**Project Proposal: Employee Leave & Attendance Management System using Salesforce**

**1. Problem Statement**

In many organizations, the leave and attendance management process is manual and error-prone:

* Employees face delays in leave approvals.
* Managers struggle to monitor leave requests and attendance records.
* HR teams lack real-time visibility into leave balances and departmental reports.

This results in delayed approvals, inaccurate leave balances, and reduced employee satisfaction.

**2. Project Overview**

The proposed system is a Salesforce CRM app built with Lightning Web Components (LWC), Apex Triggers, and Approval Workflows.

**Core Features**

* Role-based Access
  + Employee: Submit leave requests, view leave history.
  + Manager: Approve/reject leave requests above 3 days.
  + HR/Admin: Monitor attendance, leave balances, and reports.
* Leave Approval Workflow
  + Leave ≤ 3 days → Auto-approved.
  + Leave > 3 days → Sent for manager approval.
* Custom Components
  + LWC for Leave Request Form and Leave Summary.
  + Visualforce component (optional) for personalized announcements or messages.
* Business Logic with Apex Triggers
  + Leave Trigger: Prevent overlapping leave requests, auto-update leave balance.
  + Attendance Trigger: Update attendance status when leave is approved/rejected.
  + Notification Trigger: Email alerts for approvals/rejections.
* Reports & Dashboards
  + Pending Approvals, Leaves by Employee/Department, Attendance Summary.

**3. Objectives**

* Improve efficiency by automating leave submission and approval processes.
* Ensure accurate attendance tracking and leave balances.
* Reduce manual errors with Apex triggers and validation rules.
* Provide better reporting using dashboards for HR and managers.
* Enhance user experience with Lightning Web Components.
* Enable transparency by giving real-time visibility to Employees, Managers, and HR teams.

**4. Scope**

**In-Scope**

* Role-based functionality (Employee, Manager, HR/Admin).
* Automated leave approval workflow.
* Apex triggers to enforce business rules.
* Custom Lightning Web Components for UI.
* Reports and dashboards.

**Out-of-Scope**

* Integration with external payroll systems.
* Multi-organization deployment (limited by Developer org license).
* Complex AI/ML predictions for leave trends.

**5. Technology Stack**

* Salesforce CRM (Lightning Experience)
* Apex (Business logic, triggers)
* Lightning Web Components (LWC) (Custom UI)
* Visualforce (Optional personalization)
* SOQL/SOSL (Data queries)
* Reports & Dashboards (Analytics & monitoring)

**6. Expected Outcomes**

* Faster leave request submission and approval process.
* Accurate leave balances and attendance tracking.
* Improved collaboration between Employees, Managers, and HR.
* Real-time insights via dashboards and reports and reduced manual effort and errors in leave management.