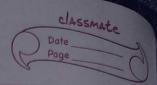## LAB-1
College Information System

Problem statement,

Paper based maintaining of college system was difficult to maintain, expensive and required more manpower. There was a need for s/w system that could handle large records efficiently and could address issues of redundancy and consistency. This system maintains student, staff and department information.

SRS

- College information system has admin who manages the staff, student and department.

- Admin can view and modify the student records like profile, attendance, fee, results and details of teachers and other employees in college, their personal information and their attendance for their salaries.

- Authentication will be done by username and password and classified by user type.

- Staff in college teach more than one course to many students and the staff who are teachers conduct examination for students of college.

- Students register themselves in department course they are interested in.

- There are different types of exams conducted by the college. Internals and SEE are 2 of them.

- Every course had unique name with different subjects. Every subject had its unique name.

- Every department has a name and provide details about itself.

- COE office should be able to view student details, edit examination marks, and publish them.

College Management System
Class Diagram

Course
- name: string
- code: string
- enrollment: int
- credits: int
- viewDetails()

Student
- name: string
- id: int
- mail: string
- deptid: int
- view_attendance()

enrolledby

* enroll id: int

College
- name: string
- address: string
- id: int
- viewBranches()

had

Library
- name: string
- numResource: int
- issueBook()
- viewCard()

Admin
- id: int
- name: string
- password: string
- login()
- logout()
- addStaff()
- addStudent()
- addCourse()

handle

PLO
- name: string
- viewCompanies()

Department
- name: string
- id: int
- HOD: string
- viewFaculty()

has

COE
- name: string
- publishResult()
- issueHallTicket()

Course

offers 1..*

Staff
- id: int
- designation: string
- viewDetails()
- updateDetails()

has 1..*

Teaching
- name: string
- markAttendance()
- enterMarks()

Non Teaching
- name: string