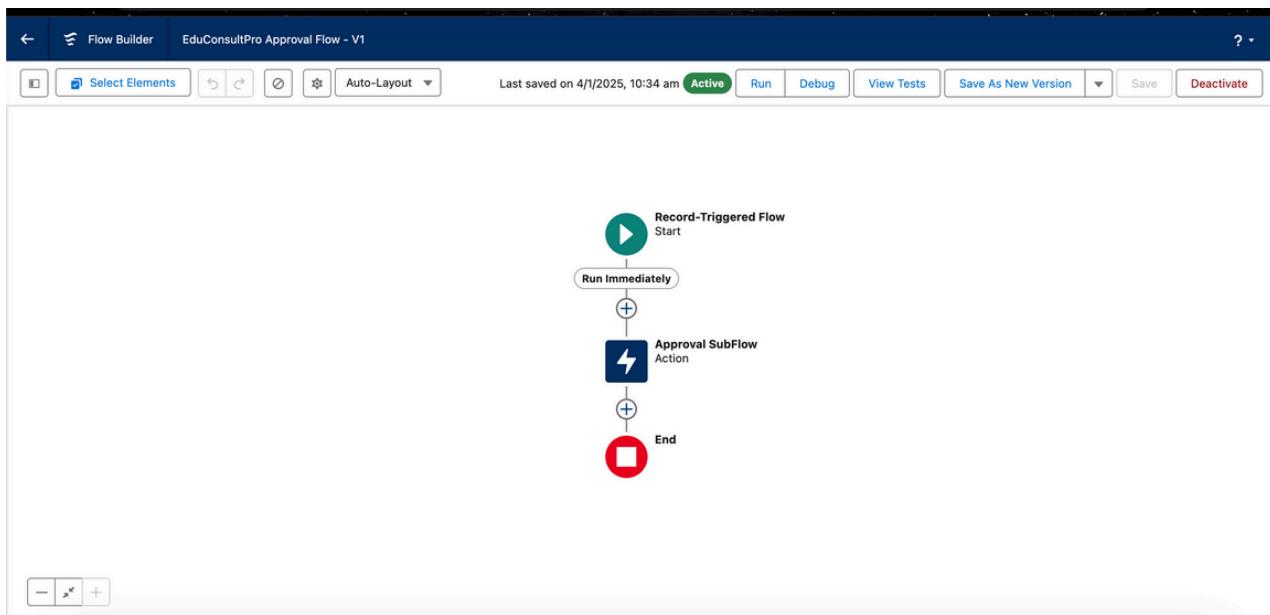
Email Templates	Recent	3 items	Search recent email templates...				New Email Template	New Folder	⋮
EMAIL TEMPLATES	Recent	Created by Me	Private Email Templates	Email Template Name	Description	Folder	Last Modified By	Last Modified Date	⋮
				Student Approval Request		EduConsultantPro	Anvita Surarapu	4/1/2025, 10:06 am	⋮
				Student Rejection Request		EduConsultantPro	Anvita Surarapu	4/1/2025, 10:05 am	⋮
				Submission Template		EduConsultantPro	Anvita Surarapu	4/1/2025, 10:23 am	⋮

- **Create An Approval Process:** An approval process for the Appointment object was configured. The manager of the submitting user was designated as the approver. Record editability properties were set to allow administrators or the assigned approver to edit records during the approval process. Initial Submission, Final Approval, and Final Rejection actions were configured to update the Appointment record's status and send email notifications using the respective templates.

