

Student Attendance & Performance Tracker

Phase 1: Problem Understanding & Industry Analysis

Requirement Gathering

In colleges and universities, attendance and performance tracking are often managed manually using registers or spreadsheets. This process is inefficient, error-prone, and lacks real-time visibility. Faculty spend a significant amount of time preparing reports, while students and parents do not receive timely updates. Administrators also face challenges in identifying low-performing students early enough.

Key requirements include:

- A centralized system for recording attendance and exam results.
- Automation of alerts for low attendance or poor performance.
- Real-time dashboards for faculty and management.

Stakeholder Analysis

The system will serve different groups of stakeholders:

- Faculty – Mark attendance, enter results, and monitor students.
- Students – Have attendance and performance tracked accurately.
- Academic Management – View dashboards and reports for decision-making.
- Parents (Optional) – Receive notifications on poor attendance or low performance.

Business Process Mapping

- Current Process: Attendance is recorded manually, results are stored in files, and reports are prepared at the end of the term. This leads to inefficiencies, duplication, and errors.
- Proposed Process: Attendance and results are recorded directly in Salesforce. Automated flows notify students and faculty of issues, while dashboards provide real-time performance insights. This reduces administrative effort and enables timely corrective actions.

Industry-Specific Use Case Analysis

In the education industry, effective tracking of attendance and performance is critical to improving outcomes. A Salesforce-based solution will:

- Minimize manual effort and errors.

- Provide timely alerts and interventions for at-risk students.
- Improve communication between teachers, students, and management.
- Support data-driven decision-making for academic administrators.

AppExchange Exploration

Salesforce AppExchange offers solutions like Learning Management Systems (LMS) and Student Information Systems (SIS). However, this project focuses on a customized, simplified attendance and performance tracker tailored for colleges. This ensures adaptability, easy implementation, and an opportunity to showcase Salesforce capabilities such as:

- Custom objects and relationships.
- Process automation using Flows and Validation Rules.
- Apex triggers for performance updates.
- Dashboards for real-time insights.

The need for a Student Attendance and Performance Tracker is clear. Implementing it on Salesforce will streamline attendance management, automate notifications, and empower stakeholders with real-time data, thereby enhancing transparency and academic success.