EduConnect: Intelligent Student Success & Alumni Engagement Platform

---

Phase 6: User Interface Development

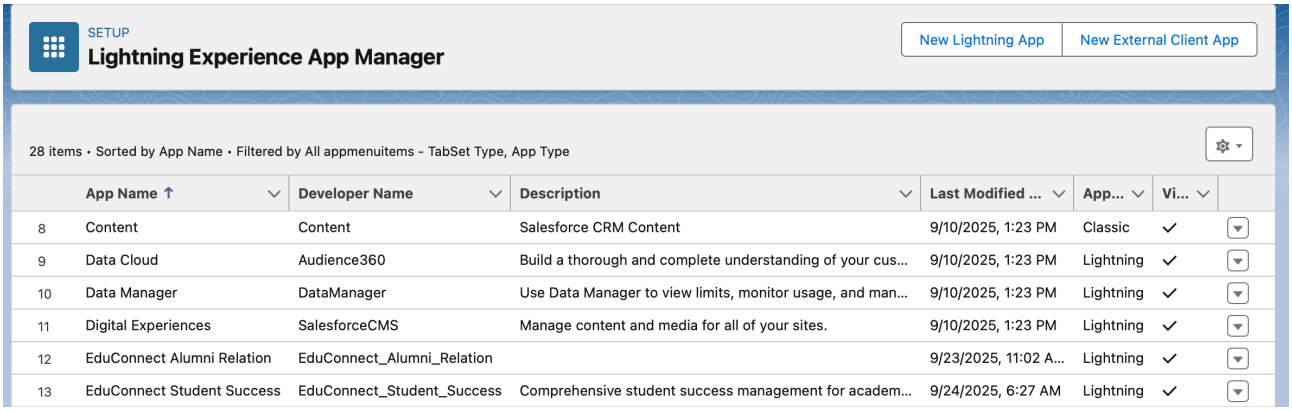
Lightning App Builder & Custom Apps

Create Custom Lightning Apps

EduConnect Student Success App

Navigation: Setup → Apps → App Manager → New Lightning App

EduConnect Alumni Relations App

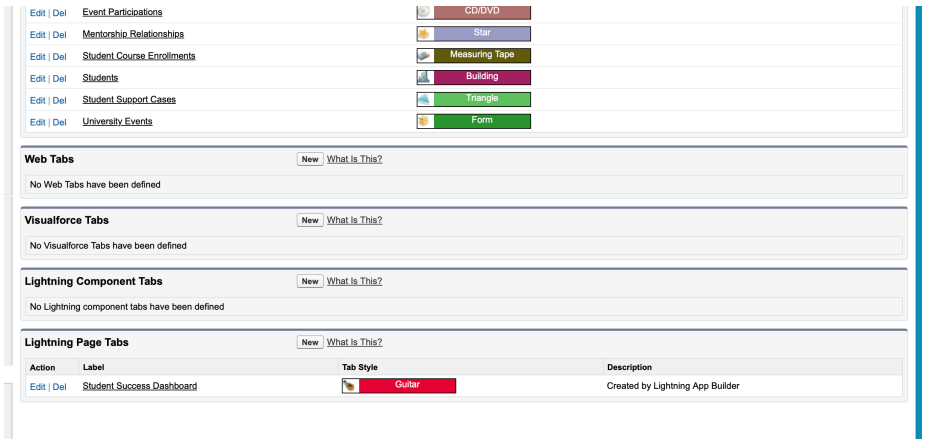


Custom Tabs Configuration

Student Tab Customization

Navigation: Setup → User Interface → Tabs → New

Alumni Tab Configuration



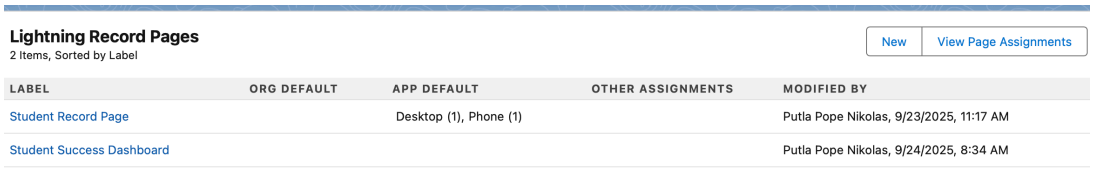
Support Cases Tab

Record Pages & Home Page Layouts

Student Record Page Design

Student Success Dashboard Record Page

Navigation: Setup → Object Manager → Student → Lightning Record Pages → New



Page Layout Design:

Header Section (Highlights Panel):

- Student photo and name
- Risk level indicator (Red/Yellow/Green badge)
- Current GPA with trend arrow
- Days since last advisor contact
- Quick action buttons: Create Case, Schedule Meeting, Send Email

Main Content Layout (2-Column):

Left Column:

1. Risk Assessment Panel (Custom LWC Component)

        - Risk score gauge visualization
        - Key risk factors breakdown
        - Intervention history timeline
        - Quick intervention actions
    2. Academic Progress Panel
        - Current semester course list with grades
        - GPA trend chart (last 4 semesters)
        - Credit progress toward graduation
        - Academic milestone tracker

Right Column:

1. Active Support Panel
    - Open support cases (filtered list view)
    - Recent advisor interactions
    - Scheduled appointments
    - Outstanding action items
2. Engagement Activities Panel
    - Recent event participations
    - Mentorship relationships status
    - Career application progress
    - Achievement badges

Related Lists Configuration:

- Course Enrollments (sorted by semester, show last 3 semesters)
- Support Cases (open cases first, then recent closed)
- Event Participations (recent first, limit 10)
- Mentorship Relationships (active first)
- Job Applications (recent first)

Alumni Engagement Record Page

Alumni Engagement Dashboard

Header Section:

