

# College Automation System Using Java Methodology (Academix Portal)

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**Abstract** - The College Automation System Project is designed to operate within the college's local area network and cater to all four departments. Its features encompass an admission system, class attendance monitoring, online notes and notice boards, and a placement system, all accessible to students using their valid registration ID and password.

The project aims to support college administrators by providing comprehensive information about faculty members' schedules and allowing them to manage user accounts through the admin panel. Administrators can add or delete users, grant special permissions, and schedule classes as needed.

Teachers benefit from the system by gaining access to student data tailored to their preferences. They can query information based on grades and percentages, identify students with attendance issues, and utilize other features available within the system.

For students, the system offers access to various resources, including teachers' notes, placement session details, upcoming company information, and a dedicated learning section for exam preparation.

Overall, the College Automation System Project serves as a centralized platform for streamlining administrative and academic processes, enhancing communication, and facilitating access to essential information within the college community.

**Key Words:** Training and placement, Similarity, Student Data, grade, percentage

## 1. INTRODUCTION

The College Automation System is a versatile software solution catering to both students and college management. Its core functionality revolves around storing and managing details of students, teachers, and department heads in a dynamic and organized manner. This system not only provides a repository for essential information but also offers insights into various college activities that may go unnoticed by students. Department heads play a crucial role in the system, being empowered to oversee and manage student details

within their respective departments. They can post department-specific notices, regulate student attendance, and facilitate examination permissions. Moreover, the system features a question and answer portal, fostering collaborative learning by allowing users to pose questions and receive answers from the community. With student names and departments displayed alongside their queries, communication within the college community is streamlined. Additionally, the system offers a comprehensive overview of the college's departmental structure and facilities, ensuring users have a clear understanding of the college's organizational framework and available resources. Overall, the College Automation System serves as a powerful tool for enhancing communication, organization, and accessibility of information within the college ecosystem.

## 2. LITERATURE SURVEY

The College Automation System boasts numerous functionalities catering to both students and management. Administered by the system administrator, it ensures data security and integrity while providing a wealth of information to users. Students benefit from access to exam details, study materials, past question papers, notices, and admission information, all conveniently stored and accessible through cloud storage. Additional features include uploading documents, video lectures, internship programs, and courses, all available free of charge. Faculty members, acting as admins, can upload notices, study materials, and manage system activities. They oversee database management, user management, and system stability. Both students and faculty access the system via a mobile app. Moreover, the system proposes utilizing cloud computing for database management, offering various options for storing large amounts of data securely. This model facilitates student enrollment in courses, participation in discussions, and future integration of services like university result uploads and online exam fee payments. Gradle, an open-source build automation system, streamlines software development, especially

for Android applications. It's complemented by Android Studio, providing editing, debugging, and testing tools.

Additionally, recent studies emphasize the importance of effective training for students' professional placements. Techniques such as fuzzy logic and leveraging expert solutions are explored to optimize training effectiveness. Other research areas include automating drone placement using expert demonstrations and improving wireless train control systems through radio channel characterization. Finally, advancements in hardware, like batch normalization processors, enhance the training process for convolutional neural networks, optimizing both speed and hardware efficiency.

### 3. SYSTEM ARCHITECTURE

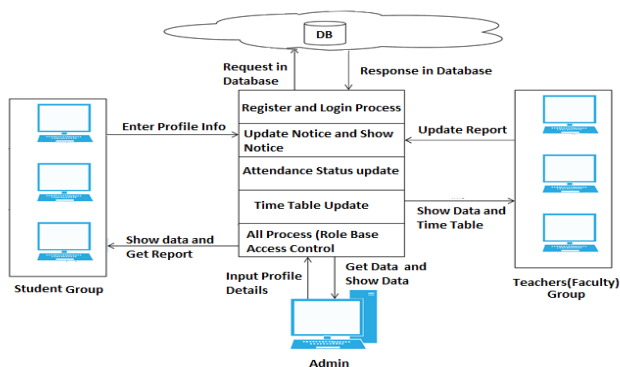


Figure 4.1 Proposed System Architecture

**Student:** Student can view the own marks, attendance status, timetable, notice details, assignment information etc. Student having only read only access for entire application

**Faculty:** Faculty can update all information such as marks, attendance, assignments etc. The uploaded information by faculty can view all three entities. Using RBAC algorithm we define the access control of published data to end user.

