



# The Sap-1 Architecture

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## 1. Introduction

This report presents a simple School Management System designed to manage students, teachers, courses, and grades. The system focuses on clarity and correctness while keeping the design simple.

## 2. System Overview

The system consists of three main users: Admin, Teacher, and Student. Each user has specific responsibilities within the system.

## 3. Use Case Diagram

The Use Case Diagram describes the interactions between the users and the system.

Actors:

- Admin
- Teacher
- Student

Main Use Cases:

- Admin manages students, teachers, and courses.
- Teacher adds and views student grades.
- Student views courses, grades, and schedule.

## 4. Class Diagram

The Class Diagram represents the system structure and relationships.

Main Classes:

- Student
- Teacher
- Course
- Grade
- Admin

Relationships are kept simple to ensure system clarity.

## 5. Sequence Diagram

The Sequence Diagram shows the interaction when a teacher adds grades for a student. It demonstrates the order of messages exchanged between the teacher and the system.

## 6. Activity Diagram

The Activity Diagram illustrates the steps a student follows to view grades, starting from login until displaying the grades.

## 7. Business Diagram

The Business Diagram explains the workflow inside the school, starting from course creation, teacher assignment, student enrollment, and grade evaluation.

## 8. Data Flow Diagram

The Data Flow Diagram (DFD) shows how data moves between users, processes, and databases within the School Management System.

## 9. Conclusion

This system design provides a clear and simple architecture suitable for academic purposes. All diagrams follow standard modeling rules and ensure correctness.

## 10. GitHub Repo

[s502y0/Computer-Architecture](#)