

JAVA PROJECT

UNIVERSITY
MANAGEMENT SYSTEM



01/9





ABOUT US

Welcome to UNIVERSITY MANAGEMENT SYSTEM , the comprehensive University Management System designed to streamline and revolutionize academic and administrative operations. Our mission is to empower universities, colleges, and educational institutions with cutting-edge technology that enhances efficiency, transparency, and collaboration.





IMPORTANCE



A University Management System (UMS) is essential for modern educational institutions as it plays a pivotal role in streamlining administrative and academic processes.

1. Efficiency in Administrative Tasks
2. Centralized Data Management
3. Enhanced Student Experience
4. Data Security and Compliance





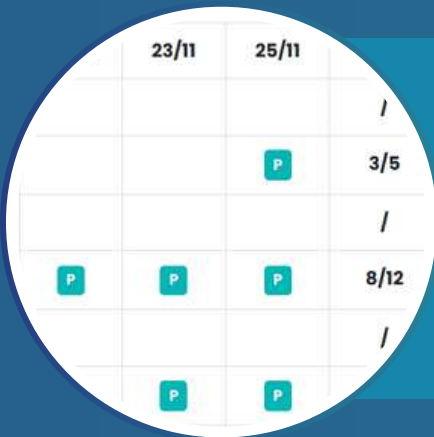
BEST PRACTICES



Student Management

The Student class is designed to:

1. Represent a student with specific details (like ID, name, and email).
2. Provide flexibility in creating or modifying student objects.



Attendance Management

The Attendance class models a student's attendance for a specific course on a particular date. The class uses private fields to encapsulate data and provides public getter and setter methods to access and modify these fields.



Fee Structure

The FeeStructure class models the fee details of a course, calculating the total fee as the sum of tuition, lab, and library fees in the constructor. It uses private fields with public getters to encapsulate data, ensuring controlled access to fee details.



Course & Enrollment Management

Course Representation: The Course class models a course with attributes for its unique id, courseName, and the number of credits, allowing structured representation of course information.





User Interface

University Management System

Add Student

Add Student

Add Course

Add Course

Enroll Student

Enroll

Record Attendance

Record Attendance



Login Page

Signin

Signin

or signin with



Welcome back!

Welcome back! We are so happy to have you here. It's great to see you again. We hope you had a safe and enjoyable time away.

No account yet? [Signup.](#)



DATABASES AND SAMPLE SCHEMAS

STUDENTS

	id	name	email
▶	1	Alice Smith	alice.smith@example.com
	2	Bob Johnson	bob.johnson@example.com
	3	Charlie Brown	charlie.brown@example.com
	4	Diana Prince	diana.prince@example.com
	5	Ethan Hunt	ethan.hunt@example.com
•	NULL	NULL	NULL

COURSES

	id	course_name	credits
▶	1	Mathematics	4
	2	Physics	3
	3	Chemistry	4
	4	Chemistry	3
	5	Biology	3
•	NULL	NULL	NULL

ATTENDANCE

	id	student_id	course_id	date	status
▶	1	1	1	2024-11-20	Present
	2	1	3	2024-11-21	Absent
	3	2	2	2024-11-20	Present
	4	2	4	2024-11-22	Present
	5	3	1	2024-11-20	Absent
	6	3	5	2024-11-21	Present
	7	4	4	2024-11-22	Absent
	8	5	2	2024-11-20	Present
•	NULL	NULL	NULL	NULL	NULL

ENROLLMENTS

	id	student_id	course_id
▶	1	1	1
	2	1	3
	3	2	2
	4	2	4
	5	3	1
	6	3	5
	7	4	4
	8	5	2
•	NULL	NULL	NULL

FEES STRUCTURE

	id	course_name	tuition_fee	lab_fee	library_fee	total_fee
▶	1	Mathematics	1000	200	150	1350
	2	Physics	1200	250	200	1650
	3	Chemistry	1100	300	180	1580
	4	Computer Science	1500	400	250	2150
	5	Biology	1300	350	220	1870
•	NULL	NULL	NULL	NULL	NULL	NULL



SERVER



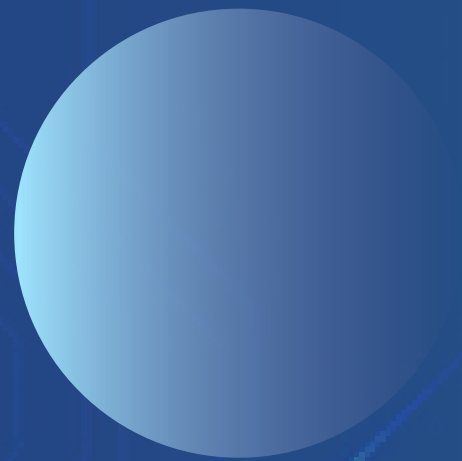
Apache Tomcat

1. Servlet Container: Runs Java servlets and JSPs to handle dynamic web content.
2. Lightweight: A fast, efficient, and easy-to-use alternative to full Java EE servers
3. Cross-Platform: Runs on any system with a JVM (Java Virtual Machine).
4. Extensible: Supports various plugins and extensions for features like security, connection pooling, and monitoring.



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THANK YOU!

