

# CRM Project – EdTech Student Success & Retention Platform

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## Phase 1: Problem Understanding & Industry Analysis

**Goal:** Identify why colleges need this CRM.

- **Problem Statement:**  
Colleges face high dropout rates due to poor academic tracking, weak communication, and lack of career guidance. Faculty rely on manual methods, students feel unsupported, and administrators cannot act early.
  - **Solution:**  
A Salesforce-based **Student Success CRM** that tracks academics, triggers early alerts, and integrates career guidance tools.
  - **Stakeholders:**
    - Students → View grades, attendance, risk alerts, career suggestions.
    - Faculty → Monitor department performance, at-risk students.
    - Career Counselors → Provide skill-building & job readiness.
    - Admins → Track retention & placement metrics.
  - **Business Process Flow:**  
Student attends class → Attendance/grades recorded → Risk engine calculates → Alerts sent → Advisor intervention → Career dashboard updated.
  - **KPIs:** Dropout % reduction, Attendance %, GPA trends, Placement rate.
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## Phase 2: Org Setup & Configuration

**Goal:** Prepare Salesforce org.

- **Profiles:** Student, Faculty, Career Advisor, Admin.
- **Roles:** University → Department → Faculty → Student.
- **Permissions:**
  - Students → View only their record.
  - Faculty → Access only their students.
  - Career Advisors → Access student career records.
  - Admins → Full visibility.

- **Settings:**
    - Fiscal year → Academic calendar (July–June).
    - Business hours → 9 AM – 6 PM (advising).
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### **Phase 3: Data Modeling & Relationships**

**Goal:** Build student data structure.

- **Custom Objects:**
    - Student\_\_c → Name, Roll No, Email, Year, Dept.
    - Attendance\_\_c → Date, % Present, Linked to Student.
    - Grade\_\_c → Subject, Semester, Marks, Linked to Student.
    - Activity\_\_c → Club, Sports, Participation Points.
    - Career\_Path\_\_c → Recommended Skills, Courses, Jobs.
  - **Relationships:**
    - Student ↔ Attendance (Master-Detail).
    - Student ↔ Grade (Master-Detail).
    - Student ↔ Activity (Lookup).
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### **Phase 4: Process Automation (Admin)**

**Goal:** Automate routine checks & alerts.

- **Validation Rules:** Grades must be 0–100.
  - **Flows:**
    - If GPA < 6 OR Attendance < 60% → Flag student “At Risk.”
    - Automated Email/SMS → Student + Faculty.
  - **Approval Process:**
    - Student requests grade re-evaluation → Routes to Faculty.
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### **Phase 5: Apex Development (Developer)**

**Goal:** Add backend intelligence.

- **Triggers:**

- On Grade insert → Calculate GPA.
  - On Attendance update → Update cumulative % automatically.
  - **Batch Apex:** Weekly scan → Update risk scores for all students.
  - **Queueable Apex:** Call LinkedIn API for skill suggestions.
  - **Scheduled Apex:** Generate weekly report → Email advisors.
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## Phase 6: User Interface Development

**Goal:** Create dashboards & portals.

- **Lightning Record Pages:**
    - Student 360 → Attendance, Grades, Activities, Risk.
    - Faculty Dashboard → Department stats, risk alerts.
  - **LWC Components:**
    - Risk Indicator Gauge (Green/Yellow/Red).
    - LinkedIn Skill Recommendations widget.
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## Phase 7: Integration & External Access

**Goal:** Connect to external systems.

- **LinkedIn API:** Skills & internship data.
  - **Email/SMS Gateway:** Attendance & risk alerts.
  - **Learning Management System (Moodle/Canvas):** Sync grades & attendance.
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## Phase 8: Data Management & Deployment

**Goal:** Manage & deploy real data.

- **Data Loader:** Import student records.
  - **Duplicate Rules:** Prevent duplicate Roll Numbers.
  - **Change Sets:** Move configs Sandbox → Production.
  - **Backup:** Weekly student data export.
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## Phase 9: Reporting & Dashboards

**Goal:** Provide actionable insights.

- **Reports:**
    - At-Risk Students by Department.
    - Attendance vs GPA correlation.
    - Placement readiness reports.
  - **Dashboards:**
    - Student Risk Dashboard → Dropout Probability.
    - Faculty Dashboard → Class Performance.
    - Career Dashboard → Placement % and Top Skills.
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## **Phase 10: Final Demo & Presentation**

**Goal:** Showcase the impact.

- **Demo Walkthrough:**

Update grades → Risk alert triggered → Faculty notified → Student portal updated with career suggestions.
- **Pitch Line:**

*“Reducing student dropout by 25% and boosting placement readiness through proactive Salesforce-powered insights.”*

## **Solution**

Build a **Salesforce-based Student Success CRM** that:

1. **Centralizes Student Data**
  - One Student 360 profile with grades, attendance, activities, and risk scores.
  - Removes silos between faculty, admin, and career counselors.
2. **Automates Early Risk Detection**
  - Flows & Apex calculate GPA and attendance automatically.
  - If GPA < threshold or attendance < 60% → Student flagged “At Risk.”
  - Immediate alerts sent to student + advisor via Email/SMS.
3. **Enables Faculty & Advisor Dashboards**
  - Faculty dashboard → Class/department performance + at-risk students.
  - Advisor dashboard → Intervention history + follow-up tasks.

**4. Provides AI-Powered Career Guidance**

- LinkedIn API integration fetches trending skills & internships.
- Career dashboards suggest personalized learning paths.
- Students see recommendations directly in their portal.

**5. Improves Engagement & Communication**

- Notifications for deadlines, grade updates, counseling sessions.
- Student portal with transparent academic & career progress.

**6. Delivers Actionable Insights to Management**

- Reports & dashboards → Retention trends, dropout probability, placement success rate.
- Helps leadership track institutional performance and act strategically.