**Admin:** It is the master module that can add, update and delete entire application information. He can also view all information such as attendance, marks, time table information, notice etc.

### 4. PROJECT REQUIREMENT & SPECIFICATION

#### Hardware Requirement

- Processor:- Intel Pentium 4 or above
- Memory:- 2 GB or above
- Other peripheral:- Printer
- Hard Disk:- 500gb

#### Software Requirement

Technologies and tools used in Policy system project are as follows Technology used:

##### Front End

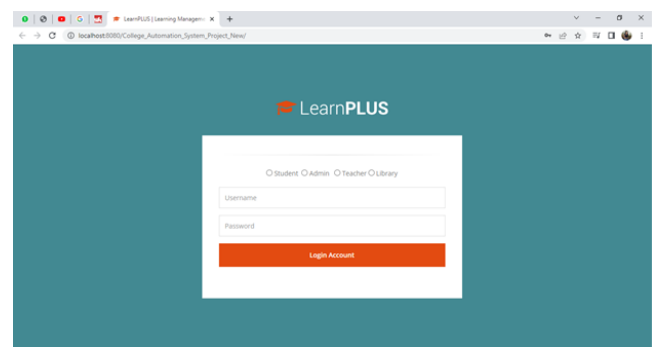
- Internet Explorer 6.0/above
- Tools: Eclipse or net beans, Heidi SQL, JDK 1.7 or Higher
- Programming Language: JAVA/J2EE

##### Back-End

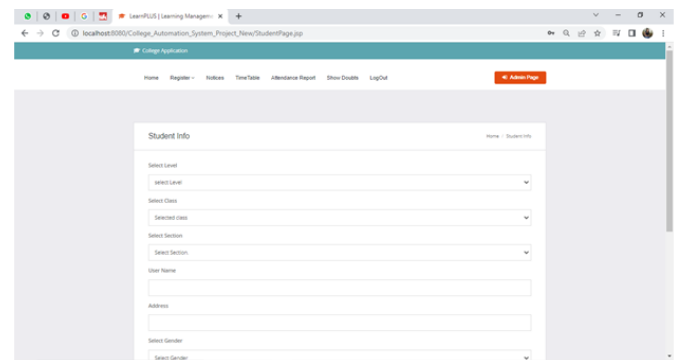
- MYSQL 5.1
- Heidi SQL

### 5. IMPLEMENTATION & RESULT

#### Login Page



#### Registration Page



### 6. Conclusion

The College Management System efficiently addresses institution-related issues with its comprehensive features. Successfully implemented as per system requirements, it offers relevant information tailored to users' needs. By streamlining processes, it minimizes time wastage and enhances accessibility, benefiting both students and faculty. Providing accurate and timely information, it contributes to the overall development of the college community.

## ACKNOWLEDGEMENT

We express our sincere thanks to all those who have provided us the valuable guidance towards the successful completion of this system as a part of syllabus for the bachelor's course. We express our sincere gratitude towards our co-operative department for providing us with the valuable assistance and equipment for the system development. We hereby take this opportunity to sincerely thank **Prof. Priyanka Kumbhar** for her valuable guidance, inspiration, whole hearted involvement during every stage of this project and her experience, perception through professional knowledge which made it

possible for us in successfully realizing the concept.

We are also thankful to **Prof. Abidali Shaikh** - Head of Department Information Technology for his constant enlightenment, support and motivation which has been highly instrumental in successful completion of our project phase II.

We are extremely thankful to **Dr. Navnath Narawade** Principal for his encouragement and providing us the opportunity and facilities to carry out this work.

Finally, we like to express our deep sense of gratitude towards our parents, friends and well-wishers who were always there for suggestions and help.

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