

Student Management System: A Java Swing Project

This project is a Java-based for managing student data efficiently.

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Overview

Java Desktop App

Built using the Swing GUI toolkit for rich user interaction.

User Roles

Supports two roles: Student and Admin with specific permissions.

Data Management

Stores student details, marks, attendance, and more in flat files.

Efficiency

Improves organization in educational institutions.

Class Schedule

Time	Monday	Tuesday	Wednesday	Thursday	Friday
9:00-10:00	CS101 Room 101		CS101 Room 101		CS101 Room 101
10:00-11:00					
11:00-12:00		CS101 Room 101		CS101 Room 101	
2:00-3:00					
3:00-4:00					

System Architecture

Model

Stores student details and academic data.

View

GUI built with Swing for user interaction.

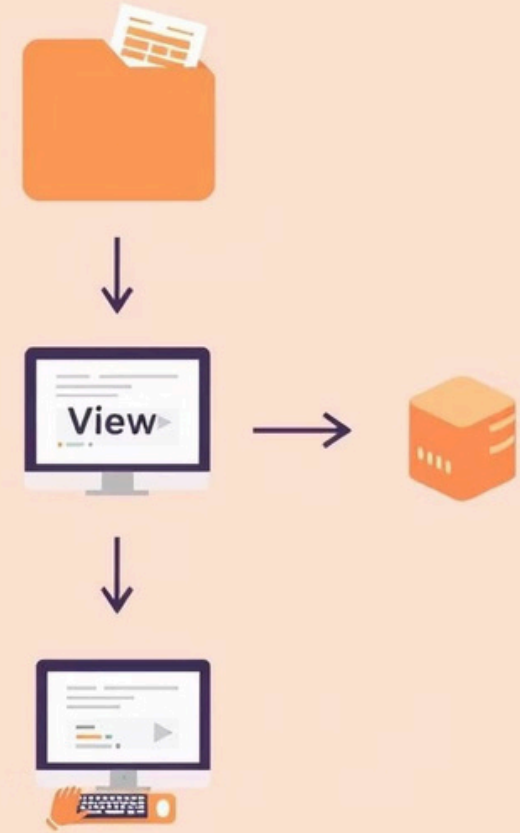
Controller

Processes user input and updates model and view.

Database

Uses flat files like CSV or text for data persistence.

MVC



File Help	
My Profile	My Courses Grades Schedule
Ayush Kumar	
ID: STU001	
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Department	Computer Science
Semester	Fall 2024
GPA	3.85

[My Profile](#) [My Courses](#) [Grades](#) [Schedule](#)

Academic Performance

101	A	3	12.0
102	A-	4	14.8
IG201	B+	3	9.9

Student Features

View personal info: name, ID, contact

• Check attendance records easily

• Access course marks and grades

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- Optionally access course materials
- Simple and user-friendly navigation

anagement System - Login

dent

Admin Login

Username:

Password:

LOGIN

© 2024 Student Management System

Admin Features



Manage Records

Add, update, delete student details.



Course Management

Handle course names, codes, and credits.



Attendance Tracking

Record and monitor student attendance.



Reporting

Generate reports on student performance.

Technology Stack

Java SE JDK

Core development platform
for cross-platform support.

Swing GUI

Rich desktop UI
components for interaction.

IDEs

IntelliJ IDEA or Eclipse for
efficient coding.

Data Storage

Flat files like CSV or
embedded databases for
persistence.



Benefits

Centralized
Storage



Accurate Data



Reporting



Efficiency

Better communication and streamlined processes boost productivity.

Real-World Uses

School Administration

Manages student records and attendance efficiently.

Teachers

Track student marks and performance trends.

Students

Access personalized academic information easily.

Institutions

Improve transparency and data accuracy.



Conclusion

- ☐ Streamlines student management processes effectively.
- ☐ User-friendly for both students and administrators.
- ☐ Scalable Java project with future integration potential.
- ☐ Supports maintaining organized academic records.

Thank You

We appreciate your attention and interest in this project.

An abstract graphic design featuring a yellow background with large, overlapping organic shapes in orange, peach, and pink. The text "Thank you." is written in a white, casual script font across the center.

Thank you.