

EDUCONNECT PRO - COLLEGE MANAGEMENT SYSTEM

NAME: G.Aakash

Phase 10: Final Presentation

Overview

Phase 10 summarizes the EduConnect Pro College Management System project and its completed phases. This final presentation captures all work done across 10 phases, including data modeling, automation, backend development, UI components, integration, data management, security implementation, and analytics dashboards.

Project Summary

Backend Development

- Created 10+ Apex classes for managing Students, Courses, Enrollments, Grades, Job Applications, Clubs, and Events
- Implemented GPACalculatorUtil with semester and cumulative GPA calculation logic
- Developed JobMatchingEngine with 100-point weighted scoring algorithm
- Built trigger handler framework for Student and Grade objects
- Implemented Batch Apex, Queueable Apex, and Scheduled Apex for asynchronous processing

User Interface (UI) Development

- Developed Lightning Web Components for Student Dashboard, Grade Viewer, Job Recommendations, and Event Calendar

- Created custom Lightning App "EduConnect Pro" with comprehensive navigation
- Designed responsive record pages for Student, Course, and Job Posting objects
- Implemented tabbed interfaces with real-time data updates
- Applied Salesforce Lightning Design System (SLDS) for consistent styling

Process Automation

- Implemented 15+ validation rules ensuring data quality (CGPA range, email domain, capacity checks)
- Created 5 workflow rules for automated email notifications
- Built 3 Process Builder processes for GPA updates and enrollment management
- Developed 2 Screen Flows including guided course enrollment with prerequisite validation
- Configured email alerts and field updates for various business processes

Integration & External Access

- Connected platform with Twilio API for SMS notifications on low attendance
- Implemented REST API endpoints for mobile app integration
- Configured Named Credentials for secure external authentication
- Set up Platform Events for real-time grade publication notifications

- Created Remote Site Settings for external API access

Data Management & Deployment

- Designed 9 custom objects with 100+ fields and complex relationships
- Used Data Import Wizard for initial student data load (500+ records)
- Managed bulk enrollments using Data Loader (2,000+ records)
- Implemented duplicate rules for Student ID and Course Code
- Deployed components using Change Sets and SFDX with VS Code
- Created unmanaged package for portability

Reports & Dashboards

- Created custom reports for Student Performance, Placement Statistics, and Attendance Tracking
- Built dashboards showing GPA trends, placement rates by department, and event participation
- Enabled dynamic filters for department, year, and date range
- Implemented matrix reports for grade distribution analysis
- Configured dashboard refresh schedules for real-time insights

The EduConnect Pro College Management System is now fully developed and functional. It provides a complete solution for academic management, placement tracking, campus engagement, and parent communication with secure data handling, intelligent automation, interactive dashboards, and seamless external integrations. The project follows Salesforce best practices, maintains high code quality with 88% test coverage, and is ready for production deployment and demonstration

VIDEO LINK :

https://drive.google.com/file/d/1udCqg59CA0iP-dxV5C3JS9veMh7fm8WR/view?usp=drive_link