- Alumni photo and professional headshot
- Engagement score badge with trend
- Current company logo and position
- Last interaction date
- Quick actions: Update Profile, Schedule Call, Send Newsletter

Main Layout:

Left Column:

1. Professional Profile Panel
    - Current role and company details
    - Career progression timeline
    - Industry expertise tags
    - LinkedIn profile integration status
2. Engagement Metrics Panel (Custom LWC)
    - Engagement score breakdown

    - Communication preferences
    - Activity heat map (last 12 months)
    - Volunteer interest areas

Right Column:

1. University Involvement Panel
    - Recent event participation history
    - Active mentorship relationships
    - Donation history summary (last 2 years)
    - Speaking engagements and contributions
2. Network Impact Panel
    - Students/alumni referred
    - Industry connections facilitated
    - Regional chapter involvement
    - Board/committee participation

Home Page Layouts

Academic Advisor Home Page

Navigation: Setup → Apps → App Manager → EduConnect Student Success → Edit → Home Page

Home Page Component Layout:

Top Row (Key Metrics Dashboard):

- At-Risk Students Count (Red alert if >15)
- Open Support Cases Requiring Action
- Students with No Contact >30 Days
- This Week's Scheduled Appointments

Second Row (Priority Actions):

- High-Priority Support Cases (table component)
- Students Requiring Immediate Attention (filtered list)
- Upcoming Graduation Candidates (this semester)
- Pending Advisor Tasks

Third Row (Resources & Tools):

- Quick Links: Intervention Resources, Academic Calendar, Grade Reports
- Department Announcements
- Training Resources and Policy Updates
- Student Success Analytics Summary

Alumni Relations Home Page

Top Row (Engagement Overview):

- New Alumni This Month
- Upcoming Events & Registration Status
- VIP Alumni Requiring Follow-up

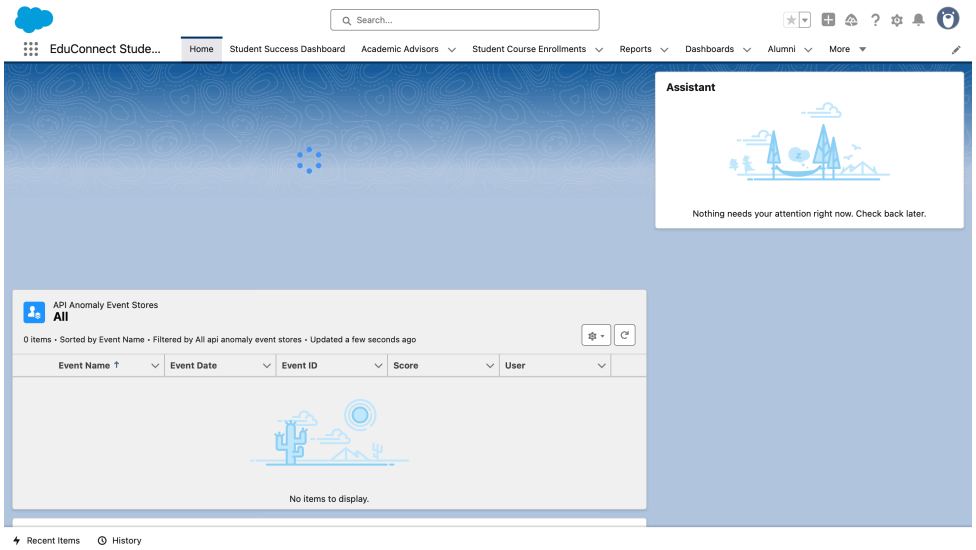
- Monthly Donation Activity Summary

Second Row (Active Campaigns):

- Recent Alumni Profile Updates (activity feed)
- Event Registration Trends Chart
- Pending Mentorship Matches
- Outstanding Engagement Tasks

Third Row (Campaign Management):

- Active Email Campaign Status
- Event Promotion Materials
- Alumni Success Stories Pipeline
- Regional Chapter Activity Updates



Lightning Web Components (LWC)

Core LWC Components

Component 1: Student Risk Indicator

File Structure:

```
force-app/main/default/lwc/studentRiskIndicator/
├── studentRiskIndicator.html
├── studentRiskIndicator.js
├── studentRiskIndicator.css
└── studentRiskIndicator.js-meta.xml
```

Component 2: Alumni Engagement Tracker

Advanced LWC Features & Navigation

- Wire Adapters & Apex Integration
- Wire Adapter Patterns
- Imperative Apex Calls

Navigation Service Implementation

- Advanced Navigation Component

Component Communication & Events

- Parent-Child Communication Pattern
- Parent Component (Dashboard):

Utility Bar Implementation

- Custom Utility Bar Components
- Student Quick Search Utility:
- Academic Calendar Utility:

Testing & Deployment

- Component Testing
- Jest Tests for LWC Components

Performance Optimization

- LWC Performance Best Practices

Optimized Data Loading:

- Integration & Final Testing
- End-to-End Component Integration
- Full Dashboard Integration Test:

- Performance Monitoring Setup

- Component Performance Tracking:

Deployment & Configuration Guide

Lightning App Deployment

Step 1: Deploy Components

Step 2: Configure App Assignments

1. Setup → Apps → App Manager
2. Edit each EduConnect app
3. Assign to appropriate user profiles
4. Set default apps for profiles

Step 3: Record Page Assignment

1. Lightning App Builder → Student Success Dashboard
2. Assign to Student object
3. Set as default for specific profiles
4. Activate the page

User Training Materials

Administrator Guide:

- Lightning App Builder customization
- Component configuration options
- Performance monitoring setup
- User adoption tracking

End User Guide:

- Navigation between apps
- Using custom components
- Mobile responsiveness features
- Keyboard shortcuts and accessibility