Action	Approval Process Name	Description
Edit Activate Del	Appointment Approval	

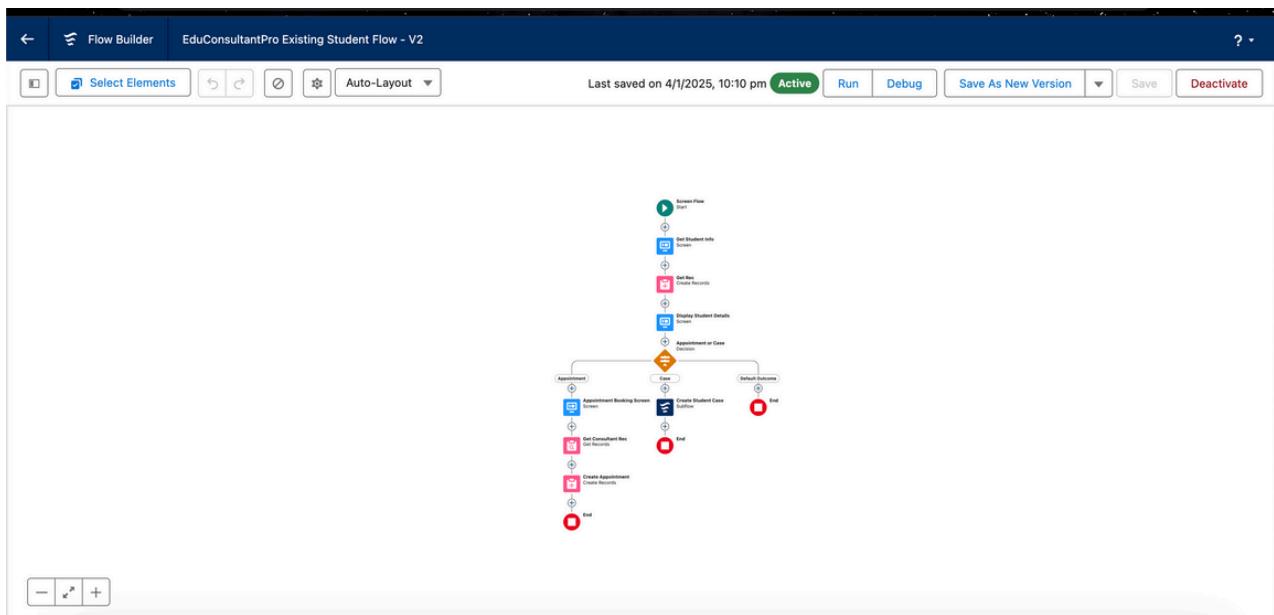
Create A Record Triggered Flow

- **Configure The Start Element:** A record-triggered flow was initiated, triggering when an Appointment record is created.
- **Add An Action Element:** An action element was added to submit the newly created Appointment record for approval using the Submit for Approval action.



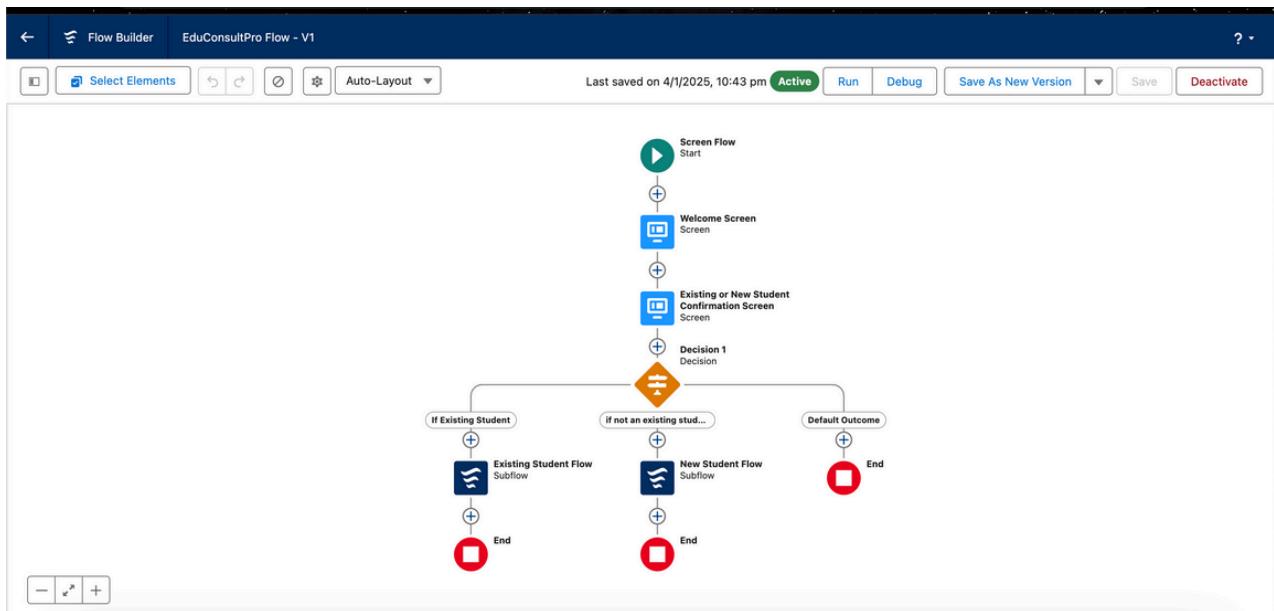
Create A ScreenFlow For Existing Student To Book An Appointment

