



The Sap-1 Architecture

Prepared by : Sarah Yaser Elsayed Husain

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](https://github.com/s502y0/Computer-Architecture)