

# SDA LAB PROJECT PROPOSAL 2025

## GROUP MEMBERS

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# INTRODUCING

The Student University Management System is a Java-based application developed using Java Swing for the user interface and SQL for database management. This system streamlines university operations by providing role-based access for students, teachers, and HODs, ensuring a structured and efficient management process.

Users can log in or create an account, with different privileges based on their roles. Students can view timetables, attendance, and grades, while teachers can mark attendance, manage grades, and make announcements. The Head of Department (HOD) has administrative rights to add faculty and students to the system.

This system enhances university management by offering a user-friendly interface, secure authentication, and database-driven operations, making it a valuable tool for academic institutions.



# GOAL ?

The goal of the Student University Management System is to streamline and digitize university operations by providing a centralized platform for students, teachers, and administrators.

This system aims to:

- Enhance Efficiency - Automate tasks like attendance tracking, timetable management, and grade recording to reduce manual workload.
- Ensure Role-Based Access - Provide different privileges to students, teachers, and HODs for secure and organized data management.
- Improve Communication - Allow teachers to make announcements and share important updates with students.
- Simplify Administration - Enable the HOD to manage faculty and student records effortlessly.
- Maintain Data Security & Integrity - Store and manage university data securely in an SQL database, ensuring reliable access and protection.





# TECH USED ?

The Student University Management System is developed using the following technologies:

- Programming Language: Java
  - User Interface: Java Swing (GUI-based application)
  - Database Management: SQL (Structured Query Language)
  - Backend Connectivity: JDBC (Java Database Connectivity)
  - Development Environment: IntelliJ IDEA.
  - Version Control: Git/GitHub.
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