- **Add Screen Element (Get Student Info):** Collects existing student's name and email.
- **Add GET Record Element (Get Rec):** Retrieves the Student record matching the entered name and email.
- **Add Decision Element (Appointment or Case):** Determines whether the student wants to book an appointment or create a case (this branch of the flow wasn't fully described in the original instructions, so requires further definition). Presumably, a screen would be needed before this decision element to offer those choices.
- **Add Screen Element (Appointment Booking Screen):** Displays fields from the Appointment object for the student to fill in. AppointmentRecordRes resource is used.
- **Add GET Record Element (Get Consultant Rec):** Retrieves the Consultant record based on the selected consultant name.
- **Create Appointment Record Using Create Records Element (Create Appointment):** Creates an Appointment record with details provided.
- **Add Screen Element (Confirmation Screen):** Displays confirmation message with appointment details.
- **Add An SubFlow Element (Create Student Case):** (This was under the "Case" path of the Decision element and requires further definition, assuming it involves creating a Case record if the student chose that option).



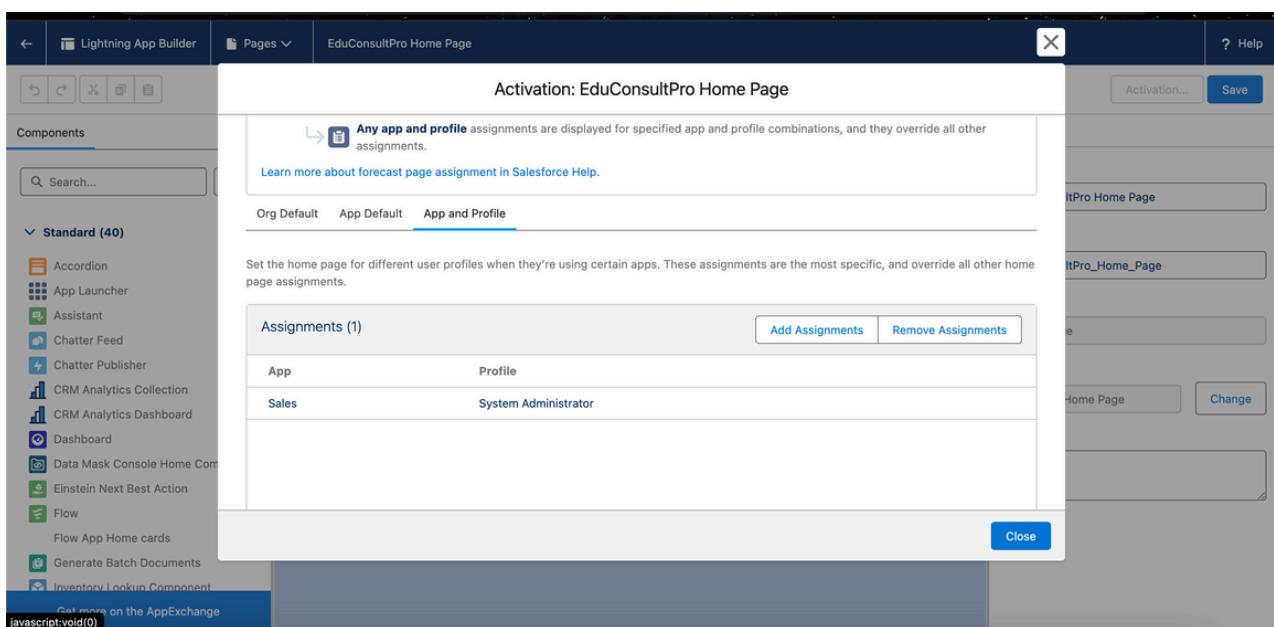
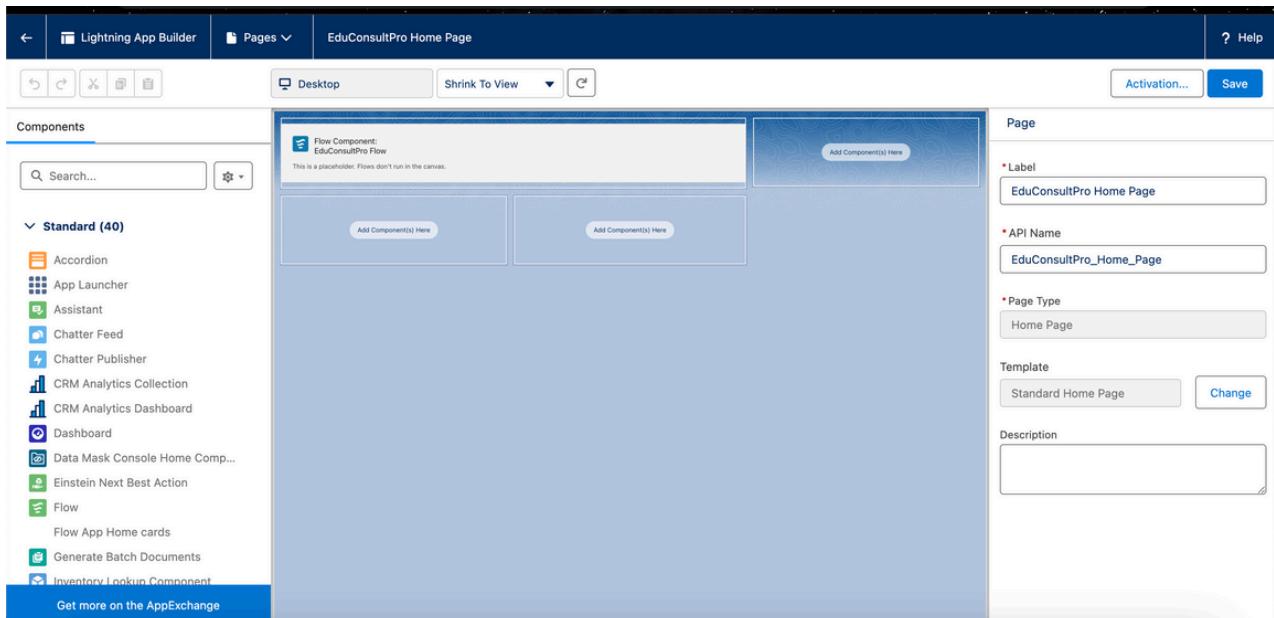
Create A ScreenFlow To Combine All The Flows At One Place

- **Add Screen Element (Welcome Screen):** Displays a welcome message.
- **Add Screen Element (Existing or New Student Confirmation Screen):** Asks the user if they are an existing student.
- **Add Decision Element (Decision 1):** Routes the flow based on user input (Existing/New Student).
- **Add An SubFlow Element (Existing Student Flow / New Student Flow)** Calls the respective Subflow based on the decision element outcome (Student Admission flow or Existing Student Appointment booking flow).



Create A Lightning App Page

- **Create a Lightning App Page:** A Lightning app page "EduConsultPro Home Page" was created and configured as the default Home page for the "Sales" app and assigned to the System Administrator profile. This page displayed the Combined Flow.



Testing and Validation

- **Unit Testing:** Apex unit tests with high code coverage for all triggers and classes.
- **Integration Testing:** Verification of interactions between objects and standard functionality.
- **User Acceptance Testing (UAT):** Real-world testing by users for usability and effectiveness.
- **Performance Testing:** Ensuring system responsiveness and stability under various loads.
- **Role-Based Access Control:** Maintaining data security and confidentiality through access levels.
- **Reporting and Analytics:** Real-time monitoring of key metrics and KPIs.
- **Integration with Existing Systems (Future Consideration):** Flexibility for future expansion.

Conclusion

The "CRM Application to Manage the Services Offered by an Institution" project successfully developed a tailored Salesforce CRM for EduConsultPro Institute, streamlining operations, enhancing communication, and centralizing key information.

With automated processes for admissions and appointment scheduling, the CRM reduces manual work, minimizes errors, and boosts staff efficiency. Automated email notifications keep students informed throughout their engagement, enriching the overall student experience.

By consolidating all relevant data, the CRM empowers EduConsultPro with comprehensive reporting and analytics, enabling data-driven decisions and continuous improvement. The flexible Salesforce platform supports future scalability, positioning EduConsultPro Institute to grow and adapt to evolving needs while delivering efficient, student-centered service management.